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# The Archive of The Amateur Observation Network of The International Halley Watch

## Volume 2: Comet Halley

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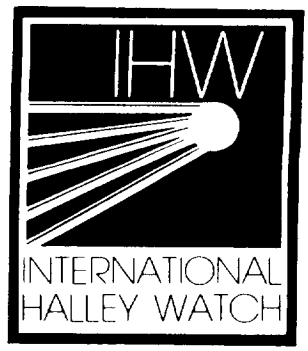

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ABSTRACT

The International Halley Watch (IHW) was organized for the purpose of gathering and archiving the most complete record of the apparition of a comet, Halley's Comet (1982i = 1986 III = 1P/Halley), ever compiled. The redirection of the International Sun-Earth Explorer 3 (ISEE-3) spacecraft, subsequently renamed the International Cometary Explorer (ICE), toward Comet Giacobini-Zinner (1984e = 1985 XIII = 21P/Giacobini-Zinner) prompted the initiation of a formal watch on that comet. All the data collected on P/Giacobini-Zinner and P/Halley have been published on CD-ROM in the *Comet Halley Archive*. This document contains a printed version of the archive data, collected by amateur astronomers, on these two comets. Volume 1 contains the Comet Giacobini-Zinner data archive and Volume 2 contains the Comet Halley archive. Both volumes include information on how to read the data in both archives, as well as a history of both comet watches (including the organizing of the network of astronomers and lessons learned from that experience).

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Charles Morris, Daniel W. E. Green, and John E. Bortle were very helpful in supplying advice and information on many aspects of cometary magnitude estimates and the visual appearance. Richard H. Stanton made photoelectric checks on several AAVSO comparison star fields before copies were issued to IHW comet observers. James A. Morgan, Alan Hale, Ruthi Moore, Mike Morrow, John D. Sabia, John Sanford, Chris Spratt, David Seargent, E. Peter Bus, Marek Muciek, Jan Hollan, Antonio Milani, Jose Campos, Klim Churyumov, Graham Keitch, Harold Ridley, Gabor Sule, Jürgen Rendtel, and many other well-known observers served as collection points and forwarded much of the data to the Lead Center. Giulio Varsi, Sandor Trajmar, and B. Watson provided translations of some observers' notes. Murray Geller helped with the proofreading and supplied good advice and considerable encouragement. Richard West provided guidance. Ray L. Newburn, Jr. was helpful and supportive in ways too numerous to list. Pamela K. Stewart supplied very helpful database management routines. Without Mikael Aronsson's programming and patience and Tim Thompson's assistance the presentation of these data would not have been possible.

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Data Set

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# THE ARCHIVE OF THE AMATEUR OBSERVATION NETWORK OF THE INTERNATIONAL HALLEY WATCH

## Prologue

The International Halley Watch (IHW) was organized by the Jet Propulsion Laboratory (JPL) for the U.S. National Aeronautics and Space Administration (NASA) for the purpose of gathering and archiving the most complete record of the apparition of a comet, Halley's Comet (1982i = 1986 III = 1P/Halley), ever compiled. Descriptions of the IHW may be found in Edberg (1985) and in Edberg, Newburn, and Rahe (1988). The potential contribution of amateur astronomers was recognized at the outset (Brandt *et al.*, 1980) and the IHW was set up to include an Amateur Observation Network.

Detailed planning and publicity began in 1981 and *The International Halley Watch Amateur Observers' Manual for Scientific Comet Studies* (Edberg, 1983) was available in time for the IHW's trial run on Comet Crommelin (1983n = 1984 IV = 27P/Crommelin) in 1983-4. The data acquired during the trial run have been published in print (Sekanina and Aronsson, 1985) and by NASA on CD-ROM, that is, compact disc - read-only memory, in the *Comet Halley Archive*, Vol. 24 (IHW Staff, 1992).

The redirection of the International Sun-Earth Explorer 3 (ISEE-3) spacecraft, subsequently renamed the International Cometary Explorer (ICE), toward Comet Giacobini-Zinner (1984e = 1985 XIII = 21P/Giacobini-Zinner) prompted the initiation of a formal watch on that comet, even as Comet P/Halley was in the first stage of its 1985-6 apparition. All the data collected on P/Giacobini-Zinner and P/Halley have been published on CD-ROM in the *Comet Halley Archive* (IHW Staff, 1992; Vol. 24 and Vols. 1 - 23, respectively; Vols. 25 - 26 contain spacecraft data and complete the set). This document contains a printed version of the archive data, collected by amateur astronomers, on these two comets. Volume 1 contains the Comet Giacobini-Zinner data archive and Volume 2 contains the Comet Halley archive. Both volumes include information on how to read the data in both archives, as well as a history of both comet watches (including the organizing of the network of astronomers and lessons learned from that experience).

## I. INTRODUCTION

Observations of Comets Halley and Giacobini-Zinner, compiled by the Discipline Specialist Team (Table I), can be grouped into four distinct categories:

(1) Visual-appearance descriptions.
(2) Drawings.
(3) Photographs.
(4) Spectrograms.

Amateur observations of Periodic Comet Giacobini-Zinner (G-Z) commenced with the visual recovery of the comet by C. S. Morris and S. J. Edberg on 1985 April 13. They ended with A. F. Jones' observation on 1985 December 10. Within that period 1016 magnitude and related visual appearance observations are included in the archive. Fifty-three drawings are listed spanning June - October and 20 photographs span July - September. Observations from 106 amateur astronomers were used in the G-Z archive.

Amateur observations of Periodic Comet Halley commenced with the visual recovery of the comet by S. J. O'Meara on 1985 January 23. They ended with D. H. Levy's observation on 1988 February 23. Within that period 11,641 magnitude and related visual appearance observations are listed in the Halley archive. Within the span of 1985 July 28 through 1986 June 30 there are 1309 drawings listed. Photographs cover the period 1985 August 12 to 1988 February 16 and total 2165. Spectra were obtained over the period 1985 December 4 through 1986 May 4 and 45 are listed.

The G-Z and Halley archives both carry identification numbers for every observation. These are called out in the amateur archive as AON#, whose leading digit is always 8 (numbers 1 - 7 identify the other disciplines in the IHW). The second (for Halley) or the third (for G-Z) digit identifies the subcollection of observations, as indicated below. The final digits were assigned to each observation in chronological order.

Because of the subjective nature of visual-appearance observation methods there is diversity in the type and quality of information recorded in the archive. When a range of values was given by the observer the more conservative value was adopted, i.e. a shorter tail, more diffuse condensation, smaller coma, and fainter magnitude. The AON# is always 1 for visual-appearance listings.

Drawings present the visual aspect of a comet. To be included in the archive a rendering must reproduce the detail discernible by the observer and provide information useful to an investigator. The AON# is always 3 for drawing listings.

All the photographic images listed in the archive are on file and were examined for quality before inclusion in the archive listings. The AON# is always 5 for photograph listings.

The spectra listed in the archive were made with either prism or grating spectrographs in a variety of modes. These spectra are perhaps the only ones in the complete IHW archive which cover the full range of visual wavelengths in one record. A few spectra extend into the photographic infrared. The AON# is always 7 for spectrogram listings.

## Planning and Organization

The rationale for including amateur observations in IHW activities was described in the original IHW report by Brandt *et al.* (1980). The goal was to ensure that amateur observations would be as scientifically useful as possible. With that in mind the *IHW Amateur Observers' Manual for Scientific Comet Studies* (Edberg, 1983) was written. The philosophy was to provide detailed instructions that observers with some experience could follow. The manual was not intended to teach neophyte amateur astronomers how to begin the hobby, though it was available early enough that a novice, wishing to learn how to make amateur astronomical observations in general and observations of comets in particular,

TABLE I

Discipline Specialist Team

| Team Member | Affiliation | Responsibility |
|---|---|---|
| Stephen J. Edberg | Earth & Space Sciences Div.<br>Jet Propulsion Laboratory<br>California Institute<br>of Technology<br>Pasadena, CA 91109, U. S. A. | Discipline Specialist, Coordinator for Amateur Observations |
| Charles S. Morris | Telecommunications Science & Engineering Division<br>Jet Propulsion Laboratory | Associate Discipline Specialist |
| Warren Morrison | American Association of Variable Star Observers (AAVSO)<br>Cambridge, MA 02138, U. S. A. | Data Recorder |
| Thomas R. Williams | AAVSO | Data Recorder |
| Michael J. Weiner | Earth and Space Sciences Div.<br>Jet Propulsion Laboratory | Data Reduction Assistant 1985-1986 |
| Mary L. Firth | Earth and Space Sciences Div.<br>Jet Propulsion Laboratory | Data Reduction Assistant 1986-1988 |
| Elizabeth La Vite | Earth and Space Sciences Div.<br>Jet Propulsion Laboratory | Data Reduction Assistant 1988-1989 |

would have enough time and could find enough general references to learn the necessary techniques.

Inviting amateur astronomers to participate in the IHW was approached in several ways. Contacts with established organizations and well-known amateur observers were made. This did not reach the bulk of potential observers. These observers were contacted via the astronomical press and other public media.

Seeking scientific assistance from amateur astronomers had its pros and cons. Filling in observational gaps in professional coverage of the comet, for the professional Large Scale Phenomena Network and the Spectroscopy and Spectrophotometry Network to name two examples, and supplying numerous visual observations were genuine, positive contributions to the IHW. On the other hand the potentially large number of contributors and observations and the observations' uncertain quality could easily have overwhelmed efforts to manage and then prepare the data for inclusion in the archive. Marketing surveys, conducted for advertisers using astronomical magazines, estimated the number of amateur astronomers in the U.S. and Canada, alone, to number 300,000.

To ameliorate the problem, amateurs planning to register with the Amateur Observation Network were encouraged, via the Observer Index registration form, to read portions of the manual first to confirm their interest not just in joining in the IHW but in actually participating by making observations useful to the scientific community.

Ultimately, the numbers of participants and observations proved manageable. There were 1575 registrations and of these, 873 actually submitted observations of P/Halley. It is noteworthy that the latter figure includes submitters who did not register with the amateur network: their observations simply arrived in the mail.

The observations were collected at the IHW's JPL Lead Center. They were either sent there directly by the observers or were forwarded by designated observation collectors - usually experienced observers willing to collect observations and advise observers - from sites around the world. (These data recorders were listed in the *International Halley Watch Amateur Observer's Bulletin* (Edberg, 1982 - 1990) and in acknowledgment and update letters sent to registered observers.) Some of the collectors also provided their assessment of the quality of the observations. The final preparation of the archive involved an assessment of all the submitted observations by the Discipline Specialist.

## Registration and Preparation

The Observer Index form in the *IHW Amateur Observers' Manual* was designed so that the observer's address and observing site particulars could be entered into computer files for later use. The information requested on telescopes, cameras, and other observing hardware, while not necessary at the time of registration (but required for observations), later proved useful on numerous

occasions when ambiguities of various types appeared in observation reports. Even the signature permitting use of the data in the archive was helpful at times.

Registrants received a letter of acknowledgement and, later, letters timed appropriately for the P/Crommelin trial run and the P/Giacobini-Zinner campaign. They were encouraged to request a free subscription to the *IHW Amateur Observer's Bulletin* (published for the IHW by the Planetary Society) so they would be informed about IHW activities.

In 1988, a short questionnaire requesting more details on each observer's past cometary and general astronomical experience was sent to all observation submitters for whom addresses were available. (Some observations were sent without the submitter's address and other observers moved without sending an address update.) Staff and time limitations prevented the inclusion of the ancillary Observer Index data and the questionnaire data in computer files, but the paper files will stay with the IHW archive for future use by those who are interested in the community of participating amateur astronomers.

The observing site coordinates, listed in Table VIII and by identification number with the observations in the archive, are mostly those supplied by the observer. They have appended to them the Discipline Specialist's subjective estimate of the accuracy of that position. Occasionally observers used additional sites for which they did not supply coordinates. For these sites any evidence available was used to estimate very approximate geographic coordinates and a very large position uncertainty estimate was attached to them, sometimes as large as a whole country.

The large number of observing sites that many individuals would use was not anticipated. Observers selected sites based on such characteristics as atmospheric conditions and weather, distance from home, height and darkness of the horizon, and the comet's azimuth, among others.

The observation report forms in the manual (as later modified and published in the *IHW Amateur Observer's Bulletin* and in letters to observers) were patterned on report forms used by various amateur astronomy organizations. Occasionally there was redundancy on the forms; this sometimes proved very helpful in preparing the data for input. The forms were as self-explanatory as possible, even though a complete glossary explaining the forms was in the Manual.

The report forms were formulated so that a selected parameter was the same for all observations reported on an individual form: for magnitudes the parameter was the comet observed; for drawings, photoelectric photometry, and meteor counts it was the date; and for all observations using photography it was photographic emulsion. Unfortunately, some observers did not follow the formulations, creating significant additional work to prepare mixed-parameter observation reports for entry in the archive.

The preparation of thousands of observations for entry in the archive leads to the following conclusion: the organizer of any activity of this nature must be prepared for the unexpected and

irrational. Sometimes instructions aren't followed, and the data system must have built-in flexibility and adaptability.

## II. THE ARCHIVE

### Visual Appearance

After discussions with the staff of the *International Comet Quarterly* (*ICQ*), their observation report form was adopted with added columns for additional data relevant to the analysis and understanding of the large number of magnitude estimates in the archive. It was a mistake not to ask for the comet's name on the report form: some observers sent in their data on P/Giacobini-Zinner and on P/Halley on separate forms but in the same mailing. Some G-Z observations were found mixed with Halley observations during the final Halley proofreading, when it was too late to add them to the G-Z archive. Another minor problem, fortunately made obvious by the observers, was that observations of brighter "comets of opportunity" discovered in 1985 were sometimes submitted with Halley observations on the same report form (this occurred with drawings as well).

UT Date was usually understood by observers but the time of observations was sometimes not correctly computed or not attached to the correct data. Some observers, responding to an IHW request, submitted their times as decimals of a day. A number of them incorrectly used the table to convert hours:minutes:seconds to decimals of a day, which was distributed in the acknowledgment letter and in the *Amateur Observer's Bulletin* (No. 11). Observations with ambiguous dates/times were discarded. With very few exceptions, decimal dates had to be specified to two or more decimal places for inclusion in the archives.

To better standardize the magnitude estimates, comparison star charts were included with the *Amateur Observers' Manual* (in Part II). These included reduced-size *AAVSO Variable Star Atlas* charts (Scovil, 1980) with their V and visual magnitudes and portions of the *B.A.A. Star Charts 1950.0* (Tirion, 1981) that had AAVSO Atlas magnitudes added to them. In addition, selected AAVSO variable star comparison charts, some checked photoelectrically by Richard Stanton (JPL, private communication) were mailed to registered observers. These efforts at standardization were thwarted both directly by the publication of other observing manuals with different star charts + magnitudes (Bouma *et al.*, 1985 and Bus, 1984) and indirectly by observers picking their own sources of comparison magnitudes. Later in this section the many reference sources used by the observers are listed. It is incumbent on any archive user to decide which set or sets of comparison charts are acceptable for research.

Some observers reported magnitudes made with the same instrument but with different magnifications on the same data line: these were discarded because of their ambiguity.

Degree of condensation, DC, often covered the full range from

0 to 9 on many nights. Charles Morris submits the following report on recent results:

> An interesting result of the February 1994 International Workshop on Cometary Astronomy concerns a comet's degree of condensation. For some time, there has been concern over the wide range of DC values (often including all possible values, 0-9) reported by different observers, even experienced observers, on a given night (S. J. Edberg, unpublished). During a panel discussion at the Workshop, led by John E. Bortle and Charles S. Morris, one reason for the spread was uncovered. Most American observers (and the IHW) define DC as a smoothly varying description of the intensity profile across a comet's head (Edberg, 1983). In particular, DC = 9 is used only when a comet is described as either wholly with a bright nuclear condensation with little surrounding coma (star-like in appearance) or with a notable, sharp-edged (planetary-like) disk. In this scheme, a diffuse coma with a stellar condensation would have a DC that is the weighted average of the two components. For instance, a totally diffuse coma (DC=0) with a faint stellar condensation might have a combined DC of two. If the same diffuse coma had a bright condensation, the DC might be six or seven.
>
> At the Workshop it was learned that British observers jump to DC = 9 immediately upon distinguishing any stellar condensation within the comet's head. While other European comet groups/observers at the Workshop indicated that they followed the American/IHW definition of DC, a visual DC test given to the participants (Shanklin, 1994) prior to the DC discussion showed good agreement among observers for all examples, except the one having a stellar condensation embedded in a diffuse coma. While not explaining all the scatter observed in the DC estimates (e.g., different instrumentation is another potential cause), it does suggest that significant confusion exists over the definition of DC when a stellar (or near-stellar) condensation is present in the comet's coma. Users of the archive should bear this in mind when analyzing DC data.

The Dark Adapted column asked for a simple yes/no response. The actual time spent dark adapting would have been a more useful datum.

The criteria for the retention of magnitude data in the archive were extensively debated. The extremes ranged from keeping the data from only a few, selected, experienced observers to keeping virtually all of them. One specific criterion and its rationale originated with Charles Morris (JPL, private communication): Exclude observers who made less than a specified number of observations (e.g., 1 observation per month on average)

during the prime 1985-86 observing period. This number should be selected so the criterion tends to filter out inexperienced observers while retaining sufficient quantities of data from the remaining observers to make meaningful intercomparisons.

Based on these discussions, the decision was made that for the archive all those data were included that, based on the report itself, appeared to have been made in the *Manual*-prescribed manner. Thus researchers may exercise the option of applying Morris' criterion. Even this liberal approach to data inclusion resulted in the discarding of roughly one-quarter of the submitted observations. Figure 1 presents light curves of G-Z and Halley. The light curve in Figure 1b was generated with a group of selected observers while Figure 1c used all of the observers.

The size of this data set will allow many more studies of interest - some of the observers perhaps, as well as of the comet - than would have been possible had a much more limited archive been produced. Workers interested in using experience as a selection criterion are referred to Table II, kindly supplied by Daniel Green (Central Bureau for Astronomical Telegrams; private communication), which lists observations by those whose data are in the *ICQ* files. Users are also referred to Green (1986) for additional data on *ICQ* observers of P/Halley. He lists both the most active *ICQ* observers of P/Halley as well as the most active observers of all comets in the *ICQ* archives.

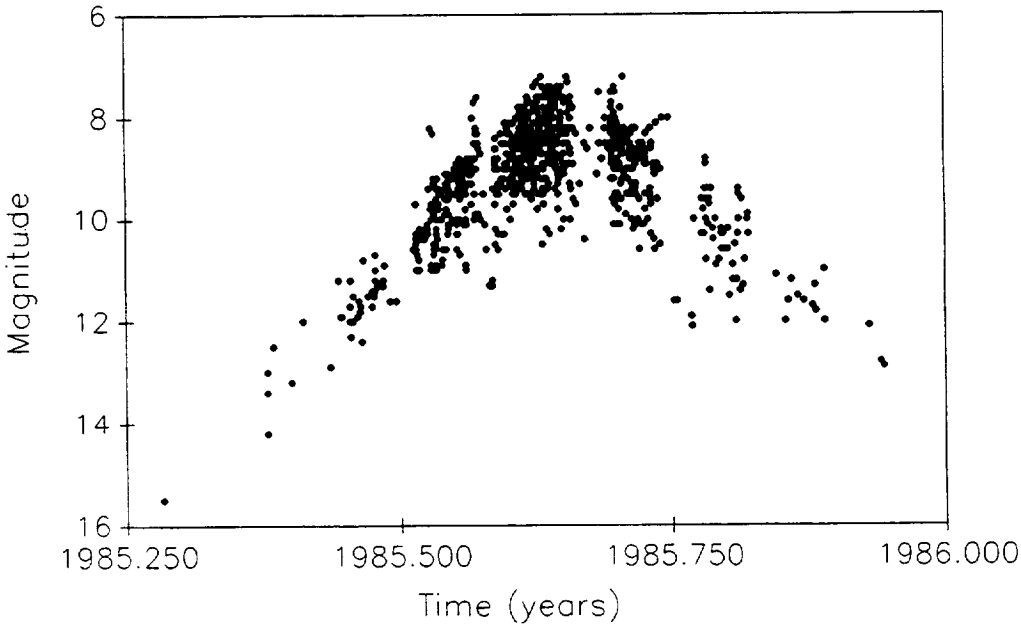


Figure 1. (a) The light curve of Comet Giacobini-Zinner, using the brightest total magnitude estimate (if more than one was made) by each observer on every night an observation was made. No aperture corrections have been applied. Breaks in the curve fall around full moon.

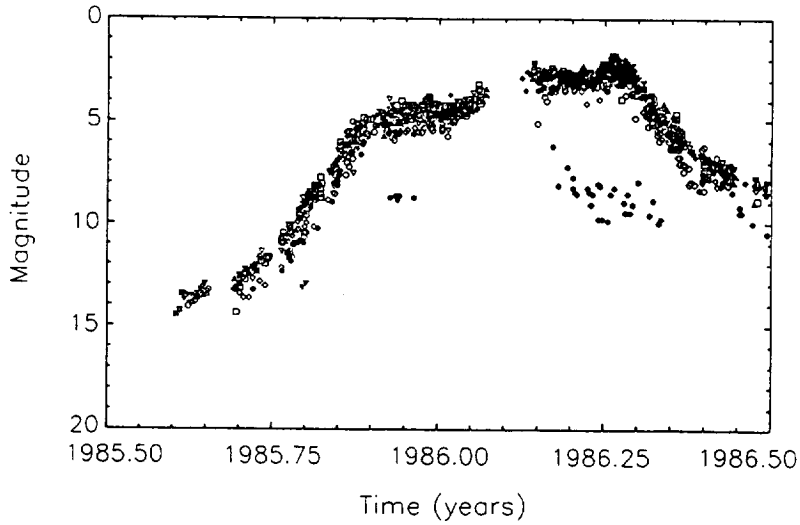


Figure 1. (b) The light curve of Comet Halley using the brightest magnitude estimate (if more than one was made) by observers J. Bortle, R. Bouma, D. W. E. Green, A. Hale, A. Jones, R. Keen, G. Keitch, C. S. Morris, W. Morrison, A. Pearce, D. Seargent, and J. Shanklin on every night an observation was made. Some "nuclear" magnitudes (m2) have been included, falling well below the total magnitude light curves. No aperture corrections have been applied. Breaks in the curve fall around full moon or perihelion.

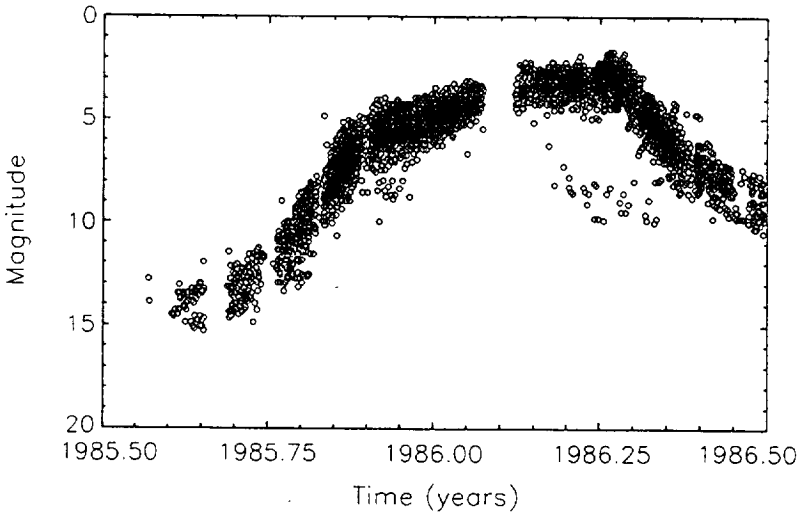


Figure 1. (c) The light curve of Comet Halley using the brightest magnitude estimate (if more than one was made) by all observers on every night an observation was made. Some "nuclear" magnitudes (m2) have been included, falling well below the total magnitude light curves. No aperture corrections have been applied. Breaks in the curve fall around full moon or perihelion.

TABLE II

The Most Active *ICQ* Observers

The top 24 active observers of all comets in the *ICQ* archive as of 1990 January 4 are listed below. The columns list observer's name, number of positive observations, and number of negative observations (comet not detected). Here, an observation is defined as a single *ICQ*-format 80-character data listing; in the *ICQ* archive there is often more than one observation per observer per comet per night, since observers use different methods and different instruments to determine the total visual magnitude. The vast majority of observations (> 95%) contain some sort of magnitude estimate while the remainder report only other aspects of the visual appearance.

| Observer | Obs. | Neg. |
|---|---|---|
| John E. Bortle | 1952 | 74 |
| Albert Jones | 1942 | 1 |
| Charles S. Morris | 1799 | 36 |
| Reinder Bouma | 914 | 8 |
| Daniel W. E. Green | 863 | 3 |
| Andrew Pearce | 801 | 43 |
| Alan Hale | 682 | 280 |
| Graham Keitch | 773 | 1 |
| Jonathan Shanklin | 657 | 18 |
| Warren Morrison | 622 | |
| David Seargent | 618 | 1 |
| Richard Keen | 607 | |
| Chris Spratt | 596 | |
| Michael Moeller | 533 | |
| Maurice Clark | 503 | |
| Jean-Claude Merlin | 480 | 19 |
| Don Machholz | 463 | 4 |
| Eric Jacobson | 391 | 20 |
| Richard Fleet | 354 | 5 |
| Georg Comello | 330 | 1 |
| Kiyotaka Kanai | 329 | |
| Werner Hasubick | 327 | 2 |
| E. P. Bus | 326 | |
| Akimasa Nakamura | 316 | |

Observers' notes, throughout the amateur archive, are usually reproduced as written by the observer, especially in the case of observers whose first language is not English. This can make for rough reading and ambiguity at times but it allows archive users to make their own judgments. Some observers supplied extensive notes not directly related to the comet or the observations. A few of these are scattered through the archive to supply a little color and context to the data and the times.

The column headings of the IHW Visual Appearance printed archive are described below:

Date(UT) Decimal date of the time of observation. Trailing zeroes are often mere space-fillers.

AON# Amateur observation network number, a unique reference number assigned to each observation.

m1 Total magnitude of the comet. A colon indicates that the given magnitude has lower than usual precision. A > indicates that the comet was fainter than the given magnitude.

MM The magnitude estimation method was one of four types:

- B - Bobrovnikoff method
- S - Sidgwick or In-Out method
- M - Morris method
- V - In-focus telescopic (as with variable stars) or naked eye estimates (made with or without defocusing; some observers remove corrective eyeglasses to defocus stars for comparison with the comet)

See Edberg (1983) for details of the first three methods.

Chart Source(s) of comparison star magnitudes:

(number < 179) Specific chart with V and/or visual magnitudes in the *American Association of Variable Star Observers (AAVSO) Variable Star Atlas* (Scovil, 1980).

(number + letter) Specific chart from the *B.A.A.* (British Astronomical Association, BAA) *Star Charts 1950.0* (Tirion, 1981) that was modified by the addition of AAVSO atlas magnitudes and published in the *IHW Amateur Observers' Manual* (Edberg, 1983).

(variable star designation) Variable star comparison chart published by the AAVSO, BAA, or Royal Astronomical Society of New Zealand (RASNZ), or AAVSO charts with V magnitudes (specially checked by R. H. Stanton, JPL; private communication). The latter were distributed by the IHW. A letter following the variable star designation identifies the specific chart used. R. W. Fleet (private communication) finds that comparison star magnitudes in the SX Leonis field are about 1/3 magnitude fainter than those in the S Sextantis field. J. Bortle (private communication) has also noted inconsistencies between comparison star fields in this part of the sky.

(numbers) *Smithsonian Astrophysical Observatory (SAO) Star Catalog* (1966) star number, or another catalog's number.

AA Chart from *The AAVSO Variable Star Atlas* (Scovil, 1980).

AAVSO Unspecified AAVSO source.

AUL UBV UBV photoelectric sequence described by Landolt (1973).

BAA Unspecified BAA source.

BSC Yale *Bright Star Catalog* (Hoffleit and Jaschek, 1982).

COELI *Atlas of the Heavens* (also called *Atlas Coeli 1950.0*; Becvar, 1958).

CZ List of white (B-V < 0.5) stars selected by J. Hollan of Copernicus Observatory & Planetarium, Brno, Czechoslovakia (private communication).

DCS Dutch Comet Section observing manual (Bus, 1984), with magnitudes based on *Sky Catalog 2000.0* (Hirshfeld and Sinnott, 1982). V magnitudes were converted to visual magnitudes.

E *Atlas Eclipticalis 1950.0* (Becvar, 1958).

IHW Unspecified IHW source; occasionally a specific chart is indicated.

IHW BAA Unspecified BAA chart published by the IHW.

LNES Lampkin's (1972) *Naked Eye Stars*.

M *Stellar Atlas* by A. A. Mikhaylov (1975) using *Henry Draper Catalogue* (HD; Cannon and Pickering, 1918-24) magnitudes.

MP *McCormick Photovisual Sequences* (published by the Univ. of Virginia; also Wirtanen and Vyssotsky, 1945).

NPS North Polar Sequence, published by the AAVSO.

PA Stars from the *Palomar Observatory Sky Survey*. Their V magnitudes were determined by comparison with the standard sequence in NGC 2119 (Hoag et al., 1961) and converted according to: (visual magnitude) = V + 0.16 [B-V] (K. Churyumov, private communication).

RASNZ Unspecified RASNZ source.

SA Selected area (Everhart, 1984), either numbered or unspecified.

SAO Smithsonian Astrophysical Observatory source.

SAO A/C *SAO Star Atlas* (1969) and *SAO Star Catalog* (1966).

SAO (+ numbers) Chart from the *SAO Star Atlas* (1969).

SC 2000 Unspecified stars from *Sky Catalog 2000.0* (Hirshfeld and Sinnot, 1982).

SPV Unspecified stars with photovisual magnitudes from the *Cape Photographic Catalog for 1950.0*.

USNOC United States Naval Observatory *Photoelectric Catalog* (Blanco et al., 1968).

VAS (+ numbers) Unspecified stars from a specific chart in Vehrenberg's (1971) *Atlas Stellarum 1950.0*.

Occasionally combinations of sources are specified, e.g. SA47SAO, SPER 16, AA NPS, AACZORI, etc. Additional sources were used by a small number of observers, about which little or no information was supplied.

Coma size — Coma diameter [arcmin]. For an elliptical coma the major and minor axes are given.

DC — Degree of condensation, a qualitative measure of the brightness profile across the coma. Values from 0 to 9 indicate increasing degrees of condensation from diffuse to stellar. See Edberg (1983) for details.

Tail — Length of a tail [deg]. In the printed archive additional tails are listed as notes.

PA — Position angle [deg] measured north through east. In the printed archive additional tails (and fans) are listed as notes.

Ap, Ins, f/, Pwr — Aperture size [m], type of instrument (see below), focal ratio, and magnification.

Type of instrument:

- B - Binoculars
- C - Cassegrainian
- EY - Naked eye
- JB - Jones-Bird
- M - Maksutov
- N - Newtonian
- R - Refractor
- SC - Schmidt-Cassegrainian
- SN - Schmidt-Newtonian

The Jones-Bird design is described by Jones (1957) and by Bird and Bowen (1979).

On a few occasions the stated telescope characteristics don't seem to match the telescope type listed, both as supplied by the observer. In the case of fast Schmidt-Cassegrainian telescopes, an auxiliary positive lens was probably used as a focal reducer (telecompressor), and a rather fast Cassegrainian telescope (f/10) is probably a Schmidt-Cassegrainian.

Lim — Limiting magnitude of stars visible to the naked eye. Interference with the observation is indicated by the letters C, M, T, or Z if used, which refer to city lights, moonlight, twilight, or zodiacal light, respectively.

DA The observer's dark adaptation (Y = yes, N = no). A few observers gave the time spent dark adapting; times greater than or equal to 10 minutes were assigned a Y, shorter times an N.

Site Observing site identification number (cf. Table VIII).

Observer(s) Name(s) of observer(s). Additional observers are indicated in notes.

Notes Observer's or editor's comments, if any.

## Drawings

The discerning eyes and skilled hands of astronomical illustrators have historically provided images of comets. Today, unfortunately, few professional or amateur astronomers have the artistic skill and accuracy, in this age of photography and electronic detectors, that were once the common tools of many astronomers. Drawings of P/Halley still help to place the comet's 1986 apparition in the context of earlier ones, however. In addition, the large number of drawings on file offers investigators the opportunity to better understand eye-brain detector variations among observers, especially when the drawings are compared with images from the Near Nucleus Studies Network that were made by non-human detectors (though later processing by archive users will insert a form of personal bias into the images, or at least into their appearance). Figure 2 presents high quality drawings.

Some observers' reports of magnification used for their observations were ambiguous. For example, an observer may have indicated 58-271, listed in the archive as 58,271. It is not clear if the observer used an unspecified intermediate power or a range of powers for that particular drawing.

The intent in asking for U. T. Start/End was to determine how long it took the observer to make the drawing since it couldn't be made instantaneously. In a few cases a single time was given with the drawing but not in the space provided for Start/End. In such cases an editor's note was inserted and any evidence available, including other drawings or magnitude estimates, was used to suggest in the note whether the supplied time was for the start or end or middle.

The format of the list of drawings in the printed archive is described below:

Date(UT) Decimal date of the time of observation. Trailing zeroes are often mere space-fillers.

AON# Amateur observation network number, a unique reference number assigned to each observation.

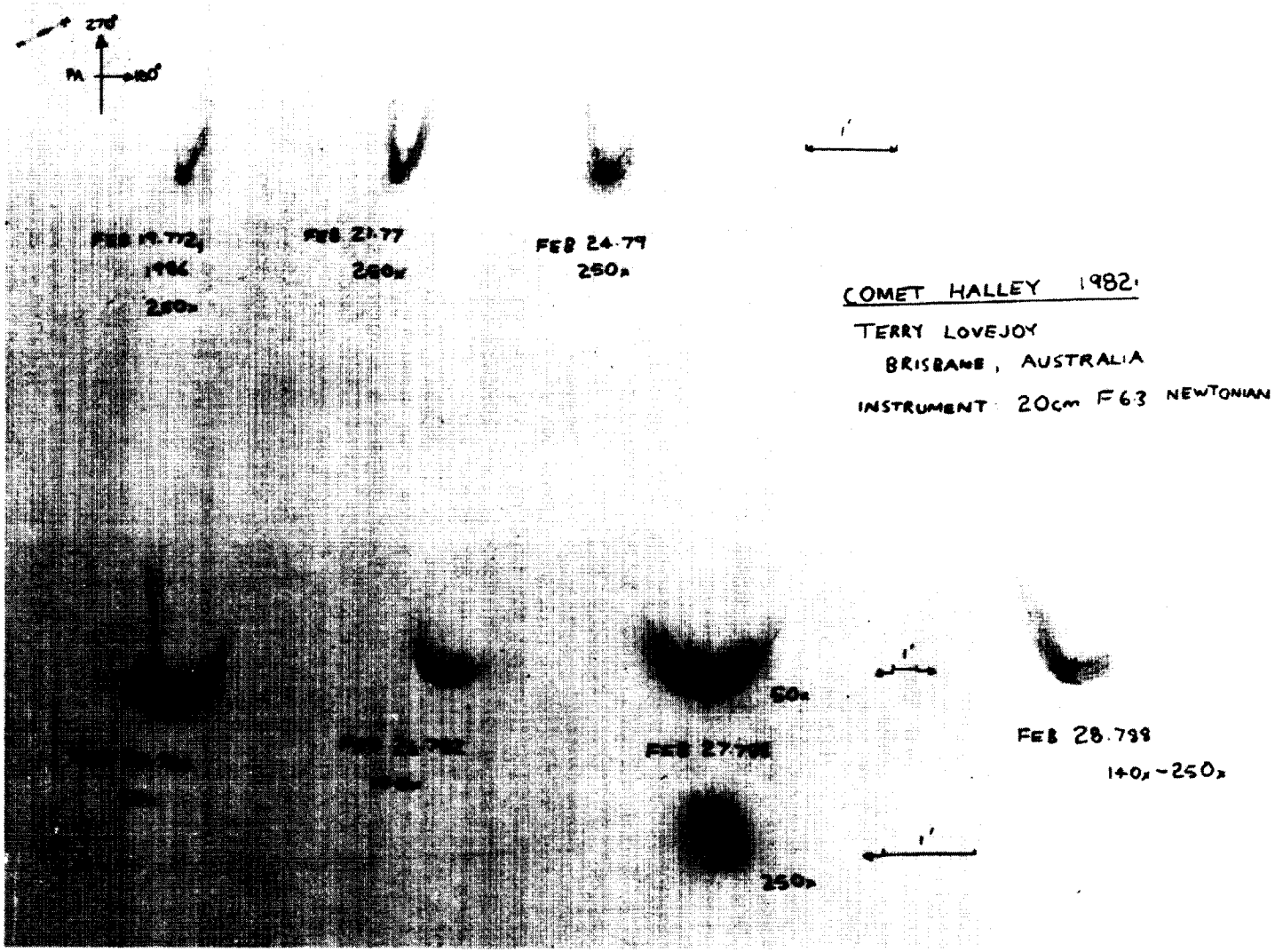


Figure 2. Terry Lovejoy supplied this collection of drawings of Comet Halley (AON#s 830847, 830850, 830855, 830857, 830860, 830863, and 830868).

Scale — Scale in minutes of arc per millimeter. Drawings lacking a scale are sometimes included.

Ap, Ins, f/, Pwr(s) — Aperture size [m], type of instrument (see below), focal ratio, and magnification(s).

Type of instrument:

- B - Binoculars
- C - Cassegrainian
- EY - Naked eye
- JB - Jones-Bird
- M - Maksutov
- N - Newtonian
- R - Refractor
- SC - Schmidt-Cassegrainian
- SN - Schmidt-Newtonian

The Jones-Bird design is described by Jones (1957) and by Bird and Bowen (1979).

On a few occasions the stated telescope characteristics don't seem to match the telescope type listed, both as supplied by the observer. In the case of fast Schmidt-Cassegrainian telescopes, an auxiliary positive lens was probably used as a telecompressor (focal reducer), and a rather fast Cassegrainian telescope (f/10) is probably a Schmidt-Cassegrainian.

DurM — Time [min] spent to execute the drawing.

Lim — Limiting magnitude of stars visible to the naked eye. Interference with the observation is indicated by the letters C, M, T, or Z if used, which refer to city lights, moonlight, twilight, or zodiacal light, respectively.

Site — Observing site identification number (cf. Table VIII).

Observer(s) — Name(s) of observer(s). Additional observers are indicated in notes.

Notes — Observer's or editor's comments, if any.

## Photography

The photography report form, updated in *IHW Amateur Observer's Bulletin* No. 6 from the version in the *Manual*, was designed with intentionally redundant entries. This was occasionally helpful in interpreting an observer's report.

Images listed in the archive are those for which a quick

visual inspection without magnification suggested that the image could have use to someone studying the appearance of the comet. Even when an image is of doubtful quality it is listed, consistent with the philosophy that it is best to let archive users be aware of the availability of that image. Roughly one-eighth of the photos submitted were not included in the archive and neither are the numerous reports of photos taken for which no copy was included. The quality of the images in the files ranges from barely useful to superb, professional-level work. Figure 3 presents samples of both wide-angle and narrow-angle photographs.

The times listed in the archive were converted from exposure start and duration to mid-exposure time. Often the photographer gave the starting time to greater precision (in hours:minutes:seconds) than is indicated by the decimal conversion.

In the archive listing, telescopes used for photography commonly have the focal length, focal ratio, and aperture all (redundantly) specified. When camera lenses were used, only focal length and focal ratio are listed. The focal ratio listed for a camera lens is that used for the photograph, which may not be the widest-open aperture (lowest focal ratio) possible with the lens.

Auxiliary lenses are sometimes used on telescopes and cameras to increase or decrease the focal length. When re-imaging is not involved and a negative lens is used to increase the telescope's effective focal length for photography, the lens is commonly called a tele-extender or teleconverter. (Such a lens is called a Barlow lens when used visually.) A telecompressor or focal reducer is a positive lens that shortens the effective focal length without re-imaging.

The ISO (ASA/DIN) speed of the emulsion is given as supplied by the observer or manufacturer. Some emulsions do not have a speed (in the usual sense of the word) determined for them, so for these, and for emulsions that have been hypersensitized or push-processed, this column is left empty. For an emulsion for which different speeds are available by manufacturer's design and recommended processing, the speed as given by the observer is used.

Gas hypersensitizing and emulsion cooling both serve to increase the sensitivity of photographic emulsions or mitigate the effects of low intensity failure of the reciprocity law for photographic emulsions. Gas hypersensitized emulsions are available commercially (Lumicon and University Optics are two such suppliers) and are also prepared by observers themselves.

Considering the varying temperaments and world-wide locations of astrophotographers it would have been impossible to standardize photographic emulsions and processing. Thus, these details are provided with the archive listing.

Kodak developer D-19b is commonly used by European astrophotographers. It is an X-ray emulsion developer that is rather radically different in composition from its high contrast American namesake, D-19. Contact Eastman Kodak Co., Dept. 841-S, 343 State St., Rochester, NY 14650-0811, USA for details. Kodak can also provide details on the spectral transmission of their gelatin Wratten filter series (see *Kodak Filters for Scientific and*

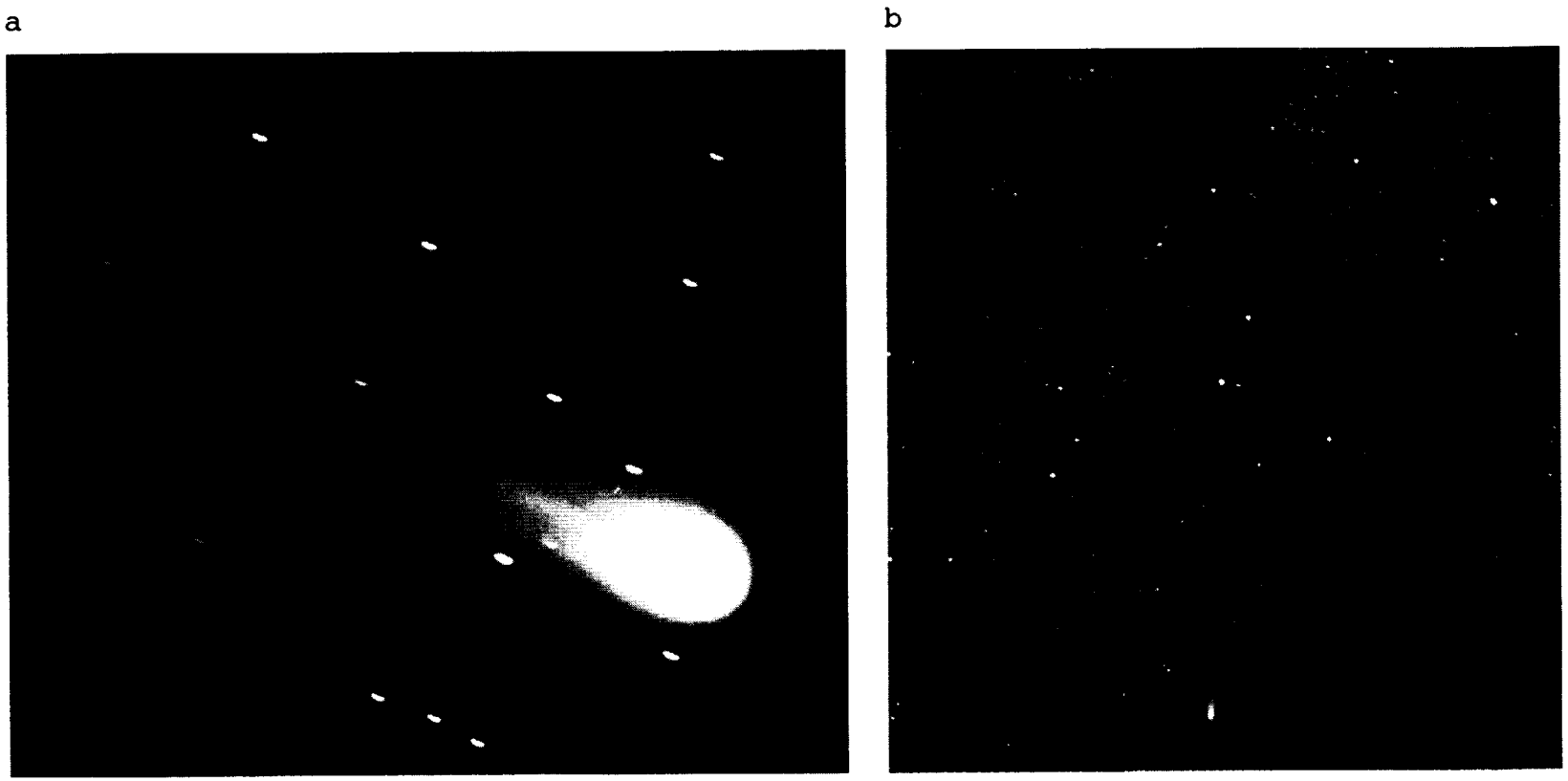




Figure 3. (a) Michael Crist obtained this photograph of Comet Halley's coma and tail root on 11 January 1986 (AON# 850760). (b) Stephen Edberg captured Comet Halley's tail extending towards the Milky Way in this photograph on 20 March 1986 (AON# 851187).

*Technical Uses* in the references; many Wratten filter designation numbers have been adopted for equivalent glass filters made by other manufacturers).

There were variations in the way observers indicated the dilutions of their developers: for example, both 1 + 4 and 1 : 4 were used.

It seemed likely that original negatives or positives of the comets would be too precious for observers to want to give up. While there are some originals in the files, the archive largely lists copies in the files, of one of the following types:

Contact Prints - positive images on paper made by placing the original negative in contact with the photographic paper.

Negatives - May be originals or copies: some are mounted in slide frames.

Prints - These are usually enlargements from the original; occasionally a halftone or xerographic (often of poor quality) copy. Composite prints are so noted but are listed as a single entry with a mid-time determined as halfway between the initial opening of the shutter and its final closing, no matter what the individual exposure times and their separations were. Negative prints were submitted rarely.

Slides - 135-size (24 x 36 mm) positive black and white or color transparencies mounted in standard frames.

Transparencies - Positive images on film, unmounted, of 135-size or larger. Standard sizes are 135, providing an image area of approximately 24 x 36 mm, and 120, with an area of approximately 6 x 6 cm (sometimes 6 x 7 cm). Rarely, other larger films were used. The data files contain hard-copy images ranging in size from individual 135-size images to oversize prints.

For the purpose of standardization the *Amateur Observers' Manual* instructed observers to obtain calibration photos of M31, M83, and Orion's belt. Only a handful of observers cooperated. Calibration photos are stored with the comet photos but are not listed in the archive.

The format of the list of photographs in the printed archive is described below:

Date(UT) Decimal date of the time of observation. For photographs this is the middle of the exposure. Trailing zeroes are often mere space-fillers.

AON# Amateur observation network number, a unique reference number assigned to each observation.

FL, f/, and Ap Instrument focal length [m], focal ratio, and aperture [m]. Listed are the effective focal length and

effective focal ratio used. A note follows giving the nominal characteristics of the instrument if auxiliary optics were used in making the image.

FOV — Computed field of view for a 24 x 36 mm frame. Larger format emulsions are identified in the notes.

ExpM — Exposure time [min].

Emulsion — Type of emulsion.

ISO — The speed (ASA/DIN) of the emulsion.

Hyp — "Y" indicates a hypersensitized emulsion, "C" stands for an exposure with a cooled-emulsion camera; otherwise an "N".

Gdng — Type of guiding:

C - Computed offsets to telescope drive
M - By micrometer
O - Cross hairs on central condensation
S - Sidereal-rate drive or guiding on a star
T - Cross hairs tangent to coma
X - Cross hairs on a coma with no condensation

These methods are explained in Edberg (1983).

Id/Typ — IHW- or observer-assigned number and type of image on file:

C - Contact print
N - Negative
P - Enlarged print
S - Slide
T - Transparency

Site — Observing site identification number (cf. Table VIII).

Observer(s) — Name(s) of observer(s). Additional observers are indicated in notes.

Notes — Observer's or editor's comments, if any.

## Astrometry

A few amateur astronomers have been contributing much-needed astrometric observations of comets for many years. These astronomers worked directly with the IHW Astrometry Network. Several other amateur astrometrists sent their measurements to the Amateur Observation Network. Astrometry Network Discipline

Specialist Donald K. Yeomans analyzed these data and, unfortunately, found them unacceptable. These observers were encouraged to continue improving their technique; good astrometric measurements of comets and asteroids continue to be sorely needed.

## Spectroscopy

Amateur astronomers apparently generated the only low dispersion spectra of Comet Halley (Figure 4). Reports of spectroscopic observations were made on a form closely matching the photographic report form. (Both the photography report form and the spectroscopy report form were each similarly revised in *IHW Amateur Observer's Bulletin* No. 6 from their versions in the *Manual*.) The principal difference was the request for information on the type of telescope and spectroscopic system used and on disperser characteristics. The archive listings indicate camera lens specifically with a "CL" and a camera lens may also be inferred, as in the listings of direct photographs, from the empty column listing for aperture.

Observer W. Tom Buchanan's spectrograph has an unusual design. It is basically an objective grating spectrograph using a camera lens. He has added a complex optical system which allows wavelength reference marks to be placed on the film with the target spectrum. His detailed description is on file with his spectra.

The format of the list of spectrograms in the printed archive is described below:

Date(UT) Decimal date of the time of observation. For spectrograms this is the middle of the exposure. Trailing zeroes are often mere space-fillers.

AON# Amateur observation network number, a unique reference number assigned to each observation.

Config The type of spectrograph used. The initial number and letter pair indicates the disperser: the number gives the grooves/mm of Grating or the apex angle of a Prism. The second letter indicates the specific configuration used: Non-objective, Objective, or Slitless.

Ins The type of instrument used. An "N" indicates a Newtonian reflector, an "R" indicates a refractor, and "CL" indicates a camera lens was used.

FL, f/, and Ap Instrument focal length [m], focal ratio, and aperture [m]. Listed are the effective focal length and effective focal ratio used. A note follows giving the nominal characteristics of the instrument if auxiliary optics were used.

ExpM Exposure time [min].

a

b

Figure 4. (a) Spectrogram of Comet Halley by W. Tom Buchanan taken on 9 April 1986 (AON# 870136). The continuum of reflected sunlight is punctuated with emissions of CN (on the far left) and various carbon compounds to the right. (b) Spectra of Comet Halley extend on both sides of the zero order image in this photograph by Stephen Edberg taken on 17 March 1986 (AON# 870132).

Emulsion Type of emulsion.

ISO The ASA/DIN speed of the emulsion.

Hyp "Y" indicates a hypersensitized emulsion, "C" stands for an exposure with a cooled-emulsion camera; otherwise an "N".

Gdng Type of guiding:

C - Computed offsets to telescope drive
M - By micrometer
O - Cross hairs on central condensation
S - Sidereal-rate drive or guiding on a star
T - Cross hairs tangent to coma
X - Cross hairs on a coma with no condensation

These methods are explained in Edberg (1983).

Id/Typ IHW- or observer-assigned number and type of image on file:

C - Contact print
N - Negative
P - Enlarged print
S - Slide
T - Transparency

Site Observing site identification number (cf. Table VII).

Observer(s) Name(s) of observer(s). Additional observers are indicated in notes.

Notes Observer's or editor's comments, if any.

## Photoelectric Photometry

Only one observer submitted photometric observations to the Amateur Observation Network, on his own report form (with the comment that the form in the manual was inadequate). These were forwarded to the professional Photometry and Polarimetry Network for disposition.

## Meteor Observations

At the time the IHW was being organized a professional network of meteor observers was not included. Amateur meteor observations were solicited to ensure that at least some meteor data would be included in the archives, especially since this is a subject easily and traditionally studied by amateurs.

With much already known about these meteor showers, hourly counts, photography, and spectrophotography were emphasized. Halley Meteor Days were set from 1982-1987 for May 2-6 and October 20-24.

Visual hourly counts were emphasized initially (in the Manual) but with the encouragement and assistance of David Meisel of the American Meteor Society (AMS) radio counts were later added to the program. Mike Morrow and Ruthi Moore, the IHW Meteor Recorders, designed an improved Visual/Radio Meteor Observation Report form which was distributed and explained in the acknowledgement letter to observers and in Bulletin No. 5.

Well over a thousand meteor reports were received from several hundred observers. The majority of them observed only over periods of one or two hours, rather than the more desirable multiple hour periods. Efforts in meteor photography were minimal. Only three direct photos were submitted (one Eta Aquarid, one Orionid, and one sporadic meteor) and no spectra. The meteor photography report form was updated in parallel with that of photography and that of spectroscopy.

On the advice of the IHW's Steering Group, a professional Meteor Studies network was created and announced in *IHW Newsletter* (Edberg, 1982 - 1987) No. 7 (18 June 1985). With this network organized, all the amateur observations were forwarded to Discipline Specialist Anton Hajduk at the Astronomical Institute of the Slovak Academy of Sciences for inclusion in the meteor archive. Copies of all the data are also included with the paper files of the amateur archive.

## III. FLEXIBLE IMAGE TRANSPORT SYSTEM (FITS) KEYWORDS IN THE DIGITAL ARCHIVE

### FITS Headers

The amateur data are computer-archived on CD-ROM and magnetic tape according to the standard, extended FITS format. The visual data use a header with table extension format. All the other types include all the data in the primary header. To maintain consistency with the P/Crommelin data set, the header + table extension is used for the archives containing P/Giacobini-Zinner and P/Halley even though it would have been more efficient to include all the magnitude data in the primary header.

The FITS keyword sets used in the archive include both the FITS standard keywords and the table extension keyword set that is offered by FITS. The keywords used are described separately in Tables III - VII.

Table III. All Types of Data

```
SIMPLE  =                    T / THIS IS A FITS FILE
BITPIX  =                    8 / BITS PER PIXEL
NAXIS   =                    0 / NO IMAGE DATA ARRAY PRESENT
EXTEND  =                    T / THERE MAY BE STANDARD EXTENSIONS

OBJECT  = 'ooo...oo'           / NAME OF OBJECT
FILE-NUM=               8nnnnn / UNIQUE FILE IDENTIFICATION NO.
DATE-OBS= 'dd/mm/YY'           / DATE OF MIDDLE OF OBSERVATION (UT)
TIME-OBS=                .ttttt / TIME OF MIDDLE OF OBSERVATION (UT)
DATE-REL= 'dd/mm/YY'           / DATE OF PUBLIC RELEASE
DISCIPLN= 'AMATEUR '           / IAU DISCIPLINE
LONG-OBS= 'ddd/mm/ss'          / EAST LONGITUDE OF OBSERVING SITE
LAT--OBS= 'sdd/mm/ss'          / LATITUDE OF OBSERVING SITE
SYSTEM  = '8nnnttii'           / OBSERVING SYSTEM CODE
OBSERVER= 'ooo...oo'           / NAME OF OBSERVER
SUBMITTR= 'sss...ss'           / NAME OF SUBMITTER OF DATA
SPEC-EVT=                    s / SPECIAL EVENT FLAG
```

Table IV. Visual Appearance

```
DAT-FORM= 'ASCII    '          / FORM OF DATA

DAT-TYPE= 'VISUAL MAG. EST.'   / TYPE OF DATA
ELEV-OBS=                 eeee / ELEVATION OF OBSERVING SITE (METER)
INSTRUME= 'iii...ii'           / TYPE OF INSTRUMENT USED
APERTURE=                a.aaa / APERTURE SIZE (METER)
FRATIO  =                 ff.f / FOCAL RATIO
POWER   =                  ppp / MAGNIFICATION
ORIGIN  = 'JET PROPULSION LAB' / TAPE WRITING INSTITUTION
COMMENT ccc...cc
    :

END

XTENSION= 'TABLE    '          / TABLE EXTENSION
BITPIX  =                    8 / BITS PER PIXEL
NAXIS   =                    2 / 2-D MATRIX
NAXIS1  =                   71 / NO. OF CHARACTERS PER ROW
NAXIS2  =                    1 / NO. OF ROWS
PCOUNT  =                    0 / NO RANDOM PARAMETERS
GCOUNT  =                    1 / ONLY ONE GROUP
TFIELDS =                   16 / NO. OF FIELDS PER ROW

TTYPE1  = 'MAG. EST. METHOD'   / VALUES: B=BOBROVNIKOFF, M=MORRIS, S=SIDGWICK
TBCOL1  =                    1 / STARTING COLUMN
TFORM1  = 'A1       '          / FORMAT
TNULL1  = '?        '          / MISSING VALUE

TTYPE2  = 'COMA MAGNITUDE'     / TOTAL MAGNITUDE    (GIVEN AS ALPHANUMERIC
TBCOL2  =                    3 / STARTING COLUMN     STRING, SINCE 1ST COL. CAN
TFORM2  = 'A5       '          / FORMAT              BE > SIGN, WHICH IMPLIES
TNULL2  = '-99.0    '          / MISSING VALUE       UPPER LIMIT)

TTYPE3  = 'MAGNITUDE COMMENT'  / INDICATES UNCERTAINTY IF VALUE IS : OR ?
TBCOL3  =                    8 / STARTING COLUMN
TFORM3  = 'A1       '          / FORMAT
TNULL3  = '         '          / MISSING VALUE

TTYPE4  = 'CHART NO.'          / USED FOR COMPARISON STARS  (SEE PRINTED CROMME-
TBCOL4  =                   10 / STARTING COLUMN             LIN ARCHIVE OR
TFORM4  = 'A7       '          / FORMAT                      INT'L. COMET QTRLY.
TNULL4  = '         '          / MISSING VALUE               FOR EXPLANATION)

TTYPE5  = 'COMA DIAMETER 1'    / CIRCULAR COMA DIAM. (OR MAJOR AXIS, ELLIPTICAL
TBCOL5  =                   18 / STARTING COLUMN                              COMA)
TFORM5  = 'E5.1     '          / FORMAT
TUNIT5  = 'ARCMIN.  '          / UNIT
TNULL5  = '-99.0    '          / MISSING VALUE

TTYPE6  = 'COMA DIAMETER 2'    / MINOR AXIS, ELLIPTICAL COMA
TBCOL6  =                   24 / STARTING COLUMN
TFORM6  = 'E5.1     '          / FORMAT
TUNIT6  = 'ARCMIN.  '          / UNIT
TNULL6  = '-99.0    '          / MISSING VALUE (OR CIRCULAR COMA)

TTYPE7  = 'DEGREE OF COND.'    / DEGREE OF CONDENSATION
TBCOL7  =                   30 / STARTING COLUMN
TFORM7  = 'I1       '          / FORMAT
TNULL7  = '         '          / MISSING VALUE

TTYPE8  = 'LENGTH OF TAIL 1'   / TAIL LENGTH (1ST TAIL)
TBCOL8  =                   32 / STARTING COLUMN
TFORM8  = 'E5.2     '          / FORMAT
TUNIT8  = 'DEGREE   '          / UNIT
TNULL8  = '-9.00    '          / MISSING VALUE

TTYPE9  = 'P.A. OF TAIL 1'     / POSITION ANGLE OF TAIL (1ST TAIL)
TBCOL9  =                   38 / STARTING COLUMN
TFORM9  = 'I3       '          / FORMAT
TUNIT9  = 'DEGREE   '          / UNIT
TNULL9  = '-99      '          / MISSING VALUE
```

Table IV. Visual Appearance (Cont'd)

```
TTYPE10 = 'LENGTH OF TAIL 2'    / TAIL LENGTH (2ND TAIL, IF SEEN)
TBCOL10 =                    42 / STARTING COLUMN
TFORM10 = 'E5.2     '           / FORMAT
TUNIT10 = 'DEGREE   '           / UNIT
TNULL10 = '-9.00    '           / MISSING VALUE

TTYPE11 = 'P.A. OF TAIL 2'      / POSITION ANGLE OF TAIL (2ND TAIL, IF SEEN)
TBCOL11 =                    48 / STARTING COLUMN
TFORM11 = 'I3       '           / FORMAT
TUNIT11 = 'DEGREE   '           / UNIT
TNULL11 = '-99      '           / MISSING VALUE

TTYPE12 = 'LENGTH OF TAIL 3'    / TAIL LENGTH (3RD TAIL, IF SEEN)
TBCOL12 =                    52 / STARTING COLUMN

TFORM12 = 'E5.2     '           / FORMAT
TUNIT12 = 'DEGREE   '           / UNIT
TNULL12 = '-9.00    '           / MISSING VALUE

TTYPE13 = 'P.A. OF TAIL 3'      / POSITION ANGLE OF TAIL (3RD TAIL, IF SEEN)
TBCOL13 =                    58 / STARTING COLUMN
TFORM13 = 'I3       '           / FORMAT
TUNIT13 = 'DEGREE   '           / UNIT
TNULL13 = '-99      '           / MISSING VALUE

TTYPE14 = 'LIMITING MAG.'       / MAGNITUDE OF FAINTEST STAR VISIBLE TO NAKED EYE
TBCOL14 =                    62 / STARTING COLUMN
TFORM14 = 'E4.1     '           / FORMAT
TNULL14 = '-9.0     '           / MISSING VALUE

TTYPE15 = 'SKY INTERFERENCE'    / LIGHT INTERFERING WITH OBSERVATION
TBCOL15 =                    66 / STARTING COLUMN  (C=CITY LIGHTS, M=MOONLIGHT,
TFORM15 = 'A4       '           / FORMAT              T=TWILIGHT, Z=ODIACAL LIGHT)
TNULL15 = '         '           / MISSING VALUE (NO INTERFERENCE)
COMMENT VALUE EQUAL TO : IMPLIES UNCERTAINTY IN FAINTEST STAR MAG.

TTYPE16 = 'DARK ADAPTED'        / WAS OBSERVER DARK ADAPTED? (Y=YES, N=NO)
TBCOL16 =                    71 / STARTING COLUMN
TFORM16 = 'A1       '           / FORMAT
TNULL16 = '         '           / MISSING VALUE

END
```

Table V. Drawings

```
DAT-FORM= 'NODATA   '           / FORM OF DATA (NO DATA RECORDS)

DAT-TYPE= 'DRAWING '            / TYPE OF DATA
ELEV-OBS=                  eeee / ELEVATION OF OBSERVING SITE (METER)
INSTRUME= 'iii...ii'            / TYPE OF INSTRUMENT USED
APERTURE=                 a.aaa / APERTURE SIZE (METER)
FRATIO  =                  ff.f / FOCAL RATIO
N-POWER =                     n / NO. OF MAGNIFICATIONS USED
POWER   =                   PPP / MAGNIFICATION
   :
MAG-LIM =                   m.m / MAGNITUDE OF FAINTEST STAR VISIBLE TO NAKED EYE
PLTSCALE=                 PPP.p / PLATE (DRAWING) SCALE (ARCSEC/MM)
DURATION=                   ddd / TIME FOR MAKING DRAWING (SECOND)
ORIGIN  = 'JET PROPULSION LAB' / TAPE WRITING INSTITUTION
COMMENT ccc...cc
   :

END
```

Table VI. Photography

```
DAT-FORM= 'NODATA   '           / FORM OF DATA (NO DATA RECORDS)

DAT-TYPE= 'PHOTOGRAPH'          / TYPE OF DATA
ELEV-OBS=                  eeee / ELEVATION OF OBSERVING SITE (METER)
PRNCPLFL=                 p.ppp / PRIMARY, UNMODIFIED INSTR. FOCAL LENGTH (METER)
TELEFL  =                 t.ttt / EFFECTIVE FOCAL LENGTH (METER)
APERTURE=                 a.aaa / APERTURE SIZE (METER)
FRATIO  =                  ff.f / FOCAL RATIO
FOVLENGT=                  ff.f / COMPUTED FOV ASSUMING 135 FORMAT (DEGREE)
FOVWIDTH=                  ff.f / COMPUTED FOV ASSUMING 135 FORMAT (DEGREE)
PLTSCALE=                 PPP.P / PLATE SCALE (ARCSEC/MM)
EMULSION= 'eee...ee'            / TYPE OF EMULSION
ISO     = 'aaaa/dd '            / ISO (ASA/DIN)
HYPERED = 'hhh...hh'            / HYPERSENSITIZATION TREATMENT
TEMP-HYP=                    tt / HYPERSENSITIZATION TEMPERATURE (CELSIUS)
TIME-HYP=                 ttt.t / HYPERSENSITIZATION TIME (HOUR)
TEMPEMUL=                    tt / COLD CAMERA TEMPERATURE (CELSIUS)
DEVELOPR= 'ddd...dd'            / DEVELOPER USED
TEMP-DEV=                    tt / DEVELOPING TEMPERATURE (CELSIUS)
TIME-DEV=                   ttt / DEVELOPING TIME (SECOND)
GUIDING = 'ggg...gg'            / GUIDING METHOD
EXPOSURE=                  eeee / EXPOSURE TIME (SECOND)
IM-ID   = 'iii      '           / IMAGE IDENTIFICATION NO.
IM-TYPE = 'iii      '           / TYPE OF IMAGE ON FILE
ORIGIN  = 'JET PROPULSION LAB' / TAPE WRITING INSTITUTION
COMMENT ccc...cc
   :

END
```

Table VII. Spectroscopy

```
DAT-FORM= 'NODATA  '            / FORM OF DATA (NO DATA RECORDS)

DAT-TYPE= 'SPECTRUM'            / TYPE OF DATA
ELEV-OBS=                  eeee / ELEVATION OF OBSERVING SITE (METER)
INSTRUME= 'iii...ii'            / TYPE OF INSTRUMENT USED
PRNCPLFL=                 p.ppp / PRIMARY, UNMODIFIED INSTR. FOCAL LENGTH (METER)
TELEFL  =                 t.ttt / EFFECTIVE FOCAL LENGTH (METER)
APERTURE=                 a.aaa / APERTURE SIZE (METER)
FRATIO  =                  ff.f / FOCAL RATIO
EMULSION= 'eee...ee'            / TYPE OF EMULSION
ISO     = 'aaaa/dd '            / ISO (ASA/DIN)
HYPERED = 'hhh...hh'            / HYPERSENSITIZATION TREATMENT
TEMP-HYP=                    tt / HYPERSENSITIZATION TEMPERATURE (CELSIUS)
TIME-HYP=                 ttt.t / HYPERSENSITIZATION TIME (HOUR)
TEMPEMUL=                    tt / COLD CAMERA TEMPERATURE (CELSIUS)
DEVELOPR= 'ddd...dd'            / DEVELOPER USED
TEMP-DEV=                    tt / DEVELOPING TEMPERATURE (CELSIUS)
TIME-DEV=                   ttt / DEVELOPING TIME (SECOND)
GUIDING = 'ggg...gg'            / GUIDING METHOD
EXPOSURE=                  eeee / EXPOSURE TIME (SECOND)
GRATING =                 ggg.g / GRATING CONSTANT (GROOVES/MM)
ORDER   =                     o / BLAZE ORDER
APDSPRSR=                a.aaaa / DISPERSER APERTURE (METER)
PROJDIST=                p.pppp / PROJECTION DISTANCE (METER)
APEX-ANG=                   aaa / PRISM APEX ANGLE (DEGREE)
GLASSTYP= 'ggg...gg'            / PRISM GLASS TYPE
AP-PRISM=                a.aaaa / PRISM APERTURE (METER)
METHOD  = 'mmm...mm'            / SPECTROSCOPIC METHOD
IM-ID   = 'iii     '            / IMAGE IDENTIFICATION NO.
IM-TYPE = 'iii     '            / TYPE OF IMAGE ON FILE
ORIGIN  = 'JET PROPULSION LAB' / TAPE WRITING INSTITUTION
COMMENT ccc...cc
   :

END
```

## IV. OBSERVING SITE LIST

Listed in Table VIII below are the observers and all the comet observing sites they supplied to the IHW. Observers' names with diacritical marks on any letters were spelled, in this list, by adopting the closest English letter visually matching the letters with marks.

An observer may not have observed from all the sites listed. The site number preceding the site coordinates corresponds to the number in the Site column in the archive listings.

In some cases the geographic coordinates were estimated by the editor. Occasionally, different sites received the same coordinates because specific coordinates could not be found. Precision is the editor's subjective estimate of the observer's precision in reporting the site's coordinates. Especially large values indicate the editor estimated the site coordinates with an available map or atlas which did not show the place named by the observer. In a few cases the site position's precision was so high that it exceeded the space available in the format used here. Country is the IHW-assigned country code.

The country code, identified in Table IX, is in the last column.

## V. CONCLUSIONS

Halley's Comet inspired amateur astronomers worldwide to contribute useful data to the IHW Archive. Halley is special, though, and the numbers of participants for any other comet or other significant astronomical event would probably be only a small fraction of this number. (One need only contemplate the small number of participants for the IHW-sponsored watches on P/Crommelin and P/Giacobini-Zinner to reach the same conclusion.) In another aspect of completeness, there are certainly numerous high quality photographs taken by amateurs which were not reported to the IHW. This is an unfortunate loss, as are the photos reported without copies submitted.

It was heartening to find that the majority of those participating took their efforts seriously enough to submit useful data. It was interesting to find that the observers new to the field of cometary observations followed directions better than the more experienced observers.

Future organizers of observational campaigns should certainly include amateur astronomers in their efforts. The talent available is a valuable resource that should be tapped. Do not expect even the most careful and lucid instructions to be followed rigorously, however. Even professional astronomers can be willful on occasion, and amateurs additionally may fail to appreciate the importance of standardizing observing techniques.

Table VIII. Observers

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| Abbadessa,M. | 1 | 017/40/00 | +40/32/00 | 140 | 1 arcmin | 7 |
| | 2 | 015/00/00 | +35/26/00 | 300 | 1 arcmin | 7 |
| Abbott,J. | 1 | 031/10/52 | -17/43/35 | 1379 | 1 arcsec | 59 |
| | 2 | 031/11/24 | -17/42/44 | 1407 | 1 arcsec | 59 |
| | 3 | 000/38/19 | +51/48/12 | 24 | 1 arcsec | 15 |
| | 4 | 000/35/42 | +51/48/21 | 53 | 1 arcsec | 15 |
| Adamoli,G. | 1 | 010/00/00 | +45/00/00 | | 5 deg | 7 |
| | 2 | 012/00/00 | +45/30/00 | | 1 deg | 7 |
| Aerts,L. | 1 | 004/44/00 | +51/00/00 | 15 | 1 arcmin | 29 |
| | 2 | 004/42/00 | +51/02/00 | 10 | 1 arcmin | 29 |
| | 3 | 006/01/24 | +43/58/30 | 735 | 0.1 arcmin | 4 |
| | 4 | 004/44/00 | +51/08/00 | 25 | 1 arcmin | 29 |
| Afeltra,J. | 1 | 301/35/58 | -34/36/30 | 40 | 1 arcsec | 27 |
| | 2 | 301/33/56 | -34/36/19 | 35 | 1 arcsec | 27 |
| Akita,I. | 1 | 135/47/26 | +34/50/57 | 50 | 0.1 arcsec | 8 |
| | 2 | observing site unknown | | | | |
| Aleynikov,A. | 1 | observing site unknown | | | | |
| Allen,E. | 1 | 287/27/30 | +46/23/24 | 38 | 0.1 arcmin | 21 |
| | 2 | 287/40/30 | +46/28/30 | 33 | 0.1 arcmin | 21 |
| | 3 | 287/44/42 | +46/28/18 | 3 | 0.1 arcmin | 21 |
| Allen,M.T. | 1 | 278/52/00 | +37/59/00 | 671 | 1 arcmin | 16 |
| | 2 | 281/02/00 | +39/05/00 | 549 | 1 arcmin | 16 |
| | 3 | 149/00/00 | -35/18/00 | | 1 deg | 26 |
| | 4 | 144/00/00 | -17/06/00 | | 1 deg | 26 |
| Alvarez,M.L. | 1 | observing site unknown | | | | |
| Alves,A.A. | 1 | 311/28/24 | -27/34/30 | | 0.5 arcmin | 2 |
| | 2 | 311/28/20 | -27/34/34 | | 0.5 arcmin | 2 |
| Amoretti,M. | 1 | 007/45/54 | +48/49/03 | 86 | 1 arcsec | 7 |
| Anklam,W. | 1 | 013/21/11 | +52/27/32 | 78 | 1 arcsec | 25 |
| Antal,M. | 1 | 018/33/18 | +53/05/48 | 91 | 0.1 arcmin | 11 |
| Arbour,R. | 1 | 001/14/49 | +51/07/13 | 122 | 0.1 arcsec | 15 |
| Ariail,R.B. | 1 | 278/58/00 | +34/00/00 | 18 | 1 arcmin | 16 |
| | 2 | 277/37/00 | +35/14/00 | 975 | 1 arcmin | 16 |
| Arpin,P. | 1 | 286/31/00 | +45/51/00 | 30 | 1 deg | 21 |
| | 2 | 286/38/00 | +45/18/00 | 30 | 1 deg | 21 |
| | 3 | 285/41/00 | +45/33/00 | 100 | 1 deg | 21 |
| | 4 | 291/35/00 | +12/06/00 | 5 | 1 arcmin | 75 |
| | 5 | 286/32/00 | +45/26/00 | | 1 deg | 21 |
| Ashdown,M. | 1 | 174/46/00 | -41/17/00 | 250 | 1 arcmin | 48 |
| | 2 | 172/38/00 | -43/32/00 | 80 | 1 arcmin | 48 |
| | 3 | 168/42/00 | -45/02/00 | 700 | 1 arcmin | 48 |
| | 4 | 174/20/00 | -41/17/00 | 20 | 1 arcmin | 48 |
| Ashley,J.B. | 1 | 241/37/48 | +33/48/24 | 122 | 0.1 arcmin | 16 |
| | 2 | 242/35/42 | +33/32/54 | 823 | 0.1 arcmin | 16 |
| | 3 | 243/16/48 | +33/29/00 | 1329 | 0.1 arcmin | 16 |
| Association M31 | 1 | 055/18/00 | -21/02/00 | 500 | 1 arcmin | 70 |
| Auckbur,R. | 1 | 057/28/36 | -20/16/00 | 360 | 0.1 arcmin | 45 |
| | 2 | 057/26/54 | -20/13/18 | 210 | 0.1 arcmin | 45 |
| Bagla,J.S. | 1 | 077/12/00 | +28/38/00 | 230 | 1 arcmin | 5 |
| | 2 | 075/52/00 | +26/55/00 | 220 | 1 arcmin | 5 |
| Bailey,G. | 1 | 256/42/16 | +44/05/12 | 1049 | 1 arcsec | 16 |
| | 2 | 256/43/00 | +43/50/00 | | 1 deg | 16 |
| Barak,R. | 1 | 016/58/00 | +49/58/30 | 350 | 1 arcmin | 35 |
| Barclay,J. | 1 | 153/06/56 | -26/49/26 | | 0.1 arcsec | 26 |
| | 2 | 153/10/58 | -27/27/15 | | 0.1 arcsec | 26 |
| Baroni,S. | 1 | 009/07/02 | +45/27/19 | 138 | 0.1 arcsec | 7 |
| | 2 | 009/11/37 | +45/49/33 | 854 | 0.1 arcsec | 7 |
| | 3 | 009/15/00 | +46/26/00 | 1610 | 1 arcmin | 7 |
| | 4 | 009/23/00 | +45/51/00 | 1300 | 1 arcmin | 7 |
| | 5 | 008/27/00 | +45/53/00 | 1000 | 1 arcmin | 7 |
| | 6 | 009/30/54 | +45/47/21 | 1340 | 0.1 arcsec | 7 |
| Bartnik,M. | 1 | 012/23/00 | +51/18/00 | 120 | 1 arcmin | 23 |
| Battaini,P. | 1 | 009/00/00 | +46/00/00 | | 2 deg | 7 |
| | 2 | 015/31/00 | +21/35/00 | 1165 | 0.01 deg | 65 |
| Battipede,F. | 1 | 009/00/00 | +46/00/00 | | 2 deg | 7 |
| Batza,H. | 1 | observing site unknown | | | | |
| | 2 | observing site unknown | | | | |
| Bauer,H.-P. | 1 | 011/37/08 | +52/10/19 | 70 | 3.6 arcsec | 23 |
| | 2 | 011/38/20 | +52/10/16 | 70 | 3.6 arcsec | 23 |
| Beach,G. | 1 | 279/03/32 | +46/27/34 | 259 | 1 arcsec | 21 |
| | 2 | 279/01/28 | +46/28/03 | 294 | 1 arcsec | 21 |
| Begbie,M.J.R. | 1 | 031/00/22 | -17/49/39 | 1450 | 1 arcsec | 59 |
| | 2 | 031/11/24 | -17/42/44 | 1407 | 1 arcsec | 59 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| Belli,V. | 1 | 009/00/00 | +46/00/00 | | 2 deg | 7 |
| Belyaev,D. | 1 | observing site unknown | | | | |
| Bembrick,C. | 1 | 151/12/12 | -33/51/40 | 44 | 1 arcsec | 26 |
| | 2 | 149/55/05 | -33/28/37 | 990 | 1 arcsec | 26 |
| | 3 | 144/39/00 | -38/16/00 | | 10 arcmin | 26 |
| | 4 | 130/58/00 | -25/11/00 | 782 | 1 arcmin | 26 |
| | 5 | 149/00/30 | -35/19/18 | 767 | 0.1 arcmin | 26 |
| Benavides,A. | 1 | 293/04/00 | +10/31/00 | | 2 deg | 17 |
| | 2 | 293/03/42 | +10/31/12 | | 0.1 arcsec | 17 |
| | 3 | 293/51/00 | +10/25/00 | | 1 arcmin | 17 |
| | 4 | 293/04/00 | +10/31/00 | | 2 deg | 17 |
| | 5 | 293/05/00 | +09/49/00 | | 2 deg | 17 |
| Berge,P.M. | 1 | 055/00/00 | -21/00/00 | 500 | 1 deg | 70 |
| Bernabeu,M. | 1 | 057/32/22 | -20/01/34 | 2 | 1 arcsec | 45 |
| Bernardis,A. | 1 | 008/47/00 | +45/44/00 | 350 | 1 arcmin | 7 |
| | 2 | 008/46/00 | +45/52/00 | 1230 | 1 arcmin | 7 |
| | 3 | 012/36/00 | +35/32/00 | 100 | 1 arcmin | 7 |
| | 4 | 007/52/00 | +45/52/00 | 2390 | 1 arcmin | 7 |
| Bezrodniy,A. | 1 | observing site unknown | | | | |
| Bhadriah,L.H.E. | 1 | 076/42/00 | +12/31/00 | 770 | 1 arcmin | 5 |
| Bigbie,B. | 1 | 256/03/00 | +30/38/00 | 488 | 5 arcmin | 16 |
| Bilek,V. | 1 | 016/44/00 | +49/06/00 | 200 | 1 arcmin | 35 |
| | 2 | 016/07/00 | +49/34/00 | 700 | 1 arcmin | 35 |
| Binnewies,S. | 1 | 289/12/00 | -29/13/00 | 2400 | 1 arcmin | 32 |
| Birkner,A. | 1 | 272/20/46 | +41/55/19 | 190 | 3.6 arcsec | 16 |
| Boetto,M. | 1 | 008/36/00 | +45/30/00 | 240 | 1 arcmin | 7 |
| Bohme,D. | 1 | 012/01/15 | +51/09/05 | 169 | 1 arcsec | 23 |
| Bonnet,M.C. | 1 | 055/00/00 | -21/00/00 | | 2 deg | 70 |
| Bordignon,F. | 1 | 009/00/00 | +46/00/00 | | 2 deg | 7 |
| Bortle,J.E. | 1 | 286/15/24 | +41/34/18 | 122 | 0.1 arcmin | 16 |
| | 2 | 286/15/00 | +41/49/00 | | 1 arcmin | 16 |
| | 3 | 286/20/00 | +42/00/00 | | 1 arcmin | 16 |
| | 4 | 165/00/00 | +15/00/00 | | 10 deg | 98 |
| | 5 | 151/00/00 | -34/00/00 | | 1 deg | 26 |
| | 6 | 134/00/00 | -23/42/00 | 457 | 1 deg | 26 |
| | 7 | 130/54/00 | -25/30/00 | 549 | 5 arcmin | 26 |
| Both,S.J.J. | 1 | 004/43/00 | +52/01/00 | -2 | 1 arcmin | 46 |
| | 2 | 004/46/00 | +52/01/30 | -2 | 1 arcmin | 46 |
| | 3 | 008/25/00 | +50/10/00 | | 1 arcmin | 22 |
| Bottger,B. | 1 | 008/26/24 | +48/59/24 | 116 | 0.01 deg | 25 |
| | 2 | 008/28/12 | +48/51/00 | 400 | 0.01 deg | 25 |
| | 3 | 008/31/58 | +48/51/20 | 406 | 0.01 deg | 25 |
| | 4 | 343/23/00 | +28/15/00 | 2400 | 1 arcmin | 74 |
| | 5 | 343/23/00 | +28/15/00 | 100 | 1 arcmin | 74 |
| | 6 | 343/23/00 | +28/15/00 | 1400 | 1 arcmin | 74 |
| | 7 | 343/23/00 | +28/15/00 | 2100 | 1 arcmin | 74 |
| | 8 | 343/23/00 | +28/15/00 | 2200 | 1 arcmin | 74 |
| Bouma,R.J. | 1 | 006/13/18 | +53/23/12 | 0 | 0.1 arcmin | 46 |
| | 2 | 006/39/12 | +53/18/36 | 0 | 0.1 arcmin | 46 |
| | 3 | 006/29/42 | +53/14/24 | 0 | 0.1 arcmin | 46 |
| | 4 | 006/01/24 | +43/58/30 | 735 | 0.1 arcmin | 46 |
| | 5 | 006/00/00 | +53/00/00 | | 1 deg | 46 |
| | 6 | 006/33/00 | +52/53/00 | | 1 arcmin | 46 |
| | 7 | 006/15/36 | +53/20/36 | | 0.1 arcmin | 46 |
| | 8 | 006/34/18 | +53/17/12 | | 0.1 arcmin | 46 |
| | 9 | 006/34/18 | +53/15/00 | | 0.1 arcmin | 46 |
| | 10 | 006/34/18 | +53/20/00 | | 0.1 arcmin | 46 |
| | 11 | 151/29/24 | -33/19/48 | 30 | 0.01 arcmin | 26 |
| | 12 | 138/41/00 | -34/52/00 | 110 | 1 arcmin | 26 |
| | 13 | 143/22/12 | -34/22/12 | 60 | 0.01 arcmin | 26 |
| | 14 | 149/04/12 | -31/16/30 | 1125 | 0.1 arcmin | 26 |
| | 15 | 149/16/06 | -31/16/24 | 520 | 0.1 arcmin | 26 |
| | 16 | 149/50/00 | -31/40/00 | 450 | 1 arcmin | 26 |
| | 17 | 153/10/30 | -27/50/00 | 20 | 0.1 arcmin | 26 |
| | 18 | 153/15/30 | -27/41/00 | 0 | 0.1 arcmin | 26 |
| | 19 | 153/16/54 | -27/46/36 | 0 | 0.1 arcmin | 26 |
| | 20 | 153/17/48 | -27/43/24 | 0 | 0.1 arcmin | 26 |
| | 21 | 153/20/12 | -27/43/24 | 0 | 0.1 arcmin | 26 |
| | 22 | 153/15/00 | -27/35/00 | 85 | 1 arcmin | 26 |
| Bracken,R. | 1 | 239/10/00 | +35/18/00 | 61 | 1 arcmin | 16 |
| Bragadin,A. | 1 | 011/25/00 | +44/30/00 | 50 | 1 arcmin | 7 |
| | 2 | 011/13/00 | +44/18/00 | 300 | 1 arcmin | 7 |
| | 3 | 012/18/00 | +44/25/00 | 5 | 1 arcmin | 7 |
| | 4 | 011/12/00 | +44/10/00 | 450 | 1 arcmin | 7 |
| | 5 | 010/00/00 | +44/15/00 | 850 | 1 deg | 7 |
| Brancik,K. | 1 | 017/00/00 | +48/49/00 | 182 | 1 arcmin | 35 |
| | 2 | 016/51/00 | +48/50/00 | 155 | 1 arcmin | 35 |
| Brandli,W. | 1 | 008/00/00 | +47/30/00 | 690 | 4 deg | 18 |
| | 2 | 008/00/00 | +47/00/00 | 1200 | 4 deg | 18 |
| Bremseth,P.-J. | 1 | 010/32/21 | +63/25/32 | 5 | 1 arcsec | 47 |
| | 2 | 344/21/00 | +27/39/00 | | 1 deg | 74 |
| | 3 | 011/35/00 | +63/25/00 | | 1 deg | 47 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| Bretschneider,H. | 1 | 012/38/12 | +50/35/54 | 480 | 0.1 arcmin | 23 |
| | 2 | 012/38/48 | +50/35/54 | 430 | 0.1 arcmin | 23 |
| Briesemeister,J. | 1 | 013/21/12 | +52/27/30 | 78 | 0.1 arcmin | 25 |
| Bril,H.J. | 1 | 005/48/48 | +53/13/06 | 30 | 0.1 arcmin | 46 |
| | 2 | 005/48/00 | +50/57/00 | 50 | 1 arcmin | 29 |
| Bro,M. | 1 | 267/16/00 | +41/56/30 | 274 | 1 arcmin | 16 |
| Brogioni,A. | 1 | 012/02/35 | +43/07/45 | 250 | 5 arcsec | 7 |
| Bruhin,W. | 1 | 007/27/15 | +46/51/14 | 960 | 0.1 arcsec | 18 |
| Brutsche,E. | 1 | 277/01/00 | +41/25/00 | 196 | 1 arcmin | 16 |
| | 2 | 279/00/00 | +27/30/00 | 18 | 1 deg | 16 |
| | 3 | 278/00/00 | +26/00/00 | 14 | 1 deg | 16 |
| Bryant,K. | 1 | 145/00/00 | -38/00/00 | 61 | 1 deg | 26 |
| Buchanan,W.T. | 1 | 275/15/00 | +32/50/00 | 425 | 1 arcmin | 16 |
| | 2 | 275/04/00 | +33/47/00 | 323 | 1 arcmin | 16 |
| | 3 | 277/01/00 | +35/22/00 | 1847 | 1 arcmin | 16 |
| | 4 | 275/09/00 | +33/44/00 | 375 | 1 arcmin | 16 |
| | 5 | 289/03/00 | -29/22/00 | 1124 | 1 arcmin | 32 |
| Budilka,P. | 1 | observing site unknown | | | | |
| Bukotkin,A. | 1 | observing site unknown | | | | |
| Burch,J.Q. | 1 | 237/22/00 | +47/35/00 | 24 | 1 arcmin | 16 |
| | 2 | 237/13/00 | +47/34/00 | 515 | 1 arcmin | 16 |
| | 3 | 237/17/00 | +47/37/00 | 122 | 1 arcmin | 16 |
| | 4 | 203/45/00 | +20/10/00 | 3054 | 1 arcmin | 76 |
| Bus,E.P. | 1 | 006/13/18 | +53/23/12 | 0 | 0.1 arcmin | 46 |
| | 2 | 006/39/12 | +53/18/36 | 0 | 0.1 arcmin | 46 |
| | 3 | 006/41/30 | +53/10/42 | 0 | 0.1 arcmin | 46 |
| | 4 | 006/01/24 | +43/58/30 | 735 | 0.1 arcmin | 4 |
| | 5 | 006/32/30 | +53/13/12 | 0 | 0.1 arcmin | 46 |
| | 6 | 006/15/36 | +53/20/36 | 0 | 0.1 arcmin | 46 |
| | 7 | 006/26/12 | +53/14/24 | | 0.1 arcmin | 46 |
| | 8 | 345/55/54 | +28/38/18 | 140 | 0.1 arcmin | 74 |
| | 9 | 345/48/30 | +28/44/42 | 2340 | 0.1 arcmin | 74 |
| Buso,V. | 1 | observing site unknown | | | | |
| Campbell,R.N. | 1 | 170/30/00 | -45/54/00 | 80 | 1 arcmin | 48 |
| | 2 | 168/42/00 | -45/02/00 | 700 | 1 arcmin | 48 |
| Campos,J. | 1 | 030/56/37 | -29/55/25 | 112 | 1 arcsec | 13 |
| | 2 | 031/06/20 | -29/37/30 | 119 | 1 arcsec | 13 |
| | 3 | 030/25/00 | -29/45/00 | 850 | 1 arcmin | 13 |
| | 4 | 030/40/50 | -29/44/30 | 823 | 1 arcsec | 13 |
| | 5 | 021/12/00 | -28/18/00 | 1520 | 1 arcmin | 13 |
| | 6 | 027/37/00 | -28/20/00 | | 1 deg | 13 |
| | 7 | 032/00/00 | -30/00/00 | 10668 | 10 deg | 48 |
| Camurri,L. | 1 | 009/13/00 | +45/32/00 | 130 | 1 arcmin | 7 |
| | 2 | 009/28/00 | +45/56/00 | 770 | 1 arcmin | 7 |
| | 3 | 057/21/00 | -20/18/00 | 0 | 1 arcmin | 45 |
| Cano,M. | 1 | 359/07/00 | +41/39/00 | | 2 deg | 14 |
| Cappellari,M. | 1 | 011/28/06 | +45/32/33 | 184 | 1 arcsec | 7 |
| Cardiel,N. | 1 | 357/04/00 | +40/45/00 | 1005 | 1 arcmin | 14 |
| | 2 | 355/52/15 | +40/17/12 | 575 | 1 arcsec | 14 |
| | 3 | 356/16/00 | +40/19/00 | | 1 deg | 14 |
| | 4 | 355/55/00 | +40/17/00 | | 1 deg | 14 |
| | 5 | 356/54/39 | +40/31/24 | 929 | 1 arcsec | 14 |
| | 6 | 355/52/00 | +40/38/00 | | 1 deg | 14 |
| | 7 | 356/40/00 | +40/56/00 | | 2 deg | 14 |
| Carello,S. | 1 | observing site unknown | | | | |
| Carragan,J. | 1 | 286/26/30 | +42/45/55 | 164 | 1 arcsec | 16 |
| | 2 | 286/19/51 | +42/42/36 | 98 | 1 arcsec | 16 |
| | 3 | 286/03/39 | +42/38/33 | 128 | 1 arcsec | 16 |
| | 4 | 286/18/16 | +42/41/28 | 67 | 1 arcsec | 16 |
| | 5 | 288/31/00 | -30/16/00 | | 0.5 deg | 32 |
| | 6 | 289/15/00 | -30/01/00 | | 0.5 deg | 32 |
| Carragan,W. | 1 | 286/26/30 | +42/45/55 | 164 | 1 arcsec | 16 |
| | 2 | 286/19/51 | +42/42/36 | 98 | 1 arcsec | 16 |
| | 3 | 286/03/39 | +42/38/33 | 128 | 1 arcsec | 16 |
| | 4 | 286/18/16 | +42/41/28 | 67 | 1 arcsec | 16 |
| | 5 | 288/31/00 | -30/16/00 | | 0.5 deg | 32 |
| | 6 | 289/15/00 | -30/01/00 | | 0.5 deg | 32 |
| Castineiras,R.S.J. | 1 | 301/35/58 | -34/36/30 | 40 | 1 arcsec | 27 |
| | 2 | 301/33/56 | -34/36/19 | | 1 arcsec | 27 |
| | 3 | 301/34/16 | -34/37/07 | 20 | 0.1 arcsec | 27 |
| | 4 | 301/35/02 | -34/38/55 | | 1 arcsec | 27 |
| Castino,R. | 1 | 007/12/10 | +44/57/04 | 627 | 1 arcsec | 7 |
| Castrillon,M.E. | 1 | 296/06/00 | -34/30/00 | 154 | 1 arcmin | 27 |
| Chernis,K. | 1 | observing site unknown | | | | |
| Chester,G.R. | 1 | 282/01/01 | +38/36/25 | 146 | 1 arcsec | 16 |
| Chmielewski,W. | 1 | 303/40/00 | +35/15/00 | 20 | 1 arcmin | 89 |
| | 2 | 292/52/00 | +30/54/00 | 20 | 1 arcmin | 89 |
| | 3 | 282/45/00 | +25/48/00 | 20 | 1 arcmin | 89 |
| | 4 | 278/15/00 | +24/23/00 | 20 | 1 arcmin | 88 |
| | 5 | 273/37/00 | +26/48/00 | 20 | 1 arcmin | 88 |
| | 6 | 269/10/00 | +30/00/00 | 20 | 1 arcmin | 16 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| | 7 | 269/05/00 | +30/05/00 | 20 | 1 arcmin | 16 |
| | 8 | 269/37/00 | +27/25/00 | 20 | 1 arcmin | 88 |
| | 9 | 275/10/00 | +21/38/00 | 20 | 1 arcmin | 87 |
| | 10 | 279/31/00 | +22/09/00 | 20 | 1 arcmin | 79 |
| | 11 | 298/20/00 | +32/00/00 | 20 | 1 arcmin | 89 |
| Chodorowski,F. | 1 | 023/06/46 | +53/04/45 | 150 | 1 arcsec | 11 |
| Chuprakov,S. | 1 | observing site unknown | | | | |
| Churyumov,K. | 1 | observing site unknown | | | | |
| Cifuentes,E. | 1 | 358/06/24 | +43/17/01 | 120 | 1 arcsec | 14 |
| | 2 | 358/00/57 | +43/17/44 | 108 | 1 arcsec | 14 |
| | 3 | 293/56/12 | +18/22/48 | 25 | 1 arcsec | 77 |
| | 4 | 292/49/42 | +18/01/15 | 1 | 1 arcsec | 77 |
| | 5 | 294/02/00 | +18/18/18 | 175 | 1 arcsec | 77 |
| | 6 | 057/32/22 | -20/01/34 | 2 | 1 arcsec | 45 |
| Cimatti,A. | 1 | 011/19/38 | +44/29/00 | 50 | 1 arcmin | 7 |
| | 2 | 011/15/13 | +44/28/00 | 245 | 1 arcmin | 7 |
| | 3 | 011/20/00 | +43/59/00 | 750 | 10 arcmin | 7 |
| | 4 | 011/15/00 | +46/00/00 | 1610 | 2 deg | 7 |
| | 5 | 057/32/22 | -20/02/36 | | 1 arcsec | 45 |
| Clark,M.L. | 1 | 116/04/20 | -32/07/18 | 274 | 1 arcsec | 26 |
| | 2 | 115/00/00 | -32/00/00 | | 1 deg | 26 |
| | 3 | 115/00/00 | -30/00/00 | | 10 deg | 26 |
| | 4 | 115/00/00 | -31/00/00 | | 1 deg | 26 |
| Coco,M. | 1 | 243/10/00 | +33/50/00 | 914 | 5 arcmin | 16 |
| | 2 | 240/55/00 | +34/50/00 | 1570 | 5 arcmin | 16 |
| | 3 | 241/50/00 | +34/10/00 | 1554 | 5 arcmin | 16 |
| | 4 | 242/55/00 | +33/00/00 | 335 | 5 arcmin | 16 |
| Comello,G. | 1 | 006/26/36 | +53/07/42 | 4 | 0.1 arcmin | 46 |
| | 2 | 006/24/00 | +53/08/00 | 3 | 1 arcmin | 46 |
| | 3 | 006/24/30 | +53/08/24 | 5 | 0.1 arcmin | 46 |
| | 4 | 006/01/00 | +43/58/00 | 730 | 1 arcmin | 4 |
| | 5 | 006/33/00 | +52/53/00 | | 1 arcmin | 46 |
| | 6 | 006/29/30 | +53/09/24 | | 0.1 arcmin | 46 |
| | 7 | 345/55/54 | +28/38/18 | 140 | 0.1 arcmin | 74 |
| | 8 | 345/48/00 | +28/45/00 | 2300 | 1 arcmin | 74 |
| | 9 | 009/24/54 | +46/49/12 | 660 | 0.1 arcmin | 18 |
| Conrad,R. | 1 | 016/20/03 | +48/14/30 | 220 | 1 arcsec | 28 |
| | 2 | 016/09/27 | +48/17/01 | | 1 arcsec | 28 |
| | 3 | 343/30/00 | +28/18/00 | 2300 | 1 arcmin | 74 |
| | 4 | 343/26/25 | +28/17/20 | 2350 | 1 arcsec | 74 |
| | 5 | 013/23/00 | +46/37/00 | | 1 arcmin | 28 |
| Cook,A.J. | 1 | 241/41/54 | +34/06/47 | 357 | 0.1 arcsec | 16 |
| | 2 | 241/18/00 | +34/34/00 | 914 | 1 arcmin | 16 |
| | 3 | 240/44/00 | +34/47/00 | 2530 | 1 arcmin | 16 |
| | 4 | 243/17/00 | +33/44/00 | 1615 | 1 arcmin | 16 |
| | 5 | 242/01/00 | +34/15/00 | 1524 | 1 arcmin | 16 |
| | 6 | 241/50/00 | +34/05/00 | 300 | 1 arcmin | 16 |
| | 7 | 133/53/00 | -23/43/00 | 600 | 1 arcmin | 26 |
| | 8 | 201/00/00 | +15/00/00 | 11277 | 1 deg | 98 |
| | 9 | 241/11/00 | +34/10/00 | 300 | 1 arcmin | 16 |
| | 10 | 242/00/00 | +33/14/00 | 1500 | 1 arcmin | 16 |
| | 11 | 244/34/00 | +33/43/00 | 500 | 1 arcmin | 16 |
| | 12 | 243/56/00 | +30/20/00 | 4 | 1 arcmin | 9 |
| | 13 | 245/12/00 | +29/43/00 | 400 | 1 arcmin | 9 |
| | 14 | 247/06/00 | +27/23/00 | 1000 | 1 arcmin | 9 |
| | 15 | 248/37/00 | +26/00/00 | 2 | 1 arcmin | 9 |
| | 16 | 250/17/00 | +23/11/00 | 7 | 1 arcmin | 9 |
| | 17 | 113/15/00 | -24/27/00 | 500 | 1 arcmin | 26 |
| | 18 | 131/01/00 | -25/20/30 | 538 | 1 arcmin | 26 |
| | 19 | 240/01/00 | +34/44/00 | 1067 | 1 arcmin | 16 |
| | 20 | 244/02/00 | +33/47/00 | 1000 | 1 arcmin | 16 |
| Crist,M. | 1 | 272/45/25 | +36/02/38 | 222 | 0.1 arcsec | 16 |
| Crossley,G. | 1 | 283/07/01 | +41/00/00 | 125 | 1 deg | 16 |
| Csomos,G. | 1 | 020/00/48 | +48/23/36 | 210 | 0.1 arcsec | 35 |
| Csukas,M. | 1 | 021/39/00 | +46/48/00 | 90 | 1 arcmin | 60 |
| Cunningham,J. | 1 | 253/05/00 | +38/33/00 | 2515 | 1 arcmin | 16 |
| Curtis,D. | 1 | 170/30/00 | -45/50/00 | 100 | 0.5 deg | 48 |
| Cuthill,D.D. | 1 | 285/26/51 | +39/29/09 | 16 | 0.1 arcsec | 16 |
| | 2 | 285/23/00 | +39/48/00 | 48 | 1 deg | 16 |
| | 3 | 285/04/25 | +39/43/36 | | 1 arcsec | 16 |
| Cuthill,L. | 1 | 285/04/00 | +39/48/37 | 48 | 1 arcsec | 16 |
| | 2 | 285/04/25 | +39/48/36 | 48 | 1 arcsec | 16 |
| | 3 | 285/03/47 | +39/48/23 | 48 | 1 arcsec | 16 |
| Czerniewski,W. | 1 | 018/37/30 | +54/23/11 | 3 | 1 arcsec | 11 |
| da Silva,L.A.L. | 1 | 308/48/22 | -30/03/17 | 13 | 0.1 arcsec | 2 |
| | 2 | 308/59/16 | -30/20/01 | 65 | 0.1 arcsec | 2 |
| | 3 | 308/58/14 | -30/20/59 | 60 | 0.1 arcsec | 2 |
| | 4 | 308/29/15 | -30/14/35 | 230 | 1 arcsec | 2 |
| | 5 | 309/16/00 | -29/48/00 | | 3 arcmin | 2 |
| | 6 | 309/00/00 | -30/22/00 | | 3 arcmin | 2 |
| | 7 | 308/30/00 | -30/05/00 | | 3 arcmin | 2 |
| | 8 | 309/48/00 | -30/08/00 | | 3 arcmin | 2 |
| Dal Santo,M. | 1 | 011/32/00 | +45/14/00 | 13 | 1 arcmin | 7 |
| | 2 | 011/32/00 | +45/14/00 | 12 | 1 arcmin | 7 |
| Danilov,M. | 1 | observing site unknown | | | | |
| Darvann,T.A. | 1 | 010/24/14 | +59/46/33 | 210 | 1 arcsec | 47 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| Date,M. | 1 | 136/30/00 | +35/00/00 | 200 | 0.1 deg | 8 |
| | 2 | 136/37/48 | +34/56/24 | 5 | 0.1 deg | 8 |
| de Assis Neto,V.F. | 1 | 315/00/16 | -20/47/22 | 920 | 1 arcsec | 2 |
| | 2 | 315/00/15 | -20/43/09 | 997 | 1 arcsec | 2 |
| de la Rosa Jr.,A. | 1 | 266/06/00 | +29/48/00 | 2 | 0.1 deg | 16 |
| de Luis,J. | 1 | 357/04/00 | +40/45/00 | 995 | 1 arcmin | 14 |
| DeYoung,J.A. | 1 | 282/53/32 | +38/44/32 | 9 | 0.1 arcsec | 16 |
| | 2 | 282/56/07 | +38/55/12 | 99 | 0.01 arcsec | 16 |
| | 3 | 282/56/01 | +38/55/17 | 93 | 0.01 arcsec | 16 |
| | 4 | 281/45/32 | +37/58/01 | 151 | 0.1 arcsec | 16 |
| | 5 | 282/04/00 | +38/41/12 | 244 | 0.1 arcmin | 16 |
| Deconinck,M. | 1 | 004/33/28 | +50/42/01 | 107 | 1 arcsec | 29 |
| | 2 | 004/20/37 | +50/47/43 | 79 | 1 arcsec | 29 |
| | 3 | 004/27/42 | +50/38/47 | 145 | 1 arcsec | 29 |
| | 4 | 005/20/28 | +50/45/47 | 185 | 1 arcsec | 29 |
| | 5 | 007/24/00 | +46/18/00 | 1515 | 1 arcmin | 29 |
| | 6 | 007/32/30 | +46/13/00 | 1600 | 1 arcmin | 29 |
| | 7 | 002/49/00 | +50/00/12 | 400 | 1 arcmin | 29 |
| Delfs,M. | 1 | 013/21/11 | +52/27/32 | 78 | 1 arcsec | 25 |
| Di Meglio,F. | 1 | 013/56/55 | +40/44/22 | 30 | 1 arcsec | 7 |
| | 2 | 013/57/29 | +40/43/57 | 25 | 1 arcsec | 7 |
| | 3 | 013/56/48 | +40/42/38 | 398 | 1 arcsec | 7 |
| | 4 | 013/53/45 | +40/43/45 | 787 | 1 arcsec | 7 |
| Diaz P.,E. | 1 | 286/10/00 | +05/07/00 | 3200 | 1 arcmin | 33 |
| | 2 | 286/02/00 | +04/43/00 | 2800 | 1 arcmin | 33 |
| | 3 | 286/31/00 | +05/01/00 | 1800 | 1 arcmin | 33 |
| | 4 | 285/55/00 | +05/06/00 | 2800 | 1 arcmin | 33 |
| | 5 | 287/15/00 | +07/20/00 | 3300 | 1 arcmin | 33 |
| | 6 | 286/07/00 | +04/52/00 | 2800 | 1 arcmin | 33 |
| | 7 | 285/56/00 | +04/05/00 | 2600 | 1 arcmin | 33 |
| Dietrich,M. | 1 | 010/02/54 | +51/15/12 | 380 | 0.1 arcmin | 23 |
| | 2 | 015/51/24 | -21/57/12 | 1300 | 0.1 arcmin | 65 |
| Dilsizian,R. | 1 | 286/13/06 | +41/23/59 | 296 | 1 arcsec | 16 |
| | 2 | 286/20/00 | +41/20/00 | 52 | 1 arcsec | 16 |
| | 3 | 300/34/00 | +13/07/30 | | 1 arcmin | 71 |
| Dionisi,M. | 1 | 012/27/15 | +41/55/25 | 0 | 1 arcsec | 7 |
| | 2 | 012/38/00 | +41/26/00 | 0 | 1 arcmin | 7 |
| Dodd,W.J. | 1 | 275/47/10 | +39/51/13 | 293 | 1 arcsec | 16 |
| | 2 | 278/38/00 | +28/32/00 | | 0.5 deg | 16 |
| | 3 | 278/30/00 | +28/00/00 | | 8 deg | 16 |
| | 4 | 275/37/22 | +40/02/18 | | 1 arcsec | 16 |
| Dominici,A. | 1 | 012/06/15 | +42/24/59 | 200 | 1 arcsec | 7 |
| Donatiello,G. | 1 | 017/14/24 | +40/30/00 | 124 | 1 arcmin | 7 |
| | 2 | 017/14/42 | +40/29/00 | 153 | 1 arcmin | 7 |
| Donth,D. | 1 | 287/51/40 | +43/26/47 | 274 | 1 arcsec | 16 |
| Douma,H. | 1 | 006/55/24 | +53/19/12 | 0 | 0.1 arcmin | 46 |
| | 2 | 006/50/48 | +53/21/36 | 0 | 0.1 arcmin | 46 |
| Dragesco,J. | 1 | 029/46/00 | +02/18/00 | 1750 | 20 arcmin | 52 |
| | 2 | 024/00/00 | +22/00/00 | | 10 deg | 64 |
| Drapun,A. | 1 | observing site unknown | | | | |
| Drapun,I. | 1 | observing site unknown | | | | |
| Dyachuk,A. | 1 | observing site unknown | | | | |
| Dzhultaev,K. | 1 | observing site unknown | | | | |
| Dziura,W. | 1 | 022/14/00 | +49/56/00 | | 1 arcmin | 11 |
| Edberg,S.J. | 1 | 241/42/10 | +34/16/25 | 488 | 2 arcsec | 16 |
| | 2 | 240/54/34 | +34/44/50 | 1570 | 2 arcsec | 16 |
| | 3 | 242/00/30 | +34/16/40 | 1524 | 1 arcsec | 16 |
| | 4 | 242/19/12 | +34/22/54 | 2287 | 1 arcsec | 16 |
| | 5 | 241/17/03 | +34/34/28 | 1006 | 1 arcsec | 16 |
| | 6 | 241/24/12 | +34/30/30 | 549 | 5 arcsec | 16 |
| | 7 | 241/11/30 | +34/43/30 | 899 | 2 arcmin | 16 |
| | 8 | 241/58/00 | +34/31/00 | 914 | 1 arcmin | 16 |
| | 9 | 244/00/00 | +34/08/00 | 610 | 2 arcmin | 16 |
| | 10 | 210/23/00 | -17/34/00 | 3 | 10 arcmin | 61 |
| | 11 | 210/14/00 | -17/31/00 | 3 | 10 arcmin | 61 |
| | 12 | 243/30/00 | +32/49/00 | 1372 | 1 arcmin | 16 |
| | 13 | 243/13/00 | +34/15/00 | 2286 | 2 arcmin | 16 |
| | 14 | 242/03/00 | +34/21/00 | 2134 | 1 arcmin | 16 |
| | 15 | 241/27/00 | +34/22/00 | 396 | 2 arcmin | 16 |
| | 16 | 253/40/00 | +39/35/00 | 3048 | 2 arcmin | 16 |
| | 17 | 241/52/00 | +34/19/00 | 762 | 2 arcmin | 16 |
| | 18 | 241/55/00 | +34/16/00 | 1372 | 2 arcmin | 16 |
| | 19 | 245/00/00 | +36/00/00 | 10600 | 4 deg | 98 |
| Elias,P. | 1 | 015/55/18 | +49/33/13 | 590 | 1 arcsec | 35 |
| Eltri,M. | 1 | 012/22/08 | +45/24/43 | 10 | 1 arcsec | 7 |
| | 2 | 012/24/00 | +45/24/00 | 3 | 0.1 deg | 7 |
| Emerson,G. | 1 | 254/37/30 | +39/52/30 | 2750 | 5 arcsec | 16 |
| | 2 | 256/21/00 | +29/18/00 | 1000 | 0.01 deg | 16 |
| Emrich,G. | 1 | observing site unknown | | | | |
| Fabre,R. | 1 | 202/04/12 | +21/37/00 | 3 | 1 arcmin | 76 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| | 2 | 201/57/00 | +21/32/00 | 3 | 1 arcmin | 76 |
| | 3 | 204/32/00 | +19/50/00 | | 1 arcmin | 76 |
| | 4 | 201/53/00 | +21/28/00 | | 1 arcmin | 76 |
| Fabricius,J. | 1 | 018/45/38 | +48/43/40 | 440 | 0.1 arcsec | 35 |
| Falorni,M. | 1 | 011/21/30 | +43/41/30 | 420 | 1 arcsec | 7 |
| | 2 | 011/26/00 | +43/45/00 | 180 | 1 arcmin | 7 |
| Falsarella,N. | 1 | 310/36/50 | -20/48/56 | 468 | 1 arcsec | 2 |
| Falvo,S.A. | 1 | 284/47/20 | +43/05/50 | 131 | 1 arcsec | 16 |
| | 2 | 284/41/19 | +43/03/52 | 229 | 1 arcsec | 16 |
| | 3 | 284/46/54 | +43/03/06 | 335 | 1 arcsec | 16 |
| Farrington,W.R. | 1 | 291/32/00 | +45/58/00 | 244 | 1 arcmin | 16 |
| Farroni,G. | 1 | 055/18/00 | -21/02/00 | 500 | 1 arcmin | 70 |
| | 2 | 000/44/56 | +47/22/10 | 70 | 0.01 arcmin | 4 |
| Feijth,H. | 1 | 005/48/48 | +53/10/54 | 0 | 0.1 arcmin | 46 |
| | 2 | 006/01/24 | +43/58/30 | 735 | 0.1 arcmin | 4 |
| | 3 | 005/48/48 | +53/05/30 | | 1 arcmin | 46 |
| Feisheng,J. | 1 | 119/00/00 | +33/00/00 | 2 | 1 deg | 10 |
| Fernandez,Y. | 1 | 303/42/30 | -34/52/30 | 29 | 10 arcmin | 62 |
| Ferrin,I. | 1 | 289/08/00 | +08/47/26 | 3600 | 1 arcsec | 17 |
| | 2 | 288/52/37 | +08/37/35 | 1880 | 1 arcsec | 17 |
| | 3 | observing site unknown | | | | |
| | 4 | 289/13/12 | +08/54/12 | 4310 | 0.1 arcmin | 17 |
| Filimon,E. | 1 | 013/36/33 | +47/54/47 | 860 | 1 arcsec | 28 |
| | 2 | 013/36/00 | +47/57/36 | 486 | 3.6 arcsec | 28 |
| | 3 | 013/36/17 | +47/57/36 | 486 | 1 arcsec | 28 |
| Filimonchev,S. | 1 | observing site unknown | | | | |
| Fischer,D. | 1 | 007/06/00 | +50/42/00 | 195 | 0.1 deg | 25 |
| | 2 | 007/00/00 | +50/00/00 | 300 | 1 deg | 25 |
| | 3 | 006/38/00 | +51/27/00 | | 5 arcmin | 25 |
| | 4 | 007/06/00 | +50/44/00 | | 5 arcmin | 25 |
| | 5 | 016/00/00 | -22/00/00 | 900 | 1 deg | 65 |
| Fitzgerald,P. | 1 | observing site unknown | | | | |
| Fleet,R.W. | 1 | 031/11/00 | -17/43/00 | 1407 | 1 arcmin | 59 |
| | 2 | 028/12/00 | -25/42/00 | | 0.1 deg | 13 |
| | 3 | 029/15/00 | -29/50/00 | | 1 arcmin | 13 |
| | 4 | 030/54/00 | -29/42/00 | | 0.1 deg | 13 |
| | 5 | 031/41/00 | -21/07/00 | | 1 arcmin | 59 |
| | 6 | 031/08/08 | -17/41/55 | 1500 | 1 arcsec | 59 |
| Foster,G. | 1 | 278/36/00 | +28/18/00 | 21 | 1 arcmin | 16 |
| Foulkes,M. | 1 | 359/45/48 | +51/47/36 | 85 | 0.1 arcmin | 15 |
| | 2 | 359/57/12 | +53/33/24 | 0 | 0.1 arcmin | 15 |
| | 3 | 359/57/30 | +53/34/06 | 10 | 0.1 arcmin | 15 |
| | 4 | 359/54/00 | +51/46/12 | 70 | 0.1 arcmin | 15 |
| | 5 | 359/49/30 | +51/47/12 | 80 | 0.1 arcmin | 15 |
| | 6 | 359/14/00 | +51/15/00 | | 1 arcmin | 15 |
| | 7 | 359/46/00 | +51/45/30 | 85 | 1 arcmin | 15 |
| | 8 | 148/11/00 | -33/09/00 | | 1 arcmin | 26 |
| | 9 | 149/18/00 | -31/14/00 | | 1 arcmin | 26 |
| | 10 | 148/35/00 | -32/11/00 | | 5 arcmin | 26 |
| | 11 | 133/50/00 | -24/18/00 | | 1 deg | 26 |
| | 12 | 133/50/00 | -24/07/00 | | 1 deg | 26 |
| | 13 | 131/03/00 | -23/21/00 | | 1 deg | 26 |
| | 14 | 133/50/00 | -23/51/00 | | 1 deg | 26 |
| Fox,J.H. | 1 | 267/11/30 | +44/52/10 | 277 | 0.1 arcsec | 16 |
| Franch,J. | 1 | 272/15/00 | +41/52/00 | 258 | 1 arcmin | 16 |
| | 2 | 271/46/00 | +40/07/00 | 320 | 1 arcmin | 16 |
| Franciosi,C. | 1 | 008/46/15 | +45/52/04 | 1228 | 0.001 arcsec | 7 |
| | 2 | 008/54/43 | +45/49/17 | 394 | 0.01 arcsec | 7 |
| Freydank,E. | 1 | 071/30/00 | +04/30/00 | | 4 deg | 78 |
| | 2 | 013/21/11 | +52/27/32 | 78 | 1 arcsec | 25 |
| Freydank,H. | 1 | 013/21/11 | +52/27/32 | 78 | 1 arcsec | 25 |
| | 2 | 013/20/00 | +52/31/00 | | 1 deg | 25 |
| Frosina,A. | 1 | 013/15/00 | +38/08/00 | 14 | 4 arcmin | 7 |
| | 2 | 014/15/00 | +37/32/00 | 950 | 4 arcmin | 7 |
| | 3 | 015/15/00 | +37/02/00 | 30 | 4 arcmin | 7 |
| Furia,S. | 1 | 008/46/15 | +45/52/04 | 1226 | 0.001 arcsec | 7 |
| | 2 | 015/51/00 | -21/58/00 | 1165 | 1 arcmin | 65 |
| Gainsford,M.J. | 1 | 358/39/50 | +52/32/07 | 100 | 1 arcsec | 15 |
| | 2 | 358/45/17 | +52/33/53 | | 1 arcsec | 15 |
| | 3 | 358/41/02 | +52/28/19 | | 1 arcsec | 15 |
| | 4 | 358/35/36 | +52/35/42 | | 0.1 arcmin | 15 |
| | 5 | 358/22/42 | +52/27/06 | | 0.1 arcmin | 15 |
| | 6 | 358/52/12 | +52/38/18 | | 0.1 arcmin | 15 |
| | 7 | observing site unknown | | | | |
| Gallego,J. | 1 | 357/04/00 | +40/45/00 | 1005 | 1 arcmin | 14 |
| | 2 | 356/07/00 | +40/15/00 | | 2 deg | 14 |
| | 3 | 355/52/15 | +40/17/12 | 575 | 1 arcsec | 14 |
| | 4 | 356/18/00 | +40/26/00 | | 0.5 deg | 14 |
| | 5 | 356/54/39 | +40/31/24 | 929 | 1 arcsec | 14 |
| | 6 | 355/52/00 | +40/38/00 | | 0.5 deg | 14 |
| Galli,A. | 1 | observing site unknown | | | | |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| | 2 | 303/49/00 | -34/53/00 | 8 | 1 arcmin | 62 |
| Garcia,A. | 1 | 286/00/00 | +05/00/00 | | 5 deg | 33 |
| Garradd,G. | 1 | 151/15/15 | -31/26/57 | 1300 | 1 arcsec | 26 |
| | 2 | 150/54/43 | -30/55/50 | 447 | 1 arcsec | 26 |
| | 3 | 151/07/54 | -31/21/45 | 545 | 1 arcsec | 26 |
| | 4 | 150/29/19 | -30/52/21 | 330 | 1 arcsec | 26 |
| | 5 | 150/45/49 | -30/44/39 | 385 | 1 arcsec | 26 |
| | 6 | 150/56/24 | -31/05/01 | 450 | 1 arcsec | 26 |
| | 7 | 151/08/38 | -30/56/55 | 1320 | 1 arcsec | 26 |
| | 8 | 150/50/55 | -31/03/02 | 375 | 1 arcsec | 26 |
| | 9 | 150/49/31 | -31/09/14 | 478 | 1 arcsec | 26 |
| | 10 | 150/13/00 | -30/52/34 | 270 | 1 arcsec | 26 |
| | 11 | 149/54/06 | -31/42/34 | 865 | 1 arcsec | 26 |
| | 12 | 149/04/10 | -31/16/28 | 1126 | 1 arcsec | 26 |
| | 13 | 150/09/21 | -30/16/40 | 1400 | 1 arcsec | 26 |
| | 14 | 150/40/29 | -30/52/34 | 535 | 1 arcsec | 26 |
| | 15 | 150/55/21 | -31/01/58 | 470 | 1 arcsec | 26 |
| | 16 | 150/34/17 | -30/59/46 | 405 | 1 arcsec | 26 |
| | 17 | 150/58/54 | -31/09/13 | 425 | 1 arcsec | 26 |
| Gaucher,C. | 1 | 291/42/00 | -32/18/00 | | 5 deg | 62 |
| Geenen,J.J. | 1 | 005/42/00 | +51/14/00 | 35 | 1 arcmin | 46 |
| | 2 | 005/41/30 | +51/15/00 | 35 | 1 arcmin | 46 |
| | 3 | 005/42/00 | +51/13/30 | 35 | 1 arcmin | 46 |
| Gelinas,M.A. | 1 | 286/33/00 | +45/30/00 | 26 | 1 arcmin | 21 |
| | 2 | 287/17/00 | +45/36/00 | 75 | 1 arcmin | 21 |
| Genebriera,J. | 1 | 354/11/00 | +41/23/00 | 50 | 1 arcmin | 14 |
| | 2 | 354/30/00 | +41/41/00 | 1060 | 1 arcmin | 14 |
| | 3 | 004/00/00 | +40/00/00 | | 1 deg | 14 |
| Gerasimov,A. | 1 | observing site unknown | | | | |
| Germann,R. | 1 | 008/55/57 | +47/16/29 | 770 | 0.1 arcsec | 18 |
| Ghione,G. | 1 | 012/35/00 | +42/36/00 | 676 | 1 arcmin | 7 |
| Giampaolo,G. | 1 | observing site unknown | | | | |
| Gianforte,J.S. | 1 | 289/08/05 | +43/16/54 | 82 | 1 arcsec | 16 |
| | 2 | 289/08/00 | +43/19/00 | 91 | 1 arcmin | 16 |
| | 3 | 289/08/30 | +43/19/00 | 61 | 1 arcmin | 16 |
| Gigli,P. | 1 | 010/50/00 | +44/03/35 | 780 | 1 arcmin | 7 |
| Gilchrist,D.K. | 1 | 279/49/00 | +40/42/20 | 421 | 1 arcmin | 16 |
| | 2 | 279/38/45 | +40/29/45 | 73 | 1 arcsec | 16 |
| | 3 | 279/40/00 | +40/29/30 | 143 | 1 arcsec | 16 |
| | 4 | 279/34/00 | +40/29/15 | 149 | 1 arcsec | 16 |
| Girardo,M.M. | 1 | 296/06/00 | -34/30/00 | 154 | 1 arcmin | 27 |
| Giraudi,J.D. | 1 | 301/35/58 | -34/36/30 | 40 | 1 arcsec | 27 |
| | 2 | 301/35/02 | -34/36/27 | 35 | 0.1 arcsec | 27 |
| | 3 | 301/00/00 | -34/30/00 | 0 | 3 deg | 27 |
| Giuntoli,M. | 1 | 010/47/11 | +43/51/39 | 21 | 1 arcsec | 7 |
| Glassett,W. | 1 | 243/38/42 | +33/54/00 | 322 | 1 arcmin | 16 |
| | 2 | 241/00/00 | +34/45/00 | 1570 | 1 deg | 16 |
| | 3 | 241/56/24 | +34/13/00 | 1742 | 1 arcmin | 16 |
| | 4 | 237/24/00 | +48/42/00 | | 1 arcmin | 16 |
| | 5 | 241/41/00 | +34/11/00 | | 10 arcmin | 16 |
| Glowinski,C. | 1 | 008/16/00 | +50/00/00 | 100 | 1 deg | 25 |
| Gojdic,S. | 1 | 021/54/40 | +48/56/17 | 160 | 0.1 arcsec | 35 |
| Goldfarb,M. | 1 | observing site unknown | | | | |
| Golubev,V. | 1 | observing site unknown | | | | |
| Gomez,A. | 1 | 357/04/00 | +40/45/00 | 1005 | 1 arcmin | 14 |
| | 2 | 355/52/15 | +40/17/12 | 575 | 1 arcsec | 14 |
| | 3 | 356/00/00 | +40/30/00 | | 2 deg | 14 |
| | 4 | 356/00/00 | +40/30/00 | | 2 deg | 14 |
| | 5 | 357/11/00 | +41/19/00 | | 0.5 deg | 14 |
| | 6 | 356/33/00 | +40/25/00 | | 0.5 deg | 14 |
| | 7 | 356/54/39 | +40/31/24 | 929 | 1 arcsec | 14 |
| | 8 | 355/45/00 | +40/26/00 | | 5 arcmin | 14 |
| Gomez,T.L. | 1 | 357/04/00 | +40/45/00 | 1005 | 1 arcmin | 14 |
| | 2 | 359/30/00 | +39/26/00 | | 1 deg | 14 |
| | 3 | 356/19/35 | +40/24/28 | 614 | 1 arcsec | 14 |
| | 4 | 356/07/00 | +40/22/00 | | 1 deg | 14 |
| | 5 | 355/45/00 | +40/26/00 | | 5 arcmin | 14 |
| Gonzalez,A. | 1 | 356/31/00 | +40/29/00 | | 1 deg | 14 |
| Gora,D. | 1 | 021/04/00 | +51/03/00 | 250 | 1 arcmin | 11 |
| Gorski,L. | 1 | 270/10/58 | +39/07/17 | 198 | 1 arcsec | 16 |
| | 2 | 270/20/48 | +39/49/26 | 174 | 1 arcsec | 16 |
| | 3 | 270/12/14 | +39/01/23 | 177 | 1 arcsec | 16 |
| | 4 | 270/17/47 | +39/05/41 | 207 | 1 arcsec | 16 |
| | 5 | 279/23/00 | +24/55/48 | 0 | 1 arcsec | 16 |
| | 6 | 270/13/53 | +39/03/27 | 192 | 1 arcsec | 16 |
| Gostev,A. | 1 | observing site unknown | | | | |
| Gozzoli,E. | 1 | 011/00/00 | +44/30/00 | 120 | 1 deg | 7 |
| Granslo,B.H. | 1 | 010/42/00 | +59/54/00 | 150 | 0.1 deg | 47 |
| | 2 | 010/48/00 | +60/12/00 | 580 | 0.1 deg | 47 |
| | 3 | 011/12/00 | +64/06/00 | 75 | 0.1 deg | 47 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| | 4 | 011/06/00 | +64/06/00 | | 0.1 deg | 47 |
| | 5 | 343/30/12 | +28/17/30 | 238 | 0.1 arcmin | 74 |
| | 6 | 342/07/12 | +28/45/30 | 2327 | 0.1 arcmin | 74 |
| Graves,D. | 1 | 285/09/00 | +39/59/00 | 18 | 1 arcmin | 16 |
| | 2 | 285/22/00 | +39/39/00 | 18 | 1 arcmin | 16 |
| Green,D.W.E. | 1 | observing site unknown | | | | |
| Grieser,D. | 1 | 276/57/01 | +40/02/49 | 258 | 1 arcsec | 16 |
| | 2 | 276/55/57 | +40/06/25 | 274 | 1 arcsec | 16 |
| Grogel,O. | 1 | 012/36/00 | +48/54/00 | 330 | 0.1 deg | 25 |
| Gronek,J.D. | 1 | 248/06/04 | +33/28/41 | 351 | 1 arcsec | 16 |
| | 2 | 248/37/15 | +33/17/44 | 561 | 1 arcsec | 16 |
| Gruengard,E. | 1 | 034/26/36 | +30/23/24 | 837 | 1 arcsec | 40 |
| Guarro,J. | 1 | 001/45/18 | +41/31/24 | 324 | 1 arcsec | 14 |
| Gubo,H. | 1 | 010/44/00 | +48/02/00 | 620 | 1 arcmin | 25 |
| | 2 | 010/44/00 | +47/44/00 | 1020 | 1 arcmin | 25 |
| Guerrini,F. | 1 | 012/12/00 | +44/25/07 | | 15 arcsec | 7 |
| Guhl,K. | 1 | 013/28/40 | +52/29/12 | 40 | 1 arcsec | 23 |
| Guryanov,S. | 1 | observing site unknown | | | | |
| Guthier,O. | 1 | 008/03/24 | +49/57/48 | 250 | 0.1 arcmin | 25 |
| | 2 | observing site unknown | | | | |
| | 3 | observing site unknown | | | | |
| | 4 | 016/00/00 | -22/00/00 | | 13 deg | 65 |
| Haagh,N. | 1 | 149/12/42 | -31/16/48 | 450 | 0.5 arcmin | 26 |
| Hajek,P. | 1 | 017/01/34 | +49/17/06 | 254 | 1 arcsec | 35 |
| Hale,A. | 1 | 242/11/48 | +34/22/18 | 2408 | 0.1 arcmin | 16 |
| | 2 | 242/00/30 | +34/16/54 | 1525 | 0.1 arcmin | 16 |
| | 3 | 241/16/48 | +34/34/36 | 915 | 0.1 arcmin | 16 |
| | 4 | 241/17/06 | +34/35/06 | 760 | 0.1 arcmin | 16 |
| | 5 | 240/58/49 | +34/48/03 | 1615 | 1 arcsec | 16 |
| | 6 | 240/57/02 | +34/45/20 | 1550 | 1 arcsec | 16 |
| | 7 | 240/52/49 | +34/42/29 | 1660 | 1 arcsec | 16 |
| | 8 | 240/52/42 | +34/42/12 | 1750 | 1 arcsec | 16 |
| | 9 | 242/18/30 | +34/22/48 | 2290 | 0.1 arcmin | 16 |
| | 10 | 243/19/54 | +32/49/54 | 760 | 0.1 arcmin | 16 |
| | 11 | 243/30/24 | +32/49/18 | 1370 | 0.1 arcmin | 16 |
| | 12 | 243/33/18 | +32/50/48 | 1675 | 0.1 arcmin | 16 |
| | 13 | 243/35/00 | +32/52/12 | 1830 | 0.1 arcmin | 16 |
| | 14 | 243/17/54 | +33/43/12 | 1620 | 0.1 arcmin | 16 |
| | 15 | 243/08/48 | +33/18/30 | 1580 | 0.1 arcmin | 16 |
| | 16 | 243/15/42 | +34/13/06 | 2225 | 0.1 arcmin | 16 |
| | 17 | 240/54/00 | +34/44/30 | 1585 | 0.1 arcmin | 16 |
| | 18 | 240/54/18 | +34/44/54 | 1585 | 0.1 arcmin | 16 |
| | 19 | 241/11/12 | +34/42/06 | 915 | 0.1 arcmin | 16 |
| | 20 | 241/24/12 | +34/30/54 | 550 | 0.1 arcmin | 16 |
| | 21 | 241/43/24 | +34/15/06 | 460 | 0.1 arcmin | 16 |
| | 22 | 241/58/12 | +34/30/18 | 915 | 0.1 arcmin | 16 |
| | 23 | 241/53/48 | +34/15/18 | 1280 | 0.1 arcmin | 16 |
| | 24 | 241/56/48 | +34/16/00 | 1370 | 0.1 arcmin | 16 |
| | 25 | 242/00/12 | +34/19/48 | 1825 | 0.1 arcmin | 16 |
| | 26 | 242/04/12 | +34/20/36 | 2135 | 0.1 arcmin | 16 |
| | 27 | 240/23/24 | +37/44/48 | 1209 | 0.1 arcmin | 16 |
| | 28 | 247/52/54 | +36/04/12 | 2093 | 0.1 arcmin | 16 |
| | 29 | 249/21/36 | +32/15/18 | 800 | 0.1 arcmin | 16 |
| | 30 | 254/03/18 | +32/52/18 | 1312 | 0.1 arcmin | 16 |
| | 31 | 253/15/42 | +32/22/00 | 1220 | 0.1 arcmin | 16 |
| | 32 | 253/17/30 | +32/17/06 | 1220 | 0.1 arcmin | 16 |
| | 33 | 251/48/42 | +33/02/12 | 1860 | 0.1 arcmin | 16 |
| | 34 | 151/13/18 | -33/59/12 | 45 | 0.1 arcmin | 26 |
| | 35 | 148/42/36 | -32/15/24 | 500 | 0.1 arcmin | 26 |
| | 36 | 141/26/42 | -31/57/48 | 300 | 0.1 arcmin | 26 |
| | 37 | 139/20/48 | -35/04/48 | 300 | 0.1 arcmin | 26 |
| | 38 | 146/54/30 | -36/42/00 | 800 | 0.1 arcmin | 26 |
| | 39 | 176/14/24 | -38/09/36 | 300 | 0.1 arcmin | 48 |
| | 40 | 253/10/18 | +32/21/00 | 1190 | 0.1 arcmin | 16 |
| | 41 | 252/50/06 | +32/29/30 | 2019 | 0.1 arcmin | 16 |
| Hall,B. | 1 | 243/16/46 | +33/29/02 | 1329 | 1 arcsec | 16 |
| Hannon,J. | 1 | 286/55/00 | +41/40/00 | 107 | 1 arcmin | 16 |
| Harrington,P. | 1 | 286/46/10 | +40/51/54 | 43 | 5 arcsec | 16 |
| | 2 | 279/04/00 | +25/08/10 | 0 | 5 arcsec | 16 |
| | 3 | 287/25/00 | +43/20/00 | | 1 deg | 16 |
| Harris,L.A. | 1 | 280/31/27 | +09/01/30 | 176 | 1 arcsec | 80 |
| | 2 | 280/30/00 | +08/59/00 | 10 | 1 arcmin | 80 |
| Hasegawa,T. | 1 | 140/06/00 | +35/30/36 | 25 | 0.01 deg | 8 |
| | 2 | 140/06/36 | +35/31/12 | 20 | 0.01 deg | 8 |
| | 3 | 140/12/00 | +35/09/36 | 75 | 0.01 deg | 8 |
| | 4 | 139/50/24 | +34/54/00 | 0 | 0.01 deg | 8 |
| Hasubick,W. | 1 | 010/44/00 | +48/02/00 | 620 | 1 arcmin | 25 |
| | 2 | 010/44/00 | +47/44/00 | 1020 | 1 arcmin | 25 |
| | 3 | 343/25/00 | +28/15/00 | 2300 | 1 arcmin | 74 |
| Hathaway,W. | 1 | 283/12/00 | +38/59/00 | 43 | 1 arcmin | 16 |
| | 2 | 283/11/00 | +39/01/00 | 50 | 1 arcmin | 16 |
| | 3 | 277/40/00 | +34/40/00 | 2037 | 10 arcmin | 16 |
| Haver,R. | 1 | 012/26/44 | +41/55/48 | 125 | 0.01 deg | 7 |
| | 2 | 012/03/36 | +42/16/48 | 340 | 0.01 deg | 7 |
| | 3 | 012/04/12 | +42/04/12 | 300 | 0.01 deg | 7 |
| | 4 | 013/12/36 | +41/57/36 | 1845 | 0.01 deg | 7 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| | 5 | 012/01/12 | +42/06/00 | 425 | 0.01 deg | 7 |
| | 6 | 011/10/12 | +42/23/24 | 600 | 0.01 deg | 7 |
| | 7 | 073/28/48 | +03/39/00 | 1 | 0.01 deg | 78 |
| Havrilak,M. | 1 | 021/54/40 | +48/56/17 | 160 | 0.1 arcsec | 35 |
| Hayashi,A. | 1 | observing site unknown | | | | |
| Hayashi,H. | 1 | 139/37/00 | +35/18/00 | 20 | 1 arcmin | 8 |
| | 2 | 138/20/00 | +35/53/00 | 1110 | 1 arcmin | 8 |
| | 3 | 139/59/00 | +35/02/00 | 5 | 1 arcmin | 8 |
| | 4 | 138/54/00 | +34/35/00 | | 3 deg | 8 |
| | 5 | 138/38/00 | +35/48/00 | 1650 | 1 arcmin | 8 |
| Hays Jr.,R.H. | 1 | 272/32/00 | +41/09/00 | 213 | 1 arcmin | 16 |
| | 2 | 272/12/00 | +41/41/00 | 186 | 1 arcmin | 16 |
| | 3 | 256/38/00 | +29/28/00 | 914 | 1 arcmin | 16 |
| | 4 | 256/28/00 | +29/19/00 | 914 | 1 arcmin | 16 |
| | 5 | 256/13/00 | +30/56/00 | 1067 | 1 arcmin | 16 |
| | 6 | 257/11/00 | +31/38/00 | 823 | 1 arcmin | 16 |
| | 7 | 260/48/00 | +33/34/00 | 427 | 1 arcmin | 16 |
| Healy,D. | 1 | 250/03/11 | +31/21/11 | 1407 | 4 arcsec | 16 |
| Henshaw,C. | 1 | 029/56/00 | -18/20/00 | 1100 | 1 deg | 59 |
| | 2 | 031/31/00 | -18/11/00 | | 1 deg | 59 |
| | 3 | 043/12/00 | -18/05/00 | 10058 | 10 deg | 98 |
| | 4 | 057/36/00 | -20/18/00 | | 2 deg | 45 |
| Hernschier,W. | 1 | 008/27/11 | +49/01/31 | 119 | 0.1 arcsec | 25 |
| | 2 | 343/30/00 | +28/30/00 | | 1 deg | 74 |
| Higuera,A. | 1 | 286/00/00 | +04/35/00 | | 15 deg | 33 |
| Hilburn,A.P. | 1 | 282/00/00 | +34/00/00 | 12 | 2 deg | 16 |
| Hiraga,M. | 1 | 131/10/00 | +34/08/00 | 60 | 1 arcmin | 8 |
| | 2 | 131/05/00 | +34/02/00 | 0 | 1 arcmin | 8 |
| | 3 | 131/00/00 | +34/00/00 | 20 | 1 arcmin | 8 |
| Hirth,G. | 1 | 023/00/00 | +40/37/00 | 15 | 5 arcmin | 25 |
| | 2 | 023/36/00 | +41/06/00 | 100 | 5 arcmin | 25 |
| | 3 | 021/48/00 | +40/18/00 | 1100 | 5 arcmin | 25 |
| Hodonsky,K. | 1 | 272/04/00 | +41/48/00 | | 1 deg | 16 |
| | 2 | 270/53/00 | +41/20/00 | | 1 deg | 16 |
| | 3 | 269/39/00 | +40/56/00 | | 1 deg | 16 |
| | 4 | 266/43/00 | +36/36/00 | | 1 deg | 16 |
| | 5 | 267/17/00 | +37/40/00 | | 1 deg | 16 |
| | 6 | 266/31/00 | +36/37/00 | | 1 deg | 16 |
| Honko,M. | 1 | 020/59/08 | +52/12/56 | 115 | 1 arcsec | 11 |
| | 2 | 023/09/36 | +53/08/48 | 150 | 1 arcsec | 11 |
| | 3 | 019/42/30 | +54/22/07 | 41 | 1 arcsec | 11 |
| House,R.R. | 1 | 280/47/39 | +42/53/27 | 177 | 1 arcsec | 21 |
| | 2 | 279/30/12 | +43/16/59 | 320 | 1 arcsec | 21 |
| | 3 | 279/33/36 | +43/27/52 | 329 | 1 arcsec | 21 |
| | 4 | 279/28/52 | +43/28/28 | 335 | 1 arcsec | 21 |
| Hroch,F. | 1 | 016/39/00 | +49/21/00 | 365 | 1 arcmin | 35 |
| Hudak,D.M. | 1 | 279/16/52 | +41/03/48 | 325 | 1 arcsec | 16 |
| | 2 | 279/21/52 | +41/06/41 | 301 | 1 arcsec | 16 |
| | 3 | 279/06/26 | +41/00/28 | 341 | 1 arcsec | 16 |
| | 4 | 278/39/31 | +41/08/28 | 346 | 1 arcsec | 16 |
| Humenansky,J. | 1 | 021/14/46 | +48/59/47 | 268 | 1 arcsec | 35 |
| Hurst,G.M. | 1 | 358/00/00 | +51/30/00 | 80 | 1 deg | 15 |
| | 2 | 359/04/00 | +52/14/00 | | 2 deg | 15 |
| Ichikawa,K. | 1 | 139/22/48 | +36/16/48 | 38 | 0.01 deg | 8 |
| | 2 | 139/19/12 | +36/15/00 | 35 | 0.01 deg | 8 |
| | 3 | 139/12/00 | +36/30/00 | 1750 | 0.01 deg | 8 |
| | 4 | 139/16/48 | +36/24/00 | 42 | 0.01 deg | 8 |
| | 5 | 138/12/00 | +36/42/00 | | 5 deg | 8 |
| | 6 | observing site unknown | | | | |
| | 7 | observing site unknown | | | | |
| | 8 | observing site unknown | | | | |
| | 9 | 139/00/00 | +36/00/00 | | 5 deg | 8 |
| | 10 | observing site unknown | | | | |
| Ino,Y. | 1 | 134/43/48 | +34/55/48 | 78 | 0.01 deg | 8 |
| | 2 | 134/43/48 | +34/45/36 | 69 | 0.01 deg | 8 |
| Isenhart,C. | 1 | 130/54/00 | -25/30/00 | 549 | 10 arcmin | 26 |
| Ivanov,V. | 1 | observing site unknown | | | | |
| Iwaki,Y. | 1 | 135/34/36 | +34/18/36 | 100 | 1 arcsec | 8 |
| Izquierdo,J. | 1 | 357/04/00 | +40/45/00 | 1005 | 1 arcmin | 14 |
| Jacobs,T. | 1 | 270/32/36 | +43/02/24 | 305 | 0.1 arcmin | 16 |
| | 2 | 270/34/24 | +43/00/30 | 296 | 0.1 arcmin | 16 |
| | 3 | 270/33/48 | +42/47/30 | 308 | 0.1 arcmin | 16 |
| Jacobson,E. | 1 | 264/18/00 | +46/00/00 | 305 | 1 deg | 16 |
| | 2 | 261/45/00 | +35/13/00 | 305 | 1 deg | 16 |
| Jager,M. | 1 | 016/36/12 | +48/03/00 | 160 | 0.1 arcmin | 28 |
| | 2 | 013/54/00 | +48/07/36 | 360 | 0.1 arcmin | 28 |
| | 3 | 015/43/30 | +47/40/24 | 1070 | 0.1 arcmin | 28 |
| | 4 | 342/58/00 | +28/41/00 | | 1 deg | 74 |
| Jahn,J. | 1 | 010/41/46 | +53/37/06 | 60 | 2 arcsec | 25 |
| | 2 | 010/00/20 | +53/40/44 | 40 | 2 arcsec | 25 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| Janecek,V. | 1 | 015/55/00 | +49/33/00 | 590 | 1 arcmin | 35 |
| Jannink,D.W. | 1 | 005/10/16 | +52/06/32 | 22 | 3.6 arcsec | 46 |
| | 2 | 006/55/08 | +52/14/28 | 70 | 3.6 arcsec | 46 |
| | 3 | 010/24/00 | +36/24/00 | | 0.1 deg | 84 |
| | 4 | 010/48/00 | +33/36/00 | 10 | 0.1 deg | 84 |
| Jeffrey,J. | 1 | 000/00/00 | +00/00/00 | | 99 deg | 99 |
| | 2 | 238/45/00 | +44/20/00 | | 1 deg | 16 |
| | 3 | 248/00/00 | +34/00/00 | | 5 deg | 16 |
| Johnstone,G.F. | 1 | 358/29/00 | +52/19/00 | 83 | 1 arcmin | 15 |
| Jones,A. | 1 | 173/14/04 | -41/19/07 | 15 | 1 arcsec | 48 |
| Jones,B.W. | 1 | 023/25/00 | -20/00/00 | 945 | 5 arcmin | 64 |
| | 2 | 024/43/00 | -25/50/00 | 1100 | 5 arcmin | 64 |
| Jordan,J. | 1 | 271/41/35 | +36/09/45 | 84 | 1 arcsec | 16 |
| Kabalin,V. | 1 | observing site unknown | | | | |
| Kaila,K. | 1 | 025/25/00 | +65/04/12 | 10 | 0.1 arcmin | 19 |
| | 2 | 026/34/18 | +64/38/36 | 100 | 0.1 arcmin | 19 |
| | 3 | 343/00/00 | +28/00/00 | 2200 | 1 deg | 74 |
| Kalauch,K.-D. | 1 | 013/53/48 | +51/33/41 | 130 | 0.1 arcsec | 23 |
| | 2 | 013/54/00 | +51/32/00 | 150 | 1 arcmin | 23 |
| Kamenickj',M. | 1 | 021/07/18 | +48/46/00 | 470 | 0.1 arcsec | 35 |
| Kammerer,A. | 1 | 008/21/12 | +49/00/06 | 115 | 0.1 arcmin | 25 |
| | 2 | 008/29/00 | +48/51/24 | 400 | 0.1 arcmin | 25 |
| | 3 | 008/29/24 | +48/47/54 | 690 | 0.1 arcmin | 25 |
| | 4 | 008/20/00 | +48/08/00 | 900 | 1 arcmin | 25 |
| | 5 | 359/54/00 | +38/30/00 | | 0.5 deg | 14 |
| Kamnev,Y. | 1 | observing site unknown | | | | |
| Kanai,K. | 1 | 139/16/00 | +36/15/00 | 40 | 1 arcmin | 8 |
| | 2 | 139/15/00 | +36/15/00 | 40 | 1 arcmin | 8 |
| Kasirin,I. | 1 | observing site unknown | | | | |
| Kato,T. | 1 | 135/47/00 | +35/02/00 | 60 | 1 arcmin | 8 |
| | 2 | 135/35/00 | +34/43/00 | 6 | 1 arcmin | 8 |
| Kaufmann,R. | 1 | 285/00/00 | +40/00/00 | | 2 deg | 16 |
| | 2 | 284/15/00 | +35/40/00 | | 5 deg | 16 |
| Kauschke,A. | 1 | 013/40/00 | +53/15/00 | 50 | 1 arcmin | 23 |
| Keen,R. | 1 | 254/37/00 | +39/53/00 | 2730 | 1 arcmin | 16 |
| | 2 | 257/00/00 | +37/00/00 | 1517 | 5 deg | 16 |
| | 3 | 256/02/00 | +36/15/00 | | 5 deg | 16 |
| | 4 | 210/00/00 | +23/00/00 | | 30 deg | 98 |
| | 5 | 177/00/00 | -17/00/00 | | 5 deg | 81 |
| | 6 | 177/15/00 | -17/50/00 | | 5 deg | 81 |
| | 7 | 172/38/00 | -43/30/00 | | 5 deg | 48 |
| | 8 | 170/30/00 | -44/02/00 | | 5 deg | 48 |
| | 9 | 169/58/00 | -44/28/00 | | 5 deg | 48 |
| | 10 | 167/45/00 | -45/25/00 | | 5 deg | 48 |
| | 11 | 170/12/00 | -43/25/00 | | 5 deg | 48 |
| | 12 | 174/40/00 | -36/55/00 | | 5 deg | 48 |
| | 13 | 210/15/00 | -17/30/00 | | 5 deg | 61 |
| | 14 | 202/30/00 | -15/00/00 | | 10 deg | 61 |
| | 15 | 210/25/00 | -17/30/00 | | 5 deg | 61 |
| Keijmel,P.C. | 1 | 003/34/00 | +51/28/00 | 1 | 1 arcmin | 46 |
| | 2 | 003/38/00 | +51/32/00 | 1 | 1 arcmin | 46 |
| Kellner,A. | 1 | observing site unknown | | | | |
| Kemble,L.J. | 1 | 245/32/31 | +51/12/14 | 1228 | 0.1 arcsec | 21 |
| | 2 | 245/33/00 | +51/03/00 | | 1 arcmin | 21 |
| | 3 | 246/09/05 | +49/12/00 | | 1 arcmin | 21 |
| Kerber,F. | 1 | 011/36/00 | +48/06/00 | 530 | 0.1 deg | 25 |
| | 2 | 316/30/00 | -20/30/00 | 700 | 1 deg | 2 |
| | 3 | 313/00/00 | -23/30/00 | 1100 | 1 deg | 2 |
| Keszthelyi,S. | 1 | 018/18/38 | +46/06/49 | 202 | 1 arcsec | 38 |
| | 2 | 018/18/37 | +46/06/47 | 209 | 1 arcsec | 38 |
| | 3 | 018/13/47 | +46/05/02 | 290 | 1 arcsec | 38 |
| | 4 | 032/50/00 | +25/45/00 | 100 | 1 arcmin | 66 |
| | 5 | 022/28/00 | +40/05/00 | | 1 arcmin | 36 |
| | 6 | 022/25/00 | +38/45/00 | | 1 arcmin | 36 |
| | 7 | 024/00/00 | +38/08/00 | | 1 arcmin | 36 |
| | 8 | 021/40/00 | +39/40/00 | | 1 arcmin | 36 |
| Kieltyka,G. | 1 | 022/32/35 | +51/14/50 | 240 | 1 arcsec | 11 |
| | 2 | 021/44/58 | +49/41/18 | 280 | 1 arcsec | 11 |
| | 3 | 022/56/12 | +51/22/16 | 171 | 1 arcsec | 11 |
| Kiselev,N. | 1 | observing site unknown | | | | |
| Kishi,A. | 1 | 139/48/00 | +35/44/00 | 40 | 0.1 deg | 8 |
| | 2 | observing site unknown | | | | |
| Kitamura,K. | 1 | 136/45/00 | +35/17/00 | 50 | 1 arcmin | 8 |
| | 2 | 137/00/00 | +35/15/00 | | 1 deg | 8 |
| Kliche,J. | 1 | 014/02/00 | +51/48/09 | 65 | 1 arcsec | 23 |
| Knain,E. | 1 | 010/48/00 | +63/24/50 | 100 | 1 arcmin | 47 |
| | 2 | 010/00/00 | +63/00/00 | | 5 deg | 47 |
| Knight,S. | 1 | 289/18/27 | +44/12/10 | 191 | 1 arcsec | 16 |
| | 2 | 289/18/41 | +44/12/10 | 179 | 1 arcsec | 16 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| | 3 | 289/18/50 | +44/12/18 | 177 | 1 arcsec | 16 |
| | 4 | 289/19/07 | +44/12/08 | 164 | 1 arcsec | 16 |
| Knisely,D. | 1 | 263/15/00 | +40/17/00 | 402 | 0.01 deg | 16 |
| | 2 | 263/17/00 | +40/04/00 | 396 | 0.01 deg | 16 |
| | 3 | 263/25/00 | +40/14/00 | 427 | 0.01 deg | 16 |
| | 4 | 263/31/00 | +40/14/00 | 463 | 0.01 deg | 16 |
| Knyazyuk,N. | 1 | observing site unknown | | | | |
| Kobayashi,J. | 1 | 130/45/00 | +32/40/42 | 65 | 0.01 deg | 8 |
| | 2 | 145/45/00 | +16/30/00 | | 10 deg | 82 |
| Koch,B. | 1 | 356/39/00 | +36/57/00 | 1800 | 1 arcmin | 14 |
| | 2 | 006/20/00 | +50/40/00 | 450 | 1 arcmin | 25 |
| | 3 | 018/00/00 | -23/30/00 | 1700 | 0.1 deg | 65 |
| | 4 | 006/57/40 | +51/09/48 | 60 | 1 arcsec | 25 |
| Koch,B.O. | 1 | 010/44/00 | +48/02/00 | 620 | 1 arcmin | 25 |
| | 2 | 010/44/00 | +47/44/00 | 1020 | 1 arcmin | 25 |
| Koch,V. | 1 | 010/44/00 | +48/02/00 | 620 | 1 arcmin | 25 |
| | 2 | 010/44/00 | +47/44/00 | 1020 | 1 arcmin | 25 |
| Kohler,N. | 1 | 011/36/00 | +50/54/00 | 145 | 0.1 deg | 23 |
| | 2 | 011/36/00 | +50/54/00 | 349 | 0.1 deg | 23 |
| | 3 | 011/36/00 | +50/48/00 | 200 | 0.1 deg | 23 |
| Kojima,T. | 1 | 139/29/00 | +36/11/00 | 20 | 1 arcmin | 8 |
| | 2 | 145/46/00 | +15/10/00 | 50 | 1 arcmin | 82 |
| Kolchanov,V. | 1 | observing site unknown | | | | |
| Kolomeyets,S. | 1 | observing site unknown | | | | |
| Konstantinov,S. | 1 | observing site unknown | | | | |
| Kopp,M. | 1 | 007/02/15 | +51/20/50 | 228 | 1 arcsec | 25 |
| | 2 | 008/01/00 | +51/01/00 | 450 | 1 arcsec | 25 |
| | 3 | 006/58/20 | +51/19/40 | 145 | 1 arcsec | 25 |
| | 4 | 006/57/10 | +51/18/55 | 120 | 1 arcsec | 25 |
| | 5 | 007/08/05 | +50/44/52 | 46 | 1 arcsec | 25 |
| Kopplin,J. | 1 | 012/28/00 | +50/57/00 | 220 | 1 arcmin | 23 |
| Korneev,V. | 1 | observing site unknown | | | | |
| Korth,S. | 1 | 006/50/54 | +51/11/36 | 45 | 0.1 arcmin | 25 |
| | 2 | 006/20/00 | +50/40/00 | 490 | 1 arcmin | 25 |
| Kosa-Kiss,A. | 1 | 021/39/00 | +46/48/00 | 90 | 1 arcmin | 60 |
| | 2 | 021/57/00 | +47/04/00 | 150 | 1 arcmin | 60 |
| Koschny,D. | 1 | 011/22/44 | +48/12/24 | 350 | 1 arcsec | 25 |
| | 2 | 011/14/34 | +48/14/10 | 554 | 1 arcsec | 25 |
| | 3 | 011/22/49 | +48/12/20 | 500 | 1 arcsec | 25 |
| | 4 | 011/22/19 | +48/08/05 | 510 | 1 arcsec | 25 |
| Kosinski,J. | 1 | 021/27/31 | +52/36/20 | 97 | 1 arcsec | 11 |
| | 2 | 020/59/08 | +52/12/56 | 115 | 1 arcsec | 11 |
| | 3 | 019/42/30 | +54/22/04 | 41 | 1 arcsec | 11 |
| Kourimsky,M. | 1 | 014/25/00 | +50/02/00 | 250 | 1 arcmin | 35 |
| | 2 | 015/36/00 | +50/42/00 | 725 | 1 arcmin | 35 |
| | 3 | 014/33/00 | +49/55/00 | 470 | 1 arcmin | 35 |
| Kral,M. | 1 | 015/55/00 | +49/33/00 | 590 | 1 arcmin | 35 |
| Kraling,W. | 1 | 008/49/53 | +50/47/18 | 220 | 1 arcsec | 25 |
| Krisciunas,K. | 1 | 204/32/36 | +19/45/18 | 2804 | 0.1 arcmin | 76 |
| | 2 | 204/31/42 | +19/46/36 | 4200 | 0.1 arcmin | 76 |
| | 3 | 205/01/42 | +19/34/00 | 91 | 0.1 arcmin | 76 |
| | 4 | 204/33/00 | +19/45/00 | 2134 | 10 arcmin | 76 |
| | 5 | 204/22/00 | +19/50/00 | 1524 | 1 arcmin | 76 |
| Kronk,G. | 1 | 270/04/35 | +38/41/42 | 171 | 1 arcsec | 16 |
| Kroon,B. | 1 | 005/57/06 | +52/15/06 | 16 | 0.1 arcmin | 46 |
| | 2 | 033/11/00 | +15/39/00 | | 1 arcmin | 63 |
| | 3 | 033/14/00 | +15/36/00 | | 1 arcmin | 63 |
| | 4 | 033/08/00 | +15/43/00 | | 1 arcmin | 63 |
| Krylov,A. | 1 | observing site unknown | | | | |
| Kucera,P. | 1 | 017/03/00 | +49/04/00 | 300 | 1 arcmin | 35 |
| | 2 | 015/53/00 | +49/13/00 | 430 | 1 arcmin | 35 |
| Kuipers,G. | 1 | 006/23/42 | +53/13/42 | 2 | 0.1 arcmin | 46 |
| | 2 | 006/23/00 | +53/12/42 | 2 | 1 arcmin | 46 |
| Kukkonen,I.T. | 1 | 024/48/24 | +60/22/36 | 30 | 0.1 arcmin | 19 |
| | 2 | 343/00/00 | +28/00/00 | 2200 | 1 deg | 74 |
| Kurtsov,S. | 1 | observing site unknown | | | | |
| Kusumi,E. | 1 | 138/46/35 | +37/33/52 | 36 | 1 arcsec | 8 |
| Lairet,R. | 1 | 293/04/12 | +10/30/23 | 1046 | 1 arcsec | 17 |
| | 2 | 289/08/00 | +08/47/26 | 3600 | 1 arcmin | 17 |
| | 3 | observing site unknown | | | | |
| | 4 | observing site unknown | | | | |
| | 5 | observing site unknown | | | | |
| Lamb,J.F. | 1 | 264/05/00 | +33/15/00 | 171 | 1 arcmin | 16 |
| Laroche,Y. | 1 | 285/42/38 | +45/33/12 | 60 | 1 arcsec | 21 |
| Laszlo,A. | 1 | 020/30/00 | +46/13/00 | 85 | 1 arcmin | 38 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| Lavarack,N. | 1 | 031/02/40 | -29/45/40 | 183 | 5 arcsec | 13 |
| | 2 | 031/06/20 | -29/37/30 | 119 | 5 arcsec | 13 |
| | 3 | 030/25/00 | -29/45/00 | 850 | 5 arcmin | 13 |
| | 4 | 030/40/50 | -28/44/30 | 823 | 5 arcsec | 13 |
| Lazerson,H. | 1 | 241/28/00 | +34/03/00 | 183 | 1 arcmin | 16 |
| | 2 | 240/50/00 | +34/50/00 | 1524 | 1 arcmin | 16 |
| Lehmann,T. | 1 | 011/00/00 | +51/00/00 | 220 | 0.1 deg | 23 |
| | 2 | 011/36/00 | +50/54/00 | 300 | 0.1 deg | 23 |
| Leitao Jr.,C. | 1 | 313/14/23 | -23/18/45 | 780 | 1 arcsec | 2 |
| Levai,R. | 1 | 313/17/00 | -23/32/00 | 780 | 1 deg | 2 |
| | 2 | 313/28/00 | -23/10/00 | 800 | 1 deg | 2 |
| Levy,A. | 1 | 260/28/37 | +19/47/24 | 3070 | 1 arcsec | 9 |
| Levy,D.H. | 1 | 249/14/00 | +31/57/00 | 1036 | 1 arcmin | 16 |
| | 2 | 249/12/36 | +32/26/33 | 2783 | 2 arcmin | 16 |
| | 3 | 256/00/00 | +30/40/00 | | 10 arcmin | 16 |
| | 4 | 248/24/00 | +31/57/48 | 2120 | 0.1 arcmin | 16 |
| | 5 | 249/16/06 | +32/25/00 | 2510 | 0.1 arcmin | 16 |
| | 6 | 249/14/00 | +32/13/00 | | 5 arcmin | 16 |
| | 7 | 288/08/00 | -13/25/00 | | 10 arcmin | 67 |
| | 8 | 281/28/00 | -00/17/00 | | 1 deg | 85 |
| | 9 | 272/15/00 | -00/10/00 | | 3 deg | 73 |
| Lewis,D.E. | 1 | 273/24/46 | +38/53/22 | 206 | 1 arcsec | 16 |
| | 2 | 278/21/18 | +28/03/58 | 38 | 1 arcsec | 16 |
| Li Causi,G. | 1 | 012/27/00 | +41/55/00 | | 1 arcmin | 7 |
| | 2 | 012/07/12 | +42/25/12 | 750 | 0.01 deg | 7 |
| | 3 | 011/42/00 | +42/39/00 | 300 | 0.1 deg | 7 |
| | 4 | 012/52/51 | +41/27/52 | | 0.01 arcmin | 7 |
| Lieder,F. | 1 | 011/49/00 | +50/47/00 | 325 | 1 arcmin | 23 |
| Lifgren Jr.,M. | 1 | 286/10/00 | +40/55/00 | 49 | 5 arcmin | 16 |
| | 2 | 286/24/00 | +41/00/00 | 229 | 5 arcmin | 16 |
| | 3 | 285/59/00 | +41/18/30 | 390 | 1 arcmin | 16 |
| Lilge,A. | 1 | 243/08/00 | +33/21/00 | | 1 deg | 16 |
| Linder,J. | 1 | 008/15/56 | +48/56/00 | 110 | 1 arcsec | 25 |
| | 2 | 008/18/16 | +48/56/01 | 119 | 1 arcsec | 25 |
| | 3 | 008/31/58 | +48/51/20 | 406 | 1 arcsec | 25 |
| | 4 | 008/30/59 | +48/47/37 | 720 | 1 arcsec | 25 |
| | 5 | 008/27/04 | +48/49/21 | 622 | 1 arcsec | 25 |
| | 6 | 008/24/55 | +48/58/40 | 116 | 1 arcsec | 25 |
| | 7 | 008/33/30 | +48/47/00 | 610 | 1 arcmin | 25 |
| | 8 | 343/20/00 | +28/20/00 | 2200 | 1 deg | 74 |
| | 9 | 343/20/00 | +28/20/00 | 10 | 1 deg | 74 |
| | 10 | 343/20/00 | +28/20/00 | 1400 | 1 deg | 74 |
| | 11 | observing site unknown | | 10 | | |
| Linger,S. | 1 | 359/05/00 | +51/45/00 | 30 | 10 arcmin | 15 |
| Linke,H. | 1 | 011/12/00 | +51/48/00 | 220 | 0.1 deg | 23 |
| Lipski,P. | 1 | 013/48/25 | +51/02/45 | 120 | 0.1 arcsec | 23 |
| Llabres,J. | 1 | 356/00/00 | +40/00/00 | | 5 deg | 14 |
| Lohvinenko,T.W. | 1 | 262/36/18 | +49/53/48 | 232 | 1 arcsec | 21 |
| | 2 | 262/52/45 | +49/38/43 | 234 | 1 arcsec | 21 |
| Lopez,E.V.A. | 1 | 299/26/00 | -33/52/00 | | 1 arcmin | 27 |
| Losada,R. | 1 | 344/21/00 | +27/39/00 | 500 | 1 deg | 74 |
| | 2 | 344/21/00 | +27/39/00 | 1900 | 1 deg | 74 |
| | 3 | observing site unknown | | | | |
| | 4 | 356/18/00 | +40/26/00 | | 0.5 deg | 14 |
| | 5 | 355/52/15 | +40/17/12 | 575 | 1 arcsec | 14 |
| Lovejoy,T. | 1 | 153/10/00 | -27/39/00 | 20 | 1 arcmin | 26 |
| | 2 | 150/10/00 | -30/15/00 | 1524 | 1 arcmin | 26 |
| | 3 | 152/59/00 | -27/44/00 | 46 | 1 arcmin | 26 |
| | 4 | 156/00/00 | -27/00/00 | 10668 | 10 deg | 98 |
| | 5 | 153/10/00 | -27/30/00 | | 1 deg | 26 |
| Lovera,A. | 1 | observing site unknown | | | | |
| Lozano,L. | 1 | 356/18/00 | +40/26/00 | | 5 deg | 14 |
| | 2 | 356/15/00 | +40/25/00 | 1000 | 5 deg | 14 |
| Lucius,D. | 1 | 010/50/00 | +52/25/00 | 70 | 1 arcmin | 25 |
| | 2 | 010/51/00 | +52/17/30 | 150 | 1 arcmin | 25 |
| | 3 | 009/50/00 | +51/37/00 | 160 | 1 arcmin | 25 |
| Ludewig O.,F.L. | 1 | 291/29/00 | +10/10/00 | | 10 deg | 17 |
| | 2 | 290/41/00 | +10/04/00 | 566 | 2 deg | 17 |
| | 3 | observing site unknown | | | | |
| Luga,M. | 1 | 015/19/55 | +51/37/05 | 120 | 0.5 arcmin | 11 |
| Lund,L. | 1 | 275/52/02 | +35/59/07 | 338 | 0.5 arcsec | 16 |
| | 2 | 275/52/06 | +35/39/09 | 335 | 1 arcsec | 16 |
| Lunde,R. | 1 | 005/50/15 | +62/20/53 | 27 | 0.1 arcsec | 47 |
| | 2 | 005/55/10 | +62/19/45 | 500 | 0.1 arcsec | 47 |
| Lupianez,B. | 1 | 301/34/00 | -34/36/18 | 20 | 1 arcmin | 27 |
| | 2 | 301/31/12 | -34/40/00 | 25 | 1 arcmin | 27 |
| | 3 | 301/08/00 | -34/47/00 | 30 | 1 arcmin | 27 |
| Luthen,H. | 1 | 010/16/00 | +53/39/00 | 53 | 1 arcmin | 25 |
| | 2 | 343/30/00 | +28/18/00 | 1500 | 1 arcmin | 74 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| | 3 | 009/48/00 | +53/27/00 | 40 | 1 arcmin | 25 |
| Lyubavin,A. | 1 | observing site unknown | | | | |
| Maat,W.J. | 1 | 006/52/54 | +53/19/24 | 0 | 0.1 arcmin | 46 |
| | 2 | 006/50/48 | +53/21/36 | 0 | 0.1 arcmin | 46 |
| Mac Kenzie,G. | 1 | 299/50/00 | +46/07/59 | 8 | 3.6 arcsec | 21 |
| | 2 | 299/44/13 | +45/33/40 | 5 | 3.6 arcsec | 21 |
| Machholz,D. | 1 | 238/06/00 | +37/04/00 | 1024 | 0.1 deg | 16 |
| | 2 | 237/54/00 | +37/15/00 | 640 | 0.1 deg | 16 |
| | 3 | 238/06/00 | +37/18/00 | 21 | 0.1 deg | 16 |
| | 4 | 239/40/00 | +38/05/00 | | 0.5 deg | 16 |
| | 5 | 172/38/00 | -43/30/00 | | 2 deg | 48 |
| | 6 | 169/55/00 | -44/25/00 | | 1 deg | 48 |
| | 7 | 176/17/00 | -38/07/00 | | 1 deg | 48 |
| | 8 | 176/25/00 | -38/07/00 | | 1 deg | 48 |
| | 9 | 175/20/00 | -38/02/00 | | 1 deg | 48 |
| | 10 | 238/20/00 | +36/41/00 | | 1 deg | 16 |
| | 11 | 243/13/00 | +34/15/00 | 2286 | 2 arcmin | 16 |
| | 12 | 238/30/00 | +37/10/00 | | 0.5 deg | 16 |
| Maciejewski,W. | 1 | 017/02/00 | +51/05/35 | 130 | 1 arcmin | 11 |
| Madenberg,J. | 1 | 269/00/00 | -01/00/00 | | 3 deg | 73 |
| Maeda,S. | 1 | 133/51/24 | +33/30/12 | 10 | 0.1 arcmin | 8 |
| Makino,J. | 1 | 137/24/00 | +35/05/00 | 760 | 1 arcmin | 8 |
| | 2 | 137/11/00 | +35/13/00 | 350 | 1 arcmin | 8 |
| | 3 | 136/58/00 | +35/10/00 | 30 | 1 arcmin | 8 |
| | 4 | 136/58/00 | +34/43/00 | 20 | 1 arcmin | 8 |
| | 5 | 137/37/00 | +34/47/00 | | 1 arcmin | 8 |
| Maksimov,S. | 1 | observing site unknown | | | | |
| Mamedov,V. | 1 | observing site unknown | | | | |
| Manulis,I. | 1 | 034/59/45 | +31/55/40 | 225 | 1 arcsec | 40 |
| | 2 | 034/27/36 | +30/23/24 | 837 | 1 arcsec | 40 |
| Mao,A. | 1 | 012/18/00 | +45/25/00 | | 2 deg | 7 |
| Marafie,A.H. | 1 | 047/57/00 | +28/33/00 | 145 | 1 arcmin | 42 |
| | 2 | 048/05/00 | +29/18/00 | 58 | 1 arcmin | 42 |
| Maraziti,A. | 1 | 017/00/00 | +38/54/00 | 0 | 0.1 deg | 7 |
| | 2 | 016/36/00 | +38/54/00 | 350 | 0.1 deg | 7 |
| | 3 | observing site unknown | | | | |
| | 4 | observing site unknown | | | | |
| Marekfia,G. | 1 | 007/00/00 | +49/00/00 | | 1 deg | 25 |
| Martin,D. | 1 | 358/43/00 | +54/35/00 | 15 | 1 arcmin | 15 |
| | 2 | 358/44/00 | +54/22/00 | 250 | 1 arcmin | 15 |
| | 3 | 359/03/00 | +54/25/00 | 429 | 1 arcmin | 15 |
| | 4 | 358/38/00 | +54/37/00 | 21 | 1 arcmin | 15 |
| | 5 | 149/15/03 | -33/25/05 | | 1 arcsec | 26 |
| | 6 | 149/40/06 | -31/20/05 | 1126 | 1 arcsec | 26 |
| | 7 | 150/75/00 | -33/35/02 | | 1 arcsec | 26 |
| Martinez,C. | 1 | 301/34/00 | -34/36/18 | 20 | 1 arcmin | 27 |
| | 2 | 301/35/00 | -34/36/00 | 20 | 1 arcmin | 27 |
| | 3 | 301/08/00 | -34/47/00 | 30 | 1 arcmin | 27 |
| Martinez,P. | 1 | 055/36/00 | -21/06/00 | 100 | 1 arcmin | 70 |
| | 2 | 055/18/00 | -21/02/00 | 500 | 1 arcmin | 70 |
| Martis,A. | 1 | observing site unknown | | | | |
| Marx,H. | 1 | 009/11/51 | +48/47/01 | 354 | 1 arcsec | 25 |
| | 2 | 009/05/00 | +48/48/00 | 300 | 1 arcmin | 25 |
| Matchett,V. | 1 | 152/59/06 | -27/30/47 | 10 | 3.6 arcsec | 26 |
| Maturkanic,M. | 1 | 021/54/40 | +48/56/17 | 160 | 0.1 arcsec | 35 |
| Maydik,A. | 1 | observing site unknown | | | | |
| Maylisov,P. | 1 | observing site unknown | | | | |
| McBain,J. | 1 | 028/39/34 | -20/05/09 | 1330 | 0.1 arcsec | 59 |
| McBride,P. | 1 | 266/36/46 | +36/19/43 | 378 | 0.1 arcsec | 16 |
| McNaught,R.H. | 1 | 149/06/00 | -31/18/00 | 1126 | 0.1 deg | 26 |
| Medway,K. | 1 | 358/36/00 | +50/56/21 | 50 | 2 arcmin | 15 |
| Melandri,F. | 1 | 011/56/00 | +44/33/00 | 6 | 1 arcmin | 7 |
| | 2 | 011/45/00 | +44/03/00 | 681 | 1 arcmin | 7 |
| | 3 | 011/15/00 | +44/28/00 | 246 | 1 arcmin | 7 |
| | 4 | 011/56/00 | +44/25/00 | 30 | 1 arcmin | 7 |
| | 5 | 012/02/00 | +44/32/00 | 5 | 1 arcmin | 7 |
| | 6 | 012/11/00 | +44/26/00 | 4 | 1 arcmin | 7 |
| | 7 | 011/09/00 | +44/16/00 | 250 | 1 arcmin | 7 |
| | 8 | 011/33/00 | +44/02/00 | 600 | 1 arcmin | 7 |
| | 9 | 011/47/00 | +44/03/00 | 767 | 1 arcmin | 7 |
| | 10 | 011/48/00 | +44/30/00 | 9 | 1 arcmin | 7 |
| | 11 | 011/51/00 | +44/25/00 | 13 | 1 arcmin | 7 |
| | 12 | 057/00/00 | -20/00/00 | | 1 deg | 45 |
| Mendez,J. | 1 | 359/19/00 | +37/37/00 | | 1 arcmin | 14 |
| | 2 | 356/46/00 | +40/05/00 | | 1 arcmin | 14 |
| | 3 | 359/16/00 | +37/42/00 | | 1 arcmin | 14 |
| | 4 | 356/21/00 | +40/18/00 | | 1 arcmin | 14 |
| Menichetti,R. | 1 | 012/34/37 | +43/20/00 | 580 | 1 arcmin | 7 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| Meozzi,D. | 1 | 012/18/50 | +42/09/20 | 250 | 1 arcsec | 7 |
| | 2 | 013/35/30 | +42/07/34 | 1850 | 1 arcsec | 7 |
| | 3 | 013/34/00 | +42/09/30 | 1065 | 1 arcsec | 7 |
| | 4 | 013/12/25 | +41/57/20 | 1785 | 1 arcsec | 7 |
| | 5 | 012/27/10 | +41/55/20 | 20 | 1 arcsec | 7 |
| Merlin,J.-C. | 1 | 004/26/06 | +46/49/43 | 350 | 1 arcsec | 4 |
| | 2 | 004/23/40 | +46/49/20 | 455 | 1 arcsec | 4 |
| | 3 | 006/55/36 | +43/44/54 | 1270 | 0.1 arcmin | 4 |
| | 4 | 315/00/16 | -20/47/22 | 920 | 1 arcmin | 2 |
| Micek,I. | 1 | 017/21/00 | +48/40/00 | 200 | 1 arcmin | 35 |
| Mikuz,H. | 1 | 014/04/33 | +45/56/44 | 730 | 1 arcsec | 35 |
| Milani,G. | 1 | 011/50/00 | +45/25/00 | 30 | 5 arcmin | 7 |
| | 2 | 011/50/00 | +45/20/00 | 400 | 5 arcmin | 7 |
| | 3 | 011/40/00 | +45/50/00 | 600 | 5 arcmin | 7 |
| | 4 | 011/30/00 | +45/52/00 | 1300 | 5 arcmin | 7 |
| | 5 | 011/25/00 | +45/20/00 | 300 | 5 arcmin | 7 |
| Minton,R.B. | 1 | 255/03/36 | +39/35/24 | 1710 | 0.01 deg | 16 |
| | 2 | 255/04/00 | +39/27/00 | | 3 arcmin | 16 |
| | 3 | 210/30/00 | -17/30/00 | | 0.5 deg | 61 |
| Misuhin,A. | 1 | observing site unknown | | | | |
| Mitchell,R.C. | 1 | 239/16/36 | +46/57/06 | 1198 | 0.1 arcmin | 16 |
| Mitsuma,S. | 1 | 139/15/00 | +36/14/00 | 40 | 1 arcmin | 8 |
| | 2 | 139/06/36 | +36/08/00 | 380 | 0.1 arcmin | 8 |
| | 3 | 139/09/24 | +36/08/30 | 320 | 0.1 arcmin | 8 |
| Mobberley,M. | 1 | 000/47/06 | +52/10/20 | 85 | 1 arcsec | 15 |
| | 2 | 343/20/00 | +28/00/00 | | 1 arcmin | 74 |
| Moeller,M. | 1 | 010/43/46 | +53/51/38 | 22 | 1 arcsec | 25 |
| | 2 | 010/50/18 | +53/59/06 | 8 | 1 arcsec | 25 |
| | 3 | 010/45/42 | +54/01/45 | 3 | 1 arcsec | 25 |
| Molinari,L. | 1 | 008/45/00 | +46/00/00 | | 1 deg | 7 |
| Moller,D. | 1 | 013/20/00 | +52/31/00 | | 1 deg | 25 |
| Momose,M. | 1 | 139/33/00 | +35/36/00 | 50 | 1 arcmin | 8 |
| | 2 | 137/26/00 | +36/08/00 | 680 | 1 arcmin | 8 |
| | 3 | observing site unknown | | | | |
| Monopoli,M.O. | 1 | 301/34/00 | -34/36/18 | 20 | 1 arcmin | 27 |
| Moore,A.J. | 1 | 257/31/46 | +31/44/50 | 925 | 1 arcsec | 16 |
| | 2 | 257/14/30 | +32/02/40 | 995 | 1 arcsec | 16 |
| Moreno,G. | 1 | 301/57/00 | -34/50/00 | 20 | 1 arcmin | 27 |
| | 2 | 301/35/00 | -34/36/00 | 30 | 1 arcmin | 27 |
| Moriya,M. | 1 | 136/57/32 | +35/09/16 | 40 | 0.01 arcsec | 8 |
| | 2 | 139/22/00 | +35/41/31 | | 1 arcsec | 8 |
| Mormil,V. | 1 | observing site unknown | | | | |
| Morris,C.S. | 1 | 242/19/12 | +34/22/54 | 2287 | 1 arcsec | 16 |
| | 2 | 243/13/00 | +34/15/00 | 2286 | 2 arcmin | 16 |
| | 3 | 240/54/34 | +34/44/50 | 1631 | 1 arcsec | 16 |
| | 4 | 249/16/06 | +32/25/00 | 2545 | 1 arcsec | 16 |
| | 5 | 249/14/00 | +31/57/00 | 1036 | 1 arcmin | 16 |
| | 6 | 242/00/30 | +34/16/40 | 1524 | 1 arcsec | 16 |
| | 7 | 241/17/03 | +34/34/28 | 1006 | 1 arcsec | 16 |
| | 8 | 242/24/00 | +34/24/00 | 2408 | 1 arcmin | 16 |
| | 9 | 241/42/10 | +34/16/25 | 488 | 1 arcsec | 16 |
| | 10 | 241/45/00 | +34/17/24 | 524 | 1 arcmin | 16 |
| | 11 | 242/03/00 | +34/21/00 | 2134 | 1 arcmin | 16 |
| | 12 | 243/30/00 | +32/49/00 | 1372 | 1 arcmin | 16 |
| | 13 | 241/58/00 | +34/31/00 | 914 | 1 arcmin | 16 |
| | 14 | 241/48/00 | +34/18/00 | 1067 | 1 arcmin | 16 |
| | 15 | 241/54/00 | +34/27/00 | 1219 | 1 arcmin | 16 |
| | 16 | 241/11/30 | +34/43/30 | 899 | 2 arcmin | 16 |
| | 17 | 241/24/12 | +34/30/30 | 549 | 5 arcsec | 16 |
| | 18 | 241/27/00 | +34/22/00 | 396 | 1 arcmin | 16 |
| | 19 | 301/30/00 | -34/45/00 | 61 | 1 arcmin | 27 |
| | 20 | 305/02/50 | -34/57/45 | 9 | 1 arcsec | 89 |
| | 21 | 308/08/06 | -32/48/04 | 9 | 1 arcsec | 89 |
| | 22 | 312/36/18 | -27/56/30 | 9 | 1 arcsec | 89 |
| | 23 | 313/38/00 | -25/03/00 | 9 | 1 arcmin | 89 |
| | 24 | 316/45/00 | -23/00/00 | 30 | 1 arcmin | 2 |
| | 25 | 271/42/00 | +03/12/00 | 10668 | 1 arcmin | 98 |
| | 26 | 244/00/00 | +35/00/00 | 10363 | 1 deg | 98 |
| | 27 | 241/42/06 | +34/07/06 | 362 | 1 arcsec | 16 |
| | 28 | 198/00/00 | +15/00/00 | 10668 | 1 deg | 98 |
| | 29 | 151/30/00 | -33/21/00 | 30 | 1 arcmin | 26 |
| | 30 | 151/29/00 | -33/24/00 | 107 | 1 arcmin | 26 |
| | 31 | 149/04/12 | -31/16/48 | 1181 | 1 arcsec | 26 |
| | 32 | 150/45/00 | -34/00/00 | 152 | 1 arcmin | 26 |
| | 33 | 151/30/00 | -34/00/00 | 9 | 1 arcmin | 26 |
| | 34 | 134/00/00 | -23/42/00 | 457 | 1 deg | 26 |
| | 35 | 134/00/00 | -23/36/00 | 10058 | 1 deg | 98 |
| | 36 | 133/30/00 | -24/30/00 | 457 | 1 arcmin | 26 |
| | 37 | 130/54/00 | -25/30/00 | 549 | 1 arcmin | 26 |
| | 38 | 241/36/00 | +34/24/00 | 366 | 1 arcmin | 16 |
| | 39 | 240/56/24 | +34/48/00 | 2591 | 1 arcmin | 16 |
| Morrisby,A. | 1 | 028/37/00 | -20/09/00 | 1340 | 1 arcmin | 59 |
| Morrison,W. | 1 | 281/39/42 | +44/17/18 | 195 | 0.1 arcmin | 21 |
| | 2 | 281/33/48 | +44/13/54 | 240 | 0.1 arcmin | 21 |
| | 3 | 281/36/00 | +44/12/54 | 200 | 0.1 arcmin | 21 |
| | 4 | 281/38/34 | +44/17/53 | 240 | 1 arcsec | 21 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| Mosch,J. | 1 | 013/30/00 | +51/10/00 | 100 | 1 arcmin | 23 |
| | 2 | 013/45/00 | +50/45/00 | 750 | 1 arcmin | 23 |
| | 3 | 012/35/00 | +54/25/00 | 5 | 1 arcmin | 23 |
| | 4 | 013/02/00 | +50/55/00 | 280 | 1 arcmin | 23 |
| Moskal,W. | 1 | 021/46/09 | +49/41/41 | 260 | 1 arcsec | 11 |
| Muller,R.D. | 1 | 153/00/00 | -29/00/00 | | 2 deg | 26 |
| Muravyeva,Yu. | 1 | observing site unknown | | | | |
| Nagele,A. | 1 | 011/21/58 | +48/08/06 | 532 | 3.6 arcsec | 25 |
| | 2 | 011/21/58 | +47/39/22 | 615 | 3.6 arcsec | 25 |
| Nakamura,A. | 1 | 137/34/00 | +35/17/00 | 1130 | 1 arcmin | 8 |
| | 2 | 137/18/00 | +35/12/00 | 250 | 1 arcmin | 8 |
| | 3 | 137/35/00 | +34/48/00 | 40 | 1 arcmin | 8 |
| | 4 | 136/53/00 | +34/45/00 | 100 | 1 arcmin | 8 |
| | 5 | 137/36/00 | +35/11/00 | 1050 | 1 arcmin | 8 |
| | 6 | 137/23/00 | +35/05/00 | 620 | 1 arcmin | 8 |
| | 7 | 136/59/00 | +35/01/00 | 30 | 1 arcmin | 8 |
| | 8 | 137/51/00 | +36/40/00 | 720 | 1 arcmin | 8 |
| | 9 | 147/47/00 | +13/17/00 | 0 | 1 arcmin | 8 |
| | 10 | 140/08/00 | +36/12/00 | 360 | 1 arcmin | 8 |
| Nakamura,Y. | 1 | 136/33/00 | +34/46/00 | 3 | 1 arcmin | 8 |
| | 2 | 137/00/00 | +38/00/00 | | 15 deg | 8 |
| | 3 | 137/00/00 | +38/00/00 | | 15 deg | 8 |
| | 4 | 137/00/00 | +38/00/00 | | 15 deg | 8 |
| Nassr,J.L. | 1 | 120/34/00 | +16/24/39 | 1507 | 1 arcsec | 50 |
| | 2 | 120/36/34 | +16/24/36 | 1542 | 0.01 arcsec | 50 |
| Navalihin,M. | 1 | observing site unknown | | | | |
| Nesterov,Yu. | 1 | observing site unknown | | | | |
| Nieborek,T. | 1 | 021/28/00 | +52/36/00 | 90 | 1 arcmin | 11 |
| Niijima,T. | 1 | 139/20/12 | +36/14/43 | 34 | 0.1 arcsec | 8 |
| Nolle,M. | 1 | 010/09/00 | +48/26/00 | 560 | 1 arcmin | 25 |
| | 2 | 009/42/00 | +48/33/00 | 785 | 1 arcmin | 25 |
| Notley,M. | 1 | 202/30/00 | +21/10/00 | 70 | 0.01 deg | 76 |
| | 2 | 202/30/36 | +21/20/00 | 0 | 0.01 deg | 76 |
| Nowak,G.T. | 1 | 286/50/00 | +44/20/00 | 194 | 5 arcmin | 16 |
| | 2 | 287/20/00 | +43/25/00 | 274 | 5 arcmin | 16 |
| | 3 | 287/10/00 | +43/30/00 | 366 | 5 arcmin | 16 |
| O'Meara,S.J. | 1 | 288/52/12 | +42/22/48 | 24 | 0.1 arcmin | 16 |
| | 2 | 204/32/00 | +19/49/36 | 4215 | 1 arcmin | 16 |
| | 3 | 288/26/30 | +42/30/18 | 185 | 0.1 arcmin | 16 |
| | 4 | 287/28/30 | +42/21/57 | 110 | 0.1 arcmin | 16 |
| | 5 | 288/39/00 | +42/28/00 | | 10 arcmin | 16 |
| | 6 | 172/38/00 | -43/30/00 | | 1 deg | 48 |
| | 7 | 130/54/00 | -25/30/00 | 549 | 0.5 deg | 26 |
| | 8 | 134/00/00 | -23/42/00 | 457 | 0.5 deg | 26 |
| Ocampo M.,W. | 1 | 286/30/00 | +05/30/00 | 2000 | 0.5 deg | 33 |
| Oka,A. | 1 | 131/51/00 | +34/42/00 | 20 | 1 arcmin | 8 |
| | 2 | 131/51/00 | +34/32/00 | 250 | 1 arcmin | 8 |
| Okada,M. | 1 | 135/43/00 | +34/35/00 | 50 | 1 arcmin | 8 |
| | 2 | 135/57/00 | +34/37/00 | 458 | 1 arcmin | 8 |
| Okuda,M. | 1 | 136/00/09 | +34/34/02 | 400 | 0.36 arcsec | 8 |
| | 2 | 136/00/51 | +34/34/13 | 400 | 1 arcsec | 8 |
| | 3 | 135/38/18 | +34/52/23 | 50 | 1 deg | 8 |
| Okumura,S. | 1 | 137/52/50 | +35/30/38 | 428 | 1 arcsec | 8 |
| | 2 | 137/45/36 | +35/24/17 | 700 | 1 arcsec | 8 |
| Olesen,J.O. | 1 | 014/43/18 | +55/08/42 | 10 | 1 arcsec | 22 |
| Onofre D.,D. | 1 | 308/49/53 | -29/55/42 | 3 | 0.01 arcsec | 2 |
| | 2 | 308/29/15 | -30/14/35 | 200 | 1 arcsec | 2 |
| Oskin,E. | 1 | observing site unknown | | | | |
| Pacholka,W. | 1 | 243/54/00 | +33/54/00 | 1067 | 0.1 deg | 16 |
| Padilla,S. | 1 | 241/56/42 | +34/13/00 | 1742 | 0.1 arcmin | 16 |
| Palko,Yu. | 1 | observing site unknown | | | | |
| Paolinetti,R. | 1 | 011/10/26 | +43/43/41 | 140 | 0.01 arcsec | 7 |
| Paradowski,M. | 1 | 022/32/35 | +51/14/50 | 240 | 1 arcsec | 11 |
| | 2 | 022/56/12 | +51/22/16 | 171 | 1 arcsec | 11 |
| Parisio,R. | 1 | 009/36/46 | +45/27/59 | 150 | 1 arcsec | 7 |
| | 2 | 009/29/16 | +45/44/15 | 1800 | 1 arcsec | 7 |
| | 3 | 009/00/00 | +45/00/00 | 1300 | 10 deg | 7 |
| | 4 | 009/00/00 | +45/00/00 | 500 | 10 deg | 7 |
| | 5 | observing site unknown | | | | |
| | 6 | 315/00/00 | +15/00/00 | | 30 deg | 98 |
| | 7 | 317/40/00 | -22/50/00 | | 5 deg | 2 |
| Parkinson,M. | 1 | 152/58/54 | -27/35/36 | 0 | 0.1 arcmin | 26 |
| | 2 | 152/54/42 | -27/35/12 | 0 | 0.1 arcmin | 26 |
| | 3 | 151/34/12 | -26/57/36 | 914 | 0.1 arcmin | 26 |
| | 4 | 152/25/18 | -28/04/30 | 750 | 0.1 arcmin | 26 |
| Paschenko,A. | 1 | observing site unknown | | | | |
| Pashko,D. | 1 | observing site unknown | | | | |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| Passalacqua,P. | 1 | 284/39/00 | +43/14/00 | 152 | 1 arcmin | 16 |
| Paul,E. | 1 | 013/36/00 | +53/04/00 | 20 | 0.1 deg | 23 |
| Pawlutschenko,B. | 1 | observing site unknown | | | | |
| Pearce,A. | 1 | 115/47/17 | -31/55/00 | 20 | 1 arcmin | 26 |
| | 2 | 115/45/42 | -31/55/08 | 35 | 1 arcsec | 26 |
| | 3 | 116/09/47 | -31/57/30 | 120 | 1 arcsec | 26 |
| | 4 | 116/11/19 | -31/48/17 | 290 | 1 arcsec | 26 |
| Pedersen,V.T. | 1 | 344/00/00 | +29/00/00 | | 3 deg | 74 |
| Pedraz,S. | 1 | 355/52/00 | +40/38/00 | | 0.5 deg | 14 |
| | 2 | 355/52/15 | +40/17/12 | 575 | 1 arcsec | 14 |
| | 3 | 357/04/00 | +40/45/00 | 1005 | 1 arcmin | 14 |
| Pena,E.D. | 1 | 286/10/00 | +05/07/00 | 3200 | 1 arcmin | 33 |
| Pennelli,G. | 1 | 010/30/00 | +43/09/00 | 20 | 30 arcmin | 7 |
| | 2 | 010/30/00 | +43/09/00 | 200 | 30 arcmin | 7 |
| Pereira,A. | 1 | 350/45/51 | +38/43/37 | 105 | 1 arcsec | 51 |
| | 2 | 350/46/08 | +38/42/00 | 29 | 1 arcsec | 51 |
| | 3 | 350/31/26 | +38/46/32 | 235 | 0.1 arcsec | 51 |
| Persell,D. | 1 | 241/23/37 | +34/15/33 | 293 | 1 arcsec | 16 |
| Pesci,S. | 1 | 009/40/00 | +45/30/00 | | 0.5 deg | 7 |
| | 2 | 006/50/00 | +45/02/00 | 1800 | 1 arcmin | 7 |
| Petrov,P. | 1 | observing site unknown | | | | |
| Pfitzner,E. | 1 | 012/21/00 | +50/44/00 | 330 | 1 arcmin | 23 |
| Phillips,J. | 1 | 281/00/00 | +33/00/00 | 2 | 1 deg | 16 |
| Piccinini,M. | 1 | 012/28/07 | +41/49/24 | 50 | 1 arcsec | 7 |
| | 2 | 011/52/30 | +42/02/26 | 15 | 1 arcsec | 7 |
| | 3 | 014/15/56 | +41/50/07 | 1540 | 1 arcsec | 7 |
| | 4 | 012/44/03 | +41/44/28 | 850 | 1 arcsec | 7 |
| | 5 | 012/27/06 | +41/43/00 | 20 | 1 arcsec | 7 |
| Pilch,R. | 1 | 017/10/00 | +51/05/00 | 120 | 1 arcmin | 11 |
| Pilski,A. | 1 | 019/41/00 | +54/20/30 | 46 | 0.1 arcmin | 11 |
| | 2 | 020/00/42 | +48/22/36 | 210 | 1 arcsec | 11 |
| Pishnenko,V. | 1 | observing site unknown | | | | |
| Pizzi,R. | 1 | 299/18/00 | -32/57/00 | | 1 deg | 27 |
| Pleshkunov,D. | 1 | observing site unknown | | | | |
| Polak,J. | 1 | 013/22/00 | +49/44/00 | 340 | 1 arcmin | 35 |
| | 2 | 013/10/00 | +49/52/00 | 500 | 1 arcmin | 35 |
| Ponomaryov,E. | 1 | observing site unknown | | | | |
| Poroshin,A. | 1 | observing site unknown | | | | |
| Portela,A. | 1 | 357/04/00 | +40/45/00 | 1005 | 1 arcmin | 14 |
| | 2 | 356/15/00 | +40/20/00 | | 1 deg | 14 |
| | 3 | 356/00/00 | +40/00/00 | | 10 deg | 14 |
| | 4 | 355/42/40 | +40/26/40 | 910 | 1 arcsec | 14 |
| | 5 | 356/53/35 | +40/31/15 | 916 | 1 arcsec | 14 |
| Posa,O. | 1 | 020/00/48 | +48/22/36 | 210 | 0.1 arcsec | 35 |
| Poulos,D. | 1 | 238/52/00 | +37/14/00 | 610 | 1 arcmin | 16 |
| | 2 | 238/10/00 | +37/06/00 | 1012 | 1 arcmin | 16 |
| | 3 | 238/18/00 | +37/20/00 | 518 | 1 arcmin | 16 |
| | 4 | 238/10/00 | +37/20/00 | 107 | 1 arcmin | 16 |
| Pravec,P. | 1 | 016/35/00 | +49/33/00 | 350 | 1 arcmin | 35 |
| | 2 | 018/21/00 | +49/41/00 | 340 | 1 arcmin | 35 |
| | 3 | 018/22/00 | +49/41/00 | 350 | 1 arcmin | 35 |
| | 4 | 016/07/00 | +49/11/00 | 430 | 1 arcmin | 35 |
| Priester,D.C. | 1 | 276/18/26 | +32/55/36 | 145 | 1 arcsec | 16 |
| | 2 | 276/19/25 | +32/57/28 | 187 | 1 arcsec | 16 |
| | 3 | 276/32/22 | +32/27/33 | 101 | 0.5 arcsec | 16 |
| | 4 | 276/30/57 | +33/01/10 | 194 | 1 arcsec | 16 |
| | 5 | 276/13/07 | +33/01/37 | 145 | 1 arcsec | 16 |
| Pryal,J. | 1 | 238/00/00 | +48/00/00 | 305 | 1 deg | 16 |
| | 2 | 236/00/00 | +49/00/00 | 305 | 1 deg | 21 |
| | 3 | 237/48/00 | +47/46/00 | | 1 deg | 16 |
| | 4 | 238/00/00 | +48/00/00 | | 5 deg | 16 |
| | 5 | 238/00/00 | +48/00/00 | | 5 deg | 16 |
| | 6 | 237/49/00 | +47/59/00 | | 5 deg | 16 |
| | 7 | 237/48/00 | +47/37/00 | | 1 deg | 16 |
| | 8 | 203/58/00 | +20/52/00 | | 1 deg | 76 |
| | 9 | 238/00/00 | +48/00/00 | | 5 deg | 16 |
| | 10 | 238/00/00 | +48/00/00 | | 5 deg | 16 |
| Purvinskis,R. | 1 | 116/06/00 | -31/55/00 | 225 | 1 arcsec | 26 |
| | 2 | 115/49/00 | -32/04/00 | 25 | 1 arcsec | 26 |
| Raffaello,D. | 1 | 011/11/00 | +43/49/00 | 921 | 1 arcmin | 7 |
| | 2 | 011/15/00 | +43/46/00 | 55 | 1 arcmin | 7 |
| Rapavy,P. | 1 | 020/00/48 | +48/22/36 | 210 | 0.1 arcsec | 35 |
| | 2 | 018/17/00 | +47/52/00 | 110 | 1 arcmin | 35 |
| | 3 | 019/09/15 | +48/43/00 | 570 | 1 arcmin | 35 |
| Ratz,K. | 1 | 010/14/00 | +50/48/00 | 240 | 1 arcmin | 23 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| Ratz,M. | 1 | 010/14/00 | +50/48/00 | 240 | 1 arcmin | 23 |
| Riccabone,G. | 1 | 007/38/04 | +45/02/48 | 255 | 1 arcsec | 7 |
| | 2 | 007/45/56 | +45/02/46 | 532 | 1 arcsec | 7 |
| | 3 | 007/46/45 | +44/15/15 | 1474 | 1 arcsec | 7 |
| | 4 | 007/28/52 | +45/17/25 | | 1 arcsec | 7 |
| Richardson,C. | 1 | 115/35/00 | -31/10/00 | | 1 arcmin | 26 |
| Richert,M. | 1 | 011/37/30 | +52/10/00 | 70 | 1 arcsec | 23 |
| | 2 | 011/39/00 | +52/07/00 | | 0.5 deg | 23 |
| Ridley,H.B. | 1 | 357/15/42 | +50/55/21 | 59 | 1 arcsec | 15 |
| Ripero,J. | 1 | 357/04/00 | +40/45/00 | 1005 | 1 arcmin | 14 |
| | 2 | 356/28/00 | +40/21/00 | 635 | 2 arcmin | 14 |
| Robertson,G. | 1 | 172/20/59 | -43/30/04 | 152 | 0.1 arcsec | 48 |
| | 2 | 133/56/00 | -23/42/00 | | 1 arcmin | 26 |
| Robertson,T. | 1 | 241/13/00 | +34/16/00 | 364 | 1 arcmin | 16 |
| | 2 | 242/11/00 | +34/42/00 | | 10 arcmin | 16 |
| | 3 | 245/20/00 | +32/40/00 | | 1 deg | 16 |
| Robinson,P.C. | 1 | 280/03/12 | +39/39/06 | 335 | 0.1 arcmin | 16 |
| | 2 | 280/08/42 | +39/29/36 | 527 | 0.1 arcmin | 16 |
| | 3 | 280/02/54 | +39/34/54 | 411 | 0.1 arcmin | 16 |
| | 4 | 279/57/48 | +39/41/54 | 427 | 0.1 arcmin | 16 |
| Robinson,R.L. | 1 | 280/03/12 | +39/39/06 | 335 | 0.1 arcmin | 16 |
| | 2 | 279/39/44 | +40/41/54 | 335 | 1 arcsec | 16 |
| Robotham,R. | 1 | 279/12/00 | +42/48/00 | 275 | 0.1 deg | 21 |
| Rodriguez C.,J.A. | 1 | 356/23/18 | +41/00/24 | 1010 | 10 arcmin | 14 |
| | 2 | 356/18/00 | +40/26/00 | | 0.5 deg | 14 |
| | 3 | 357/04/00 | +40/45/00 | 1005 | 1 arcmin | 14 |
| Rodriguez,J. | 1 | 286/13/00 | +05/06/00 | | 0.5 deg | 33 |
| Rodriguez,V. | 1 | 293/02/00 | +10/30/00 | 885 | 5 deg | 17 |
| | 2 | 293/02/00 | +10/30/00 | | 5 deg | 17 |
| | 3 | 293/02/00 | +10/30/00 | | 5 deg | 17 |
| Rogers,J.H. | 1 | 000/05/42 | +52/12/48 | 30 | 0.1 arcmin | 15 |
| | 2 | 000/16/00 | +52/06/00 | 50 | 1 arcmin | 15 |
| | 3 | 358/12/00 | +54/24/00 | | 0.1 deg | 15 |
| | 4 | 343/18/00 | +28/00/00 | 100 | 0.1 deg | 74 |
| | 5 | 343/18/00 | +28/00/00 | 1600 | 0.1 deg | 74 |
| | 6 | 343/18/00 | +28/00/00 | 1800 | 0.1 deg | 74 |
| | 7 | 343/18/00 | +28/00/00 | 2070 | 0.1 deg | 74 |
| Rogozin,V. | 1 | observing site unknown | | | | |
| Roos,M.C. | 1 | 004/36/00 | +52/19/00 | 0 | 1 arcmin | 46 |
| | 2 | 004/42/00 | +52/18/00 | 0 | 1 arcmin | 46 |
| Rosenthal,D. | 1 | 210/05/30 | -17/30/42 | 0 | 1 arcsec | 61 |
| Rossi,L. | 1 | 013/07/00 | +43/26/42 | 505 | 0.1 arcmin | 7 |
| | 2 | 013/04/06 | +43/19/42 | 1200 | 0.1 arcmin | 7 |
| Rousom,J. | 1 | 278/54/36 | +43/01/12 | 278 | 0.01 deg | 21 |
| Royer,R. | 1 | 242/21/00 | +34/22/00 | 2134 | 2 arcmin | 16 |
| | 2 | 149/04/00 | -31/17/00 | 1100 | 0.5 deg | 26 |
| | 3 | 241/51/00 | +33/50/00 | | 10 arcmin | 16 |
| | 4 | 134/00/00 | -24/00/00 | 610 | 40 deg | 26 |
| | 5 | 243/00/00 | +36/34/00 | 610 | 2 deg | 16 |
| | 6 | 244/07/00 | +34/02/00 | 1372 | 1 deg | 16 |
| | 7 | 133/56/00 | -23/38/00 | 610 | 2 deg | 16 |
| | 8 | 134/00/00 | -24/00/00 | 9 | 40 deg | 26 |
| | 9 | 145/49/00 | -17/02/00 | 30 | 2 deg | 16 |
| Ru-Hu,C. | 1 | 121/27/00 | +31/10/00 | 4 | 1 arcmin | 10 |
| | 2 | 109/00/00 | +19/00/00 | | 1.5 deg | 10 |
| Rudakov,G. | 1 | observing site unknown | | | | |
| Rudenko,S. | 1 | observing site unknown | | | | |
| Rudolph,M. | 1 | 011/38/31 | +50/34/25 | 501 | 1 arcsec | 23 |
| | 2 | 011/38/10 | +50/34/12 | 533 | 1 arcsec | 23 |
| Rueda,N. | 1 | 285/56/00 | +04/35/00 | 2600 | 1 arcmin | 33 |
| | 2 | 286/13/00 | +05/06/00 | 2900 | 1 arcmin | 33 |
| | 3 | 286/00/00 | +05/00/00 | | 5 deg | 33 |
| Ruiz,J. | 1 | 356/12/00 | +43/28/00 | 10 | 5 arcmin | 14 |
| Rumyantsev,I. | 1 | observing site unknown | | | | |
| Sabers,D. | 1 | 149/04/00 | -31/17/00 | 610 | 0.5 deg | 26 |
| Sabia,J.D. | 1 | 284/19/56 | +41/35/47 | 399 | 1 arcsec | 16 |
| | 2 | 287/28/50 | +43/16/41 | 393 | 1 arcsec | 16 |
| | 3 | 284/19/50 | +41/30/44 | 439 | 1 arcsec | 16 |
| Sajtz,A. | 1 | 021/43/00 | +46/39/00 | 100 | 1 arcmin | 60 |
| Sakai,Y. | 1 | 138/51/36 | +35/00/57 | | 1 arcsec | 8 |
| Sanchez,A. | 1 | 249/39/55 | +31/03/13 | 2460 | 1 arcsec | 9 |
| Sanford,J. | 1 | 243/16/46 | +33/29/02 | 1329 | 1 arcsec | 16 |
| | 2 | 242/35/00 | +33/38/00 | | 10 arcmin | 16 |
| | 3 | 242/25/00 | +33/45/00 | | 10 arcmin | 16 |
| | 4 | 175/15/00 | -37/45/00 | | 10 arcmin | 48 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| | 5 | 242/20/00 | +33/47/00 | | 0.5 deg | 16 |
| | 6 | 171/30/00 | -45/50/00 | | 10 arcmin | 48 |
| Saraceno,J. | 1 | observing site unknown | | | | |
| Sardini,D. | 1 | 010/05/00 | +45/36/00 | 203 | 1 arcmin | 7 |
| Sarocchi,D. | 1 | 011/21/30 | +43/41/30 | 420 | 1 arcsec | 7 |
| | 2 | 010/55/00 | +43/43/00 | | 10 arcmin | 7 |
| | 3 | 011/15/18 | +43/45/12 | 184 | 0.1 arcmin | 7 |
| Savelyev,A. | 1 | observing site unknown | | | | |
| Saxon,V.P. | 1 | 242/04/40 | +34/49/00 | 701 | 1 arcsec | 16 |
| | 2 | 241/54/00 | +34/42/00 | 732 | 1 arcmin | 16 |
| | 3 | 241/50/00 | +34/57/00 | 762 | 1 arcmin | 16 |
| Scardella,M. | 1 | 012/45/00 | +41/49/00 | | 1 deg | 7 |
| Schambeck,C.M. | 1 | 011/07/08 | +48/12/03 | 540 | 0.05 arcmin | 25 |
| | 2 | 344/25/56 | +27/44/48 | 2 | 1 arcsec | 74 |
| | 3 | 344/22/18 | +27/45/23 | 75 | 1 arcsec | 74 |
| | 4 | 344/25/37 | +27/44/40 | 20 | 1 arcsec | 74 |
| Schmeer,P. | 1 | 007/03/42 | +49/12/52 | 293 | 1 arcsec | 25 |
| Schneidereit,J.. | 1 | 011/36/00 | +50/54/00 | 145 | 0.1 deg | 23 |
| Scholten,A. | 1 | 006/03/30 | +52/06/54 | 17 | 0.1 arcmin | 46 |
| | 2 | 006/07/18 | +52/11/54 | 7 | 0.1 arcmin | 46 |
| | 3 | 006/03/30 | +52/09/00 | | 1 arcmin | 46 |
| | 4 | 011/00/00 | +33/48/00 | 10 | 0.1 deg | 84 |
| | 5 | 006/07/15 | +52/11/52 | 7 | 1 arcsec | 46 |
| Schumacher,K. | 1 | 007/40/00 | +49/10/00 | 300 | 1 arcmin | 25 |
| Sciezor,T. | 1 | 019/55/00 | +50/05/00 | 220 | 2 arcmin | 11 |
| | 2 | 019/49/00 | +49/58/00 | 260 | 1 arcmin | 11 |
| Seargent,D. | 1 | 151/29/37 | -33/21/02 | 30 | 0.1 arcsec | 26 |
| Searles,M. | 1 | 264/50/00 | +29/28/00 | 2 | 1 arcmin | 16 |
| Sedelkin,D. | 1 | observing site unknown | | | | |
| Selevich,G. | 1 | observing site unknown | | | | |
| Shankar,A. | 1 | 077/12/06 | +28/30/12 | 240 | 0.1 arcmin | 5 |
| | 2 | 076/53/18 | +28/27/24 | 225 | 0.1 arcmin | 5 |
| | 3 | 077/04/42 | +28/28/36 | 236 | 0.1 arcmin | 5 |
| | 4 | 077/10/00 | +28/30/00 | 260 | 0.1 arcmin | 5 |
| Shanklin,J.D. | 1 | 000/05/46 | +52/12/47 | 10 | 3.6 arcsec | 15 |
| | 2 | 000/10/12 | +52/01/48 | 70 | 0.01 deg | 15 |
| | 3 | 357/03/00 | +53/08/24 | 20 | 0.01 deg | 15 |
| | 4 | 000/06/00 | +52/00/00 | | 0.1 deg | 15 |
| | 5 | 295/42/00 | -65/18/00 | | 0.1 deg | 1 |
| | 6 | 291/36/00 | -67/42/00 | | 0.1 deg | 1 |
| | 7 | 291/24/00 | -66/30/00 | | 0.1 deg | 1 |
| | 8 | 295/42/00 | -65/18/00 | | 0.1 deg | 1 |
| | 9 | 302/30/00 | -55/06/00 | | 0.1 deg | 89 |
| | 10 | 302/12/00 | -51/42/00 | | 0.1 deg | 89 |
| | 11 | 303/00/00 | -52/12/00 | | 0.1 deg | 89 |
| | 12 | 306/36/00 | -55/24/00 | | 0.1 deg | 89 |
| | 13 | 314/24/00 | -60/42/00 | | 0.1 deg | 89 |
| | 14 | 322/00/00 | -54/00/00 | | 0.1 deg | 89 |
| | 15 | 321/36/00 | -53/12/00 | | 0.1 deg | 89 |
| | 16 | 321/36/00 | -49/12/00 | | 0.1 deg | 89 |
| | 17 | 320/48/00 | -45/06/00 | | 0.1 deg | 89 |
| | 18 | 319/48/00 | -40/36/00 | | 0.1 deg | 89 |
| | 19 | 319/06/00 | -36/18/00 | | 0.1 deg | 89 |
| | 20 | 318/30/00 | -32/12/00 | | 0.1 deg | 89 |
| | 21 | 318/12/00 | -30/36/00 | | 0.1 deg | 89 |
| | 22 | 317/42/00 | -27/48/00 | | 0.1 deg | 89 |
| | 23 | 317/36/00 | -27/12/00 | | 0.1 deg | 89 |
| | 24 | 317/24/00 | -26/24/00 | | 0.1 deg | 89 |
| | 25 | 316/54/00 | -22/48/00 | | 0.1 deg | 89 |
| | 26 | 316/48/00 | -22/54/00 | | 0.1 deg | 89 |
| | 27 | 317/42/00 | -23/06/00 | | 0.1 deg | 89 |
| | 28 | 321/18/00 | -18/30/00 | | 0.1 deg | 89 |
| | 29 | 322/42/00 | -15/06/00 | | 0.1 deg | 89 |
| | 30 | 324/18/00 | -10/36/00 | | 0.1 deg | 89 |
| | 31 | 326/06/00 | -06/06/00 | | 0.1 deg | 89 |
| | 32 | 333/30/00 | +15/18/00 | | 0.1 deg | 89 |
| | 33 | 335/12/00 | +19/18/00 | | 0.1 deg | 89 |
| | 34 | 337/12/00 | +23/30/00 | | 0.1 deg | 89 |
| | 35 | 339/18/00 | +27/30/00 | | 0.1 deg | 89 |
| | 36 | 341/48/00 | +31/24/00 | | 0.1 deg | 89 |
| | 37 | 346/54/00 | +39/06/00 | | 0.1 deg | 89 |
| | 38 | 349/30/00 | +43/00/00 | | 0.1 deg | 89 |
| Shilov,S. | 1 | observing site unknown | | | | |
| Shirokov,A. | 1 | observing site unknown | | | | |
| Shitikov,A. | 1 | observing site unknown | | | | |
| Siccardi,L. | 1 | 296/06/00 | -34/30/00 | 154 | 5 arcmin | 27 |
| | 2 | observing site unknown | | | | |
| Sicoli,P. | 1 | 009/14/27 | +45/47/32 | 271 | 1 arcsec | 7 |
| | 2 | 009/13/37 | +45/52/55 | 1182 | 1 arcsec | 7 |
| Sikoruk,L. | 1 | observing site unknown | | | | |
| Silban,J. | 1 | 017/02/30 | +49/04/00 | 300 | 2.5 arcmin | 35 |
| Simmons,K. | 1 | 278/11/00 | +30/30/00 | 11 | 1 arcmin | 16 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| Simmons,W. | 1 | 278/11/00 | +30/30/00 | 11 | 1 arcmin | 16 |
| Skjaeraasen,O. | 1 | 010/47/21 | +59/55/12 | 50 | 2 arcsec | 47 |
| | 2 | 010/40/06 | +59/59/13 | 530 | 2 arcsec | 47 |
| | 3 | 010/38/00 | +59/54/00 | 10 | 1 arcmin | 47 |
| | 4 | 010/00/00 | +60/00/00 | | 5 deg | 47 |
| Skorupa,W. | 1 | 007/21/00 | +51/20/00 | 281 | 1 arcmin | 25 |
| Skvarka,J. | 1 | 019/09/00 | +48/43/00 | 568 | 1 arcmin | 35 |
| Sladkov,Ya. | 1 | observing site unknown | | | | |
| Slusarczyk,J. | 1 | 020/13/23 | +50/02/03 | 189 | 1 arcsec | 11 |
| Smith,A. | 1 | 273/48/25 | +35/07/40 | 299 | 1 arcsec | 16 |
| | 2 | 273/54/15 | +35/12/29 | 296 | 1 arcsec | 16 |
| Smith,D. | 1 | 273/35/50 | +35/44/25 | 204 | 1 arcsec | 16 |
| Snyder,L.F. | 1 | 240/03/30 | +39/15/10 | 2134 | 10 arcsec | 16 |
| | 2 | 240/04/10 | +39/12/00 | 2134 | 10 arcsec | 16 |
| | 3 | 240/07/00 | +39/19/00 | 2743 | 10 arcsec | 16 |
| Soc. Astro. de France | 1 | 055/42/00 | -21/13/00 | 2300 | 1 arcmin | 70 |
| | 2 | 055/14/00 | -21/02/00 | 100 | 1 arcmin | 70 |
| | 3 | 002/13/54 | +48/48/16 | 170 | 0.1 arcmin | 4 |
| | 4 | 000/08/42 | +42/56/12 | 2861 | 0.1 arcmin | 4 |
| Soder,J. | 1 | 275/46/22 | +40/14/56 | 309 | 1 arcsec | 16 |
| Spalding,G.H. | 1 | 358/33/07 | +51/37/26 | 70 | 3.6 arcsec | 15 |
| Speil,J. | 1 | 015/33/36 | +77/00/04 | 10 | 1 arcsec | 11 |
| Spratt,C.E. | 1 | 236/49/12 | +48/15/00 | 9 | 0.01 deg | 21 |
| | 2 | 236/46/48 | +48/18/00 | 9 | 0.01 deg | 21 |
| | 3 | 236/49/48 | +48/15/36 | 6 | 0.01 deg | 21 |
| | 4 | 236/48/36 | +48/16/48 | 21 | 0.01 deg | 21 |
| Stapleton,J. | 1 | 242/14/00 | +33/53/00 | 168 | 1 arcmin | 16 |
| | 2 | 241/53/00 | +33/51/00 | 12 | 1 arcmin | 16 |
| | 3 | 243/51/00 | +34/05/00 | 951 | 1 arcmin | 16 |
| | 4 | 283/00/00 | -10/00/00 | 0 | 10 deg | 67 |
| Stephan,C. | 1 | 278/33/16 | +27/31/23 | 39 | 0.1 arcsec | 16 |
| Sternwarte Frankfurt | 1 | 016/24/00 | -23/17/00 | 1780 | 1 arcmin | 15 |
| Sternwarte Hof | 1 | 011/54/56 | +50/18/05 | 521 | 1 arcsec | 25 |
| | 2 | 011/52/36 | +50/14/56 | 624 | 1 arcsec | 25 |
| | 3 | 357/20/00 | +36/55/00 | 2311 | 1 arcmin | 14 |
| | 4 | 326/02/30 | +09/30/00 | 2000 | 1 arcmin | 69 |
| Stolzen,P. | 1 | 015/52/00 | -22/00/00 | 1165 | 2 deg | 65 |
| Stomeo,E. | 1 | 012/21/01 | +45/23/17 | 10 | 0.36 arcsec | 7 |
| | 2 | 012/24/00 | +45/24/00 | 3 | 0.1 deg | 7 |
| Storey,D. | 1 | 357/59/00 | +51/30/00 | 156 | 1 arcmin | 15 |
| | 2 | 358/06/20 | +51/33/00 | 130 | 1 arcmin | 15 |
| | 3 | 345/38/30 | -07/56/00 | | 1 arcmin | 83 |
| Stott,D. | 1 | 358/42/24 | +51/03/36 | 80 | 0.1 arcmin | 15 |
| Suzuki,K. | 1 | 137/21/24 | +35/10/12 | 420 | 0.1 arcmin | 8 |
| | 2 | 137/15/24 | +35/08/06 | 115 | 0.1 arcmin | 8 |
| | 3 | 143/20/00 | +14/00/00 | | 1 deg | 82 |
| Swart,E.T. | 1 | 005/29/54 | +51/28/06 | 17 | 0.1 arcmin | 46 |
| Swavely,M.E. | 1 | 282/05/00 | +40/45/00 | 34 | 1 arcmin | 16 |
| | 2 | 282/12/00 | +40/42/00 | | 1 arcmin | 16 |
| Szulc,M. | 1 | 017/52/04 | +53/35/04 | 128 | 0.1 arcsec | 11 |
| Szymocha,M. | 1 | 019/20/00 | +50/30/00 | 350 | 1 arcmin | 11 |
| Takacs,R. | 1 | 019/09/11 | +48/45/00 | 568 | 1 arcmin | 35 |
| Tanikawa,M. | 1 | 146/00/00 | +16/00/00 | 50 | 1 deg | 8 |
| | 2 | 139/29/00 | +35/55/00 | | 1 deg | 8 |
| | 3 | 139/00/00 | +36/00/00 | | 10 deg | 8 |
| | 4 | 139/00/00 | +36/00/00 | | 10 deg | 8 |
| | 5 | observing site unknown | | | | |
| | 6 | observing site unknown | | | | |
| | 7 | 139/31/00 | +35/51/00 | | 5 deg | 82 |
| Tanti,T. | 1 | 014/26/54 | +35/55/02 | 120 | 1 arcsec | 44 |
| | 2 | observing site unknown | | | | |
| Tarnutzer,A. | 1 | 008/19/21 | +47/02/15 | 470 | 1 arcsec | 18 |
| | 2 | 008/18/23 | +47/02/23 | 487 | 1 arcsec | 18 |
| | 3 | 313/10/17 | -22/54/00 | 1100 | 1 arcsec | 2 |
| Tatarnikov,A. | 1 | observing site unknown | | | | |
| Tatum,R. | 1 | 282/25/12 | +37/30/30 | 106 | 0.1 arcsec | 16 |
| Taylor,D.L. | 1 | 288/34/00 | -41/05/00 | | 1 arcmin | 27 |
| Taylor,M.D. | 1 | 358/28/56 | +53/40/34 | 30 | 0.1 arcsec | 15 |
| | 2 | 358/11/36 | +53/54/12 | 350 | 0.1 arcmin | 15 |
| | 3 | 343/21/30 | +28/00/18 | 10 | 0.1 arcmin | 74 |
| Temprano,J. | 1 | 359/44/49 | +43/27/48 | | 1 arcsec | 14 |
| Thomas,A. | 1 | 006/47/00 | +50/40/00 | 180 | 1 arcmin | 25 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| | 2 | 008/17/00 | +49/56/00 | 175 | 1 arcmin | 25 |
| | 3 | 343/20/00 | +28/11/00 | 2020 | 1 arcmin | 74 |
| | 4 | 008/40/00 | +49/47/00 | 150 | 1 arcmin | 25 |
| Thompson,G. | 1 | 153/19/02 | -27/39/40 | 130 | 1 arcsec | 26 |
| | 2 | 153/08/04 | -27/37/07 | 85 | 0.1 arcsec | 26 |
| | 3 | 153/25/00 | -27/43/00 | 30 | 1 arcmin | 26 |
| | 4 | 153/23/00 | -27/41/00 | 200 | 1 arcmin | 26 |
| | 5 | 153/10/00 | -27/50/00 | 5 | 1 arcmin | 26 |
| | 6 | 153/16/00 | -27/46/00 | 0 | 1 arcmin | 26 |
| | 7 | 153/17/48 | -27/43/24 | 0 | 0.1 arcmin | 26 |
| | 8 | 153/10/00 | -27/45/00 | 20 | 1 arcmin | 26 |
| | 9 | 153/20/12 | -27/43/16 | 0 | 0.1 arcmin | 26 |
| | 10 | 153/25/00 | -27/41/00 | 200 | 1 arcmin | 26 |
| | 11 | 130/54/00 | -25/30/00 | 549 | 1 deg | 26 |
| Torres,E. | 1 | 358/06/24 | +43/17/01 | 120 | 1 arcsec | 14 |
| | 2 | 358/01/00 | +43/19/00 | | 1 deg | 14 |
| | 3 | 293/20/00 | +18/00/00 | | 3 deg | 77 |
| | 4 | 293/50/00 | +18/30/00 | | 1 deg | 77 |
| | 5 | 293/20/00 | +18/00/00 | | 3 deg | 77 |
| | 6 | observing site unknown | | | | |
| Townsend,R. | 1 | 359/50/00 | +51/53/00 | 95 | 1 arcmin | 15 |
| | 2 | 359/52/00 | +51/53/00 | 110 | 1 arcmin | 15 |
| | 3 | 359/38/00 | +51/59/00 | 61 | 1 arcmin | 15 |
| Travnik,N.A.S. | 1 | 313/10/19 | -22/53/59 | 1100 | 1 arcsec | 2 |
| Trebacz,A. | 1 | 020/13/23 | +50/02/03 | 198 | 1 arcsec | 11 |
| Tregaskis,T.B. | 1 | 145/06/26 | -38/11/06 | 110 | 1 arcsec | 26 |
| | 2 | 145/11/00 | -38/16/00 | | 1 arcmin | 26 |
| | 3 | 145/10/00 | -37/49/00 | | 20 arcmin | 26 |
| | 4 | 145/17/00 | -38/24/00 | | 1 arcmin | 26 |
| | 5 | 147/19/00 | -42/54/00 | | 1 arcmin | 26 |
| | 6 | 145/03/00 | -36/51/00 | | 1 arcmin | 26 |
| | 7 | 144/57/00 | -37/18/00 | | 1 arcmin | 26 |
| | 8 | 145/06/00 | -38/11/00 | | 20 arcmin | 26 |
| Trixler,F. | 1 | 011/31/00 | +47/51/00 | 730 | 1 arcmin | 25 |
| | 2 | 011/29/00 | +47/51/00 | 600 | 1 arcmin | 25 |
| Troiani,D.M. | 1 | 271/00/00 | +42/30/00 | 299 | 1 deg | 16 |
| | 2 | 271/00/00 | +41/30/00 | 239 | 1 deg | 16 |
| | 3 | 272/00/00 | +42/30/00 | 216 | 1 deg | 16 |
| | 4 | 269/00/00 | +29/00/00 | 3072 | 1 deg | 16 |
| | 5 | 271/30/00 | +42/00/00 | | 1 deg | 16 |
| | 6 | 272/23/00 | +41/49/00 | | 1 deg | 16 |
| | 7 | 272/00/00 | +41/15/00 | | 10 deg | 16 |
| | 8 | 272/00/00 | +41/49/00 | | 10 deg | 16 |
| | 9 | 272/07/00 | +41/07/00 | | 2 arcmin | 16 |
| | 10 | 272/10/00 | +41/56/00 | | 2 arcmin | 16 |
| Trost,D. | 1 | observing site unknown | | | | |
| Tsvetkov,L. | 1 | observing site unknown | | | | |
| Tsygankov,D. | 1 | observing site unknown | | | | |
| Turner,N. | 1 | 151/46/00 | -32/56/00 | 55 | 1 arcmin | 26 |
| | 2 | 151/05/00 | -32/05/00 | 305 | 1 arcmin | 26 |
| Tuten,J. | 1 | 264/55/00 | +29/31/00 | 6 | 1 arcmin | 16 |
| | 2 | 262/49/30 | +29/37/00 | 8 | 1 arcmin | 16 |
| | 3 | 264/50/00 | +29/28/00 | 2 | 1 arcmin | 16 |
| Uberti,M. | 1 | 009/13/35 | +45/26/40 | 137 | 0.1 arcsec | 7 |
| | 2 | 009/30/20 | +45/50/00 | 1400 | 1 arcsec | 7 |
| | 3 | 009/07/15 | +45/59/20 | 1322 | 1 arcsec | 7 |
| | 4 | 009/06/23 | +46/01/00 | 1100 | 1 arcsec | 7 |
| Uda,K. | 1 | 136/04/42 | +34/53/42 | 280 | 0.1 arcmin | 8 |
| | 2 | 136/03/06 | +34/52/48 | 350 | 0.1 arcmin | 8 |
| Ulbricht,S. | 1 | 013/20/00 | +52/31/00 | | 1 deg | 25 |
| Underhay,E. | 1 | observing site unknown | | | | |
| Urbanski,P. | 1 | 019/37/00 | +52/14/00 | 100 | 1 arcmin | 11 |
| Vaclik,F. | 1 | 014/39/00 | +48/54/00 | 500 | 1 arcmin | 35 |
| Valasek,V. | 1 | 016/35/00 | +49/02/00 | 200 | 1 arcmin | 35 |
| Valeriani,G. | 1 | 289/35/34 | +44/11/33 | 176 | 0.36 arcsec | 16 |
| | 2 | 289/37/07 | +44/11/29 | 253 | 0.36 arcsec | 16 |
| Valisa,P. | 1 | observing site unknown | | | | |
| van Asperen,H. | 1 | 005/58/18 | +51/59/30 | | 0.1 arcmin | 46 |
| van de Weg,R.L.W. | 1 | 006/45/36 | +52/17/42 | 15 | 0.1 arcmin | 46 |
| | 2 | 006/47/18 | +52/17/48 | 16 | 0.1 arcmin | 46 |
| | 3 | 006/44/12 | +52/17/06 | 17 | 0.1 arcmin | 46 |
| | 4 | 003/54/45 | +51/43/30 | 1 | 0.1 arcmin | 46 |
| | 5 | 013/58/18 | +46/40/36 | 511 | 0.1 arcmin | 28 |
| van der Laan,T.A. | 1 | 007/12/06 | +53/04/48 | 2 | 0.1 arcmin | 46 |
| van der Mey,L. | 1 | 026/43/00 | -27/58/00 | 1350 | 1 arcmin | 13 |
| | 2 | 027/07/30 | -28/18/30 | 1450 | 0.1 arcmin | 13 |
| van Loo,F.R. | 1 | 004/42/48 | +51/06/24 | 10 | 0.1 arcmin | 29 |
| | 2 | 004/44/18 | +51/02/24 | 15 | 0.1 arcmin | 29 |
| | 3 | 006/01/24 | +43/58/30 | 735 | 0.1 arcmin | 4 |
| | 4 | 005/50/00 | +44/06/00 | 1700 | 0.1 deg | 4 |
| | 5 | 342/58/00 | +28/41/00 | | 0.5 deg | 74 |
| | 6 | observing site unknown | | | | |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| | 7 | 004/45/30 | +51/06/29 | | 1 arcmin | 29 |
| | 8 | 343/20/38 | +28/26/53 | | 3.6 arcsec | 74 |
| van Munster,T. | 1 | 005/04/48 | +50/46/18 | 80 | 0.1 arcmin | 29 |
| Vanin,G. | 1 | 011/54/42 | +46/03/22 | 462 | 0.1 arcsec | 7 |
| | 2 | 011/48/44 | +45/58/18 | 1050 | 0.1 arcsec | 7 |
| | 3 | 012/18/35 | +46/04/51 | 1500 | 1 arcsec | 7 |
| | 4 | 010/12/00 | +46/33/00 | 2250 | 1 arcmin | 7 |
| | 5 | 010/10/00 | +46/33/00 | 1816 | 1 arcmin | 7 |
| | 6 | 012/01/36 | +46/00/48 | 1010 | 1 arcsec | 7 |
| | 7 | 012/04/30 | +46/37/42 | 3191 | 0.1 arcmin | 7 |
| | 8 | 010/36/00 | +34/36/00 | 0 | 1 arcmin | 84 |
| | 9 | 009/01/00 | +33/28/00 | 0 | 1 arcmin | 84 |
| | 10 | 007/56/00 | +34/26/00 | 900 | 1 arcmin | 84 |
| | 11 | 009/37/00 | +33/02/00 | 0 | 1 arcmin | 84 |
| Vargas B.,A.G. | 1 | 293/56/00 | -17/23/00 | 2500 | 1 arcmin | 31 |
| | 2 | 294/25/00 | -17/41/00 | 4200 | 1 arcmin | 31 |
| Velasco,E. | 1 | 356/15/00 | +40/20/00 | | 1 deg | 14 |
| | 2 | 356/27/10 | +40/21/20 | 601 | 1 arcsec | 14 |
| | 3 | 356/35/00 | +40/14/00 | 640 | 1 deg | 14 |
| Velasco,P. | 1 | 356/15/00 | +40/20/00 | | 1 deg | 14 |
| | 2 | 356/27/10 | +40/21/20 | 601 | 1 arcsec | 14 |
| Ventura,F. | 1 | 014/25/44 | +35/54/21 | 85 | 1 arcsec | 44 |
| Verdenet,M. | 1 | 003/45/15 | +46/37/20 | 250 | 1 arcsec | 4 |
| Verhoeven,P.G. | 1 | 005/43/42 | +50/47/42 | 56 | 0.1 arcmin | 46 |
| | 2 | 005/42/18 | +50/49/54 | 50 | 0.1 arcmin | 46 |
| Villa,M. | 1 | 011/56/00 | +44/33/00 | 6 | 1 arcmin | 7 |
| | 2 | 011/45/00 | +44/03/00 | 681 | 1 arcmin | 7 |
| | 3 | 011/15/00 | +44/28/00 | 246 | 1 arcmin | 7 |
| | 4 | 011/56/00 | +44/25/00 | 30 | 1 arcmin | 7 |
| | 5 | 012/06/00 | +44/27/00 | 5 | 1 arcmin | 7 |
| | 6 | 012/01/00 | +46/31/00 | 2117 | 1 arcmin | 7 |
| | 7 | 011/47/00 | +44/03/00 | 767 | 1 arcmin | 7 |
| | 8 | 011/48/00 | +44/30/00 | 9 | 1 arcmin | 7 |
| | 9 | 011/51/00 | +44/25/00 | 13 | 1 arcmin | 7 |
| | 10 | 015/01/00 | +37/07/00 | 695 | 1 arcmin | 7 |
| | 11 | 015/07/00 | +37/04/00 | 17 | 1 arcmin | 7 |
| | 12 | 012/28/00 | +42/30/00 | 200 | 1 arcmin | 7 |
| | 13 | 011/54/00 | +44/29/00 | 6 | 1 arcmin | 7 |
| | 14 | 012/17/00 | +41/44/00 | 3 | 1 arcmin | 7 |
| Villate,F. | 1 | 285/00/00 | +10/57/00 | | 0.5 deg | 33 |
| Villegas,S. | 1 | 301/35/00 | -34/36/00 | 25 | 1 arcmin | 27 |
| | 2 | 301/34/00 | -34/36/18 | 20 | 1 arcmin | 27 |
| Vincent,F. | 1 | 356/59/21 | +56/27/54 | 152 | 1 arcsec | 12 |
| | 2 | 357/11/24 | +56/19/44 | 38 | 1 arcsec | 12 |
| | 3 | 027/34/00 | -29/36/00 | 1676 | 1 arcmin | 68 |
| | 4 | 028/02/00 | -29/51/00 | 2286 | 1 arcmin | 68 |
| Vincent,J. | 1 | 031/30/00 | -17/42/00 | 1500 | 0.1 deg | 59 |
| | 2 | 031/06/26 | -17/46/07 | 1510 | 0.1 arcsec | 59 |
| | 3 | 025/00/00 | -29/00/00 | | 10 deg | 13 |
| | 4 | 025/00/00 | -29/00/00 | | 10 deg | 13 |
| | 5 | 030/00/00 | -23/00/00 | | 5 deg | 13 |
| Vohla,F. | 1 | 012/28/00 | +50/57/00 | 220 | 1 arcmin | 23 |
| Wagner,G. | 1 | 008/15/54 | +48/55/32 | 120 | 1 arcsec | 25 |
| | 2 | 008/18/16 | +48/56/01 | 119 | 1 arcsec | 25 |
| | 3 | 008/31/58 | +48/51/20 | 406 | 1 arcsec | 25 |
| | 4 | 008/30/39 | +48/47/37 | 720 | 1 arcsec | 25 |
| | 5 | 008/27/04 | +48/49/21 | 622 | 1 arcsec | 25 |
| | 6 | 008/21/54 | +48/58/40 | 116 | 1 arcsec | 25 |
| Wakatsuki,M. | 1 | 139/27/20 | +35/20/29 | 13 | 1 arcsec | 8 |
| | 2 | 139/02/06 | +35/13/00 | | 1 arcsec | 8 |
| | 3 | 139/02/53 | +35/10/48 | | 1 arcsec | 8 |
| Wallace,B.G. | 1 | 277/15/41 | +27/46/59 | 6 | 1 arcsec | 16 |
| | 2 | 277/15/51 | +27/37/45 | 2 | 0.1 arcsec | 16 |
| | 3 | 277/19/33 | +27/38/57 | 2 | 0.1 arcsec | 16 |
| | 4 | 277/19/28 | +27/39/21 | 2 | 0.1 arcsec | 16 |
| | 5 | 277/42/11 | +28/28/43 | 82 | 0.1 arcsec | 16 |
| Ward,A. | 1 | 357/50/38 | +51/38/19 | 116 | 1 arcsec | 15 |
| | 2 | 149/04/00 | -31/17/00 | | 20 arcmin | 26 |
| | 3 | 149/00/00 | -31/00/00 | | 5 deg | 26 |
| Washi,I. | 1 | 136/00/09 | +34/34/02 | 400 | 0.36 arcsec | 8 |
| | 2 | 145/45/00 | +15/11/00 | | 1 deg | 82 |
| Washi,S. | 1 | 136/00/09 | +34/34/02 | 400 | 0.36 arcsec | 8 |
| | 2 | observing site unknown | | | | |
| | 3 | 145/45/00 | +15/11/00 | | 1 deg | 82 |
| Watanabe,A. | 1 | 140/49/10 | +38/13/47 | 100 | 1 arcsec | 8 |
| Watanabe,H. | 1 | 140/49/10 | +38/13/47 | 100 | 1 arcsec | 8 |
| Watanabe,N. | 1 | 139/10/00 | +37/55/00 | 10 | 1 arcmin | 8 |
| | 2 | 139/30/00 | +38/02/00 | 230 | 1 arcmin | 8 |
| | 3 | 139/21/00 | +37/56/00 | 20 | 1 arcmin | 8 |
| | 4 | 140/30/00 | +37/41/00 | 1500 | 1 arcmin | 8 |
| | 5 | 139/04/00 | +36/26/00 | | 1 deg | 8 |
| | 6 | 139/26/30 | +38/12/15 | | 0.1 arcmin | 8 |
| Webb,R. | 1 | 238/19/51 | +36/25/39 | 581 | 0.01 arcsec | 16 |
| Weissferdt,F. | 1 | 008/23/43 | +50/32/17 | 200 | 1 arcsec | 25 |

Table VIII. Observers (Cont'd)

| Observer | Site | Longitude | Latitude | Altitude | Precision | Country |
|---|---|---|---|---|---|---|
| | 2 | 008/15/59 | +50/22/09 | 220 | 1 arcsec | 25 |
| | 3 | 015/30/00 | -20/15/00 | 1150 | 1 arcmin | 65 |
| Westlund,M. | 1 | 017/45/00 | +59/53/42 | 25 | 0.1 arcmin | 54 |
| | 2 | 017/06/00 | +60/05/00 | 60 | 0.1 arcmin | 54 |
| | 3 | 012/52/36 | +60/48/54 | 570 | 0.1 arcmin | 54 |
| | 4 | 012/51/12 | +60/45/54 | 300 | 0.1 arcmin | 54 |
| | 5 | 012/57/54 | +60/17/48 | 520 | 0.1 arcmin | 54 |
| | 6 | 342/18/00 | +28/37/00 | 46 | 1 arcmin | 74 |
| | 7 | 343/26/00 | +28/17/00 | 2021 | 1 arcmin | 74 |
| | 8 | 344/22/00 | +27/45/00 | 18 | 1 arcmin | 74 |
| | 9 | 017/24/36 | +59/56/24 | 30 | 0.1 arcmin | 54 |
| | 10 | 346/15/06 | +28/59/36 | 186 | 0.1 arcmin | 74 |
| | 11 | 343/30/00 | +28/18/00 | 2387 | 1 arcmin | 74 |
| Wikholm,L. | 1 | 025/03/54 | +60/14/00 | 30 | 1 arcmin | 19 |
| Will,M. | 1 | 270/57/07 | +37/48/26 | 125 | 1 arcsec | 16 |
| | 2 | 271/02/04 | +37/47/38 | 139 | 1 arcsec | 16 |
| | 3 | 281/34/00 | +38/32/00 | 1006 | 1 arcmin | 16 |
| | 4 | 281/37/00 | +38/35/00 | 1006 | 1 arcmin | 16 |
| | 5 | 284/32/00 | +38/07/00 | 0 | 1 arcmin | 16 |
| | 6 | 282/59/00 | +39/00/00 | | 1 arcmin | 16 |
| Williams,D.J. | 1 | 271/00/00 | +35/42/00 | 145 | 0.1 deg | 16 |
| Williams,J. | 1 | 265/47/25 | +39/06/23 | 244 | 1 arcsec | 16 |
| Williams,P.F. | 1 | 150/59/44 | -34/05/45 | 189 | 1 arcsec | 26 |
| | 2 | 149/15/42 | -31/20/00 | 1160 | 1 arcsec | 26 |
| | 3 | 130/58/00 | -25/11/00 | 860 | 1 arcmin | 26 |
| Wils,P. | 1 | 004/19/54 | +51/06/54 | 6 | 0.1 arcmin | 29 |
| | 2 | 006/01/24 | +43/58/30 | 735 | 0.1 arcmin | 4 |
| | 3 | 343/20/38 | +28/26/53 | 2400 | 3.6 arcsec | 74 |
| | 4 | 342/58/00 | +28/41/00 | 0 | 1 deg | 74 |
| Wilson,A.M. | 1 | 249/59/30 | +34/09/12 | 1981 | 3 arcsec | 16 |
| Winkler,R. | 1 | 012/40/00 | +51/30/00 | 114 | 1 arcmin | 23 |
| Wisniewski,P. | 1 | 284/57/45 | +42/03/30 | 45 | 1 arcsec | 16 |
| Witte,F. | 1 | 014/34/30 | +52/14/42 | 27 | 0.1 arcmin | 23 |
| | 2 | 014/39/48 | +52/09/54 | 35 | 0.1 arcmin | 23 |
| | 3 | 014/25/18 | +52/15/18 | 43 | 0.1 arcmin | 23 |
| Woidyla,B. | 1 | 265/50/16 | +45/33/38 | 317 | 1 arcsec | 16 |
| | 2 | 265/36/29 | +45/34/50 | 378 | 1 arcsec | 16 |
| | 3 | 255/58/41 | +30/40/19 | 1829 | 4 arcsec | 16 |
| Yasuki,M. | 1 | 134/15/00 | +35/28/00 | 10 | 1 arcmin | 8 |
| | 2 | 134/20/00 | +35/29/00 | 415 | 1 arcmin | 8 |
| | 3 | 134/15/00 | +35/28/00 | 20 | 1 arcmin | 8 |
| | 4 | 134/17/00 | +35/23/00 | 72 | 1 arcmin | 8 |
| Yen,B. | 1 | 240/56/00 | +34/48/00 | 2591 | 5 arcmin | 16 |
| | 2 | 240/55/00 | +34/42/00 | 1585 | 0.5 deg | 16 |
| | 3 | 244/00/00 | +33/40/00 | | 1 deg | 16 |
| Young,J.W. | 1 | 242/19/12 | +34/22/54 | 2286 | 0.1 arcmin | 16 |
| Yurchenko,Yu. | 1 | observing site unknown | | | | |
| Zagaynov,V.A. | 1 | observing site unknown | | | | |
| Zalles,R. | 1 | 295/00/00 | -18/00/00 | | 5 deg | 31 |
| Zanette,D. | 1 | 289/00/00 | -41/00/00 | | 1 deg | 27 |
| Zanotta,M.V. | 1 | 009/00/00 | +46/00/00 | | 2 deg | 7 |
| | 2 | 006/45/00 | +45/59/00 | 700 | 1 arcmin | 7 |
| | 3 | 006/48/00 | +45/59/00 | 1322 | 1 arcmin | 7 |
| | 4 | 009/28/00 | +45/52/00 | | 2 deg | 7 |
| | 5 | 009/03/00 | +45/48/00 | | 2 deg | 7 |
| Zanstra,W.T. | 1 | 006/51/00 | +53/19/00 | 0 | 2 arcmin | 46 |
| | 2 | 006/50/48 | +53/21/36 | 0 | 0.1 arcmin | 46 |
| | 3 | 007/23/00 | +47/14/00 | 1306 | 0.1 arcmin | 18 |
| | 4 | 255/03/00 | +42/05/00 | 1400 | 1 arcmin | 16 |
| Zanut,S. | 1 | 012/47/24 | +45/57/00 | | 0.01 deg | 7 |
| | 2 | 012/34/12 | +46/06/00 | 400 | 0.1 deg | 7 |
| Zhigalev,A. | 1 | observing site unknown | | | | |
| Zimnikoval,P. | 1 | 019/09/11 | +48/43/00 | 568 | 1 arcmin | 35 |
| Zinvyev,V.A. | 1 | observing site unknown | | | | |
| Zische,E. | 1 | 014/25/20 | +51/06/56 | 330 | 1 arcsec | 23 |
| | 2 | 014/25/57 | +51/02/34 | 335 | 1 arcsec | 23 |
| | 3 | 014/27/00 | +51/11/00 | | 3 deg | 23 |
| Znasik,M. | 1 | 018/45/15 | +49/12/21 | 404 | 0.1 arcsec | 35 |

Table IX. Assigned Country Codes

Assigned Country Codes

| (sorted by name) | | (sorted by code) | |
|---|---|---|---|
| 98 | Air borne | 01 | Antarctica |
| 01 | Antarctica | 02 | Brazil |
| 27 | Argentina | 03 | Bulgaria |
| 83 | Ascension Island | 04 | France |
| 26 | Australia | 05 | India |
| 28 | Austria | 06 | Indonesia |
| 71 | Barbados | 07 | Italy |
| 29 | Belgium | 08 | Japan |
| 30 | Bermuda | 09 | Mexico |
| 31 | Bolivia | 10 | People's Republic of China |
| 64 | Botswana | 11 | Poland |
| 02 | Brazil | 12 | United Kingdom (also: 15, 72) |
| 03 | Bulgaria | 13 | South Africa |
| 21 | Canada | 14 | Spain |
| 74 | Canary Islands | 16 | United States (also: 76) |
| 32 | Chile | 17 | Venezuela |
| 33 | Colombia | 18 | Switzerland |
| 34 | Costa Rica | 19 | Finland |
| 79 | Cuba | 20 | U.S.S.R. (also: 24) |
| 35 | Czechoslovakia | 21 | Canada |
| 22 | Denmark | 22 | Denmark |
| 85 | Ecuador | 23 | German Democratic Republic |
| 66 | Egypt | 25 | Federal Republic of Germany |
| 25 | Federal Republic of Germany | 26 | Australia |
| 81 | Fiji | 27 | Argentina |
| 19 | Finland | 28 | Austria |
| 04 | France | 29 | Belgium |
| 73 | Galapagos Islands | 30 | Bermuda |
| 23 | German Democratic Republic | 31 | Bolivia |
| 36 | Greece | 32 | Chile |
| 37 | Hong Kong | 33 | Colombia |
| 38 | Hungary | 34 | Costa Rica |
| 05 | India | 35 | Czechoslovakia |
| 06 | Indonesia | 36 | Greece |
| 39 | Ireland | 37 | Hong Kong |
| 40 | Israel | 38 | Hungary |
| 07 | Italy | 39 | Ireland |
| 08 | Japan | 40 | Israel |
| 41 | Korea | 41 | Korea |
| 42 | Kuwait | 42 | Kuwait |
| 68 | Lesotho | 43 | Malaysia |
| 43 | Malaysia | 44 | Malta |
| 78 | Maldive Islands | 45 | Mauritius |
| 44 | Malta | 46 | Netherlands |
| 82 | Mariana Islands (Guam & Saipan) | 47 | Norway |
| 45 | Mauritius | 48 | New Zealand |
| 09 | Mexico | 49 | Papua New Guinea |
| 65 | Namibia | 50 | Philippines |
| 46 | Netherlands | 51 | Portugal |
| 75 | Netherlands Antilles | 52 | Rwanda |
| 48 | New Zealand | 53 | Singapore |
| 47 | Norway | 54 | Sweden |
| 80 | Panama | 55 | Taiwan |
| 49 | Papua New Guinea | 56 | Trinidad & Tobago |
| 10 | People's Republic of China | 57 | Turkey |
| 67 | Peru | 58 | Yugoslavia |
| 50 | Philippines | 59 | Zimbabwe |
| 11 | Poland | 60 | Romania |
| 51 | Portugal | 61 | Society Islands (Tahiti) |
| 77 | Puerto Rico | 62 | Uruguay |
| 70 | Reunion Island | 63 | Sudan |
| 60 | Romania | 64 | Botswana |
| 52 | Rwanda | 65 | Namibia |
| 89 | Sea borne (Atlantic Ocean) | 66 | Egypt |
| 87 | Sea borne (Carribean) | 67 | Peru |
| 88 | Sea borne (Gulf of Mexico) | 68 | Lesotho |
| 53 | Singapore | 69 | Tanzania |
| 61 | Society Islands (Tahiti) | 70 | Reunion Island |
| 13 | South Africa | 71 | Barbados |
| 99 | Space borne | 73 | Galapagos Islands |
| 14 | Spain | 74 | Canary Islands |
| 63 | Sudan | 75 | Netherlands Antilles |
| 54 | Sweden | 77 | Puerto Rico |
| 18 | Switzerland | 78 | Maldive Islands |
| 55 | Taiwan | 79 | Cuba |
| 69 | Tanzania | 80 | Panama |
| 56 | Trinidad & Tobago | 81 | Fiji |
| 84 | Tunisia | 82 | Mariana Islands (Guam & Saipan) |
| 57 | Turkey | 83 | Ascension Island |
| 20 | U.S.S.R. (also: 24) | 84 | Tunisia |
| 12 | United Kingdom (also: 15, 72) | 85 | Ecuador |
| 16 | United States (also: 76) | 87 | Sea borne (Carribean) |
| 62 | Uruguay | 88 | Sea borne (Gulf of Mexico) |
| 17 | Venezuela | 89 | Sea borne (Atlantic Ocean) |
| 58 | Yugoslavia | 98 | Air borne |
| 59 | Zimbabwe | 99 | Space borne |

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# Amateur Observation Network Data on Comet Halley

DATE: 23 JAN 1985

DATE: 23 JAN 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.347 | 810001 | 19.6 | M | SA51 | | 0 | | | 0.61 | C | 18 | 549 | | Y | 2 | O'Meara,S.J | A |

NOTE A Time of observation spanned 23.340-23.354. Nuclear magnitude. Palomar charts also used. Coma diameter 5 arc sec. 14000 feet. Used oxygen. Position confirmed with CCD on 88 inch. (Observer gave limit as </=20.4, SA51. See observer's account in Sky and Telescope, 1985 April, pages 376-377. Ed.)

DATE: 24 JAN 1985 DATE: 24 JAN 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.266 | 810002 | | M | SA51 | | 0 | | | 0.61 | C | 18 | 549 | | Y | 2 | O'Meara,S.J | A |

NOTE A Time of observation spanned 23.240-23.292. Magnitude: can only say about same as 850123. Palomar charts also used. Coma seen but not measured. (See observer's account in Sky and Telescope, 1985 April, pages 376-377. Ed.)

DATE: 13 APR 1985

DATE: 13 APR 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.000 | 810003 | 15.5 | M | SA | | | | | 0.46 | R | 15 | 250 | | | | O'Meara,S.J | A |

NOTE A Questionable.

DATE: 21 JUL 1985 DATE: 21 JUL 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ips | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.13 | 810004 | >13.6 | | SU TAU | | | | | 0.35 | N | 5.5 | 160 | 5.5Z | Y | 1 | Fleet,R.W | A |

NOTE A Magnitude limit is of faintest star visible at altitude of approx. 30 degrees, with limited time available. No attempt was made to locate naked eye stars close to the comet position. Times given are just before start of twilight when faintest stars were usually recorded. Comet not seen.

DATE: 22 JUL 1985

DATE: 22 JUL 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.13 | 810005 | >14.0 | | SU TAU | | | | | 0.35 | N | 5.5 | 160 | 5.5Z | Y | 1 | Fleet,R.W | A |

NOTE A Magnitude limit is of faintest star visible at altitude of approx. 30 degrees, with limited time available. No attempt was made to locate naked eye stars close to the comet position. Times given are just before start of twilight when faintest stars were usually recorded. Comet not seen.

DATE: 23 JUL 1985

DATE: 23 JUL 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.13 | 810006 | >13.9 | | SU TAU | | | | | 0.35 | N | 5.5 | 160 | 5.5Z | Y | 1 | Fleet,R.W | A |

NOTE A Magnitude limit is of faintest star visible at altitude of approx. 30 degrees, with limited time available. No attempt was made to locate naked eye stars close to the comet position. Times given are just before start of twilight when faintest stars were usually recorded. Comet not seen.

DATE: 24 JUL 1985

DATE: 24 JUL 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.13 | 810007 | >13.8 | | SU TAU | | | | | 0.35 | N | 5.5 | 160 | 5.5Z | Y | 1 | Fleet,R.W | A |

NOTE A Magnitude limit is of faintest star visible at altitude of approx. 30 degrees, with limited time available. No attempt was made to locate naked eye stars close to the comet position. Times given are just before start of twilight when faintest stars were usually recorded. Comet not seen.

DATE: 25 JUL 1985

DATE: 25 JUL 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.13 | 810008 | >14.1 | | SU TAU | | | | | 0.35 | N | 5.5 | 160 | 5.5Z | Y | 1 | Fleet,R.W | A |

NOTE A Magnitude limit is of faintest star visible at altitude of approx. 30 degrees, with limited time available. No attempt was made to locate naked eye stars close to the comet position. Times given are just before start of twilight when faintest stars were usually recorded. Comet not seen.

DATE: 26 JUL 1985

DATE: 26 JUL 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.13 | 810009 | >14.3 | | SU TAU | | | | | 0.35 | N | 5.5 | 160 | 5.5Z | Y | 1 | Fleet,R.W | A |

NOTE A Magnitude limit is of faintest star visible at altitude of approx. 30 degrees, with limited time available. No attempt was made to locate naked eye stars close to the comet position. Times given are just before start of twilight when faintest stars were usually recorded. Comet not seen.

DATE: 27 JUL 1985

DATE: 27 JUL 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.13 | 810010 | >14.3 | | SU TAU | | | | | 0.35 | N | 5.5 | 160 | 5.5Z | Y | 1 | Fleet,R.W | A |
| 27.48 | 810011 | 15.0: | S | SU TAU | | | | | 0.61 | C | 16 | 375 | | Y | 4 | Edberg,S.J | B |
| 27.48 | 810012 | 15.0: | S | SU TAU | 0.2 | 1 | | | 0.610 | C | 16.0 | 390 | 5.0 | Y | 1 | Morris,C.S | C |

NOTE A Magnitude limit is of faintest star visible at altitude of approx. 30 degrees, with limited time available. No attempt was made to locate naked eye stars close to the comet position. Times given are just before start of twilight when faintest stars were usually recorded. Comet not seen.
NOTE B Comet sufficiently stellar for direct in-focus comparison. Observation made by C. Morris and S. Edberg.
NOTE C Approximate coma diameter = 0.17'.

DATE: 28 JUL 1985

DATE: 28 JUL 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.11 | 810013 | 14.5: | | SU TAU | 0.5 | 2 | | | 0.355 | SC | 11 | 200 | | | 1 | Verdenet,M | A |
| 28.13 | 810014 | >14.6 | | SU TAU | | | | | 0.35 | N | 5.5 | 160 | 5.5Z | Y | 1 | Fleet,R.W | B |
| 28.48 | 810015 | 15.0: | S | SU TAU | | | | | 0.61 | C | 16 | 375 | | Y | 4 | Edberg,S.J | C |
| 28.48 | 810016 | 15.0: | S | SU TAU | 0.2 | 1 | | | 0.610 | C | 16.0 | 390 | 5.0 | Y | 1 | Morris,C.S | D |
| 28.91 | 810017 | 12.8 | S | | 0.3 | 1 | | | 0.41 | N | 4.2 | 135 | 6.8 | Y | 1 | Clark,M.L | E |

NOTE A Magnitude uncertain. Bright sky.
NOTE B Magnitude limit is of faintest star visible at altitude of approx. 30 degrees, with limited time available. No attempt was made to locate naked eye stars close to the comet position. Times given are just before start of twilight when faintest stars were usually recorded. Comet not seen.
NOTE C Comet sufficiently stellar for direct in-focus comparison. Observation made by C. Morris and S. Edberg.
NOTE D Approximate coma diameter = 0.17'.
NOTE E Averted vision only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.115 | 830001 | | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | A |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 29 JUL 1985

DATE: 29 JUL 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MN | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.13 | 810018 | >14.5 | | SU TAU | | | | | 0.35 | N | 5.5 | 160 | 5.5Z | Y | 1 | Fleet,R.W | A |
| 29.313 | 810019 | 13.9 | S | SU TAU | 0.5 | 3 | | | 0.254 | N | 5.6 | 120 | 6.0Z | Y | 1 | Knight,S | B |

NOTE A Magnitude limit is of faintest star visible at altitude of approx. 30 degrees, with limited time available. No attempt was made to locate naked eye stars close to the comet position. Times given are just before start of twilight when faintest stars were usually recorded. Comet not seen.

NOTE B Slightly elongated coma.

DATE: 30 JUL 1985

DATE: 30 JUL 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.11 | 810020 | 14.5: | | SU TAU | 0.5 | 3 | | | 0.355 | SC | 11 | 200 | | | 1 | Verdenet,M | A |
| 30.13 | 810021 | >14.5 | | SU TAU | | | | | 0.35 | N | 5.5 | 160 | 5.5Z | Y | 1 | Fleet,R.W | B |

NOTE A Magnitude uncertain. Better sky.
NOTE B Magnitude limit is of faintest star visible at altitude of approx. 30 degrees, with limited time available. No attempt was made to locate naked eye stars close to the comet position. Times given are just before start of twilight when faintest stars were usually recorded. Zodiacal light interfered after moonset. Comet not seen.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30.109 | 830002 | | 0.356 | SC | 11 | 200 | 15 | | 1 | Verdenet,M |

DATE: 8 AUG 1985 DATE: 8 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.41 | 810022 | 13.5: | | B | 0.3 | 1 | | | 0.335 | N | 4.5 | 216 | 4.5 | Y | | Kronk,G | A |

NOTE A Coma diameter approximate. Exceptionally clear.

DATE: 10 AUG 1985

DATE: 10 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.48 | 810023 | 14.5 | S | SU TAU | | 2 | | | 0.61 | C | 16 | 390 | 7 | Y | 9 | Hale,A | A |
| 10.48 | 810024 | 14.5 | S | SU TAU | 0.3 | 2 | | | 0.610 | C | 16.0 | 390 | 5.5 | Y | 1 | Morris,C.S | B |

NOTE A Joint observation with C.S. Morris and S.J. Edberg.
NOTE B A stellar condensation (m2 = 16 or fainter), offset toward the northeast, was glimpsed. Coma diameter = 0.30'.

DATE: 11 AUG 1985 DATE: 11 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.47 | 810025 | 14.6 | S | SU TAU | | 1 | | | 0.61 | C | 16 | 375 | | Y | 4 | Edberg,S.J | A |
| 11.48 | 810026 | 14.5 | S | SU TAU | 0.2 | 2 | | | 0.610 | C | 16.0 | 390 | 5.5 | Y | 1 | Morris,C.S | B |

NOTE A Comet sufficiently stellar for direct in-focus comparison. Observing with C. Morris and A. Hale.
NOTE B Stellar condensation not seen. Coma diameter = 0.25'

DATE: 12 AUG 1985

DATE: 12 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.48 | 810027 | 14.3 | S | SU TAU | | 2 | | | 0.61 | C | 16 | 390 | 7 | Y | 9 | Hale,A | A |
| 12.48 | 810028 | 14.3 | S | SU TAU | 0.4 | 2 | | | 0.610 | C | 16.0 | 390 | 6.0 | Y | 1 | Morris,C.S | B |

NOTE A Joint observation with C.S. Morris.
NOTE B Hint of a faint condensation. Coma diameter = 0.42'.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.130 | 850001 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 15.00 | Kodak 2415 | | N | | 10/P | 1 | Koch,B | A |
| 12.160 | 850002 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 20.00 | Kodak 2415 | | N | | 11/P | 1 | Koch,B | A |

NOTE A Photograph made by J. Stahlhut and B. Koch. W92 filter used.

DATE: 13 AUG 1985 DATE: 13 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.10 | 810029 | 14 : | | SU TAU | 0.5 | | | | 0.406 | N | 5.6 | 164 | 5.5 | Y | 4 | Bouma,R.J | A |
| 13.10 | 810030 | >14.0 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.2 | Y | 1 | Fleet,R.W | B |
| 13.10 | 810031 | 14 : | S | SU TAU | 0.5 | 2 | | | 0.406 | N | 5.6 | 126 | 5.5 | Y | 4 | Bus,E.P | C |
| 13.733 | 810032 | 14.5 | M | | 1 | | | | 0.3 | N | 6 | 100 | 6.0 | Y | 1 | Ichikawa,K | D |
| 13.744 | 810033 | 14.5 | M | | 0.6 | | | | 0.3 | N | 6 | 100 | 6.0 | Y | 1 | Ichikawa,K | |
| 13.896 | 810034 | 13.5 | S | SU TAU | 0.4 | 2 | | | 0.41 | N | 4.2 | 165 | 6.4 | Y | | Pearce,A | |

NOTE A Positive observation, confirmed by photograph recently. Coma diameter approximate.
NOTE B Before moonrise. Comet not seen.
NOTE C Positive observation, drawing compared with photograph recently. Coma diameter approximate.
NOTE D Coma diameter is upper limit.

DATE: 14 AUG 1985

DATE: 14 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.12 | 810035 | >14.6 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.2 | Y | 1 | Fleet,R.W | A |
| 14.12 | 810036 | 14.3 | S | SU TAU | 0.5 | 3 | | | 0.400 | N | 5 | 170 | 6.5 | Y | 2 | Merlin,J.-C | |
| 14.736 | 810037 | 14.3 | M | | 1.2 | | | | 0.3 | N | 6 | 100 | 6.5 | Y | 1 | Ichikawa,K | |
| 14.86 | 810038 | 13.1 | S | SU TAUC | 0.4 | 2 | | | 0.41 | N | 4.2 | 135 | 6.7 | Y | 1 | Clark,M.L | B |

NOTE A Comet not seen.
NOTE B Very difficult.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.099 | 830003 | 0.11 | 0.40 | N | 5 | 170,254 | 75 | | 2 | Merlin,J.-C | A |
| 14.115 | 830004 | 0.22 | 0.356 | SC | 11 | 400 | 30 | | 1 | Verdenet,M | |

NOTE A Magnitude 15.2; coma diameter 27". Stars down to mag. 16-16.5.

DATE: 15 AUG 1985

DATE: 15 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.11 | 810039 | 13.5 | S | SUT | | | | | 0.33 | N | 5 | 125 | 5.0 | | 1 | Shanklin,J.D | |
| 15.11 | 810040 | 13.7 | S | SU TAU | 0.3 | 2 | | | 0.406 | N | 5.6 | 164 | 6 Z | Y | 4 | Bus,E.P | |
| 15.12 | 810041 | 13.8 | S | SU TAU | 0.3 | 2 | | | 0.406 | N | 5.6 | 164 | 5.5Z | Y | 4 | Bouma,R.J | |
| 15.12 | 810042 | >14.7 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comet not seen.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.094 | 830005 | 0.23 | 0.356 | SC | 11 | 400 | | | 1 | Verdenet,M | A |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 16 AUG 1985

DATE: 16 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.098 | 850003 | 2.032 | 5 | 0.508 | 1.0 x 0.7 | 5.00 | Kodak Tri-X | 400/27 | N | C | 001/P | 1 | Arbour,R | A |
| 16.108 | 850004 | 2.032 | 5 | 0.508 | 1.0 x 0.7 | 10.00 | Kodak Tri-X | 400/27 | N | C | 002/P | 1 | Arbour,R | A |
| 16.124 | 850005 | 2.032 | 5 | 0.508 | 1.0 x 0.7 | 5.00 | Kodak Tri-X | 400/27 | N | C | 003/P | 1 | Arbour,R | A |
| 16.130 | 850006 | 2.032 | 5 | 0.508 | 1.0 x 0.7 | 6.33 | Kodak Tri-X | 400/27 | N | C | 004/P | 1 | Arbour,R | A |
| 16.156 | 850007 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 20.00 | Kodak 2415 | | N | | 16/P | 1 | Koch,B | B |

NOTE A (On original report form observer gave photo method as negative projection, which contradicts values he supplied for instrument focal length and EFL. Ed.)

NOTE B Photograph made by J. Stahlhut and B. Koch. W92 filter used.

DATE: 17 AUG 1985

DATE: 17 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.08 | 810043 | 14.2 | S | SU TAU | 0.5 | 3 | | | 0.400 | N | 5 | 170 | 6.5 | Y | 2 | Merlin,J.-C | |
| 17.11 | 810044 | 13.5 | S | SU TAU | 0.3 | 2 | | | 0.406 | N | 5.6 | 102 | 6 z | Y | 4 | Bus,E.P | |
| 17.12 | 810045 | 13.6 | S | SU TAU | | 1 | | | 0.406 | N | 5.6 | 102 | 5.5z | Y | 4 | Bouma,R.J | |
| 17.12 | 810046 | >14.7 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.3 | Y | 1 | Fleet,R.W | A |
| 17.34 | 810047 | 14.1 | S | SU TAU | 0.5 | 5 | | | 0.610 | N | 4 | 270 | | | | Bortle,J.E | |
| 17.358 | 810048 | 15.0: | B | SU TAU | | | | | 0.445 | N | 4.5 | 167 | 6.0 | Y | 3 | Morrison,N | |
| 17.734 | 810049 | 14.2 | M | | 0.5 | | | | 0.3 | N | 6 | 100 | 6.5 | Y | 3 | Ichikawa,K | |

NOTE A Comet not seen.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 17.099 | 830006 | | 0.356 | SC | 11 | 200,400 | 75 | | 1 | Verdenet,M |

DATE: 18 AUG 1985

DATE: 18 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.12 | 810050 | 14.9 | | CZ ORI | | 9 | | | 0.35 | N | 5.5 | 160 | 5.3 | Y | 1 | Fleet,R.W | A |
| 18.48 | 810051 | 13.9: | S | SU TAU | | | | | 0.20 | N | 6 | 244 | 7 | Y | 1 | Hale,A | B |
| 18.4861 | 810052 | | | | 0.3 | 5 | | | 0.61 | N | 5 | 381 | 6.2 | Y | 4 | Cook,A.J | |
| 18.4896 | 810053 | 14.3 | S | SU TAU | 0.3 | 3 | | | 0.32 | N | 4.8 | 170 | 6.2 | Y | 4 | Cook,A.J | |
| 18.49 | 810054 | 14.0 | S | SU TAU | 0.3 | | | | 0.256 | N | 4.5 | 156 | 7.0 | Y | 8 | Morris,C.S | C |

NOTE A Recorded as a suspect at limit.
NOTE B Comet extremely faint and at the limit of visibility. Candidate suspected on August 18.49 and confirmed on August 19.49.
NOTE C Coma diameter = 0.30'.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.486 | 850008 | 0.216 | 5.5 | 0.392 | 9.5 x 6.4 | 10.00 | Kodak Tri-X | 400/ | Y | S | 000/P | 1 | Hall,B |

DATE: 19 AUG 1985 DATE: 19 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.11 | 810055 | 13.5 | S | SU TAU | 0.3 | 2 | | | 0.406 | N | 5.6 | 126 | 6 Z | Y | 4 | Bus,E.P | |
| 19.11 | 810056 | 14 : | | | 0.3 | 7 | | | 0.406 | N | 5.6 | 164 | 6 | Y | 3 | van Loo,F.R | A |
| 19.12 | 810057 | 13.6 | S | SU TAU | 0.4 | 1 | | | 0.406 | N | 5.6 | 164 | 6 Z | Y | 4 | Bouma,R.J | |
| 19.12 | 810058 | >14.8 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.1 | Y | 1 | Fleet,R.W | B |
| 19.49 | 810059 | 13.9 | S | SU TAU | | | | | 0.20 | N | 6 | 244 | 7 | Y | 1 | Hale,A | C |

NOTE A Coma diameter approximate.
NOTE B Comet not seen.
NOTE C Comet extremely faint and at the limit of visibility. Candidate suspected on August 18.49 and confirmed on August 19.49.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.137 | 850009 | 3.000 | | 0.355 | 0.7 x 0.5 | 50.00 | Kodak 2415 | | Y | S | 32/T | 2 | Genebriera,J | |
| 19.137 | 850010 | 3.000 | | 0.355 | 0.7 x 0.5 | 50.00 | Kodak 2415 | | Y | S | 000/T | 2 | Genebriera,J | A |

NOTE A (Observer's image identifier is W/N. Ed.)

DATE: 20 AUG 1985

DATE: 20 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.12 | 810060 | >14.8 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.3 | Y | 1 | Fleet,R.W | A |

NOTE A Comet not seen.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.131 | 850011 | 3.000 | | 0.355 | 0.7 x 0.5 | 50.00 | Kodak 2415 | | Y | S | 35/T | 2 | Genebriera,J |

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.063 | 810061 | 14.4: | | U ORI | | | | | 0.203 | SC | 6 | | | | 4 | Linder,J | A |
| 21.11 | 810062 | 14.9 | | CZ ORI | | 9 | | | 0.35 | N | 5.5 | 160 | 5.3 | Y | 1 | Fleet,R.W | B |
| 21.49 | 810063 | 13.9 | S | SU TAU | 0.5 | 3 | | | 0.256 | N | 4.5 | 156 | 7.0 | Y | 8 | Morris,C.S | C |
| 21.85 | 810064 | 13.3 | S | SU TAUC | 0.3 | 2 | | | 0.41 | N | 4.2 | 135 | 6.8 | Y | 1 | Clark,M.L | D |
| 21.896 | 810065 | 13.7 | S | SU TAU | 0.3 | 2 | | | 0.41 | N | 4.2 | 165 | 6.3 | Y | | Pearce,A | |

NOTE A Photograph derived magnitude. Kodak 103a-E 0230 UT-0255 UT. Photographic magnitude estimate using the diameter of stars in this field for estimate the brightness of the comet. [sic] Photograph made using C8 with Telekompressor at 1:6.04. Center of field approximately 6h 3.2, approximately +19 deg. 12'.
NOTE B Recorded as star at limit.
NOTE C Coma diameter = 0.52'.
NOTE D Very difficult. Averted vision only.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.113 | 850012 | 1.222 | 6 | 0.203 | 1.7 x 1.1 | 25.00 | Kodak 103a-E | | N | S | 1/P | 4 | Linder,J |

DATE: 22 AUG 1985

DATE: 22 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.12 | 810066 | 13.5 | S | SU TAU | 0.4 | 2 | | | 0.406 | N | 5.6 | 164 | 6 Z | Y | 4 | Bouma,R.J | |
| 22.12 | 810067 | 15.1 | | CZ ORI | | 9 | | | 0.35 | N | 5.5 | 160 | 5.5 | Y | 1 | Fleet,R.W | A |
| 22.365 | 810068 | 15.0: | B | SU TAU | 0.2 | | | | 0.445 | N | 4.5 | 286 | 6.0 | Y | 3 | Morrison,W | B |
| 22.722 | 810069 | 14.0 | M | | 0.8 | | | | 0.3 | N | 6 | 100 | 5.5 | Y | 1 | Ichikawa,K | |
| 22.92 | 810070 | 15.2 | B | PA | 0.1 | 1 | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |

NOTE A Movement seen in one hour.
NOTE B Coma diameter approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.122 | 830007 | | 0.356 | SC | 11 | 200 | 30 | | 1 | Verdenet,M | A |

NOTE A (Three drawings supplied at 200x (0.20'/mm), 400x, and 400x. Ed.)

DATE: 23 AUG 1985

DATE: 23 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.10 | 810071 | 14.6 | | CZ ORI | | 9 | | | 0.35 | N | 5.5 | 160 | 5.3 | Y | 1 | Fleet,R.W | A |
| 23.363 | 810072 | 15.0: | S | SU TAU | 0.2 | | | | 0.445 | N | 4.5 | 286 | 6.0 | Y | 3 | Morrison,W | |
| 23.389 | 810073 | 13.4 | M | SU TAU | | 1 | | | 0.254 | N | 4.5 | 143 | 6.5 | Y | 4 | DeYoung,J.A | |
| 23.49 | 810074 | 13.5 | S | SU TAU | 1.0 | 2 | | | 0.256 | N | 4.5 | 156 | 7.0 | Y | 8 | Morris,C.S | |
| 23.726 | 810075 | 13.7 | M | | 1.2 | | | | 0.3 | N | 6 | 100 | 4.6 | Y | 1 | Ichikawa,K | |

NOTE A Recorded as star 1/2 mag brighter.

DATE: 24 AUG 1985

DATE: 24 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.09 | 810076 | 13.8 | S | SU TAU | 0.6 | 4 | | | 0.400 | N | 5 | 170 | 6.5 | Y | 2 | Merlin,J.-C | |
| 24.111 | 810077 | 14.8 | | CZ ORI | 0.2 | 6 | | | 0.35 | N | 5.5 | 160 | 5.5 | Y | 1 | Fleet,R.W | A |
| 24.125 | 810078 | 13.0: | | | | 5 | | | 0.345 | N | 4.5 | 75 | 5.6 | Y | 1 | Gomez,A | |
| 24.13 | 810079 | 13.3 | S | SU TAU | 0.4 | 2 | | | 0.406 | N | 5.6 | 164 | 5.5Z | Y | 4 | Bouma,R.J | |
| 24.13 | 810080 | 13.5 | S | SU TAU | 0.3 | 2 | | | 0.406 | N | 5.6 | 164 | 5.5Z | Y | 4 | Bus,E.P | |
| 24.35 | 810081 | 13.6 | S | SU TAU | 0.5 | 4 | | | 0.500 | N | 5 | 241 | | | | Bortle,J.E | |
| 24.49 | 810082 | 13.4 | S | SU TAU | 0.9 | 2 | | | 0.20 | N | 6 | 122 | 7 | Y | 1 | Hale,A | |
| 24.49 | 810083 | 13.4 | S | SU TAU | 1.0 | 3 | | | 0.256 | N | 4.5 | 156 | 7.0 | Y | 8 | Morris,C.S | |
| 24.587 | 810084 | 14.8 | S | | 0.3 | 0 | | | 0.44 | N | 4.5 | 225 | 6.5 | Y | 4 | Fabre,R | |

NOTE A Central condensation magnitude only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.104 | 830008 | | 0.335 | N | 4.5 | 75 | | 5.6 | 1 | Ripero,J | A |
| 24.120 | 830009 | | 0.345 | N | 4.5 | 75 | 15 | 5.6 | 1 | Gomez,A | B |
| 24.127 | 830010 | 0.20 | 0.356 | SC | 11 | 200,400 | 35 | | 1 | Verdenet,M | |

NOTE A Field: 0.6 deg. Faintest star visible through the telescope about 14.5. (Drawing data inferred from magnitude report form. Duration not indicated. Time of observation is assumed to be start time. Ed.)

NOTE B With a 2x Barlow lens, it appeared with a little "haze" around it. Pearly white color. 5 observers saw it.

DATE: 25 AUG 1985

DATE: 25 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | m1 | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.104 | 810085 | 14.8 | | CZ ORI | 0.2 | 6 | | | 0.35 | N | 5.5 | 160 | 5.3 | Y | 1 | Fleet,R.W | A |
| 25.42 | 810086 | 13 : | B | | 0.3 | 1 | | | 0.335 | N | 4.5 | 216 | 4.5 | Y | | Kronk,G | B |
| 25.45 | 810087 | 13.6 | S | SU TAU | 0.8 | 2 | | | 0.32 | N | 4 | 66 | 6.5 | Y | 1 | Keen,R | |
| 25.48 | 810088 | 13.2 | S | SU TAU | 0.9 | 3 | | | 0.256 | N | 4.5 | 156 | 7.0 | Y | 11 | Morris,C.S | C |
| 25.4868 | 810089 | 13.3 | S | SU TAU | 0.7 | 6 | | | 0.32 | N | 4.8 | 146 | 6.2 | Y | 4 | Cook,A.J | D |

NOTE A Central condensation magnitude only.
NOTE B Coma diameter approximate. Exceptionally clear.
NOTE C A faint condensation was glimpsed.
NOTE D m2 = 14.5.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.092 | 850013 | 2.032 | 5 | 0.508 | 1.0 x 0.7 | 10.00 | Kodak Tri-X | 400/27 | N | C | 005/P | 1 | Arbour,R | A |
| 25.115 | 850014 | 2.032 | 5 | 0.508 | 1.0 x 0.7 | 10.00 | Kodak Tri-X | 400/27 | N | C | 006/P | 1 | Arbour,R | A |
| 25.489 | 850015 | 2.79 | | 0.279 | 0.7 x 0.5 | 12.00 | Kodak 103a-O | | N | S | 1/N | 1 | Sanford,J | B |

NOTE A Time is only approximate to the nearest minute. (On original report form observer gave photo method as negative projection, which contradicts values he supplied for instrument focal length and EFL. Ed.)
NOTE B Instrument is Celestron C11 Schmidt-Cassegrain. Little fuzzy object looks double - could see faint starlike point and dim fuzzy object in 22" f/8 before this exposure.

DATE: 26 AUG 1985

DATE: 26 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.097 | 810090 | 15.1 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.1 | Y | 1 | Fleet,R.W | A |
| 26.100 | 810091 | 14.6 | | CZ ORI | 0.3 | 6 | | | 0.35 | N | 5.5 | 160 | 5.1 | Y | 1 | Fleet,R.W | B |
| 26.12 | 810092 | 13.1 | S | SU TAU | 0.5 | 4 | | | 0.406 | N | 5.6 | 126 | 6.5Z | Y | 4 | Bouma,R.J | |
| 26.12 | 810093 | 13.0 | S | SU TAU | 0.6 | 1 | | | 0.406 | N | 5.6 | 126 | 6.5Z | Y | 4 | Bus,E.P | C |
| 26.13 | 810094 | 13.0 | S | SU TAU | | | | | 0.254 | JB | 6 | 90 | 6.5Z | Y | 4 | Bouma,R.J | |
| 26.13 | 810095 | 13.0 | S | SU TAU | 0.6 | 2 | | | 0.254 | JB | 6 | 90 | 6.5Z | Y | 4 | Bus,E.P | |

NOTE A Central condensation magnitude only.
NOTE B Averted vision total magnitude.
NOTE C Coma elongated.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 26.109 | 830011 | 0.17 | 0.356 | SC | 11 | 200,400 | 75 | | 1 | Verdenet,M |

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.148 | 850016 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 12.00 | Kodak 2415 | | Y | M | 1/P | 1 | Guarro,J |

DATE: 27 AUG 1985

DATE: 27 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.090 | 810096 | 14.8 | | CZ ORI | 0.3 | 6 | | | 0.35 | N | 5.5 | 160 | 5.3 | Y | 1 | Fleet,R.W | A |
| 27.101 | 810097 | 15.1 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.3 | Y | 1 | Fleet,R.W | B |
| 27.13 | 810098 | 13.4 | S | SUT | | | | | 0.33 | N | 5 | 125 | 5.7 | | 1 | Shanklin,J.D | |
| 27.49 | 810099 | 13.5 | S | SU TAU | | | | | 0.20 | N | 6 | 244 | 7 | Y | 1 | Hale,A | C |
| 27.49 | 810100 | 13.4 | S | SU TAU | 0.8 | 4 | | | 0.256 | N | 4.5 | 156 | 7.0 | Y | 3 | Morris,C.S | D |
| 27.95 | 810101 | 15.3 | S | E | 0.5 | 1 | | | 1.02 | N | 13 | 185 | | | | Chernis,K | |

NOTE A Averted vision total magnitude.
NOTE B Central condensation magnitude only.
NOTE C Comet next to 11th magnitude star, which possibly affected magnitude estimate.
NOTE D Comet close to 13th mag. star. North Polar Seq. also used. Coma diameter = 0.75'.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 27.104 | 830012 | 0.17 | 0.356 | SC | 11 | 200,400 | 60 | | 1 | Verdenet,M |

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.136 | 850017 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 17.00 | Kodak 2415 | | Y | M | 2/P | 1 | Guarro,J |

DATE: 28 AUG 1985

DATE: 28 AUG 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.08 | 810102 | 13.4 | S | SU TAU | 0.5 | 3 | | | 0.400 | N | 5 | 170 | 6.5 | Y | 2 | Merlin,J.-C | |
| 28.122 | 810103 | 14.7 | | CZ ORI | | 9 | | | 0.35 | N | 5.5 | 160 | 5.2 | Y | 1 | Fleet,R.W | A |
| 28.142 | 810104 | 12 | | U ORI | 0.5 | 3 | | | 0.36 | SC | 11 | 330 | 4 | Y | | Korth,S | |
| 28.35 | 810105 | 13.3 | S | SU TAU | 0.5 | 5 | | | 0.500 | N | 5 | 241 | | | | Bortle,J.E | |

NOTE A Star interfering.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 28.115 | 830013 | 0.13 | 0.356 | SC | 11 | 400 | 30 | | 1 | Verdenet,M |

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.089 | 850018 | 1.800 | 4.5 | 0.400 | 1.1 x 0.8 | 15.00 | Kodak 2415 | | Y | C | 16/C | 1 | Ghione,G | A |
| 28.113 | 850019 | 1.800 | 4.5 | 0.400 | 1.1 x 0.8 | 30.00 | Kodak 2415 | | Y | C | 17/C | 1 | Ghione,G | A |

NOTE A (Observer's image identifier includes suffix "A". Ed.)

DATE: 7 SEP 1985

DATE: 7 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.104 | 810106 | | | | 0.3 | | | | 0.250 | N | 6 | 187 | 5.9 | Y | 1 | Guthier,O | A |

NOTE A Comet stellar, magnitude 13.5-14.0. Magnitude estimation method "J" used.

DATE: 10 SEP 1985

DATE: 10 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.101 | 810107 | 13.2 | B | SA 74 | 0.2 | | | | 0.250 | N | 6 | 187 | 5.7 | Y | 1 | Guthier,O | A |
| 10.986 | 810108 | 11.5 | M | CZ | | 7 | | | 0.31 | N | 8 | 62 | 5.0 | Y | 1 | Hajek,P | |
| 10.99 | 810109 | 14.4 | B | E | 0.6 | 1 | | | 1.02 | N | 13 | 185 | | | | Chernis,K | |

NOTE A Stellar.

DATE: 11 SEP 1985

DATE: 11 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.04 | 810110 | 14.7 | | CZ ORI | | 9 | | | 0.35 | N | 5.5 | 160 | 5.6 | Y | 1 | Fleet,R.W | A |
| 11.118 | 810111 | 13.2 | | SA 74 | | | | | 0.250 | N | 6 | 187 | 5.8 | Y | 1 | Guthier,O | B |
| 11.390 | 810112 | 13.3 | S | SU TAU | 0.4 | | | | 0.445 | N | 4.5 | 167 | 6.3 | Y | 3 | Morrison,W | |
| 11.43 | 810113 | 12.8 | S | SU TAU | 2.0 | 1 | | | 0.32 | N | 4 | 66 | 6.0 | Y | 1 | Keen,R | C |
| 11.97 | 810114 | 14.6 | B | E | 0.7 | 1 | | | 1.02 | N | 13 | 475 | | | | Chernis,K | |

NOTE A Motion noted over 2 hours.
NOTE B Stellar. Magnitude estimation method "J" used.
NOTE C Moon nearby.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 11.010 | 830014 | | 0.356 | SC | 11 | 200,400 | 30 | | 1 | Verdenet,M |

DATE: 12 SEP 1985

DATE: 12 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.04 | 810115 | 12.8 | S | SU TAU | 0.4 | 3 | 0.01 | 270 | 0.400 | N | 5 | 170 | 6.0 | Y | 2 | Merlin,J.-C | |
| 12.04 | 810116 | 12.2 | B | E | 1.0 | 5 | | | 0.16 | N | 10 | 30 | | | | Mormil,V | |
| 12.056 | 810117 | 14.4 | | CZ ORI | | 9 | | | 0.35 | N | 5.5 | 160 | 5.6 | Y | 1 | Fleet,R.W | A |
| 12.11 | 810118 | 13.5 | S | CZ ORI | 0.3 | | | | 0.305 | N | 5 | 150 | 6.2 | Y | 2 | Zanotta,M.V | B |
| 12.156 | 810119 | 13.1 | M | CZ ORI | | | | | 0.298 | N | 5 | 269 | 5.5 | Y | 1 | Stott,D | C |
| 12.354 | 810120 | 13.6 | S | CZ ORI | 0.5 | 5 | | | 0.254 | N | 5.6 | 120 | 6.2 | Y | 1 | Knight,S | D |
| 12.36 | 810121 | 14.4 | V | LNES | 0.1 | 5 | | | 0.203 | N | 6 | 116 | | | | Green,D.W.E | E |
| 12.36 | 810122 | 13.2 | S | SU TAU | 0.4 | | | | 0.317 | N | 6 | 170 | | | | Bortle,J.E | |
| 12.36 | 810123 | 13.3 | S | SU TAU | 0.5 | 6 | | | 0.500 | N | 5 | 241 | | | | Bortle,J.E | |
| 12.49 | 810124 | 13.2 | M | SU TAU | 0.7 | 5 | | | 0.256 | N | 4.5 | 156 | 6.5 | Y | 6 | Morris,C.S | F |
| 12.50 | 810125 | 13.2 | S | SU TAU | | 4 | | | 0.20 | N | 6 | 122 | 6.5 | Y | 2 | Hale,A | |
| 12.615 | 810126 | 14.1 | S | | 0.4 | 0 | | | 0.44 | N | 4.5 | 225 | 5.5 | Y | 1 | Fabre,R | |
| 12.97 | 810127 | 14.3 | B | E | | 1 | | | 1.02 | N | 13 | 185 | | | | Chernis,K | |

NOTE A Coma suspected.
NOTE B Very faint and diffuse. The observation was troubled by the proximity of a field star (magnitude about 13). Coma diameter approximate.
NOTE C Stellar.
NOTE D Stellar nucleus.
NOTE E Coma diameter approximate.
NOTE F North Polar Seq. also used. Coma diameter = 0.68'.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.045 | 830015 | 0.07 | 0.40 | N | 5 | 170,254 | 10 | 6.0 | 2 | Merlin,J.-C | A |
| 12.109 | 830016 | 0.27 | 0.400 | N | 5 | 100,222 | 15 | 5.5 | 2 | Sarocchi,D | B |

NOTE A Jet at approximately PA 180; jet at PA 241, then curved southward. Fan-shaped.
NOTE B The object is very faint and difficult to see but we can understand a shape like I have draw. [sic]

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.081 | 850020 | 2.800 | 10 | 0.280 | 0.7 x 0.5 | 30.00 | Kodak Tri-X | 400/27 | N | | 16/N | 1 | Darvann,T.A |

DATE: 13 SEP 1985 DATE: 13 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.05 | 810128 | 12.9: | | | | 1 | | | 0.205 | N | 6 | 80 | 5.5 | Y | 1 | Germann,R | |
| 13.108 | 810129 | 14.1 | | CZ ORI | | | | | 0.22 | N | 8 | 150 | 5.5 | Y | 1 | Fleet,R.W | A |
| 13.111 | 810130 | 14.1 | | CZ ORI | | 7 | | | 0.35 | N | 5.5 | 160 | 5.5 | Y | 1 | Fleet,R.W | B |
| 13.125 | 810131 | 13.5: | | | | | | | 0.250 | N | 6 | 187 | 5.8 | Y | 1 | Guthier,O | C |
| 13.13 | 810132 | 13.2 | S | SU TAU | 0.5 | 6 | | | 0.250 | N | 10 | 250 | 6 | Y | 1 | van Loo,F.R | |
| 13.192 | 810133 | 12.5 | S | CZ ORI | 0.5 | 2 | | | 0.20 | SC | 10 | 77 | 6 | Y | 1 | Ward,A | D |
| 13.34 | 810134 | 12.8 | S | SU TAU | 0.9 | 6 | | | 0.500 | N | 5 | 157 | | | | Bortle,J.E | |
| 13.34 | 810135 | 13.1 | S | SU TAU | 0.8 | | | | 0.317 | N | 6 | 170 | | | | Bortle,J.E | |
| 13.361 | 810136 | 13.7 | S | CZ ORI | 0.5 | 5 | | | 0.254 | N | 5.6 | 120 | 6.7 | Y | 1 | Knight,S | E |
| 13.365 | 810137 | 14.4 | | CZ ORI | | | | | 0.254 | N | 5.6 | 115 | 6.7 | Y | 1 | Knight,S | F |
| 13.367 | 810138 | 13.3 | S | SU TAU | 0.5 | 3 | | | 0.445 | N | 4.5 | 167 | 6.6 | Y | 3 | Morrison,W | |
| 13.368 | 810139 | 14.0 | S | | | 1 | | | 0.41 | N | 4.5 | 100 | 6.8 | Y | 2 | Ariail,R.B | |
| 13.397 | 810140 | 13.7 | B | SU TAU | | 4 | | | 0.508 | N | 4.5 | 155 | 5.8C | Y | 9 | Troiani,D.M | |
| 13.479 | 810141 | 13.5 | M | | | 0 | | | 0.356 | N | 5 | 225 | | Y | 1 | Jeffrey,J | G |
| 13.76 | 810142 | 13.1 | S | AAVSO | 0.6 | 3 | | | 0.20 | N | 5.6 | 123 | 6.0 | Y | 1 | Nakamura,A | |
| 13.77 | 810143 | 13.6 | S | | 0.1 | 7 | | | 0.26 | N | 5 | 263 | 5.0 | Y | 1 | Kanai,K | |
| 13.94 | 810144 | 14.2 | B | PA | 0.5 | 1 | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 13.95 | 810145 | 12.9 | B | PA | | 1 | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 13.99 | 810146 | 14.3 | B | E | 0.6 | 1 | | | 1.02 | N | 13 | 475 | | | | Chernis,K | |

NOTE A At limit.
NOTE B 0.3' coma, averted vision.
NOTE C Magnitude estimation method "J" used.
NOTE D Very faint in 8 inch. Averted vision only. Estimate of coma diameter very approximate. Only seen for about 10 min., using averted vision.
NOTE E Stellar nucleus.
NOTE F Stellar nucleus magnitude.
NOTE G First sighting of Halley. Comet was south of the path shown in the September 1985 issue of Sky and Telescope Halley Notebook (page 222). Comet was faint, estimated magnitude 13.5. Coma was small, round, with no condensation at all seen. No tail seen. Limit 15.0.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.355 | 850021 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | S | 1/P | 1 | Dilsizian,R | A |

NOTE A Giacobini-Zinner and Halley. Exposure duration approximate.

DATE: 14 SEP 1985

DATE: 14 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.11 | 810147 | 12.6 | S | SU TAU | 0.6 | 2 | | | 0.254 | JB | 6 | 117 | 6.5 | Y | 2 | Bouma,R.J | |
| 14.11 | 810148 | 12.2 | S | SU TAU | 1 | 2 | | | 0.254 | JB | 6 | 72 | 6.5 | Y | 2 | Bus,E.P | A |
| 14.125 | 810149 | 12.5: | | | 1 | | | | 0.256 | N | 5.6 | 85 | 5.5 | Y | 1 | Gallego,J | B |
| 14.292 | 810150 | 13.9: | | | 1.3 | | | | 0.445 | N | 4.5 | 222 | 5.5C | Y | 1 | Beach,G | C |
| 14.3 | 810151 | 13.1 | M | | 1 | 5 | | | 0.20 | N | 6 | 125 | | | | O'Meara,S.J | D |
| 14.349 | 810152 | 14.0 | S | | | 1 | | | 0.41 | N | 4.5 | 100 | 6.9 | Y | 2 | Ariail,R.B | |
| 14.36 | 810153 | 12.9 | S | SU TAU | 0.9 | 6 | | | 0.500 | N | 5 | 157 | | | | Bortle,J.E | E |
| 14.36 | 810154 | 13.0 | S | SU TAU | 0.6 | 5 | | | 0.317 | N | 6 | 170 | | | | Bortle,J.E | |
| 14.36 | 810155 | 13.2 | S | LNES | 0.5 | 3 | | | 0.203 | N | 6 | 116 | | | | Green,D.W.E | A |
| 14.378 | 810156 | 13.5 | S | SU TAU | 0.4 | 2 | | | 0.445 | N | 4.5 | 167 | 6.3 | Y | 3 | Morrison,W | |
| 14.426 | 810157 | 13.8 | B | SU TAU | | 4 | | | 0.438 | N | 4.5 | 178 | 5.8C | Y | 9 | Troiani,D.M | |
| 14.45 | 810158 | 12.6 | S | SU TAU | 2.0 | 3 | | | 0.32 | N | 4 | 66 | 7.0 | Y | 1 | Keen,R | |
| 14.47 | 810159 | 12.8 | M | SU TAU | 0.6 | 6 | | | 0.406 | N | 4.5 | 183 | 7.0 | Y | 12 | Morris,C.S | |
| 14.479 | 810160 | 13.5 | M | | | 0 | | | 0.356 | N | 5 | 225 | | Y | 1 | Jeffrey,J | F |
| 14.48 | 810161 | 13.0 | S | SU TAU | | | | | 0.20 | N | 6 | 244 | 6.5 | Y | 11 | Hale,A | |
| 14.49 | 810162 | 12.9 | M | SU TAU | 0.6 | 5 | | | 0.47 | N | 3.9 | 204 | 7.0 | Y | 12 | Morris,C.S | |
| 14.49 | 810163 | 12.9 | M | SU TAU | 0.6 | 6 | | | 0.256 | N | 4.5 | 156 | 7.0 | Y | 12 | Morris,C.S | |
| 14.583 | 810164 | 14.0 | S | | 0.4 | 1 | | | 0.44 | N | 4.5 | 225 | 5.5 | Y | 1 | Fabre,R | |
| 14.691 | 810165 | 13.0: | | | 0.5 | 5 | | | 0.20 | N | 6.3 | 140 | 6.8 | Y | 1 | Lovejoy,T | |
| 14.94 | 810166 | 14.3 | B | PA | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 14.95 | 810167 | 13.3 | B | PA | 1.0 | 3 | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 14.97 | 810168 | 14.0 | B | E | 0.7 | 3 | | | 1.02 | N | 13 | 475 | | | | Chernis,K | |

NOTE A Coma diameter approximate.
NOTE B Very faint. Coma diameter approximate.
NOTE C Very faint - featureless. Magnitude uncertain.
NOTE D Eastward fan in inner coma.
NOTE E Almost stellar nuc. of 14.5.
NOTE F First sighting of Halley. Comet was south of the path shown in the September issue of Sky and Telescope Halley Notebook (page 222). Comet was faint, estimated magnitude 13.5. Coma was small, round, with no condensation at all seen. No tail seen. Limit 15.0.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.125 | 830017 | | 0.256 | N | 5.6 | 85 | | 5.5 | 1 | Gallego,J | A |
| 14.408 | 830018 | 0.2 | 0.356 | SC | 11 | 310 | 14 | 5.9 | 1 | Cuthill,D.D | B |

NOTE A Field 1 deg. Very stellar. In the vision's limit. [sic] (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE B First obs. of Halley. The coma is very round and slightly condensed at its center. Coma diam. is about 1.5' and a total vis. mag. of 12.5.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.304 | 850022 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | S | 217/P | 1 | Sabia,J.D | A |
| 14.355 | 850023 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | S | 2/P | 1 | Dilsizian,R | B |

NOTE A Instrument is Schmidt camera.
NOTE B Giacobini-Zinner and Halley. Exposure duration approximate.

DATE: 15 SEP 1985

DATE: 15 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.02 | 810169 | 12.4 | S | SU TAU | 1.0 | 3 | 0.01 | 271 | 0.400 | N | 5 | 170 | 6.5 | Y | 2 | Merlin,J.-C |
| 15.36 | 810170 | 12.7 | S | SU TAU | 0.8 | 6 | | | 0.500 | N | 5 | 157 | | | | Bortle,J.E |
| 15.36 | 810171 | 12.8 | S | SU TAU | 0.6 | 6 | | | 0.317 | N | 6 | 170 | | | | Bortle,J.E |
| 15.365 | 810172 | 12.8 | M | CZ ORI | 1.3 | 1 | | | 0.254 | N | 4.5 | 163 | 6.5 | Y | 4 | DeYoung,J.A |
| 15.427 | 810173 | 12.1 | S | | 2 | | | | 0.406 | N | 4.5 | 520 | 5.8 | Y | 2 | Glassett,W |
| 15.5264 | 810174 | 12.7 | S | U ORI | 1.0 | 3 | | | 0.254 | N | 3.8 | 64 | 5.8 | | 1 | Machholz,D |
| 15.97 | 810175 | 14.1 | B | E | | 3 | | | 1.02 | N | 13 | 185 | | | | Chernis,K |

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.017 | 830019 | 0.11 | 0.40 | N | 5 | 170 | 10 | 6.5 | 2 | Merlin,J.-C | A |
| 15.089 | 830020 | | | | | 200,400 | 15 | | 1 | Verdenet,M | B |

NOTE A Jet at PA 209, diffuse; tail at PA 271. Bright central point mag. about 15. Central condensation diameter 10 to 15".
NOTE B (Drawings at 200x (0.17'/mm) and 400x submitted. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.339 | 850024 | 0.63 | 1.8 | 0.35 | 3.3 x 2.2 | 4.50 | 103a-F | | N | | 4/P | 2 | Ferrin,I | A |

NOTE A Giacobini-Zinner and Halley. Instrument is Schmidt camera.

DATE: 16 SEP 1985

DATE: 16 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.05 | 810176 | 12 : | B | E | 1.0 | 5 | | | 0.16 | N | 10 | 30 | | | | Mormil,V | |
| 16.111 | 810177 | 14.5 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.4 | Y | 1 | Fleet,R.W | A |
| 16.115 | 810178 | 13.7 | M | CZ ORI | | 5 | | | 0.35 | N | 5.5 | 160 | 5.4 | Y | 1 | Fleet,R.W | B |
| 16.35 | 810179 | 12.6 | S | SU TAU | 0.9 | 6 | | | 0.500 | N | 5 | 157 | | | | Bortle,J.E | C |
| 16.35 | 810180 | 12.7 | S | SU TAU | 0.6 | 2 | | | 0.317 | N | 6 | 170 | | | | Bortle,J.E | |
| 16.364 | 810181 | 13.7 | S | SU TAU | 0.5 | | | | 0.445 | N | 4.5 | 167 | 6.3 | Y | 3 | Morrison,W | D |
| 16.42 | 810182 | 12.5 | B | | 0.7 | 2 | | | 0.335 | N | 4.5 | 216 | 5.0 | Y | | Kronk,G | |
| 16.49 | 810183 | 12.8 | M | SU TAU | 0.6 | 6 | | | 0.256 | N | 4.5 | 156 | 7.0 | Y | 11 | Morris,C.S | E |
| 16.5139 | 810184 | 13.2 | S | SU TAU | 1.5 | 6 | | | 0.32 | N | 4.8 | 146 | 6.5 | Y | 2 | Cook,A.J | F |
| 16.94 | 810185 | 14.1 | B | PA | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 16.95 | 810186 | 12.9 | B | PA | | 3 | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 16.97 | 810187 | 14.0 | B | E | | 3 | | | 1.02 | N | 13 | 185 | | | | Chernis,K | |

NOTE A Central condensation magnitude only.
NOTE B 0.25' coma, averted vision.
NOTE C Stellar/almost stellar nuc. of 14.5.
NOTE D CZ Ori also used for comparison stars.
NOTE E A stellar condensation was noted (mag. = 13.7). Coma diameter = 0.61'.
NOTE F 20 mph wind.

DATE: 17 SEP 1985

DATE: 17 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.05 | 810188 | 12 : | B | E | 2 | | | | 0.16 | N | 10 | 30 | | | | Mormil,V | A |
| 17.05 | 810189 | 13.1 | S | CZ ORI | 1.8 | 3 | | | 0.305 | N | 5 | 94 | 6.4 | Y | 3 | Zanotta,M.V | B |
| 17.090 | 810190 | 13.5 | M | CZ ORI | | 5 | | | 0.35 | N | 5.5 | 160 | 5.6 | Y | 1 | Fleet,R.W | C |
| 17.115 | 810191 | 14.2 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.6 | Y | 1 | Fleet,R.W | D |
| 17.3 | 810192 | 13.0 | M | | 1.2 | 5 | | 270 | 0.20 | N | 6 | 125 | | | | O'Meara,S.J | E |
| 17.33 | 810193 | 12.8 | S | LNES | 1.2 | 3 | | | 0.203 | N | 6 | 116 | | | | Green,D.W.E | A |
| 17.354 | 810194 | 13.6 | S | CZ ORI | 1.0 | 4 | | | 0.254 | N | 5.6 | 120 | 6.7 | Y | 1 | Knight,S | F |
| 17.354 | 810195 | 14.4 | | CZ ORI | | | | | 0.254 | N | 5.6 | 120 | 6.7 | Y | 1 | Knight,S | G |
| 17.37 | 810196 | 12.5 | M | LNES | 1.2 | 3 | | | 0.203 | N | 6 | 116 | | | | Green,D.W.E | A |
| 17.37 | 810197 | 12.5 | S | SU TAU | 0.8 | 5 | | | 0.500 | N | 5 | 157 | | | | Bortle,J.E | H |
| 17.37 | 810198 | 12.6 | S | LNES | 1.2 | 3 | | | 0.203 | N | 6 | 116 | | | | Green,D.W.E | A |
| 17.37 | 810199 | 12.6 | S | SU TAU | 0.6 | 3 | | | 0.317 | N | 6 | 170 | | | | Bortle,J.E | |
| 17.49 | 810200 | 12.5 | S | SU TAU | | | | | 0.20 | N | 6 | 122 | 7 | Y | 28 | Hale,A | |
| 17.50 | 810201 | 12.3 | M | SU TAU | 0.8 | 5 | | | 0.256 | N | 4.5 | 156 | 7.0 | Y | 6 | Morris,C.S | I |
| 17.5201 | 810202 | 12.5 | S | U ORI | 1.0 | 2 | | | 0.254 | N | 3.8 | 64 | 6.2 | | 1 | Machholz,D | |
| 17.95 | 810203 | 14.0 | B | PA | 0.2 | 6 | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 17.96 | 810204 | 13.9 | B | PA | 0.1 | 5 | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |

NOTE A Coma diameter approximate.
NOTE B Disk-like central condensation. Probable coma extension on PA = 350 deg.
NOTE C 0.4' coma, averted vision.
NOTE D Central condensation magnitude only.
NOTE E Thin; tail length approximately 15 arc sec.
NOTE F Stellar nucleus.
NOTE G Stellar nucleus magnitude.
NOTE H Almost stellar nuc. of 14th mag.
NOTE I Coma was slightly elongated toward PA 200:. At 45x, the comet appeared almost stellar - only the condensation was visible. Coma diameter = 0.75'.

DATE: 18 SEP 1985

DATE: 18 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.069 | 810205 | 14.4 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.6 | Y | 1 | Fleet,R.W | A |
| 18.073 | 810206 | 13.4 | M | CZ ORI | 0.2 | 6 | | | 0.35 | N | 5.5 | 160 | 5.6 | Y | 1 | Fleet,R.W | B |
| 18.08 | 810207 | 12.5 | S | SU TAU | 0.5 | 1 | | | 0.203 | C | 10 | 80 | 6 | Y | 3 | Comello,G | C |
| 18.097 | 810208 | 13.8 | | CZ ORI | | | | | 0.22 | N | 8 | 150 | 5.6 | Y | 1 | Fleet,R.W | D |
| 18.10 | 810209 | 12.4 | S | SU TAU | 0.8 | 1 | | | 0.254 | JB | 6 | 90 | 6.5 | Y | 2 | Bouma,R.J | |
| 18.13 | 810210 | 13.0 | S | CZ ORI | 2.0 | 2 | | | 0.305 | N | 5 | 60 | 6.7 | Y | 2 | Zanotta,M.V | E |
| 18.43 | 810211 | 12.3 | B | | 0.9 | 2 | | | 0.335 | N | 4.5 | 216 | 4.5 | Y | | Kronk,G | |

NOTE A Central condensation magnitude only.
NOTE B 0.3' coma, averted vision.
NOTE C Coma diameter approximate.
NOTE D Central condensation only.
NOTE E Perfect sky. 300x: small (nearly star-like) central condensation of magnitude = 14.5, smaller than on 17th.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.087 | 830021 | 0.16 | 0.400 | N | 5 | 100,222 | 50 | 5.4 | 2 | Sarocchi,D | A |
| 18.115 | 830022 | 0.18 | | | | | 30 | | 1 | Verdenet,M | |

NOTE A Diameter >20".

DATE: 19 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.052 | 810212 | 13.6 | M | CZ ORI | 0.2 | 6 | | | 0.35 | N | 5.5 | 160 | 5.8 | Y | 1 | Fleet,R.W | A |
| 19.056 | 810213 | 14.3 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.8 | Y | 1 | Fleet,R.W | B |
| 19.069 | 810214 | 13.5 | M | CZ ORI | | 6 | | | 0.22 | N | 8 | 150 | 5.8 | Y | 1 | Fleet,R.W | C |
| 19.09 | 810215 | 12.4 | S | SU TAU | 0.4 | 8 | | | 0.150 | R | 8 | 150 | 6 C | Y | 1 | Aerts,L | |
| 19.12 | 810216 | 12.5 | S | CZ ORI | 1 | 7 | | | 0.250 | N | 10 | 147 | 6 | Y | 1 | van Loo,F.R | |
| 19.127 | 810217 | 13.3 | | SA 74 | | | | | 0.250 | N | 6 | 187 | 5.8 | Y | 1 | Guthier,O | D |
| 19.383 | 810218 | 13.7 | S | SU TAU | 0.6 | 2 | | | 0.445 | N | 4.5 | 167 | 6.3 | Y | 3 | Morrison,W | |
| 19.44 | 810219 | 12.5 | S | SU TAU | 2.0 | 2 | | | 0.32 | N | 4 | 66 | 6.5 | Y | 1 | Keen,R | |
| 19.573 | 810220 | 13.9 | S | | 0.4 | 1 | | | 0.44 | N | 4.5 | 225 | 5.5 | Y | 1 | Fabre,R | |
| 19.89 | 810221 | 13.8 | B | PA | 0.1 | 5 | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 19.92 | 810222 | 12.5 | B | PA | | | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 19.95 | 810223 | 13.7 | B | PA | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |

NOTE A 0.6' coma, averted vision.
NOTE B Central condensation magnitude only.
NOTE C 0.4' coma, averted vision.
NOTE D Magnitude estimation method "J" used.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.075 | 830023 | | 0.400 | N | 5 | 100,166,222 | 35 | 5.3 | 2 | Sarocchi,D | A |
| 19.390 | 830024 | | 0.406 | N | 4.8 | 217 | 14 | 6.6 | 1 | Troiani,D.M | B |

NOTE A Seem to see a faint tail but long. It across the star at its east. [sic]
NOTE B Transparency (1-5): 5. DC = 4.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.467 | 850025 | 1.524 | 6 | 0.254 | 1.4 x 0.9 | 45.00 | Kodak 2415 | | Y | O | 67/C | 1 | Snyder,L.F | |
| 19.497 | 850026 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 22.00 | Kodak Tri-X | | N | M | 2/S | 1 | Webb,R | A |

NOTE A Inner coma and starlike central condensation visible on all original negatives. Film pushed processed slightly. (Observer indicated C-type guiding as well as M. Ed.)

DATE: 20 SEP 1985

DATE: 20 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.049 | 810224 | 13.6 | M | CZ ORI | 0.3 | 6 | | | 0.35 | N | 5.5 | 160 | 5.8 | Y | 1 | Fleet,R.W | A |
| 20.052 | 810225 | 14.2 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.8 | Y | 1 | Fleet,R.W | B |
| 20.076 | 810226 | 13.0 | S | SU TAU | 0.4 | 6 | | | 0.205 | N | 4.5 | 126 | 6.0 | Y | 1 | Hasubick,W | |
| 20.111 | 810227 | 13.6 | M | CZ ORI | | | | | 0.22 | N | 8 | 150 | 5.7 | Y | 1 | Fleet,R.W | |
| 20.47 | 810228 | 12.4 | M | SU TAU | 0.8 | 4 | | | 0.256 | N | 4.5 | 156 | 6.5 | Y | 6 | Morris,C.S | C |
| 20.75 | 810229 | 12.8 | S | AAVSO | 1.1 | 2 | | | 0.20 | N | 5.6 | 89 | 6.5 | Y | 1 | Nakamura,A | |
| 20.89 | 810230 | 13.8 | B | PA | 0.3 | 3 | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 20.94 | 810231 | 13.9 | B | PA | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 20.97 | 810232 | 12.7 | B | PA | | | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |

NOTE A 0.6' coma, averted vision.
NOTE B Central condensation magnitude only.
NOTE C Coma diameter = 0.75'.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.083 | 830025 | | 0.356 | SC | 11 | 200,400 | | | 1 | Verdenet,M | A |
| 20.403 | 830026 | | 0.406 | N | 4.8 | 217 | 22 | 6.6 | 1 | Troiani,D.M | B |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Drawings at 200x (0.18'/mm) and 400x submitted. Ed.)
NOTE B Condensation of coma = 4. No tail.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.118 | 850027 | 0.420 | 1.7 | 0.250 | 4.9 x 3.3 | 40.00 | Kodak 2415 | | N | S | 1/P | 1 | Bruhin,W | A |

NOTE A (Observer's image identifier is I. Ed.)

DATE: 21 SEP 1985

DATE: 21 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.059 | 810233 | 13.6 | M | CZ ORI | 0.3 | 6 | | | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | A |
| 21.066 | 810234 | 13.5 | M | CZ ORI | 0.3 | 5 | | | 0.35 | N | 5.5 | 160 | 5.8 | Y | 1 | Fleet,R.W | A |
| 21.076 | 810235 | 13.6 | M | CZ ORI | | | | | 0.22 | N | 8 | 150 | 5.8 | Y | 1 | Fleet,R.W | B |
| 21.08 | 810236 | 11.9 | S | SU TAU | 1.2 | 3 | 0.02 | 270 | 0.400 | N | 5 | 170 | 6.5 | Y | 2 | Merlin,J.-C | |
| 21.37 | 810237 | 12.3 | S | LNES | 0.8 | 1 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | C |
| 21.394 | 810238 | 13.4 | B | SU TAU | | 4 | | | 0.254 | N | 6 | 147 | 6.6 | Y | 1 | Troiani,D.M | |
| 21.45 | 810239 | 12.2 | S | SU TAU | | | | | 0.20 | N | 6 | 122 | 6 | Y | 30 | Hale,A | |
| 21.50 | 810240 | 12.2 | M | SU TAU | 0.8 | 4 | | | 0.256 | N | 4.5 | 156 | 6.5 | Y | 6 | Morris,C.S | D |
| 21.5021 | 810241 | 12.2 | S | U ORI | 1.2 | 3 | | | 0.254 | N | 3.8 | 64 | 6.0 | | 1 | Machholz,D | |
| 21.51 | 810242 | 12.8 | S | SU TAU | | 8 | | | 0.256 | N | 4.5 | 45 | 6.5 | Y | 6 | Morris,C.S | |
| 21.51 | 810243 | 12.5 | M | SU TAU | 0.4 | 7 | | | 0.256 | N | 4.5 | 67 | 6.5 | Y | 6 | Morris,C.S | E |
| 21.51 | 810244 | 12.3 | S | SU TAU | 0.5 | 3 | | | 0.256 | N | 4.5 | 222 | 6.5 | Y | 6 | Morris,C.S | |
| 21.52 | 810245 | 12.3 | M | SU TAU | 0.6 | 6 | | | 0.256 | N | 4.5 | 111 | 6.5 | Y | 6 | Morris,C.S | |
| 21.70 | 810246 | 13.3 | S | CZ ORI | | | | | 0.317 | N | 5 | 104 | | Y | | Jones,A | |

NOTE A 0.5' coma, averted vision.
NOTE B 0.4' coma, averted vision.
NOTE C Coma diameter approximate.
NOTE D Coma diameter = 0.75'.
NOTE E Coma diameter = 0.38'.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.068 | 830027 | 0.09 | 0.40 | N | 5 | 170 | 15 | 6.5 | 2 | Merlin,J.-C | A |

NOTE A Tail at PA 269, diffuse extension westward. Slight condensation diameter about 25".

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.135 | 850028 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 8.00 | Kodak 103a-F | | N | | 3/P | 1 | Guarro,J | |
| 21.317 | 850029 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | S | 223/P | 1 | Sabia,J.D | A |
| 21.477 | 850030 | 0.605 | 1.7 | | 3.4 x 2.3 | 24.00 | Ektachr. Pro | 200/ | N | S | 1/P | 1 | Levy,A | B |

NOTE A Instrument is Schmidt camera.
NOTE B Weather conditions: some clouds and fog. Venus was high on the horizon and very bright for longer exposures, also almost dawn. Photographic magnitude: 12.50.

DATE: 22 SEP 1985

DATE: 22 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.04 | 810247 | 11.6 | S | SU TAU | 1.5 | 3 | 0.03 | 270 | 0.400 | N | 5 | 81 | 6.5 | Y | 2 | Merlin,J.-C | |
| 22.080 | 810248 | 12.7 | M | CZ ORI | 0.5 | 5 | | | 0.35 | N | 5.5 | 100 | 5.9 | Y | 1 | Fleet,R.W | A |
| 22.083 | 810249 | 12.7 | M | CZ ORI | 0.4 | 5 | | | 0.35 | N | 5.5 | 160 | 5.9 | Y | 1 | Fleet,R.W | B |
| 22.097 | 810250 | 12.7 | M | CZ ORI | 0.3 | 4 | | | 0.22 | N | 8 | 90 | 5.9 | Y | 1 | Fleet,R.W | C |
| 22.14 | 810251 | 12.9 | B | SU TAU | 1.0 | 2 | | | 0.203 | SC | 10 | 80 | 6.3 | Y | 2 | Granslo,B.H | |
| 22.28 | 810252 | | | | 1.3 | 5 | | | 0.406 | N | 5 | 80 | 6 | Y | 1 | Simmons,K | |
| 22.28 | 810253 | | | | 1.6 | 4 | | | 0.406 | N | 5 | 80 | 6.0 | Y | 1 | Simmons,W | |
| 22.4236 | 810254 | 12.5 | M | SU TAU | 1.2 | 6 | | | 0.32 | N | 4.8 | 146 | 6.6 | Y | 3 | Cook,A.J | D |
| 22.47 | 810255 | 12.2 | M | SU TAU | 0.9 | 4 | | | 0.256 | N | 4.5 | 156 | 6.5 | Y | 6 | Morris,C.S | |
| 22.4958 | 810256 | 12.2 | S | U ORI | 1.2 | 2 | | | 0.254 | N | 3.8 | 32 | 6.0 | | 1 | Machholz,D | E |
| 22.500 | 810257 | 13.7 | S | | 0.5 | 3 | | | 0.33 | N | 4.5 | 175 | 6.5 | Y | 4 | Fabre,R | |
| 22.50 | 810258 | 12.3 | M | SU TAU | 0.8 | 4 | | | 0.125 | SC | 10.0 | 122 | 6.5 | Y | 6 | Morris,C.S | F |
| 22.587 | 810259 | 12.5 | S | | 1.5 | 2 | | | 0.15 | N | 6 | 100 | 6.2 | Y | 1 | Krisciunas,K | G |
| 22.87 | 810260 | 13.6 | B | PA | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 22.91 | 810261 | 13.0 | B | PA | | | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 22.94 | 810262 | 13.8 | B | PA | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |

NOTE A 1.3' coma, averted vision.
NOTE B 1.0' coma, averted vision.
NOTE C 0.8' coma, averted vision.
NOTE D m2 = 13.5.
NOTE E In a 16" f/5 reflector at about 120x the comet appeared more condensed (DC = 7) and larger (about 2.0').
NOTE F Coma diameter = 0.76'.
NOTE G Magnitude accuracy +/-0.5.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.038 | 830028 | 0.05 | 0.40 | N | 5 | 81,254 | 10 | 6.5 | 2 | Merlin,J.-C | A |
| 22.115 | 830029 | 0.08 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | B |

NOTE A Jet at PA 93; jet at PA 155, pretty large and diffuse; jet at PA 281. Tail at PA 257: axis of diffuse feature.
NOTE B (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.024 | 850031 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 10.00 | 3M CRT-4 | | Y | M | 1/C | 2 | Cimatti,A | A |
| 22.125 | 850032 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 30.00 | Kodak 103a-F | | N | M | 1/C | 2 | Cimatti,A | |

NOTE A Large format film used.

DATE: 23 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.083 | 810263 | 12.6 | M | CZ ORI | 0.5 | 6 | | | 0.35 | N | 5.5 | 100 | 5.9 | Y | 1 | Fleet,R.W | A |
| 23.090 | 810264 | 12.8 | M | CZ ORI | 0.6 | 6 | | | 0.35 | N | 5.5 | 160 | 5.9 | Y | 1 | Fleet,R.W | B |
| 23.101 | 810265 | 12.8 | M | CZ ORI | 0.3 | 6 | | | 0.22 | N | 8 | 150 | 5.9 | Y | 1 | Fleet,R.W | C |
| 23.139 | 810266 | 13.5 | | SA 74 | 0.5 | | | | 0.250 | N | 6 | 187 | 5.8 | Y | 1 | Guthier,O | D |
| 23.42 | 810267 | 12.1 | M | SU TAU | 0.9 | 4 | | | 0.256 | N | 4.5 | 156 | 6.5 | Y | 6 | Morris,C.S | |
| 23.528 | 810268 | 13.5 | S | | 0.8 | 3 | | | 0.44 | N | 4.5 | 225 | 5.5 | Y | 1 | Fabre,R | |
| 23.86 | 810269 | 12.4 | S | CN ORI | 0.7 | 3 | | | 0.317 | N | 5 | 149 | 6.0 | Y | | Pearce,A | E |

NOTE A 1.5' coma, averted vision.
NOTE B 1.0' coma, averted vision.
NOTE C 0.9' coma, averted vision.
NOTE D Diffuse! Magnitude estimation method "J" used.
NOTE E My observation of comet P/Halley used some comparison stars from the field of the Z Cam star CN Ori. The magnitudes are photovisual. 1. Mag. 12.2 RA 5h 52m 40s, -5 deg 33.0 arc min. 2. Mag. 12.6 RA 5h 47m 15s, -5 deg 31.5 arc min.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.152 | 850033 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 7.50 | Kodak 103a-F | | N | | 4/P | 1 | Guarro,J | |
| 23.156 | 850034 | 3.910 | 11 | 0.350 | 0.5 x 0.4 | 60.00 | Fujichrome | 400/ | Y | S | 15/T | 3 | Genebriera,J | |
| 23.170 | 850035 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 7.00 | Kodak 103a-F | | N | | 5/P | 1 | Guarro,J | |
| 23.722 | 850036 | 1.9 | 6 | 0.318 | 1.1 x 0.7 | 40.00 | Ilford HP5 | | N | | 1/P | 1 | Barclay,J | A |

NOTE A (Photographer rated film at ISO 5000. Ed.)

DATE: 24 SEP 1985

DATE: 24 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.05 | 810270 | 11.5: | B | E | 2.0 | | | | 0.16 | N | 10 | 30 | | | | | |
| 24.05 | 810271 | | | | | | | | | | | | | | | Mormil,V | |
| 24.06 | 810272 | 11.6 | S | SU TAU | 1.0 | 3 | | | 0.400 | N | 5 | 170 | 6.0 | Y | 1 | Verdenet,M | A |
| 24.076 | 810273 | 12.5: | | | 1 | 7 | | | 0.13 | R | 10 | 50 | | Y | 2 | Merlin,J.-C | |
| 24.104 | 810274 | 14.9 | | CZ ORI | 0.3 | 5 | | | 0.35 | N | 5.5 | 160 | 5.8 | Y | 1 | Morrisby,A | B |
| 24.16 | 810275 | 12.2 | S | SU TAU | 1 | 7 | | | 0.250 | N | 10 | 147 | 5.5T | Y | 1 | Fleet,R.W | C |
| | | | | | | | | | | | | | | | | van Loo,F.R | |

NOTE A Mixed with a bright star which seems nebulous.
NOTE B Coma diameter uncertain. Seeing and transparency good.
NOTE C Nucleus magnitude. 0.5' coma, averted vision; stars interfere.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.052 | 830030 | 0.09 | 0.356 | SC | 11 | 400 | | | 1 | Verdenet,M | A |
| 24.087 | 830031 | 0.03 | 0.40 | N | 5 | 170,407 | 10 | 6.0 | 2 | Merlin,J.-C | B |

NOTE A (Duration not indicated. Time of observation is assumed to be approximate start time. Ed.)
NOTE B Jet at PA 36, jet at PA 304, jet at PA 356; (all) 3 jets pretty faint. Star mag. 12.5 nearly occulted by nucleus at 0100 UT, at about 11" south of nucleus at 0200 UT.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.719 | 850037 | 1.9 | 6 | 0.318 | 1.1 x 0.7 | 30.00 | Ilford HP5 | | N | | 2/P | 1 | Barclay,J | A |

NOTE A (Photographer rated film at ISO 5000. Ed.)

DATE: 25 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.05 | 810276 | 11.5: | B | E | 2.0 | | | | 0.16 | N | 10 | 30 | | | | Mormil,V | |
| 25.083 | 810277 | 12.5 | M | CZ ORI | 0.4 | 6 | | | 0.35 | N | 5.5 | 160 | 5.8 | Y | 1 | Fleet,R.W | A |
| 25.087 | 810278 | 14.0 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.8 | Y | 1 | Fleet,R.W | B |
| 25.101 | 810279 | 12.6 | M | CZ ORI | 0.5 | 6 | | | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | C |
| 25.11 | 810280 | 12.6 | S | SU TAU | 1.3 | 4 | | | 0.305 | N | 5 | 94 | 6.2 | Y | 2 | Zanotta,M.V | D |
| 25.37 | 810281 | 11.7 | S | SU TAU | 1.5 | 5 | | | 0.317 | N | 6 | 88 | | | | Bortle,J.E | E |
| 25.37 | 810282 | | | | 1.2 | 6 | | | 0.500 | N | 5 | 96 | | | | Bortle,J.E | F |
| 25.381 | 810283 | 12.9 | S | SU TAU | 0.6 | 4 | | | 0.445 | N | 4.5 | 167 | 6.7 | Y | 3 | Morrison,W | G |
| 25.4555 | 810284 | 12.0 | S | U ORI | 1.2 | 4 | | | 0.254 | N | 3.8 | 64 | 5.8 | | 1 | Machholz,D | |
| 25.74 | 810285 | 12.3 | M | | 1 | | | | 0.16 | N | 6.3 | 80 | 6 | Y | 1 | Mitsuma,S | |
| 25.77 | 810286 | 12.6 | S | | 0.5 | 1 | | | 0.16 | N | 6.3 | 95 | 5.5 | Y | 2 | Hiraga,M | |
| 25.81 | 810287 | 12.7 | B | | 0.5 | 6 | | | 0.26 | N | 5 | 146 | 5.0T | Y | 1 | Kanai,K | |
| 25.81 | 810288 | 12.7 | S | | 0.5 | 6 | | | 0.26 | N | 5 | 146 | 5.0T | Y | 1 | Kanai,K | |

NOTE A 1.1' coma, averted vision.
NOTE B Central condensation magnitude only.
NOTE C 1.5' coma, averted vision.
NOTE D Haze sky.
NOTE E Near stellar nuc. of about 13th mag.
NOTE F Cond. (0.3') mag. 13.0, nuc. about 14.5.
NOTE G CZ Ori also used for comparison stars.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.115 | 830032 | | 0.356 | SC | 11 | 400 | | | 1 | Verdenet,M | A |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.125 | 850038 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 15.00 | Kodak 2415 | | Y | S | 9/N | 1 | Mikuz,H |

DATE: 26 SEP 1985

DATE: 26 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.097 | 810289 | 12.4 | M | CZ ORI | 0.5 | 6 | | | 0.35 | N | 5.5 | 100 | 5.4 | Y | 1 | Fleet,R.W | A |
| 26.10 | 810290 | 11.8 | S | SU TAU | 1.2 | 2 | | | 0.254 | JB | 6 | 73 | 6.5 | Y | 2 | Bouma,R.J | |
| 26.104 | 810291 | 12.3 | M | CZ ORI | 0.5 | 6 | | | 0.35 | N | 5.5 | 160 | 5.4 | Y | 1 | Fleet,R.W | B |
| 26.108 | 810292 | 14.3 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.4 | Y | 1 | Fleet,R.W | C |
| 26.11 | 810293 | 11.7 | S | SU TAU | 1 | 3 | | | 0.203 | C | 10 | 80 | 6 | Y | 3 | Comello,G | D |
| 26.122 | 810294 | 13.0 | S | | 1 | 2 | | | 0.250 | N | 6 | 55 | 6.0 | N | 1 | Lunde,R | E |
| 26.125 | 810295 | 13.0 | | SA 74 | 0.7 | | | | 0.250 | N | 6 | 187 | 5.9 | Y | 1 | Guthier,O | F |
| 26.13 | 810296 | 12.4: | | | 0.5 | 3 | | | 0.203 | SC | 10 | 160 | 5.7 | Y | 1 | Luthen,H | |
| 26.3 | 810297 | 12.0 | M | | 1.5 | 6 | 0.01 | 314 | 0.23 | R | 12 | 240 | | | | O'Meara,S.J | G |
| 26.33 | 810298 | 11.9 | S | LNES | 1.6 | 4 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | D |
| 26.49 | 810299 | 11.8 | M | SU TAU | 1.1 | 4 | | | 0.256 | N | 4.5 | 156 | 6.0 | Y | 6 | Morris,C.S | |
| 26.49 | 810300 | 11.4 | M | SU TAU | 2.1 | 3 | | | 0.256 | N | 4.5 | 67 | 6.0 | Y | 6 | Morris,C.S | H |
| 26.618 | 810301 | 13.4 | S | | 1 | 4 | | | 0.44 | N | 4.5 | 225 | 5.5 | Y | 1 | Fabre,R | |
| 26.81 | 810302 | 12.5 | | | 2 | 2 | | | 0.31 | N | 5.7 | 55 | 5.0 | Y | 2 | Suzuki,K | |

NOTE A 1.5' coma, averted vision.
NOTE B 1.2' coma, averted vision.
NOTE C Central condensation magnitude only.
NOTE D Coma diameter approximate.
NOTE E Coma diameter is upper limit.
NOTE F Diffuse. Magnitude estimation method "J" used.
NOTE G Jets in PA 40, 15 arc sec., and PA 130, 10 arc sec. Tail length approximately 20 arc sec.
NOTE H Coma is elongated toward the west.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.156 | 830033 | | 0.356 | SC | 11 | 400 | | | 1 | Verdenet,M | A |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.147 | 850039 | 1.400 | | 0.28 | 1.5 x 1.0 | 10.00 | Kodak Tri-X | 400/27 | N | | 19/N | 1 | Darvann,T.A | A |
| 26.509 | 850040 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 35.00 | Kodak Tri-X | | N | M | 3/S | 1 | Webb,R | B |

NOTE A (Instrument FL of 2.800 and separately specified effective FL of approximately 1.400 don't match. Ed.)
NOTE B Inner coma and starlike central condensation visible on all original negatives. Film pushed processed slightly. (Observer indicated C-type guiding as well as M. Ed.)

DATE: 27 SEP 1985

DATE: 27 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.121 | 810303 | 12.7 | B | | 0.5 | 4 | | | 0.400 | C | 15 | 120 | 6.0 | Y | 3 | Zische,E | |
| 27.146 | 810304 | 12.8 | B | SA 74 | 0.9 | 2 | | | 0.250 | N | 6 | 187 | 6.0 | Y | 1 | Guthier,O | A |
| 27.15 | 810305 | 11.3 | S | SU TAU | 1.6 | 2 | | | 0.100 | N | 9 | 23 | 6.5 | Y | 1 | van de Weg,R.L.W | B |
| 27.42 | 810306 | 11.7 | B | | 1.0 | 2 | | | 0.335 | N | 4.5 | 216 | 5.0 | Y | | Kronk,G | |

NOTE A Diffuse central condensation.
NOTE B According to DCS reference stars: 11.3; according to IHW: 11.5.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.156 | 830034 | | 0.356 | SC | 11 | 200,400 | | | 1 | Verdenet,M | A |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Drawings supplied at 200x and 400x. Ed.)

DATE: 28 SEP 1985

DATE: 28 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.35 | 810307 | 12.0 | S | LNES | 1.0 | 5 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | A |
| 28.389 | 810308 | 13.1 | S | SU TAU | 0.4 | | | | 0.445 | N | 4.5 | 167 | 5 M | N | 3 | Morrison,W | B |

NOTE A Coma diameter approximate.
NOTE B CZ Ori also used for comparison stars. Coma diameter approximate. Full moon prevents dark adaption.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 28.141 | 830035 | 0.10 | 0.36 | SC | 11 | 330 | 7 | 4 | 1 | Korth,S |

DATE: 29 SEP 1985

DATE: 29 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.167 | 810309 | 11.6 | M | AAVSO | | | | | 0.23 | R | 12 | 120 | | | | O'Meara,S.J | A |
| 29.34 | 810310 | 11.7 | S | LNES | 1.7 | 4 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | B |
| 29.38 | 810311 | 11.8 | M | LNES | 1.7 | 4 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | B |

NOTE A Nuclear mag. 13.9.
NOTE B Coma diameter approximate.

DATE: 30 SEP 1985

DATE: 30 SEP 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.194 | 810312 | 11.8 | M | AAVSO | | | | | 0.23 | R | 12 | 120 | | | | O'Meara,S.J | |
| 30.36 | 810313 | 11.7 | S | LNES | 1.3 | 3 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | A |

NOTE A Coma diameter approximate.

DATE: 1 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.177 | 810314 | 12.5: | | U ORI | 0.5 | | | | 0.36 | SC | 11 | 330 | 4 M | Y | | Korth,S | A |

NOTE A Bright moon disturbed observations.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.175 | 830036 | 0.10 | 0.36 | SC | 11 | 330 | 5 | 4 | 1 | Korth,S | A |

NOTE A Bright moon made the observation very difficult.

DATE: 5 OCT 1985

DATE: 5 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.167 | 810315 | 12.1 | M | CZ ORI | | | | | 0.298 | N | 5 | 65 | 5.7 | Y | 1 | Stott,D | A |

NOTE A Stellar.

DATE: 6 OCT 1985

DATE: 6 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.36 | 810316 | 11.9: | S | LNES | 1.1 | 5 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | A |
| 6.74 | 810317 | 12.3 | M | | 1.1 | 1 | | | 0.16 | N | 6.3 | 80 | 5 M | Y | 1 | Mitsuma,S | |

NOTE A Coma diameter approximate.

DATE: 7 OCT 1985

DATE: 7 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.36 | 810318 | 10.9 | S | LNES | 1.5 | 5 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | A |
| 7.363 | 810319 | 12.2 | S | SU TAU | 0.7 | 4 | | | 0.445 | N | 4.5 | 167 | 5.7M | N | 3 | Morrison,W | B |
| 7.39 | 810320 | 11.0 | S | SU TAU | 1.1 | | | | 0.317 | N | 6 | 88 | | | | Bortle,J.E | C |
| 7.39 | 810321 | 10.8 | M | SU TAU | 1.6 | 4 | | | 0.256 | N | 4.5 | 67 | 5.5M | Y | 6 | Morris,C.S | |
| 7.39 | 810322 | 11.4 | M | SU TAU | | | | | 0.256 | N | 4.5 | 156 | 5.5M | Y | 6 | Morris,C.S | |
| 7.646 | 810323 | 13 | S | | | | | | 0.10 | N | 10 | 111 | 5.0C | Y | 1 | Kato,T | D |
| 7.67 | 810324 | 12.4 | S | CZ ORI | | | | | 0.317 | N | 5 | 86 | | Y | | Jones,A | |
| 7.86 | 810325 | 10.9 | S | SU TAUC | 1.5 | 5 | | | 0.41 | N | 4.2 | 86 | 6.1 | Y | 2 | Clark,M.L | |
| 7.962 | 810326 | 11.9 | M | CZ ORI | 0.4 | 6 | | | 0.35 | N | 5.5 | 100 | 5.4 | Y | 1 | Fleet,R.W | E |

NOTE A Coma diameter approximate.
NOTE B CZ Ori also used for comparison stars. Moon 16 deg. from comet.
NOTE C Moonlight.
NOTE D Central condensation magnitude.
NOTE E 1.3' coma, averted vision.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.184 | 830037 | 1.18 | 0.229 | R | 10 | 100 | 60 | 5.5 | 1 | Nowak,G.T | A |
| 7.927 | 830038 | | 0.356 | SC | 11 | 200,400 | | | 1 | Verdenet,M | B |

NOTE A The comet had a star like nucleus and a ghostly coma developing around it. There was no tail or jets seen. Motion was detected in 1 (one) hour. Nucleus size was 4 seconds of arc, coma was 18 seconds of arc. Coma was also seen in 6" f/5.2 Newtonian reflector at 50x.
NOTE B (Duration not indicated. Time of observation is assumed to be start time. Drawings at 200x (0.25'/mm) and 400x submitted. Ed.)

DATE: 8 OCT 1985 DATE: 8 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.35 | 810327 | 11.0 | S | SU TAU | 1.2 | 5 | | | 0.317 | N | 6 | 88 | | | | Bortle,J.E | A |
| 8.37 | 810328 | 10.5 | M | LNES | 1.5 | 6 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | B |
| 8.37 | 810329 | 10.7 | S | LNES | 1.5 | 6 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | B |
| 8.48 | 810330 | 11.4 | M | SU TAU | | 5 | | | 0.20 | N | 6 | 122 | 6 | Y | 26 | Hale,A | |
| 8.625 | 810331 | 12 | S | | 1 | | | | 0.20 | SC | 10 | 80 | 5.0C | Y | 1 | Kato,T | |
| 8.63 | 810332 | 12.5 | | | 2 | 1 | | | 0.31 | N | 5.7 | 55 | 4.0M | Y | 2 | Suzuki,K | |
| 8.64 | 810333 | 12.5 | | | 2 | 3 | | | 0.23 | | 4.4 | 40 | 6.0 | Y | 1 | Washi,S | C |
| 8.75 | 810334 | 12.3 | S | AAVSO | 1.3 | 5 | | | 0.20 | N | 5.6 | 89 | 5.5M | Y | 5 | Nakamura,A | |
| 8.924 | 810335 | 11.8 | S | | 0.8 | 3 | | | 0.20 | SC | 10 | 111 | 5.5 | Y | 1 | Bremseth,P.-J | D |
| 8.976 | 810336 | 12.6 | | CZ ORI | | | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | E |
| 8.979 | 810337 | 12.1 | M | CZ ORI | 0.8 | 6 | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | F |
| 8.983 | 810338 | 13.0 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.7 | Y | 1 | Fleet,R.W | G |
| 8.986 | 810339 | 12.2 | M | CZ ORI | 0.6 | 6 | | | 0.35 | N | 5.5 | 160 | 5.7 | Y | 1 | Fleet,R.W | H |
| 8.990 | 810340 | 11.3 | S | SU TAU | 1.5 | 3 | | | 0.152 | N | 5 | 44 | 5.8 | Y | 2 | Moeller,M | I |

NOTE A Moonlight.
NOTE B Coma diameter approximate.
NOTE C Instrument is Wright-Schmidt. (Observer indicated "Y" method. Ed.)
NOTE D Central condensation mag. 12.5.
NOTE E Central condensation magnitude, stellar.
NOTE F 2.0' coma, averted vision.
NOTE G Nucleus magnitude.
NOTE H 1.6' coma, averted vision.
NOTE I Moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.318 | 830039 | 0.13 | 0.44 | N | 4.5 | 80,222,333 | 15 | 4.2 | 1 | Falvo,S.A | A |
| 8.368 | 830040 | 0.22 | 0.356 | SC | 11 | | 121 | 5.7 | 1 | Cuthill,D.D | B |
| 8.401 | 830041 | 0.13 | 0.44 | N | 4.5 | 80,222,333 | 15 | 4.2 | 1 | Falvo,S.A | C |
| 8.922 | 830042 | 0.23 | 0.20 | SC | 10 | 111 | 25 | 5.5 | 3 | Bremseth,P.-J | D |

NOTE A Comet approx. 13 mag. using AAVSO SU Tau star field comparison chart. The visual appearance of this comet was that of a soft patch of light, with a spherical shape. No central condensation was noted at this time.
NOTE B 2" e.p. 40' field. Coma diameter has increased to at least 4'. Coma is still symmetrical. Inner coma is much stronger, but without anything I would call "stellar" in appearance.
NOTE C Note orbital motion since first drawing was made 2 hours ago.
NOTE D With averted vision, I could see the small central condensation. The small cloud of coma was weak.

DATE: 9 OCT 1985

DATE: 9 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.007 | 810341 | 12.1 | M | CZ ORI | 0.4 | 5 | | | 0.22 | N | 8 | 90 | 5.7 | Y | 1 | Fleet,R.W | A |
| 9.083 | 810342 | 12.5: | | | | 1 | | | 0.13 | R | 10 | 50 | | Y | 1 | Morrisby,A | |
| 9.090 | 810343 | 11.9: | S | U ORI | 0.8 | 2 | | | 0.203 | SC | 10 | 80 | 4 | Y | 1 | Tanti,T | B |
| 9.155 | 810344 | 11.0 | B | | 2.0 | 4 | | | 0.200 | N | 7.2 | 36 | 5.0M | Y | 1 | Lipski,P | C |
| 9.260 | 810345 | 11.4: | S | CZ ORI | 1 | 0 | | | 0.25 | N | 5.6 | 56 | 6 M | Y | 1 | Jordan,J | D |
| 9.62 | 810346 | 12.0 | | | 2 | 1 | | | 0.31 | N | 5.7 | 55 | 5.0 | Y | 2 | Suzuki,K | |
| 9.969 | 810347 | 11.4 | S | | 0.7 | 3 | | | 0.20 | SC | 10 | 111 | 6.0 | Y | 1 | Bremseth,P.-J | E |
| 9.986 | 810348 | 11.5 | M | CZ ORI | 0.8 | 6 | | | 0.35 | N | 5.5 | 100 | 5.4 | Y | 1 | Fleet,R.W | F |
| 9.990 | 810349 | 12.3 | | CZ ORI | | | | | 0.35 | N | 5.5 | 100 | 5.4 | Y | 1 | Fleet,R.W | G |
| 9.992 | 810350 | 11.0 | S | U ORI | | 0 | | | 0.25 | N | 6 | 120 | | Y | 1 | Gainsford,M.J | |

NOTE A 1.8' coma, averted vision.
NOTE B Seeing good, transparency good. Wind. Moon.
NOTE C Small nucleus.
NOTE D Observation made during and shortly after moonrise, thus making estimate somewhat uncertain.
NOTE E No centr. condens.
NOTE F 1.9' coma, averted vision, between clouds.
NOTE G Central condensation magnitude.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.404 | 830043 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | A |
| 9.969 | 830044 | 0.23 | 0.20 | SC | 10 | 111 | 10 | 6 | 3 | Bremseth,P.-J | B |

NOTE A Close examination of this dim object shows no visible features and it is hard to say whether or not the comet's fuzzy coma is really visible. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B No central condensation was observed this time. Funny, when the seeing was so good. (?) [sic]

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.331 | 850041 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | S | l/P | 1 | Dilsizian,R | A |

NOTE A Stellar guiding was used because of the small angular movement of the comet with respect to time.

DATE: 10 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.062 | 810351 | 9.0 | S | SAO | | | | | 0.31 | N | 5 | 80 | | | | Giampaolo,G | |
| 10.090 | 810352 | 11.5: | S | U ORI | 1.3 | 4 | | | 0.203 | SC | 10 | 80 | 4 | Y | 1 | Tanti,T | A |
| 10.15 | 810353 | 11.7 | S | SU TAU | 1 | 5 | | | 0.250 | N | 5.6 | 80 | 6 M | Y | 1 | van Loo,F.R | |
| 10.23 | 810354 | 10.6 | S | | 1.1 | | | | 0.203 | N | 7 | 54 | 4.5 | Y | 1 | Harrington,P | |
| 10.38 | 810355 | 10.7 | S | SU TAU | 1.8 | 5 | | | 0.317 | N | 6 | 68 | | | | Bortle,J.E | B |
| 10.5368 | 810356 | 11.4 | S | U ORI | 2.0 | 5 | | | 0.254 | N | 3.8 | 64 | 5.4 | | 3 | Machholz,D | |
| 10.71 | 810357 | 10.6 | S | SU TAU | 2 | | | | 0.152 | N | 5 | 76 | 6.2 | Y | 1 | Seargent,D | |
| 10.73 | 810358 | 10.7 | S | Y TAU | 1.0 | 7 | | | 0.20 | N | 6.3 | 50 | 6.8 | Y | 1 | Lovejoy,T | C |
| 10.81 | 810359 | 11.5 | S | | 1.5 | 3 | | | 0.317 | N | 5 | 63 | 6.0 | Y | | Pearce,A | |
| 10.94 | 810360 | 11.0 | S | SU TAU | 3.0 | 3 | 0.01 | 273 | 0.400 | N | 5 | 81 | 6.5 | Y | 2 | Merlin,J.-C | |
| 10.983 | 810361 | 11.3 | M | CZ ORI | 1.1 | 6 | | | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | D |

NOTE A Seeing excellent, transparency excellent. Moon.
NOTE B Almost stellar nucleus.
NOTE C Glare from close star.
NOTE D 2.7' coma, averted vision.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.932 | 830045 | 0.05 | 0.40 | N | 5 | 81,254 | 15 | 6.5 | 2 | Merlin,J.-C | A |
| 10.948 | 830046 | 0.14 | 0.356 | SC | 11 | 200,400 | | | 1 | Verdenet,M | B |

NOTE A Jet at PA 8, narrow, straight and quite bright; jet at PA 59, more diffuse; jet at PA 191, very diffuse feature; jet at PA 337, fountain like feature. Central point mag. about 15. Large fan westward.
NOTE B (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.337 | 850042 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | S | 2/P | 1 | Dilsizian,R | A |
| 10.944 | 850043 | 0.420 | 1.7 | 0.250 | 4.9 x 3.3 | 40.00 | Kodak 2415 | | N | S | 2/P | 1 | Bruhin,W | B |

NOTE A Stellar guiding was used because of the small angular movement of the comet with respect to time.
NOTE B (Observer's image identifier is II. Ed.)

DATE: 11 OCT 1985

DATE: 11 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.010 | 810362 | 10.9 | S | U ORI | 1.6 | 2 | | | 0.25 | N | 6 | 120 | 4.9 | Y | 1 | Gainsford,M.J | |
| 11.020 | 810363 | 10.7 | S | Y TAU | 2.5 | 3 | | | 0.08 | B | | 15 | 6.6 | Y | 4 | Haver,R | |
| 11.021 | 810364 | 13.1 | | CZ ORI | | | | | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | A |
| 11.042 | 810365 | 11.6 | M | CZ ORI | 1.0 | 6 | | | 0.35 | N | 5.5 | 160 | 5.8 | Y | 1 | Fleet,R.W | B |
| 11.045 | 810366 | 13.4 | | CZ ORI | | | | | 0.35 | N | 5.5 | 160 | 5.8 | Y | 1 | Fleet,R.W | A |
| 11.049 | 810367 | 11.3 | M | CZ ORI | 1.0 | 6 | | | 0.22 | N | 8 | 90 | 5.8 | Y | 1 | Fleet,R.W | C |
| 11.052 | 810368 | 11.6 | M | CZ ORI | | 7 | | | 0.15 | N | 4 | 50 | 5.8 | Y | 1 | Fleet,R.W | D |
| 11.087 | 810369 | 11.2 | S | U ORI | 1.3 | 5 | | | 0.203 | SC | 10 | 80 | 5.5 | Y | 1 | Tanti,T | E |
| 11.297 | 810370 | 11.5 | S | SU TAU | 1.8 | 3 | | | 0.15 | R | 5 | 62 | 6.7 | Y | 3 | Morrison,W | F |
| 11.342 | 810371 | 11.6 | S | SU TAU | 1.4 | 5 | | | 0.445 | N | 4.5 | 80 | 6.7 | Y | 3 | Morrison,W | F |
| 11.35 | 810372 | 10.9 | M | SU TAU | | 4 | | | 0.20 | N | 6 | 122 | 6 | Y | 3 | Hale,A | |
| 11.35 | 810373 | 10.9 | M | SU TAU | | 4 | | | 0.20 | N | 6 | 61 | 6 | Y | 3 | Hale,A | |
| 11.417 | 810374 | 11.0 | M | U ORI | | 2 | | | 0.356 | N | 5 | 225 | | Y | 1 | Jeffrey,J | G |
| 11.43 | 810375 | 10.3 | M | SU TAU | 2.8 | 4 | | | 0.256 | N | 4.5 | 67 | 6.5 | Y | 6 | Morris,C.S | H |
| 11.46 | 810376 | 10.1 | S | NPS | 4 | 3 | | | 0.080 | B | | 20 | 6.5 | Y | 6 | Morris,C.S | |
| 11.4951 | 810377 | 11.2 | S | U ORI | 2.0 | 5 | | | 0.254 | N | 3.8 | 64 | 6.0 | | 1 | Machholz,D | |
| 11.78 | 810378 | 11.7 | S | | 1.2 | 2 | | | 0.317 | N | 5 | 63 | 6.0 | Y | | Pearce,A | |
| 11.91 | 810379 | 11.2 | S | | 2.5 | 6 | | | 0.254 | N | 4.5 | 71 | 6.7 | Y | 3 | Zanotta,M.V | I |
| 11.983 | 810380 | 13.0 | | CZ ORI | | | | | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | J |
| 11.997 | 810381 | 11.1 | M | CZ ORI | 0.9 | 6 | | | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | C |

NOTE A Nucleus magnitude.
NOTE B 2.1' coma, averted vision.
NOTE C 2.4' coma, averted vision.
NOTE D 0.2' coma, averted vision.
NOTE E Seeing good, transparency excellent.
NOTE F CZ Ori also used for comparison stars.
NOTE G Coma still very diffuse and faint in the outer areas, inner coma now shows a definite greater brightness. No tail or other features seen. Drawing made. Limit 14.5.
NOTE H Comet had 1' central condensation.
NOTE I The comet was low in the east sky, and haze affected the estimate.
NOTE J Central condensation magnitude, stellar.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.917 | 830047 | 0.14 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | A |
| 11.974 | 830048 | 0.05 | 0.40 | N | 5 | 81,254 | 15 | 6.5 | 2 | Merlin,J.-C | B |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Jet at PA 48; jet at PA 84; jet at PA 222. Hood at PA 306; PA given = axis of the parabolic hood. General structure extremely similar to what was seen on 1985 Oct. 10, except that the diffuse fan is now rather southward.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.780 | 850044 | 0.300 | 1.5 | | 6.9 x 4.6 | 20.00 | Kodak 2415 | | Y | S | 1/P | 2 | Nassr,J.L | A |
| 11.946 | 850045 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 101/P | | Jager,M | B |

NOTE A First photographic recovery of the comet from the Philippines.
NOTE B Coma 4 to 5 arc min.; no tail; magnitude 10.5. Instrument is Schmidt camera.

DATE: 12 OCT 1985

DATE: 12 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.00 | 810382 | 10.8 | S | SU TAU | 3.0 | 4 | 0.03 | 270 | 0.400 | N | 5 | 81 | 6.5 | Y | 2 | Merlin,J.-C | |
| | | | | | | | | | 0.15 | N | | | | | | Korneev,V | |
| 12.00 | 810383 | 10.2: | B | E | | | | | 0.150 | N | 5 | 25 | 6.5 | Y | 2 | Merlin,J.-C | |
| 12.01 | 810384 | 10.3 | S | SU TAU | 3.0 | 2 | | | 0.205 | N | 6 | 80 | 5.5 | Y | 1 | Germann,R | |
| 12.02 | 810385 | 11.3: | | VAS 133 | | 3 | | | 0.256 | N | 5.6 | 88 | | Y | 1 | Cardiel,N | |
| 12.021 | 810386 | 11.0 | B | | | | | | 0.156 | N | 5 | 36 | 6.5 | Y | 2 | Bouma,R.J | |
| 12.04 | 810387 | 10.4 | S | SU TAU | 2.5 | 3 | | | 0.156 | N | 5 | 36 | 6.5 | Y | 2 | Bus,E.P | |
| 12.04 | 810388 | 10.4 | S | SU TAU | 2.5 | 3 | | | 0.203 | C | 10 | 80 | 6 | Y | 3 | Comello,G | |
| 12.04 | 810389 | 10.7 | S | SU TAU | 3 | 2 | | | 0.153 | N | 5 | | | Y | 1 | Cardiel,N | A |
| 12.042 | 810390 | 10.5 | B | | 2 | | | | 0.203 | N | 6 | 94 | | Y | 1 | Gomez,A | B |
| 12.045 | 810391 | 10.5 | B | | 2 | 3 | | | 0.114 | N | 3.7 | 47 | | Y | 1 | Gomez,T.L | C |
| 12.056 | 810392 | 10.5: | | | 0.5 | | | | 0.256 | N | 5.6 | 88 | | Y | 3 | Pedraz,S | D |
| 12.063 | 810393 | 10.5: | | | 3 | | 0.07 | | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | E |
| 12.069 | 810394 | 11.3 | M | CZ ORI | 1.0 | 6 | | | 0.19 | | 4 | 38 | | Y | 1 | Mikuz,H | F |
| 12.073 | 810395 | 10.5 | S | SU TAU | 3 | 3 | | | 0.202 | SC | 10 | 169 | 5.2C | Y | 1 | Kammerer,A | |
| 12.075 | 810396 | 11.4: | S | U ORI | 0.5 | 4 | | | 0.15 | N | 4 | 50 | 5.8 | Y | 1 | Fleet,R.W | G |
| 12.076 | 810397 | 11.9 | M | CZ ORI | | 7 | | | 0.203 | SC | 10 | 80 | 5.7 | Y | 1 | Luthen,H | |
| 12.076 | 810398 | 11.4 | S | U ORI | 1 | 4 | | | 0.256 | N | 5.6 | 200 | | Y | 1 | Gallego,J | H |
| 12.078 | 810399 | 10.5 | B | | 3 | | | | 0.100 | N | 9 | 23 | 6.5 | Y | 1 | van de Weg,R.L.W | |
| 12.08 | 810400 | 10.6 | S | SU TAU | 3 | 2 | | | 0.22 | N | 8 | 90 | 5.8 | Y | 1 | Fleet,R.W | I |
| 12.083 | 810401 | 11.5 | M | CZ ORI | 0.9 | 6 | | | 0.150 | N | 5 | 127 | | Y | 3 | Rodriguez C.,J.A | |
| 12.083 | 810402 | 10.4 | B | | | | | | 0.203 | SC | 10 | 80 | 5 | Y | 1 | Tanti,T | J |
| 12.094 | 810403 | 11.2 | S | U ORI | 1.4 | 4 | | | 0.310 | JB | 6 | 72 | 6 C | Y | 1 | Feijth,H | |
| 12.11 | 810404 | 11.1 | S | SU TAU | | 4 | | | 0.203 | SC | 10 | 80 | 6.3 | Y | 2 | Granslo,B.H | |
| 12.14 | 810405 | 11.5 | B | SU TAU | 1.2 | 3 | | | 0.25 | N | 6 | 120 | 4.9 | Y | 1 | Gainsford,M.J | |
| 12.191 | 810406 | 11.9 | S | SU TAU | 1.6 | 2 | | | 0.445 | N | 4.5 | 222 | 6.2C | Y | 1 | Beach,G | K |
| 12.208 | 810407 | 12.5: | | | 2.5 | 0 | | | 0.203 | N | 7 | 135 | | | | Green,D.W.E | A |
| 12.26 | 810408 | 10.3 | M | LNES | 3.3 | 5 | | | 0.203 | N | 7 | 135 | | | | Green,D.W.E | A |
| 12.26 | 810409 | 10.5 | S | LNES | 3.3 | 5 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |
| 12.31 | 810410 | 10.3 | S | LNES | 3.3 | 2 | | | 0.203 | N | 7 | 55 | | | | Green,D.W.E | A |
| 12.33 | 810411 | 10.2 | M | LNES | 3.3 | 6 | | | 0.203 | N | 7 | 55 | | | | Green,D.W.E | A |
| 12.33 | 810412 | 10.4 | S | LNES | 3.3 | 6 | | | 0.44 | N | 4.5 | 333 | 5.2 | Y | 1 | Falvo,S.A | L |
| 12.333 | 810413 | 12.3 | M | 60 | 0.2 | 4 | | | 0.15 | R | 5 | 62 | 6.7 | Y | 3 | Morrison,W | M |
| 12.354 | 810414 | 11.5 | S | SU TAU | 2.1 | 2 | | | 0.317 | N | 6 | 68 | | | | Bortle,J.E | N |
| 12.37 | 810415 | 10.3 | S | SU TAU | 3.2 | 6 | | | 0.256 | N | 4.5 | 67 | 7.0 | Y | 1 | Morris,C.S | O |
| 12.49 | 810416 | 10.3 | M | SU TAU | 2.8 | 5 | | | 0.256 | N | 4.5 | 156 | 7.0 | Y | 1 | Morris,C.S | O |
| 12.50 | 810417 | 11.4 | M | SU TAU | 1.2 | 5 | | | 0.610 | C | 16.0 | 264 | 7.0 | Y | 1 | Morris,C.S | P |
| 12.50 | 810418 | | | | | | | | 0.152 | N | 8.0 | 76 | 5.6 | | 3 | Machholz,D | |
| 12.5354 | 810419 | 11.1 | S | U ORI | 1.5 | 2 | | | 0.31 | N | 5.7 | 55 | 4.5 | Y | 2 | Suzuki,K | Q |
| 12.66 | 810420 | 12 | | | 2 | 1 | | | 0.317 | N | 5 | 86 | | Y | | Jones,A | |
| 12.68 | 810421 | 11.9 | S | CZ ORI | 1 | 3 | | | 0.318 | N | 8 | 150 | | Y | 1 | Tregaskis,T.B | R |
| 12.774 | 810422 | 13 : | | 59, 60 | 0.5 | 3 | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 12.96 | 810423 | 12.3 | B | PA | 0.5 | 4 | | | 0.400 | N | 5 | 81 | 6.5 | Y | 2 | Merlin,J.-C | S |
| 12.98 | 810424 | 10.7 | S | SU TAU | 3.0 | 3 | 0.02 | 14 | 0.150 | N | 5 | 25 | 6.5 | Y | 2 | Merlin,J.-C | |
| 12.98 | 810425 | 10.2 | S | SU TAU | 3.0 | 2 | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 12.98 | 810426 | 11.2 | B | PA | 1.0 | 3 | | | 0.406 | N | 4.5 | 138 | 6.0 | Y | 5 | Linder,J | |
| 12.9836 | 810427 | | | | 1.0 | 5 | | | 0.08 | B | | 15 | 6.7 | Y | 4 | Haver,R | |
| 12.985 | 810428 | 10.6 | S | Y TAU | 2.0 | 3 | | | 0.26 | N | 6 | 218 | 4.0C | Y | 1 | Hurst,G.M | T |
| 12.985 | 810429 | 11.7 | S | SU TAU | 0.6 | 3 | | | | | | | | | | | |

NOTE A Coma diameter approximate.
NOTE B Drawing 2. Coma diameter approximate.
NOTE C Very faint. Coma diameter approximate. Drawing 2.
NOTE D Tail length approximate.
NOTE E 2.7' coma, averted vision.
NOTE F Excellent weather conditions. Instrument is flat-field Schmidt. Faintest star on sequence 12.8.
NOTE G 0.7' coma, averted vision.
NOTE H Condensed.
NOTE I 2.4' coma, averted vision.
NOTE J Seeing good, transparency good.
NOTE K Easy to see. Brighter. Magnitude uncertain.
NOTE L Comet has brightened approx. full magnitude. Noted when looking directly at coma, a small central condensation. Averted vision did not show any condensation, just a soft glow.
NOTE M CZ Ori also used for comparison stars.
NOTE N Nearly stellar nuc. of 13.0.
NOTE O North Polar Seq. also used.
NOTE P Comet was distinctly elongated toward PA 240 and had a bright non-stellar condensation.
NOTE Q Cloud.
NOTE R M.M. estimated - object almost at limit - no known comparison stars nearby. Clear - dawn breaking. Observing comet directly over glow of Melbourne to the north. Faintest star seen in instrument approximately 14.
NOTE S Streamer (not tail).
NOTE T Circular, diffuse glow, very small, no elongation seen. Slightly condensed. Star-like object just east of comet and of magnitude 13.5-14 glimpsed at limit of vision. No star later found on Stellarum and track line on S and T chart obscures. Presumed a star but may just have been a nuclear spot?? Comet field low.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.021 | 830049 | | 0.256 | N | 5.6 | 88 | | | 1 | Cardiel,N | A |
| 12.042 | 830050 | | 0.153 | N | 5 | | | | 1 | Cardiel,N | B |
| 12.045 | 830051 | | 0.203 | N | 6 | 94 | | | 1 | Gomez,A | C |
| 12.063 | 830052 | | 0.256 | N | 5.6 | 88 | | | 3 | Pedraz,S | D |
| 12.076 | 830053 | 0.09 | 0.83 | R | 19.7 | 270 | 10 | | 3 | Soc. Astro. de France | E |
| 12.078 | 830054 | | 0.256 | N | 5.6 | 88 | | | | Gallego,J | F |
| 12.094 | 830055 | 0.09 | 0.83 | R | 19.7 | 270 | 12 | | 3 | Soc. Astro. de France | G |
| 12.122 | 830056 | | 0.15 | N | 5 | 127 | 11 | | 3 | Rodriguez C.,J.A | |
| 12.123 | 830057 | | 0.335 | N | 4.5 | 150 | 5 | | 2 | Ripero,J | H |
| 12.340 | 830058 | 0.09 | 0.44 | N | 4.5 | 222,333 | 20 | 5.2 | 1 | Falvo,S.A | I |
| 12.969 | 830059 | 0.22 | 0.356 | SC | 11 | 200 | 150 | | 1 | Verdenet,M | |
| 12.990 | 830060 | 0.07 | 0.40 | N | 5 | 81,254 | 10 | 6.5 | 2 | Merlin,J.-C | J |

NOTE A Field 45 arc min. (Duration not indicated. Time of observation is assumed to be mid time. Drawing data inferred from magnitude report form. Ed.)
NOTE B Field 14 arc min. (Duration not indicated. Time of observation is assumed to be mid time. Drawing data inferred from magnitude report form. Ed.)
NOTE C (Duration not indicated. Time of observation is assumed to be roughly mid time. Drawing data inferred from magnitude report form. Ed.)
NOTE D Field: 45'. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE E Dimensions of the comet's nebulosity: 55"x38". Drawing made by J. Claude Thorel.
NOTE F Field 20'. Condensed nucleus. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred

DATE: 12 OCT 1985

from magnitude report form. Ed.)
NOTE G Dimensions of the comet's nebulosity: 55"x38". Drawing made by Yvonne Ensarguelx.
NOTE H Field: 0.4 deg. The comet was clearly visible as a tiny nebulous patch, brightest in the center.
NOTE I It is rare that I can see a 5th mag. star with the naked eye from my site.
NOTE J Jet at PA 54, diffuse extension superimposed; jet at PA 189, quite large; jet at PA 261, narrower than other jets, possibly tailward; jet at PA 296.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.022 | 850046 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 11.00 | Kodak 2415 | | Y | S | 33/N | 1 | Mikuz,H | |
| 12.058 | 850047 | 0.500 | 6.3 | 0.080 | 4.1 x 2.7 | 15.00 | ORWO NP 27 | 400/27 | N | | 218/P | 1 | Richert,M | A |
| 12.080 | 850048 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 20.00 | Ilford HP5 | 400/27 | N | O | 5/C | 1 | Paolinetti,R | B |
| 12.108 | 850049 | 0.500 | 6.3 | 0.080 | 4.1 x 2.7 | 11.00 | ORWO NP 27 | 400/27 | N | | 222/P | 1 | Richert,M | C |
| 12.115 | 850050 | 0.300 | 4.0 | | 6.9 x 4.6 | 30.00 | Kodak 2415 | | Y | S | 2/P | 1 | Portela,A | |
| 12.161 | 850051 | 1.750 | 5 | 0.350 | 1.2 x 0.8 | 34.80 | Kodak 2415 | | Y | M | 1/P | 1 | Mobberley,M | |
| 12.259 | 850052 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | S | 225/P | 1 | Sabia,J.D | |
| 12.302 | 850053 | 0.63 | 1.8 | 0.35 | 3.3 x 2.2 | 4.50 | 103a-F | | N | | 01/P | 2 | Ferrin,I | D |
| 12.315 | 850054 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | S | 1/P | 1 | Dilsizian,R | |
| 12.328 | 850055 | 0.63 | 1.8 | 0.35 | 3.3 x 2.2 | 12.50 | 103a-F | | N | | 001/P | 2 | Ferrin,I | E |

NOTE A City lights interfered with the observation. (Observer's image identifier is 82 18. Ed.)
NOTE B (Observer's image identifier is followed by suffix A. Ed.)
NOTE C City lights interfered with the observation. (Observer's image identifier is 82 22. Ed.)
NOTE D Red filter used. (Observer's image identifier is 1A. Ed.) Instrument is Schmidt camera.
NOTE E Blue filter used. (Observer's image identifier is 1B. Ed.) Instrument is Schmidt camera.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.00 | 810430 | 12.4 | B | PA | | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 13.004 | 810431 | 11.1 | S | SU TAU | 2 | | 4 | | | 0.152 | N | 5 | 44 | 6.1 | Y | 2 | Moeller,M | |
| 13.01 | 810432 | 11.2 | M | CZ ORI | 1.1 | | 6 | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | A |
| 13.01 | 810433 | 12.8 | | CZ ORI | | | | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | B |
| 13.014 | 810434 | 11.5 | S | SU TAU | 0.8 | | 3 | | | 0.26 | N | 6 | 145 | 4.5 | Y | 1 | Hurst,G.M | C |
| 13.02 | 810435 | 11.1 | S | CY AQR | 0.5 | | 2 | | | 0.203 | SC | 10 | 77 | 6.0 | Y | 1 | Maraziti,A | D |
| 13.02 | 810436 | 11.3 | M | CZ ORI | 0.6 | | 6 | | | 0.22 | N | 8 | 90 | 5.7 | Y | 1 | Fleet,R.W | E |
| 13.02 | 810437 | 12.7 | | CZ ORI | | | | | | 0.22 | N | 8 | 90 | 5.7 | Y | 1 | Fleet,R.W | F |
| 13.021 | 810438 | 11.2 | S | SU TAU | 0.8 | | 3 | | | 0.26 | N | 6 | 55 | 5.0 | Y | 1 | Hurst,G.M | G |
| 13.024 | 810439 | >10.0 | S | SAOC | | | | | | 0.08 | B | | 15 | 5.0 | Y | 1 | Hurst,G.M | H |
| 13.03 | 810440 | 11 : | | | 2 | | 5 | | | 0.140 | | 1.7 | | 6.0 | | 1 | Kraling,W | I |
| 13.042 | 810441 | 10.9 | S | | 0.2 | | 4 | | 270 | 0.41 | N | 4.5 | 180 | 5.9 | Y | 3 | Parisio,R | |
| 13.05 | 810442 | 10.1 | S | SU TAU | 2.8 | | 3 | | | 0.156 | N | 5 | 29 | 6.5 | Y | 6 | Bouma,R.J | |
| 13.069 | 810443 | 11.9 | | CZ ORI | | | 8 | | | 0.075 | R | 16 | 50 | 5.7 | Y | 1 | Fleet,R.W | J |
| 13.08 | 810444 | 10.3 | S | SU TAU | 2.5 | | 3 | | | 0.254 | JB | 6 | 72 | 6 C | Y | 5 | Bus,E.P | K |
| 13.08 | 810445 | 10.8 | S | SU TAU | 2.6 | | 6 | | | 0.250 | N | 5.6 | 56 | 6 | Y | 1 | van Loo,F.R | |
| 13.0853 | 810446 | 11.4 | S | U ORI | 1.0 | | 4 | | | 0.203 | SC | 10 | 100 | 6.0 | Y | 5 | Linder,J | |
| 13.097 | 810447 | 10.8 | S | U ORI | 2.0 | | 4 | | | 0.203 | SC | 10 | 80 | 4 | Y | 1 | Tanti,T | L |
| 13.10 | 810448 | 11.5 | S | SU TAU | 1 | | 3 | | | 0.150 | R | 8 | 150 | 5.5C | Y | 1 | Aerts,L | |
| 13.10 | 810449 | 10.8 | S | | 3.6 | | 5 | | | 0.305 | N | 5 | 60 | 6.7 | Y | 2 | Zanotta,M.V | M |
| 13.115 | 810450 | 11.9 | S | SU TAU | 1.3 | | 3 | | 30 | 0.25 | N | 6 | 120 | 5.0 | Y | 1 | Gainsford,M.J | N |
| 13.118 | 810451 | 10.7 | S | Y TAU C | 2.1 | | 2 | | | 0.203 | SC | 10 | 51 | 6.2 | Y | 1 | Meozzi,D | |
| 13.12 | 810452 | 11.7 | S | SUT | | | | | | 0.20 | R | 12 | 120 | 6.3 | | 1 | Shanklin,J.D | |
| 13.12 | 810453 | 10.6 | S | SU TAU | 5 | | 2 | | | 0.203 | C | 10 | 80 | 6.5 | Y | 5 | Comello,G | O |
| 13.12 | 810454 | 10.7 | S | | | | | | | 0.080 | B | | 20 | 6.7 | Y | 2 | Zanotta,M.V | |
| 13.13 | 810455 | 10.5 | S | SU TAU | 2.3 | | 6 | | | 0.254 | N | 5.6 | 70 | 6.5 | Y | 1 | Kuipers,G | |
| 13.13 | 810456 | 10.5 | S | SU TAU | 2.3 | | 6 | | | 0.254 | N | 5.6 | 70 | 6.5 | Y | 1 | Kroon,B | |
| 13.13 | 810457 | 10.3 | S | SU TAU | 3 | | 3 | 0.08 | 250 | 0.100 | N | 9 | 23 | 6.6 | Y | 1 | van de Weg,R.L.W | |
| 13.153 | 810458 | 11.4 | B | SA 74 | 1.1 | | 5 | | | 0.250 | N | 6 | 75 | 5.8 | Y | 1 | Guthier,O | P |
| 13.159 | 810459 | 10.6 | B | SUTAU59 | 1.8 | | 3 | | | 0.330 | N | 4.5 | 59 | 6.5 | Y | 1 | Castino,R | |
| 13.17 | 810460 | 10.6 | S | SU TAU | 2 | | 4 | | | 0.250 | N | 5.6 | 80 | 6.5 | Y | 1 | van Loo,F.R | O |
| 13.20 | 810461 | 10.0 | S | | 2.5 | | 2 | | | 0.203 | N | 7 | 54 | 6.0 | Y | 1 | Harrington,P | |
| 13.23 | 810462 | 10.5 | B | CZ ORI | 1.5 | | 3 | 0.04 | 285 | 0.20 | SC | 10 | 77 | 5.5 | Y | 1 | Ward,A | Q |
| 13.364 | 810463 | 10.3 | B | | 4 | | 7 | | | 0.20 | SC | 10 | 77 | 6.0 | Y | 1 | Hodonsky,K | R |
| 13.39 | 810464 | 10.1 | S | NPS | 4 | | 2 | | | 0.080 | B | | 20 | 6.5 | Y | 1 | Morris,C.S | |
| 13.40 | 810465 | 10.1 | M | SU TAU | 3.7 | | 3 | | | 0.256 | N | 4.5 | 45 | 6.5 | Y | 1 | Morris,C.S | S |
| 13.4160 | 810466 | 11.0 | M | SU TAU | 3.2 | | 6 | | | 0.32 | N | 4.8 | 59 | 6.6 | Y | 3 | Cook,A.J | |
| 13.42 | 810467 | 10.1 | M | SU TAU | 2.5 | | 3 | | | 0.256 | N | 4.5 | 67 | 6.5 | Y | 1 | Morris,C.S | S |
| 13.43 | 810468 | 10.5 | M | SU TAU | 1.4 | | 6 | | | 0.256 | N | 4.5 | 111 | 6.5 | Y | 1 | Morris,C.S | S |
| 13.44 | 810469 | 10.7 | M | SU TAU | 0.9 | | 7 | | | 0.256 | N | 4.5 | 156 | 6.5 | Y | 1 | Morris,C.S | S |
| 13.448 | 810470 | 10.8 | S | | 3 | | | | | 1.524 | C | 16 | 443 | 5.2 | Y | 3 | Glassett,W | T |
| 13.50 | 810471 | 10.6 | M | SU TAU | | | | | | 0.20 | N | 6 | 61 | 6.5 | Y | 2 | Hale,A | |
| 13.604 | 810472 | 12.7 | S | | 1 | | 4 | | | 0.33 | N | 4.5 | 175 | 6.0 | Y | 2 | Fabre,R | |
| 13.67 | 810473 | 11.1 | S | CZ ORI | 1 | | 4 | | | 0.317 | N | 5 | 86 | | Y | | Jones,A | |
| 13.73 | 810474 | 12.5 | M | 60 | 1 | 0.5 | 4 | | | 0.150 | N | 6 | 102 | 5.5 | Y | 4 | Watanabe,N | |
| 13.86 | 810475 | 12.2 | B | PA | | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 13.87 | 810476 | 11.5 | B | PA | | | | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 13.88 | 810477 | 12.4 | B | PA | | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 13.90 | 810478 | 11.2 | B | PA | 3.0 | | 3 | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 13.94 | 810479 | 11.4 | B | PA | | | | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 13.955 | 810480 | 10.1 | S | SU TAU | 3 | | 3 | | | 0.19 | | 4 | 38 | | Y | 1 | Mikuz,H | U |
| 13.972 | 810481 | 12.0 | S | SU TAU | | | | | | 0.25 | N | 6 | 120 | 4.5 | Y | 1 | Gainsford,M.J | V |
| 13.972 | 810482 | | | | 1.2 | | | | | 0.25 | N | 6 | 60 | 4.5 | Y | 1 | Gainsford,M.J | V |
| 13.976 | 810483 | 12.8 | | CZ ORI | | | | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | B |
| 13.979 | 810484 | 11.0 | M | CZ ORI | 1.1 | | 6 | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | W |

NOTE A 2.2' coma, averted vision.
NOTE B Central condensation magnitude.
NOTE C Noticeably condensed, DC 3-4. Circular, with brighter area to diameter 0.6' and a faint halo, to total 0.8'.
NOTE D Very diffuse spherical coma. GEOS chart used.
NOTE E 1.7' coma, averted vision.
NOTE F Central condensation magnitude.
NOTE G Circular, quite condensed glow, DC 3.
NOTE H Comet not seen.
NOTE I Coma diameter approximate. Tri-X film used in camera for this estimate.
NOTE J Magnitude includes faint star.
NOTE K Star in Halley's coma.
NOTE L Seeing good, transparency good/fair.
NOTE M Perfect sky. At 150x I saw a strong and well-defined central condensation (disk-like) whose diameter was = 0.3'.
NOTE N Tail length = ? elong. PA uncertain.
NOTE O Coma diameter approximate.
NOTE P Coma!
NOTE Q Fine sighting, good visibility.
NOTE R No tail seen.
NOTE S North Polar Seq. also used.
NOTE T Bright nucleus.
NOTE U Excellent conditions. Instrument is flat-field Schmidt. Faintest star on sequence 12.8.
NOTE V Misty.
NOTE W 2.8' coma, averted vision.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.005 | 830061 | 0.15 | 0.26 | N | 6 | 218,145, 55 | 57 | 4.0 | 1 | Hurst,G.M | A |
| 13.045 | 830062 | | 0.203 | SC | 10 | 160 | 10 | | 1 | Velasco,E | B |
| 13.173 | 830063 | 0.05 | 0.83 | R | 19.7 | 320 | 10 | | 3 | Soc. Astro. de France | C |
| 13.181 | 830064 | 0.07 | 0.83 | R | 19.7 | 320 | 10 | | 3 | Soc. Astro. de France | D |
| 13.188 | 830065 | 0.04 | 0.83 | R | 19.7 | 320 | 9 | | 3 | Soc. Astro. de France | E |
| 13.198 | 830066 | 0.05 | 0.83 | R | 19.7 | 320 | 3 | | 3 | Soc. Astro. de France | F |
| 13.203 | 830067 | 0.07 | 0.83 | R | 19.7 | 320 | 7 | | 3 | Soc. Astro. de France | G |
| 13.208 | 830068 | 0.05 | 0.83 | R | 19.7 | 320 | 6 | | 3 | Soc. Astro. de France | E |
| 13.243 | 830069 | 0.18 | 0.254 | N | 5.6 | 53, 60,120 | 10 | 6.4 | 3 | Knisely,D | H |
| 13.917 | 830070 | 0.18 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | I |

NOTE A Estimated coma size 0.6'. Circular, diffuse glow, very small, no elongation seen. Slightly condensed, DC 3. Star like object possibly just east of comet and of magnitude 13.5-14 glimpsed at limit of vision. No star later found on Stellarum and track line on S and T chart obscures. Presumed a star but may just have been a nuclear spot??
NOTE B More fainter than predicted. Observation made with J. Rabanal, owner of the telescope. Observation made by brothers Pedro and Enrique Velasco.
NOTE C Light pollution near Paris. No features. Drawing made by J. Phillipe Garsztka.

DATE: 13 OCT 1985

DATE: 13 OCT 1985

NOTE D Dimensions of the comet's nebulosity: 40"x28". Atmospheric and luminous pollution above Paris (east to south). Drawing made by J. Claude Thorel.
NOTE E Light pollution near Paris. Drawing made by Phillipe Venant.
NOTE F No features. Drawing made by J. Philippe Garstka.
NOTE G Dimensions of the comet's nebulosity: 40"x28". Atmosphere and luminous pollution above Paris (east to south). Drawing made by J. Claude Thorel.
NOTE H Same size as NGC 3077 in Ursa Major but slightly fainter. Brightness drops off more rapidly from center outward than in NGC 3077. 11th magn. star near west edge of coma, other star in south part of coma. No definite nucleus seen. Not quite circular coma. E-W elongation? Magnification of 160x also used.
NOTE I (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.172 | 850056 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 10.00 | Kodak 103a-F | | N | | 6/P | 1 | Guarro,J | |
| 13.189 | 850057 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 10.00 | Kodak 103a-F | | N | | 7/P | 1 | Guarro,J | |
| 13.526 | 850058 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 26.00 | Kodak Tri-X | | N | M | 4/S | 1 | Webb,R | A |

NOTE A Inner coma and starlike central condensation visible on all original negatives. Film push processed slightly. (Observer indicated C-type guiding as well as M. Ed.)

DATE: 14 OCT 1985

DATE: 14 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.024 | 810485 | 10.8 | S | SU TAU | 1 | 4 | | | 0.203 | SC | 10 | 80 | 4.2 | Y | 1 | Foulkes,M | A |
| 14.049 | 810486 | 10.7 | M | CZ ORI | 1.0 | 6 | | | 0.22 | N | 8 | 90 | 5.7 | Y | 1 | Fleet,R.W | B |
| 14.05 | 810487 | 10.2 | S | SU TAU | 3.5 | 3 | 0.08 | 270 | 0.100 | N | 9 | 23 | 6.7 | Y | 1 | van de Weg,R.L.W | |
| 14.063 | 810488 | 11.2 | M | Y TAU | 1.2 | 2 | | | 0.205 | N | 7.5 | 125 | 5.6 | Y | 1 | Falorni,M | C |
| 14.073 | 810489 | 10.9 | M | CZ ORI | 0.8 | 5 | | | 0.15 | N | 4 | 50 | 5.7 | Y | 1 | Fleet,R.W | D |
| 14.083 | 810490 | 12.0 | | CZ ORI | | 8 | | | 0.075 | R | 16 | 50 | 5.7 | Y | 1 | Fleet,R.W | |
| 14.12 | 810491 | 11.5 | S | SU TAU | 1 | 3 | | | 0.150 | R | 8 | 150 | 6 C | Y | 1 | Aerts,L | |
| 14.12 | 810492 | 10.1 | S | SU TAU | 2.5 | 6 | | | 0.250 | N | 5.6 | 56 | 6.5 | Y | 1 | van Loo,F.R | |
| 14.13 | 810493 | 10.6 | S | | 3.6 | 4 | | | 0.305 | N | 5 | 60 | 6.2 | Y | 2 | Zanotta,M.V | E |
| 14.14 | 810494 | 11.5 | M | AA | 3.5 | 3 | | | 0.106 | R | 5.7 | 24 | | | | Keszthelyi,S | |
| 14.274 | 810495 | 10.6 | S | CZ ORI | 2 | 0 | | | 0.25 | N | 5.6 | 56 | 6 | Y | 1 | Jordan,J | F |
| 14.382 | 810496 | 10.0 | B | Y TAU | | 5 | | | 0.254 | N | 6 | 147 | 6.6 | Y | 1 | Troiani,D.M | |
| 14.4229 | 810497 | 10.7 | S | U ORI | 2.0 | 4 | | | 0.152 | N | 8.0 | 76 | 5.8 | | 3 | Machholz,D | |
| 14.514 | 810498 | 10.8 | B | U ORI | 2 | 4 | | | 0.15 | N | 6 | 100 | 6.0 | Y | 1 | Krisciunas,K | |
| 14.625 | 810499 | 12.3 | S | | 1 | 5 | | | 0.44 | N | 4.5 | 225 | 5.5 | Y | 1 | Fabre,R | |
| 14.65 | 810500 | 11.1 | S | CZ ORI | 1 | 6 | | | 0.317 | N | 5 | 86 | | Y | | Jones,A | |
| 14.70 | 810501 | 11.5 | M | | | | | | 0.16 | N | 6.3 | 80 | 4.5 | Y | 1 | Mitsuma,S | |
| 14.79 | 810502 | 11.0 | S | | 1.5 | 4 | | | 0.317 | N | 5 | 63 | 5.9 | Y | | Pearce,A | |
| 14.88 | 810503 | 12.4 | B | PA | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 14.89 | 810504 | 11.2 | B | PA | 2.0 | 3 | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 14.92 | 810505 | 12.3 | B | PA | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 14.94 | 810506 | 11.0 | B | AAVSO | | | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 14.97 | 810507 | 12.2 | B | PA | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |

NOTE A Slight haze.
NOTE B 3.1' coma, averted vision.
NOTE C Possible extension in PA = 300 deg.?
NOTE D 2.4' coma, averted vision.
NOTE E 120x: strong central condensation, whose diameter was = 0.5' At 187x I saw a difficult and faint star-like nuclear region.
NOTE F Sky conditions were excellent, although a light cloud cover occasionally interrupted observation. This is the best view I have had of the comet so far this month.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.148 | 830071 | 1 | 0.106 | R | 5.7 | 24, 48, 60 | 27 | 6.7 | 1 | Keszthelyi,S | |
| 14.175 | 830072 | 0.04 | 0.83 | R | 19.7 | 800 | 7 | 5.9 | 3 | Soc. Astro. de France | A |
| 14.190 | 830073 | 0.1 | 0.298 | N | 5 | 65,179 | 8 | 5.5 | 1 | Stott,D | B |
| 14.360 | 830074 | 0.22 | 0.203 | R | 13 | 110 | | | 1 | Phillips,J | C |

NOTE A Streamer at PA 176, 24" long; ion tail at PA 220, 35" long; streamer at PA 270, 22" long. Drawing made by Serge Thebault.
NOTE B Coma approximately 0.3' in diameter. Spherical in shape.
NOTE C City lights. Exceedingly faint smudge of bluish light. Very difficult. Possible stellar nucleus glimpsed. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.173 | 850059 | 1.750 | 5 | 0.350 | 1.2 x 0.8 | 38.00 | Kodak 2415 | | Y | M | 2/P | 1 | Mobberley,M | |
| 14.639 | 850060 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 13.00 | Kodak 2415 | | Y | | 1/P | 1 | Niijima,T | A |

NOTE A (Observer's image identifier is 851014-6. Ed.) Large format (70 mm) film used. City lights interfered with the observation.

DATE: 15 OCT 1985

DATE: 15 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.049 | 810508 | 12.5 | B | | 2 | | | | 0.203 | SC | 10 | 160 | | N | 3 | Velasco,E | A |
| 15.052 | 810509 | 11.2 | M | CZ ORI | 1.0 | 6 | | | 0.35 | N | 5.5 | 100 | 5.6 | Y | 1 | Fleet,R.W | B |
| 15.069 | 810510 | 11.3 | M | CZ ORI | 0.9 | 6 | | | 0.22 | N | 8 | 90 | 5.6 | Y | 1 | Fleet,R.W | C |
| 15.125 | 810511 | 10.7 | S | Y TAU C | 1.5 | 2 | | | 0.203 | SC | 10 | 51 | 5.6 | Y | 1 | Meozzi,D | D |
| 15.38 | 810512 | 10.4 | M | SU TAU | | | | | 0.20 | N | 6 | 61 | 6.5 | Y | 25 | Hale,A | |
| 15.3931 | 810513 | 10.5 | S | U ORI | 2.0 | 6 | | | 0.254 | N | 3.8 | 64 | 6.2 | | 1 | Machholz,D | |
| 15.44 | 810514 | 10.4 | M | SU TAU | 4 | 5 | | | 0.32 | N | 4 | 66 | 7.0 | Y | 1 | Keen,R | E |
| 15.458 | 810515 | 10.8 | M | U ORI | 1.4 | 3 | | | 0.356 | N | 5 | 225 | | Y | 1 | Jeffrey,J | F |
| 15.61 | 810516 | 11.0 | B | | 1.5 | 6 | | | 0.15 | N | 8 | 43 | 6.0 | N | 1 | Uda,K | |
| 15.611 | 810517 | 12.7 | S | | 1 | | | | 0.10 | N | 10 | 80 | 5.0C | Y | 1 | Kato,T | G |
| 15.64 | 810518 | 11.5 | | | 3 | 3 | | | 0.31 | N | 5.7 | 55 | 5.0 | Y | 2 | Suzuki,K | |
| 15.68 | 810519 | 11.6 | M | | 1.8 | 2 | | | 0.16 | N | 6.3 | 80 | 6 | Y | 1 | Mitsuma,S | |
| 15.70 | 810520 | 11.1 | M | | 2.3 | 2 | | | 0.16 | N | 6.3 | 31 | 6 | Y | 1 | Mitsuma,S | |
| 15.72 | 810521 | 11.1 | S | | 1.2 | 6 | | | 0.26 | N | 5 | 105 | 5.0 | Y | 1 | Kanai,K | |
| 15.76 | 810522 | 10.8 | S | AAVSO | 2.5 | 4 | | | 0.20 | N | 5.6 | 89 | 6.0 | Y | 5 | Nakamura,A | |
| 15.88 | 810523 | 12.2 | B | PA | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |
| 15.90 | 810524 | 11.0 | B | AAVSO | 1.0 | 5 | | | 0.20 | R | 15 | 120 | | | | Churyumov,K | |
| 15.92 | 810525 | 12.2 | B | PA | | | | | 1.00 | N | 13 | 185 | | | | Churyumov,K | |

NOTE A Observation made by Pedro Velasco and Enrique Velasco.
NOTE B 2.6' coma, averted vision.
NOTE C 2.1' coma, averted vision.
NOTE D High clouds.
NOTE E Mag 12 cond. at 130x.
NOTE F Limit 15.0.
NOTE G Central concentration magnitude.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.016 | 830075 | 0.25 | 0.356 | SC | 11 | 200 | 285 | | 1 | Verdenet,M | A |
| 15.273 | 830076 | | 0.254 | N | 5.6 | 53, 60,120 | 5 | 6.4 | 3 | Knisely,D | B |

NOTE A (Two drawings submitted. Ed.)
NOTE B Magnification of 160x also used. Overall appearance unchanged since 10/13/85 observation. Slight elongation east-west. Drawing not attempted.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.224 | 850061 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 12.00 | Kodak 2415 | | Y | M | 8/P | 1 | Guarro,J | |
| 15.410 | 850062 | 0.305 | 2.5 | 0.122 | 6.8 x 4.5 | 4.00 | Kodak Tri-X | 400/ | N | S | 4/P | 1 | Minton,R.B | A |

NOTE A Instrument is Aero-Ektar aerial camera lens. (Print submitted by observer is a composite of two 2 min. exposures separated by 6 min. Ed.)

DATE: 16 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.007 | 810526 | 10.7 | M | CZ ORI | 1.0 | 6 | | | 0.22 | N | 8 | 90 | 5.7 | Y | 1 | Fleet,R.W | A |
| 16.021 | 810527 | 12.6 | | CZ ORI | | | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | B |
| 16.028 | 810528 | 10.8 | M | CZ ORI | 1.2 | 6 | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | C |
| 16.045 | 810529 | 11.3 | M | CZ ORI | 0.3 | 6 | | | 0.15 | N | 4 | 50 | 5.7 | Y | 1 | Fleet,R.W | D |
| 16.059 | 810530 | 12.1 | | CZ ORI | | 9 | | | 0.075 | R | 16 | 50 | 5.7 | Y | 1 | Fleet,R.W | |
| 16.101 | 810531 | | S | | 1.6 | 4 | | | 0.203 | SC | 10 | 80 | | Y | 1 | Tanti,T | E |
| 16.146 | 810532 | 11.2 | B | SA 74 | 1.0 | 4 | | | 0.250 | N | 6 | 75 | 5.5 | Y | 1 | Guthier,O | F |
| 16.16 | 810533 | 10.3 | S | | 3.1 | 5 | | | 0.305 | N | 5 | 60 | 6.4 | Y | 2 | Zanotta,M.V | G |
| 16.260 | 810534 | 10.6 | S | CZ ORI | 2 | 1 | | | 0.25 | N | 5.6 | 56 | 6 | Y | 1 | Jordan,J | H |
| 16.341 | 810535 | 10.1 | B | | 4 | 7 | | | 0.20 | SC | 10 | 77 | 5.5 | Y | 1 | Hodonsky,K | I |
| 16.36 | 810536 | 10.3 | M | SU TAU | | | | | 0.20 | N | 6 | 61 | 6.5 | Y | 24 | Hale,A | |
| 16.42 | 810537 | 10.5 | B | | 2.0 | 7 | | | 0.335 | N | 4.5 | 121 | 4.0 | Y | | Kronk,G | J |
| 16.49 | 810538 | 10.0 | S | SU TAU | 3.1 | 4 | | | 0.256 | N | 4.5 | 45 | 6.5 | Y | 6 | Morris,C.S | |
| 16.65 | 810539 | 11.0 | S | CZ ORI | 2 | 5 | | | 0.317 | N | 5 | 86 | | Y | | Jones,A | |
| 16.97 | 810540 | 10.9 | | VAS 133 | 0.6 | 3 | | | 0.205 | N | 6 | 80 | 5.0 | Y | 1 | Germann,R | |

NOTE A 2.1' coma, averted vision.
NOTE B Central condensation magnitude.
NOTE C 2.5' coma, averted vision.
NOTE D 1.9' coma, averted vision.
NOTE E Seeing good, transparency fair/poor. Limit +2 to +4.5. Clouds.
NOTE F Central condensation.
NOTE G Much more bright than on 14/10/1985 (very likely the magnitude was 10.2). Extremely diffuse outer coma, with indefinite edges; strong central condensation whose diameter was = 0.8' (150x). Star-like nuclear region of magnitude approximately 13.0 (150x).
NOTE H Comet seen under excellent skies. Coma appeared round and uniform in brightness, although a slight degree of condensation surrounding nucleus may have been seen.
NOTE I No tail seen.
NOTE J Foggy.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.281 | 830077 | 2.0 | 0.30 | R | 15 | 225 | 90 | 5.0 | 2 | Franch,J | A |
| 16.917 | 830078 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | B |

NOTE A The comet appeared as a circular diffuse glow some 3' in extent with a starlike nucleus visible at times. Its estimated magnitude was 10.5. (Extreme ends of observer's start and end time ranges given. Ed.)
NOTE B (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.304 | 850063 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | S | 2/P | 1 | Dilsizian,R |

DATE: 17 OCT 1985

DATE: 17 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.028 | 810541 | 10.6 | M | CZ ORI | 1.2 | 6 | | | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | A |
| 17.031 | 810542 | 12.8 | | CZ ORI | | | | | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | B |
| 17.049 | 810543 | 10.9 | M | CZ ORI | 1.0 | 6 | | | 0.22 | N | 8 | 90 | 5.8 | Y | 1 | Fleet,R.W | C |
| 17.076 | 810544 | 11.1 | M | CZ ORI | 0.5 | 6 | | | 0.15 | N | 4 | 50 | 5.8 | Y | 1 | Fleet,R.W | D |
| 17.154 | 810545 | 11.0 | M | AAVSO | 0.5 | 2 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | |
| 17.236 | 810546 | | | | 1.9 | 4 | | | 0.152 | N | 6 | 73 | 7.0 | Y | 3 | Knight,S | E |
| 17.347 | 810547 | 10.5 | S | CZ ORI | 2 | 1 | | | 0.25 | N | 5.6 | 56 | 6 | Y | 1 | Jordan,J | F |
| 17.35 | 810548 | 9.4 | M | LNES | 1.6 | 6 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | G |
| 17.35 | 810549 | 9.5 | S | LNES | 1.6 | 6 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | G |
| 17.382 | 810550 | 10.9 | M | SU TAU | 1.0 | 5 | | | 0.61 | | 13.5 | 110 | 5.0 | Y | 3 | DeYoung,J.A | |
| 17.39 | 810551 | 9.8 | S | NPS | 4.3 | 2 | | | 0.080 | B | | 20 | 7.0 | Y | 6 | Morris,C.S | |
| 17.39 | 810552 | 9.6 | S | SU TAU | | | | | 0.080 | B | | 20 | 7.0 | Y | 6 | Morris,C.S | |
| 17.40 | 810553 | 9.9 | S | NPS | 3.7 | 4 | | | 0.256 | N | 4.5 | 45 | 7.0 | Y | 6 | Morris,C.S | |
| 17.4007 | 810554 | 10.3 | S | U ORI | 2.0 | 5 | | | 0.254 | N | 3.8 | 64 | 6.2 | | 1 | Machholz,D | |
| 17.401 | 810555 | 10.8 | S | | 3 | | | | 0.444 | N | 4.4 | 221 | 5.0 | Y | 1 | Glassett,W | |
| 17.41 | 810556 | 10.3 | M | SU TAU | | | | | 0.20 | N | 6 | 61 | 6.5 | Y | 2 | Hale,A | |
| 17.65 | 810557 | 10.9 | S | CZ ORI | 1.5 | 5 | | | 0.317 | N | 5 | 86 | | Y | | Jones,A | |
| 17.69 | 810558 | 9.3 | S | SU TAU | 4 | 5 | | | 0.152 | N | 5 | 76 | 6.2 | Y | 1 | Seargent,D | |
| 17.69 | 810559 | 9.4 | S | SU TAU | | | | | 0.152 | N | 5 | 29 | | | | Seargent,D | |
| 17.917 | 810560 | 10.2 | S | | 0.3 | 4 | | 250 | 0.15 | B | | 25 | 6.0 | Y | 3 | Parisio,R | |
| 17.986 | 810561 | 9.7 | M | SU TAU | 8 | 4 | | | 0.19 | | 4 | 38 | | Y | 1 | Mikuz,H | H |
| 17.997 | 810562 | 10.7 | M | CZ ORI | 1.5 | 6 | | | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | I |

NOTE A 2.4' coma, averted vision.
NOTE B Central condensation magnitude.
NOTE C 2.2' coma, averted vision.
NOTE D 1.7' coma, averted vision.
NOTE E Stellar nucleus.
NOTE F Comet seen again under excellent skies, with intermittent light cloud cover.
NOTE G Coma diameter approximate.
NOTE H Excellent conditions. Instrument is flat-field Schmidt. Faintest star on sequence 12.8.
NOTE I 3.0' coma, averted vision.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.342 | 850064 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | S | 3/P | 1 | Dilsizian,R | |
| 17.973 | 850065 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 5.00 | Kodak 2415 | | Y | S | 01/P | 7 | Linder,J | A |
| 17.985 | 850066 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 5.00 | Kodak 2415 | | Y | S | 02/P | 7 | Linder,J | A |

NOTE A Instrument is Schmidt camera.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.010 | 810563 | 10.9 | M | CZ ORI | 0.7 | 6 | | | 0.15 | N | 4 | 50 | 5.8 | Y | 1 | Fleet,R.W | A |
| 18.021 | 810564 | 10.0 | S | U ORI | 2.1 | 5 | | | 0.140 | SN | 3.6 | 25 | 6 | Y | 7 | Linder,J | |
| 18.03 | 810565 | 10.0 | S | | 4.5 | 5 | | | 0.254 | N | 4.5 | 46 | 6.4 | Y | | Zanotta,M.V | B |
| 18.031 | 810566 | 11.9 | | CZ ORI | | 6 | | | 0.075 | R | 16 | 50 | 5.8 | Y | 1 | Fleet,R.W | C |
| 18.031 | 810567 | 10.3 | M | Y TAU | 2.8 | 4 | | | 0.37 | R | 14.3 | 132 | 5.3 | Y | 2 | Falorni,M | |
| 18.038 | 810568 | 10.6 | M | CZ ORI | 1.4 | 6 | | | 0.22 | N | 8 | 90 | 5.8 | Y | 1 | Fleet,R.W | A |
| 18.04 | 810569 | 10.8 | B | E | | | | | 0.08 | R | | | | | | Nesterov,Yu | |
| 18.05 | 810570 | 10.3 | S | | 2.9 | 4 | | | 0.14 | | 3.6 | 25 | 6.0 | Y | 1 | Bottger,B | |
| 18.053 | 810571 | 10.7 | S | CZ ORI | 2.0 | 6 | | | 0.20 | SC | 10 | 50 | 5.8 | Y | 2 | Campos,J | D |
| 18.06 | 810572 | 10.0: | S | | 5 | 3 | | | 0.080 | B | | 20 | 6.4 | Y | | Zanotta,M.V | |
| 18.090 | 810573 | 11.1 | | CZ ORI | | 8 | | | 0.08 | B | | 11 | 5.8 | Y | 1 | Fleet,R.W | |
| 18.097 | 810574 | 10.2 | S | Y TAU C | 2.7 | 5 | | | 0.203 | SC | 10 | 51 | 6.3 | Y | 1 | Meozzi,D | E |
| 18.097 | 810575 | 10.4 | S | Y TAU | 2.6 | 5 | | | 0.203 | SC | 10 | 50 | 5.5 | Y | 1 | Tanti,T | F |
| 18.34 | 810576 | 9.4 | S | SU TAU | 7 | 3 | | | 0.080 | B | | 20 | 6.5 | Y | 6 | Morris,C.S | |
| 18.35 | 810577 | 9.7: | S | Y TAU | | | | | 0.080 | B | | 20 | 6.5 | Y | 6 | Morris,C.S | |
| 18.35 | 810578 | 9.8 | S | NPS | | | | | 0.080 | B | | 20 | 6.5 | Y | 6 | Morris,C.S | |
| 18.35 | 810579 | 9.8 | S | AUL UBV | | | | | 0.080 | B | | 20 | 6.5 | Y | 6 | Morris,C.S | G |
| 18.36 | 810580 | 9.4 | S | LNES | 2.2 | 6 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | H |
| 18.38 | 810581 | 9.4 | S | LNES | 2.9 | 4 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | H |
| 18.473 | 810582 | 10.8 | S | | 3 | | | | 0.444 | N | 4.4 | 221 | 4.8 | Y | 1 | Glassett,W | |
| 18.500 | 810583 | 12.0 | S | | 1 | 5 | | | 0.44 | N | 4.5 | 225 | 5.5 | Y | 1 | Fabre,R | I |
| 18.597 | 810584 | 10.9 | M | | 1 | 6 | | | 0.20 | SC | 10 | 100 | 4.0C | Y | 1 | Kato,T | J |
| 18.628 | 810585 | 12.8 | S | | | | | | 0.20 | SC | 10 | 160 | 4.0C | Y | 1 | Kato,T | K |
| 18.65 | 810586 | 10.9 | S | CZ ORI | 2 | 6 | | | 0.317 | N | 5 | 86 | | Y | | Jones,A | |
| 18.950 | 810587 | 10.4 | S | SU TAU | 2.5 | 5 | | | 0.152 | N | 5 | 44 | 6.0 | Y | 2 | Moeller,M | L |
| 18.95 | 810588 | | | | 1.3 | 7 | | | 0.20 | R | 25 | 150 | | | | Rumyantsev,I | |
| 18.993 | 810589 | 11.1 | M | CZ ORI | 1.8 | 6 | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | M |

NOTE A 2.4' coma, averted vision.
NOTE B Very diffuse outer coma, with indefinite edges. Strong central condensation; star-like nuclear region of magnitude approximately 12.0.
NOTE C 2.7' coma, averted vision.
NOTE D Round coma with central condensation.
NOTE E Bright nucleus.
NOTE F Seeing good, transparency excellent.
NOTE G Mv Sequence at RA 5h and Dec. 0.
NOTE H Coma diameter approximate.
NOTE I Used Sky & Telescope chart.
NOTE J Condensation mag. = 13.2.
NOTE K Central condensation magnitude.
NOTE L Central condens. 12 mag.
NOTE M 3.0' coma, averted vision.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.065 | 830079 | 0.26 | 0.400 | N | 5 | 100, 40,160 | 13 | 5.5 | 2 | Sarocchi,D | A |
| 18.175 | 830080 | 0.26 | 0.400 | N | 5 | 100,160 | 13 | 5.7 | 2 | Sarocchi,D | |

NOTE A Magnitude estimate about 11. DC 2.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.020 | 850067 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 10.00 | Ilford HP5 | 400/27 | N | S | 78/N | 1 | Mikuz,H |

DATE: 19 OCT 1985

DATE: 19 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.000 | 810590 | 12.5 | | CZ ORI | | | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | A |
| 19.000 | 810591 | 10.5 | B | | 5 | 2 | | | 0.203 | N | 6 | 47 | 6.2 | Y | 5 | Gomez,A | B |
| 19.010 | 810592 | 11.6 | M | CZ ORI | 0.4 | 5 | | | 0.15 | N | 4 | 50 | 5.7 | Y | 1 | Fleet,R.W | C |
| 19.024 | 810593 | 10.9 | M | CZ ORI | 1.3 | 6 | | | 0.22 | N | 8 | 90 | 5.7 | Y | 1 | Fleet,R.W | D |
| 19.026 | 810594 | 10.4 | S | U ORI | 1.5 | 5 | | | 0.203 | SC | 10 | 80 | 5.7 | Y | 1 | Luthen,H | |
| 19.03 | 810595 | 9.3 | S | SU TAU | 3.5 | 4 | | | 0.156 | N | 5 | 29 | 6.5 | Y | 2 | Bouma,R.J | |
| 19.03 | 810596 | 9.5 | S | SU TAU | 4 | 4 | | | 0.156 | N | 5 | 29 | 6.5 | Y | 2 | Bus,E.P | E |
| 19.04 | 810597 | 13.2 | V | SU TAU | | | | | 0.156 | N | 5 | 45 | 6.5 | Y | 2 | Bouma,R.J | F |
| 19.049 | 810598 | 11.9 | | CZ ORI | | 6 | | | 0.075 | R | 16 | 50 | 5.7 | Y | 1 | Fleet,R.W | G |
| 19.05 | 810599 | 9.8 | S | SU TAU | 4 | 3 | | | 0.108 | R | 10 | 22 | 6 | Y | 3 | Comello,G | |
| 19.05 | 810600 | 10 : | B | E | 3.0 | 5 | | | 0.16 | N | 10 | 30 | | | | Mormil,V | |
| 19.06 | 810601 | 10.6 | S | SU TAU | 0.2 | 4 | | | 0.203 | SC | 10 | 77 | 5.9C | Y | 2 | Maraziti,A | H |
| 19.06 | 810602 | 10.5 | S | | 2.4 | 3 | | | 0.20 | N | 6 | 49 | 5.5 | Y | 1 | Jahn,J | |
| 19.06 | 810603 | 10.3 | S | SU TAU | | 3 | | | 0.258 | N | 5 | 50 | 6 C | Y | 1 | Feijth,H | |
| 19.063 | 810604 | 10.8 | S | CZ ORI | 1.5 | 8 | | | 0.13 | R | 4 | 21 | 5.3 | Y | 2 | Campos,J | I |
| 19.094 | 810605 | 10.6 | S | Y TAU | 2.5 | 4 | | | 0.203 | SC | 10 | 50 | 5 | Y | 1 | Tanti,T | J |
| 19.288 | 810606 | 9.3 | M | 59 | | 7 | | | 0.20 | N | 4.5 | 43 | 6.0C | Y | 1 | Hilburn,A.P | K |
| 19.354 | 810607 | 10.6 | S | | 12 | | | | 0.203 | SC | 10 | 80 | 4.5C | Y | 1 | Gronek,J.D | L |
| 19.4132 | 810608 | 10.3 | S | U ORI | 2.5 | 6 | | | 0.254 | N | 3.8 | 64 | 6.3 | | 4 | Machholz,D | |
| 19.48 | 810609 | 9.1 | M | Y TAU | 6.1 | 3 | | | 0.256 | N | 4.5 | 45 | 7.0 | Y | 6 | Morris,C.S | |
| 19.49 | 810610 | 9.1 | M | Y TAU | 7.7 | 1 | | | 0.080 | B | | 20 | 7.0 | Y | 6 | Morris,C.S | |
| 19.51 | 810611 | 8.8 | S | Y TAU | 12 | 0 | | | 0.040 | R | | 12 | 7.0 | Y | 6 | Morris,C.S | |
| 19.637 | 810612 | 11 | M | | 1 | | | | 0.10 | N | 10 | 111 | 5.0C | Y | 1 | Kato,T | |
| 19.65 | 810613 | 12.0 | M | | 0.8 | 4 | | | 0.20 | N | 5 | 36 | | Y | 1 | Curtis,D | M |
| 19.65 | 810614 | 11.0 | S | CZ ORI | 1.5 | 5 | | | 0.317 | N | 5 | 86 | | Y | | Jones,A | |
| 19.73 | 810615 | 11.3 | M | | 1.5 | 3 | | | 0.16 | N | 6.3 | 80 | 6 | Y | 1 | Mitsuma,S | |
| 19.74 | 810616 | 9.5 | S | Y TAU | 3.0 | 6 | | | 0.20 | N | 6.3 | 50 | 6.5 | Y | 1 | Lovejoy,T | N |
| 19.74 | 810617 | 10.7 | M | | 2.4 | 2 | | | 0.16 | N | 6.3 | 31 | 6 | Y | 1 | Mitsuma,S | |
| 19.760 | 810618 | 11.4 | S | 59 YTAU | 0.6 | 3 | | | 0.318 | N | 8 | 150 | | Y | 1 | Tregaskis,T.B | O |
| 19.85 | 810619 | 10.2 | S | SU TAUE | 2 | 5 | 0.02 | 85 | 0.41 | N | 4.2 | 86 | 6.8 | Y | 3 | Clark,M.L | P |
| 19.931 | 810620 | 10.5 | S | SU TAU | 2 | 4 | | | 0.152 | N | 5 | 44 | 5.6 | Y | 2 | Moeller,M | Q |
| 19.94 | 810621 | 9.9 | S | U ORI | 3.0 | 4 | 0.03 | 284 | 0.400 | N | 5 | 81 | 6.5 | Y | 2 | Merlin,J.-C | |
| 19.95 | 810622 | 9.5 | B | U ORI | 4.0 | 2 | | | 0.150 | N | 5 | 75 | 6.5 | Y | 2 | Merlin,J.-C | |
| 19.97 | 810623 | 10.2: | B | E | 2.0 | 5 | | | 0.16 | N | 10 | 30 | | | | Mormil,V | |
| 19.979 | 810624 | 10.6 | S | SU TAU | 2 | 5 | | | 0.203 | SC | 10 | 80 | 4.2 | Y | 1 | Foulkes,M | R |
| 19.990 | 810625 | 10.5 | S | SU TAU | 2.7 | 4 | | | 0.26 | N | 6 | 55 | 5.0 | Y | 1 | Hurst,G.M | S |

NOTE A Central condensation magnitude.
NOTE B Diffuse. Drawing 3. Coma diameter approximate and limit uncertain.
NOTE C 2.7' coma, averted vision.
NOTE D 2.4' coma, averted vision.
NOTE E Coma diameter approximate.
NOTE F Magnitude of "stellar" condensation. Diameter less than 0.1 arc min.
NOTE G 1.6' coma, averted vision.
NOTE H Diffuse, no nuclear condensation.
NOTE I Round coma with central condensation.
NOTE J Seeing good, transparency good. Clouds.
NOTE K Noted movement in one hour time.
NOTE L Recovery. Damp air - coma appeared to flare in mag.
NOTE M Semi urban sky.
NOTE N Coma asymmetric.
NOTE O Drifting cloud. Observing comet directly over glow of Melbourne to the north. Faintest star seen in instrument approximately 14.5.
NOTE P Short tail clearly visible.
NOTE Q Hazy.
NOTE R Cloud.
NOTE S Circular, bright, easy object to direct vision at low power (55x). Much larger than previously seen but inner brighter condensed area of 0.5' evident within a larger more diffuse ill-defined area reaching a diameter of 2.7', DC 4.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.000 | 830081 | | 0.203 | N | 6 | 47 | | | 5 | Gomez,A | A |
| 19.307 | 830082 | | 0.20 | N | 4.5 | 43 | 55 | 6.0 | 1 | Hilburn,A.P | B |
| 19.399 | 830083 | | 0.203 | SC | 10 | 51 | | | 1 | Lohvinenko,T.W | C |
| 19.927 | 830084 | 0.17 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | D |
| 19.969 | 830085 | 0.06 | 0.40 | N | 5 | 81,254 | 10 | 6.5 | 2 | Merlin,J.-C | E |
| 19.988 | 830086 | 0.45 | 0.26 | N | 6 | 55,145 | 45 | 5.0 | 1 | Hurst,G.M | F |
| 19.990 | 830087 | 0.17 | 0.26 | N | 6 | 218 | 50 | 5.0 | 1 | Hurst,G.M | G |

NOTE A Much more "bright" than in the previous week, but yet very diffuse. Same DC = 2 and mag. = 10.5. (It's more faint than predicted...or, it seems.) (Duration not indicated. Time of observation is assumed to be roughly mid time. Drawing data inferred from magnitude report form. Ed.)
NOTE B No tail seen!
NOTE C Magnitude 11.2 (check star: AGK3+20 deg. 0417). (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Jet at PA 51, short, straight and narrow; jet at PA 145, then curved westward and becoming diffuse. Tail at PA 284, about tailward, possibly two levels of brightness superimposed.
NOTE F Circular bright easy object to direct vision at low power (55x). Much larger than previously seen but inner brighter condensed area of 0.5' evident within a larger more diffuse ill-defined area reaching a diameter of 2.7', DC 4.
NOTE G At 218x, the outer regions of the coma were lost and the overall estimate of size was reduced to 1.8'. The inner condensed area of 0.5' was very bright. In fleeting moments of good seeing a star-like object, apparently displaced north following the centre of the coma's apparent centre, was seen. It was perhaps not quite stellar, possibly extending to 3-4 arc seconds diameter, magnitude 13.4.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.015 | 850068 | 1.800 | 4.5 | 0.400 | 1.1 x 0.8 | 16.00 | Ilford HP 5 | 400/27 | N | C | 3/C | 1 | Ghione,G |
| 19.138 | 850069 | 0.135 | 2.8 | | 15.2 x10.2 | 25.00 | Kodak 2415 | | Y | S | 1/P | | Izquierdo,J |

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.000 | 810626 | 9.9 | S | Y TAU | 3.5 | 3 | | | 0.08 | B | | 15 | 6.2 | Y | 3 | Haver,R | |
| 20.003 | 810627 | 10.6 | S | SU TAU | 2.7 | 4 | | | 0.26 | N | 6 | 145 | 5.0 | Y | 1 | Hurst,G.M | A |
| 20.007 | 810628 | | S | SU TAU | 1.8 | 5 | | | 0.26 | N | 6 | 218 | 5.0 | Y | 1 | Hurst,G.M | B |
| 20.010 | 810629 | 9.7 | S | SU TAU | 3.0 | 4 | | | 0.08 | B | | 15 | 5.0 | Y | 1 | Hurst,G.M | C |
| 20.01 | 810630 | 10.6 | S | SU TAU | 2 | 6 | | | 0.320 | N | 7.2 | 100 | 6.5 | Y | 6 | van Loo,F.R | |
| 20.017 | 810631 | 10.5 | | AAVSO | 1.5 | 4 | 0.03 | 250 | 0.36 | SC | 11 | 330 | 4.5 | Y | | Korth,S | D |
| 20.02 | 810632 | 10.7 | S | SUT | | | | | 0.20 | R | 12 | 40 | 6.0 | | 1 | Shanklin,J.D | |
| 20.02 | 810633 | 10.5 | S | SUT | | | | | 0.08 | B | | 20 | 6.0 | | 1 | Shanklin,J.D | |
| 20.021 | 810634 | 11.0 | M | CZ ORI | 1.4 | 6 | | | 0.22 | N | 8 | 90 | 5.6 | Y | 1 | Fleet,R.W | E |
| 20.021 | 810635 | 10.7 | M | Y TAU | 2.0 | 3 | | | 0.205 | N | 7.5 | 125 | 5.8 | Y | 1 | Palorni,M | |
| 20.031 | 810636 | 12.8 | | CZ ORI | | | | | 0.35 | N | 5.5 | 100 | 5.6 | Y | 1 | Fleet,R.W | F |
| 20.035 | 810637 | 10.8 | M | CZ ORI | 1.5 | 6 | | | 0.35 | N | 5.5 | 100 | 5.6 | Y | 1 | Fleet,R.W | G |
| 20.05 | 810638 | 10.3 | S | SU TAU | 4 | 5 | | | 0.320 | N | | 200 | 6 | Y | | Aerts,L | H |
| 20.053 | 810639 | 10.6 | S | CZ ORI | 2.0 | 7 | | | 0.13 | R | 4 | 21 | 5.6 | Y | 2 | Campos,J | I |
| 20.066 | 810640 | 9.8 | B | | 4 | | | | 0.256 | N | 5.6 | 80 | 5.3 | Y | 1 | Losada,R | |
| 20.068 | 810641 | 11.1 | B | | 1 | 4 | | | 0.150 | C | 15 | 56 | 6.0 | Y | 2 | Zische,E | |
| 20.072 | 810642 | 9.7 | S | Y TAU C | 2.1 | 6 | | | 0.203 | SC | 10 | 51 | 6.2 | Y | 1 | Meozzi,D | |
| 20.083 | 810643 | 9.8 | B | | 7 | | | | 0.256 | N | 5.6 | 88 | | Y | 3 | Gallego,J | |
| 20.09 | 810644 | 11.0 | S | SU TAU | 2.0 | 5 | | | 0.203 | SC | 10 | 50 | 6.0 | N | 1 | Schmeer,P | |
| 20.10 | 810645 | 10.8 | B | SU TAU | 2.5 | 4 | | | 0.203 | SC | 10 | 80 | 6.3 | Y | 2 | Granslo,B.H | |
| 20.10 | 810646 | 10.0 | B | SU TAU | 3 | 4 | | | 0.150 | R | 15 | 88 | 5 C | N | 1 | Geenen,J.J | |
| 20.125 | 810647 | 10 : | | | 5 | | | | 0.256 | N | 5.6 | 88 | | Y | 2 | Pedraz,S | |
| 20.132 | 810648 | 11.1 | M | CZ ORI | 0.8 | 4 | | | 0.298 | N | 5 | 65 | 5.8 | Y | 1 | Stott,D | |
| 20.142 | 810649 | 11.0 | B | | 1 | 3 | | | 0.063 | R | 13 | 34 | 6.5 | Y | 1 | Zische,E | |
| 20.146 | 810650 | 10.5 | B | SA 74 | 1.5 | 4 | | | 0.250 | N | 6 | 75 | 5.0 | Y | 1 | Guthier,O | J |
| 20.16 | 810651 | 9.4 | S | | 2.4 | 4 | | | 0.203 | N | 7 | 54 | 6.0 | Y | 1 | Harrington,P | |
| 20.16 | 810652 | 10.8 | S | SU TAU | 2 | 4 | | | 0.254 | JB | 6 | 76 | 5 C | Y | 1 | Wils,P | |
| 20.17 | 810653 | 11.2 | B | U ORI | 2 | 3 | | | 0.318 | N | 5 | 62 | 6 | Y | 1 | Simmons,K | |
| 20.17 | 810654 | 11.0 | B | U ORI | 2.3 | 3 | | | 0.318 | N | 5 | 62 | 6.0 | Y | 1 | Simmons,W | |
| 20.18 | 810655 | 9.3 | S | SU+YTAU | 5 | 3 | 0.12 | 280 | 0.100 | N | 9 | 23 | 6.5 | Y | 1 | van de Weg,R.L.W | K |
| 20.280 | 810656 | > 8.4 | B | 59 | 5 | 4 | | | 0.203 | R | 13 | 85 | 4.6 | Y | 1 | Fox,J.H | |
| 20.284 | 810657 | 10.0 | B | 59 | | 5 | | | 0.200 | SC | 10 | 127 | 5 | Y | 2 | Gelinas,M.A | |
| 20.30 | 810658 | 9.8 | M | Y TAU | | | | | 0.20 | N | 6 | 61 | 6 | Y | 2 | Hale,A | L |
| 20.35 | 810659 | 9.2: | S | LNES | 2 | 7 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | C |
| 20.3736 | 810660 | 10.3 | S | U ORI | 2.0 | 7 | | | 0.254 | N | 3.8 | 64 | 6.0 | | 4 | Machholz,D | |
| 20.382 | 810661 | 10.4 | M | 59 | 0.5 | 5 | | | 0.44 | N | 4.5 | 222 | 4.2 | Y | 1 | Falvo,S.A | M |
| 20.40 | 810662 | 9.1 | | Y TAU | 11 | 2 | | | 0.040 | B | | 8 | 7.0 | Y | 1 | Keen,R | N |
| 20.40 | 810663 | 9.5 | M | Y TAU | 17 | 5 | | | 0.32 | N | 4 | 40 | 7.0 | Y | 1 | Keen,R | |
| 20.424 | 810664 | 10.2 | S | Y TAU | 2.2 | 4 | | | 0.15 | R | 5 | 62 | 6.3 | Y | 3 | Morrison,W | O |
| 20.45 | 810665 | 9.0 | S | Y TAU | 9 | 1 | | | 0.080 | B | | 20 | 6.5 | Y | 6 | Morris,C.S | |
| 20.45 | 810666 | 9.1 | S | NPS | | | | | 0.080 | B | | 20 | 6.5 | Y | 6 | Morris,C.S | |
| 20.45 | 810667 | 9.2 | M | Y TAU | 4.9 | 3 | | | 0.256 | N | 4.5 | 45 | 6.5 | Y | 6 | Morris,C.S | |
| 20.458 | 810668 | 10.5 | M | U ORI | | 3 | | | 0.356 | N | 5 | 225 | | Y | 1 | Jeffrey,J | P |
| 20.65 | 810669 | 9.2 | S | SU TAU | | | | | 0.152 | N | 5 | 29 | 6.2 | Y | 1 | Seargent,D | |
| 20.65 | 810670 | 9.2 | S | SU TAU | | | | | 0.08 | B | | 15 | | | | Seargent,D | |
| 20.75 | 810671 | 10.1 | S | AAVSO | 3 | 4 | | | 0.20 | N | 5.6 | 89 | 6.5 | Y | 5 | Nakamura,A | |
| 20.75 | 810672 | 10.4 | B | AAVSO | | | | | 0.20 | N | 5.6 | 44 | | Y | | Nakamura,A | |
| 20.76 | 810673 | 10.3 | M | | 3.0 | 4 | | | 0.16 | N | 6.3 | 31 | 5.5 | Y | 2 | Hiraga,M | |
| 20.930 | 810674 | 10.2 | B | | 2.5 | 4 | | | 0.200 | N | 7.2 | 36 | 5.0M | Y | 1 | Lipski,P | Q |
| 20.93 | 810675 | 9.7 | B | U ORI | 2.5 | 4 | 0.03 | 230 | 0.400 | N | 5 | 81 | 6.0 | Y | 2 | Merlin,J.-C | |
| 20.948 | 810676 | 10.4 | S | Y TAU | 0.5 | 2 | | | 0.15 | N | 6.6 | 100 | 4.4M | N | 1 | Dal Santo,M | |
| 20.969 | 810677 | 10.6 | S | SU TAU | 1.4 | 3 | | | 0.26 | N | 6 | 55 | 4.0 | Y | 1 | Hurst,G.M | |
| 20.993 | 810678 | 12.6 | | CZ ORI | | | | | 0.35 | N | 5.5 | 100 | 5.6 | Y | 1 | Fleet,R.W | F |
| 20.997 | 810679 | 10.5 | M | CZ ORI | 1.4 | 6 | | | 0.35 | N | 5.5 | 100 | 5.6 | Y | 1 | Fleet,R.W | R |

NOTE A Inner condensed area more clearly defined at 145x. Estimated to be 1/5 of overall coma diameter, = 0.5'.
NOTE B At 218x, the outer regions of the coma were lost and the overall estimate of size was reduced to 1.8'. The inner condensed area of 0.5' was very bright. In fleeting moments of good seeing a star-like object, apparently displaced north following the centre of the coma's apparent centre, was seen. It was perhaps not quite stellar, possibly extending to 3-4 arc seconds diameter, magnitude 13.4.
NOTE C Coma diameter approximate.
NOTE D Tail length uncertain, PA approximate.
NOTE E 2.7' coma, averted vision.
NOTE F Central condensation magnitude.
NOTE G 3.0' coma, averted vision.
NOTE H Coma asymmetric, U-shaped.
NOTE I Round coma with central condensation.
NOTE J Central condensation. Comet bright.
NOTE K Also visible in 12x60 mm binoculars.
NOTE L Magnitude estimate possibly affected by thin clouds and proximity to a fairly bright star.
NOTE M Comet brightened significantly to approx. 10.4 mag. The central condensation was obvious this observing run. Appearing as a small starlike point in center of coma.
NOTE N Modified Sidgwick method used.
NOTE O SU Tau and CZ Ori also used for comparison stars.
NOTE P Comet little change in appearance all month. Limit 15.0.
NOTE Q Small nucleus.
NOTE R 2.9' coma, averted vision.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.015 | 830088 | 0.10 | 0.36 | SC | 11 | 330 | 6 | 4.5 | 1 | Korth,S | A |
| 20.074 | 830089 | | 0.250 | | 8 | 100 | 7 | 6 | | Skorupa,W | B |
| 20.083 | 830090 | | 0.256 | N | 5.6 | 88 | | | 3 | Gallego,J | C |
| 20.108 | 830091 | | 0.256 | N | 5.6 | 88 | | | 2 | Cardiel,N | D |
| 20.125 | 830092 | | 0.256 | N | 5.6 | 88 | | | 2 | Pedraz,S | E |
| 20.162 | 830093 | 0.05 | 0.83 | R | 19.7 | 800 | 16 | 5.7 | 3 | Soc. Astro. de France | F |
| 20.185 | 830094 | 0.04 | 0.83 | R | 19.7 | | 13 | 5.9 | 3 | Soc. Astro. de France | G |
| 20.280 | 830095 | 0.6 | 0.203 | R | 13 | 85 | 5 | 4.6 | 1 | Fox,J.H | H |
| 20.285 | 830096 | 0.27 | 0.200 | SC | 10 | 127 | 4 | 5 | 2 | Gelinas,M.A | I |
| 20.389 | 830097 | 0.09 | 0.44 | N | 4.5 | 222 | 20 | 4.2 | 1 | Falvo,S.A | |
| 20.948 | 830098 | 0.22 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | J |
| 20.967 | 830099 | 0.3 | 0.26 | N | 6 | 55 | 35 | 4.0 | 1 | Hurst,G.M | K |

NOTE A Tail? at about PA 250.
NOTE B Tiny core, brightening in forward H2 part, brightness ca. 10.5 mag. I still stress the good viewing conditions. Instrument is Ritchey-Chretien. (Translated by IHW staff. Ed.)
NOTE C Big and diffuse. Spherical aspect. [sic] (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE D Big but very diffuse. The night wasn't very good. Field 45 arc min. (Duration not indicated. Time of observation is assumed

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to be mid time. Drawing data inferred from magnitude report form. Ed.)
NOTE E Field: 45'. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE F Jet at PA 73, 6" long; streamer at PA 189, 24" long; jet at PA 251, 5" long; jet at PA 323, 11" long. Drawing made by Alain Perez.
NOTE G Jet at PA 74, 10" long; streamer at PA 198, 30" long; streamer at PA 262, 32" long. Drawing made by Serge Thebault.
NOTE H Very similar to M1 except comet shows nuclear condensation and is more circular.
NOTE I Lumicon Deep Sky filter used during part of the observation.
NOTE J (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE K Very pale diffuse disk is circular, no tail seen. Also seen 145x and 218x but very unsteady and wavering image made further accurate observation impossible.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.122 | 850070 | 1.800 | | 0.28 | 1.1 x 0.8 | 8.33 | Kodak Tri-X | 400/27 | N | | 13/N | 1 | Darvann,T.A | A |

NOTE A (Instrument FL of 2.800 and separately specified effective FL of approximately 1.800 don't match. Ed.)

DATE: 21 OCT 1985 DATE 21 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.00 | 810680 | 13.0 | V | SU TAU | | | | | 0.254 | JB | 6 | 90 | 6.5 | Y | 7 | Bouma,R.J | A |
| 21.00 | 810681 | 9.8 | B | SU+YTAU | | | | | 0.156 | N | 5 | 29 | 6.5 | Y | 6 | Bus,E.P | |
| 21.00 | 810682 | 9.2 | S | Y TAU | 45 | 3 | | | 0.156 | N | 5 | 29 | 6.5 | Y | 6 | Bus,E.P | B |
| 21.00 | 810683 | 9.6 | S | SU TAU | 3 | 3 | | | 0.110 | N | 5 | 21 | 5.5C | Y | 1 | Feijth,E | |
| 21.007 | 810684 | 10.5 | M | CZ ORI | 1.4 | 6 | | | 0.22 | N | 8 | 90 | 5.6 | Y | 1 | Fleet,R.W | C |
| 21.007 | 810685 | 10.4 | S | SU TAU | 2 | 5 | | | 0.203 | SC | 10 | 50 | 5.1 | Y | 1 | Foulkes,M | |
| 21.01 | 810686 | 9.0 | S | Y TAU | 4 | 4 | | | 0.156 | N | 5 | 29 | 6.5 | Y | 7 | Bouma,R.J | |
| 21.021 | 810687 | 10.5 | M | CZ ORI | 1.0 | 6 | | | 0.15 | N | 4 | 50 | 5.6 | Y | 1 | Fleet,R.W | D |
| 21.021 | 810688 | 8.6 | S | SAO | | | | | 0.31 | N | 5 | 62 | | | | Giampaolo,G | |
| 21.038 | 810689 | 11.9 | | CZ ORI | | 6 | | | 0.075 | R | 16 | 50 | 5.6 | Y | 1 | Fleet,R.W | E |
| 21.04 | 810690 | 9.8 | S | SU TAU | 2.5 | 6 | | | 0.254 | N | 5.6 | 70 | 6 C | Y | 1 | Kuipers,G | |
| 21.04 | 810691 | 9.8 | S | SU TAU | 2.5 | 6 | | | 0.254 | N | 5.6 | 70 | 6 C | Y | 1 | Kroon,B | |
| 21.056 | 810692 | 10.1 | M | CZ ORI | | 8 | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | F |
| 21.06 | 810693 | 9.5 | S | Y TAU | 6 | 3 | | | 0.203 | C | 10 | 65 | 6 | Y | 3 | Comello,G | G |
| 21.083 | 810694 | 10.2 | S | Y TAU | 2.3 | 4 | | | 0.203 | SC | 10 | 50 | 5 | Y | 1 | Tanti,T | H |
| 21.12 | 810695 | 10.2 | S | SU TAU | 4 | 5 | | | 0.150 | R | 8 | 68 | 5.5C | N | 1 | Aerts,L | |
| 21.125 | 810696 | 9.9 | B | SAOSA74 | 2.7 | 3 | | | 0.250 | N | 6 | 75 | 6.0 | Y | 1 | Guthier,O | I |
| 21.14 | 810697 | 9.4 | S | Y TAU | 6 | 4 | | | 0.250 | N | 5.6 | 56 | 6.5 | Y | 1 | van Loo,F.R | |
| 21.15 | 810698 | 10.5 | S | SUT | | | | | 0.20 | R | 12 | 40 | 5.5 | | 1 | Shanklin,J.D | |
| 21.155 | 810699 | 10.4 | M | CZ ORI | 1 | 4 | | | 0.080 | B | | 20 | 5.8 | Y | 1 | Stott,D | |
| 21.16 | 810700 | 9.2 | S | SU+YTAU | 5 | 3 | 0.12 | 270 | 0.100 | N | 9 | 23 | 6.6 | Y | 1 | van de Weg,R.L.W | |
| 21.177 | 810701 | | | | 2 | 2 | | | 0.089 | R | 5.5 | 18 | 5.4 | N | 1 | Ventura,F | |
| 21.235 | 810702 | | | | 2.0 | 6 | | | 0.445 | N | 4.5 | 80 | 6.7 | Y | 3 | Morrison,W | |
| 21.34 | 810703 | 9.6 | S | LNES | 1.6 | 5 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | G |
| 21.35 | 810704 | 9.3 | M | LNES | 1.5 | 6 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | G |
| 21.35 | 810705 | 9.6 | S | LNES | 1.5 | 6 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | G |
| 21.352 | 810706 | 10.0 | S | Y TAU | 3.2 | 4 | | | 0.15 | R | 5 | 62 | 6.7 | Y | 3 | Morrison,W | J |
| 21.37 | 810707 | 9.1 | M | LNES | 2.5 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | G |
| 21.37 | 810708 | 9.1 | M | SU TAU | 2.5 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | G |
| 21.37 | 810709 | 9.3 | S | LNES | 2.5 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | G |
| 21.37 | 810710 | 9.3 | S | SU TAU | 2.5 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | G |
| 21.406 | 810711 | 10.0 | S | Y TAURI | 2.7 | 1 | | | 0.25 | N | 5.6 | 56 | 6 | Y | 1 | Jordan,J | K |
| 21.47 | 810712 | 8.9 | | Y TAU | 11 | 3 | | | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | L |
| 21.604 | 810713 | 11.5 | M | | 1 | 6 | | | 0.44 | N | 4.5 | 225 | 5.5 | Y | 1 | Fabre,R | |
| 21.69 | 810714 | 9.1 | S | SUTAU59 | | | | | 0.152 | N | 5 | 76 | | | | Seargent,D | |
| 21.69 | 810715 | 9.1 | S | SUTAU59 | 3 | 6 | | | 0.152 | N | 5 | 29 | 6.2 | Y | 1 | Seargent,D | |
| 21.760 | 810716 | 10.3 | S | 59 YTAU | 0.9 | 1 | | | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | M |
| 21.965 | 810717 | 9.6 | S | Y TAU | 3.5 | 4 | | | 0.08 | B | | 15 | 6.2 | Y | 3 | Haver,R | N |
| 21.965 | 810718 | 10.0 | B | | 2.0 | | | | 0.200 | N | 7.2 | 36 | 4.5M | Y | 1 | Lipski,P | O |
| 21.979 | 810719 | 10.0 | S | S9 | 1.5 | 2 | | | 0.09 | M | 11 | 56 | 5.0C | Y | 1 | Westlund,M | P |

NOTE A Magnitude of "stellar" condensation. Diameter less than 0.1 arc min.
NOTE B Coma diameter approximate. Halley also visible in 15x50 finder (refractor).
NOTE C 2.7' coma, averted vision.
NOTE D 2.4' coma, averted vision.
NOTE E 1.9' coma, averted vision.
NOTE F 1.2' coma, averted vision.
NOTE G Coma diameter approximate.
NOTE H Seeing good, transparency good/fair. Dew.
NOTE I Central condensation 0.7 arc min.
NOTE J SU Tau and CZ Ori also used for comparison stars.
NOTE K Sky conditions were good this morning, although not as dark as in previous observation due to increased sky glow.
NOTE L Modified Sidgwick method used.
NOTE M Slight haze dawn breaking. Observing comet directly over glow of Melbourne to the north. Faintest star seen in instrument 11.7.
NOTE N Perhaps lengthening. (Translated by IHW staff. Ed.)
NOTE O Round. Star occulation.
NOTE P Milky Way.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.033 | 830100 | 0.03 | 0.83 | R | 19.7 | 800 | 20 | | 3 | Soc. Astro. de France | A |
| 21.061 | 830101 | 0.29 | 0.400 | N | 5 | 40,222 | 13 | 5.5 | 2 | Sarocchi,D | B |
| 21.065 | 830102 | 0.03 | 0.83 | R | 19.7 | 540 | 13 | | 3 | Soc. Astro. de France | C |
| 21.077 | 830103 | 0.08 | 0.83 | R | 19.7 | 320 | 12 | | 3 | Soc. Astro. de France | D |
| 21.086 | 830104 | 0.05 | 0.83 | R | 19.7 | 320 | 9 | | 3 | Soc. Astro. de France | E |
| 21.174 | 830105 | 1 | 0.229 | R | 10 | 100 | 20 | 6.0 | 1 | Nowak,G.T | F |
| 21.176 | 830106 | 0.29 | 0.400 | N | 5 | 40, 71 | 21 | 5.6 | 2 | Sarocchi,D | B |
| 21.976 | 830107 | 1.6 | 0.090 | M | 11 | 56 | 10 | 5.0 | 1 | Westlund,M | G |

NOTE A Streamer at PA 118, 20" long; streamer at PA 195, 16" long. Drawing made by J. Phillipe Garsztka.
NOTE B DC 3 (or 4?).
NOTE C Streamer at PA 135, 36" long; streamer at PA 185, 30" long. Drawing made by J. Claude Thorel.
NOTE D Jet at PA 135, 15" long. Drawing made by J. Philippe Garsztka.
NOTE E Streamer at PA 140, 36" long; condensation at PA 185, 30" long. Drawing made by J. Claude Thorel.
NOTE F Note jets coming out of nucleus.
NOTE G Background sky lights: Milky Way, city lights.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.075 | 850071 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 5.00 | Kodak 2415 | | Y | | 1/P | 1 | Conrad,R | A |
| 21.139 | 850072 | 1.750 | 5 | 0.350 | 1.2 x 0.8 | 36.52 | Kodak 2415 | | Y | M | 3/P | 1 | Mobberley,M | |
| 21.893 | 850073 | 1.800 | | 0.28 | 1.1 x 0.8 | 7.05 | Kodak Tri-X | 400/27 | N | | 5/N | 1 | Darvann,T.A | B |

NOTE A City lights interfered with the observation; Vienna, from room!
NOTE B (Observer's image identifier is 5A. Ed.) (Instrument FL of 2.800 and separately specified effective FL of approximately 1.800 don't match. Ed.)

DATE: 22 OCT 1985

DATE: 22 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.00 | 810720 | 9.0 | S | Y TAU | 6 | | | | 0.203 | C | 10 | 65 | 5.5C | Y | 3 | Comello,G | A |
| 22.000 | 810721 | 10.4 | | | 1.5 | 5 | | | 0.254 | N | 7 | 116 | 5.5 | Y | 1 | Sternwarte Hof | |
| 22.003 | 810722 | 10.8 | M | CZ ORI | 1.5 | 6 | | | 0.22 | N | 8 | 90 | 5.6 | Y | 1 | Fleet,R.W | B |
| 22.01 | 810723 | 9.2 | S | Y TAU | 3 | 4 | | | 0.150 | R | 15 | 31 | 5 C | Y | 1 | Geenen,J.J | |
| 22.03 | 810724 | 9.6 | | SU TAU | 3 | 2 | | | 0.102 | R | | 60 | 4.5C | Y | 1 | van Asperen,H | |
| 22.042 | 810725 | 10.1 | | AAVSO | 2 | 5 | | | 0.36 | SC | 11 | 330 | 4 | Y | | Korth,S | C |
| 22.042 | 810726 | 11.5: | | | 3.5 | 1 | | | 0.13 | R | 10 | 50 | | Y | 1 | Morrisby,A | D |
| 22.043 | 810727 | 10.0 | B | | 2.5 | 5 | | | 0.200 | N | 7.2 | 36 | 5.0M | Y | 1 | Lipski,P | E |
| 22.065 | 810728 | 10.5 | S | Y TAU | 2.0 | 6 | | | 0.13 | R | 4 | 21 | 5.0 | Y | 1 | Campos,J | F |
| 22.066 | 810729 | 10.7 | M | CZ ORI | 1.2 | 5 | | | 0.15 | N | 4 | 50 | 5.7 | Y | 1 | Fleet,R.W | G |
| 22.073 | 810730 | 12.7 | | CZ ORI | | | | | 0.22 | N | 8 | 90 | 5.7 | Y | 1 | Fleet,R.W | H |
| 22.076 | 810731 | 10.6 | M | CZ ORI | 1.5 | 6 | | | 0.22 | N | 8 | 90 | 5.7 | Y | 1 | Fleet,R.W | B |
| 22.083 | 810732 | 10.6 | M | CZ ORI | 1.7 | 6 | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | I |
| 22.118 | 810733 | 10.3 | B | SA 74 | 2.9 | 4 | | | 0.250 | N | 6 | 75 | 6.0 | Y | 1 | Guthier,O | |
| 22.12 | 810734 | 9.1 | S | | 4.5 | 5 | | | 0.254 | N | 4.5 | 46 | 6.2 | Y | 2 | Zanotta,M.V | J |
| 22.13 | 810735 | 9.4 | S | Y TAU | 5 | 5 | | | 0.250 | N | 5.6 | 56 | 6 | Y | 1 | van Loo,F.R | |
| 22.13 | 810736 | 10.3 | B | SU TAU | | | | | 0.250 | N | 5.6 | 56 | 6 | Y | 1 | van Loo,F.R | |
| 22.13 | 810737 | 10.8 | B | SU TAU | 3.5 | 4 | | | 0.115 | N | 8 | 45 | 6 | Y | 1 | van Munster,T | A |
| 22.14 | 810738 | 10.8 | S | SU TAU | 3.0 | 5 | | | 0.203 | SC | 10 | 50 | 6.0 | N | 1 | Schmeer,P | |
| 22.14 | 810739 | 10.6 | S | SU TAU | 2 | 5 | | | 0.254 | JB | 6 | 76 | 4.5C | Y | 1 | Wils,P | |
| 22.15 | 810740 | 9.1 | S | | 4.2 | 5 | | | 0.080 | B | | 20 | 6.2 | Y | 2 | Zanotta,M.V | |
| 22.164 | 810741 | 10.7 | B | | 1 | 3 | | | 0.063 | R | 13 | 34 | 6.0 | Y | 1 | Zische,E | |
| 22.17 | 810742 | 10.1 | S | SU TAU | 3 | 5 | | | 0.150 | R | 8 | 68 | 5 C | N | 1 | Aerts,L | |
| 22.299 | 810743 | 9.7 | M | Y TAU | 6.0 | 7 | | | 0.254 | N | 5.6 | 120 | 6.3 | Y | 1 | Knight,S | K |
| 22.32 | 810744 | 8.4: | S | SU TAU | 7 | | | | 0.050 | B | | 10 | | | | Bortle,J.E | L |
| 22.32 | 810745 | 8.6 | S | SU TAU | 8 | 2 | | | 0.080 | B | | 20 | | | | Bortle,J.E | M |
| 22.32 | 810746 | 9.0 | S | SU TAU | 3.4 | 6 | | | 0.317 | N | 6 | 68 | | | | Bortle,J.E | N |
| 22.323 | 810747 | 10.5 | S | | 16 | | | | 0.203 | SC | 10 | 80 | 4.5C | Y | 1 | Gronek,J.D | O |
| 22.34 | 810748 | 8.9 | M | SU TAU | 2.5 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 22.34 | 810749 | 9.0 | S | SU TAU | 2.5 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 22.35 | 810750 | 8.8 | M | Y TAU | 2.5 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 22.35 | 810751 | 9.0 | S | Y TAU | 2.5 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 22.375 | 810752 | 11.0 | M | 59 | 0.5 | 5 | | | 0.44 | N | 4.5 | 222 | 5.2 | Y | 1 | Falvo,S.A | P |
| 22.64 | 810753 | 10.0 | B | | 4 | 3 | | | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 22.68 | 810754 | 10.0 | | | 3 | 4 | | | 0.31 | N | 5.7 | 55 | 5.0 | Y | 2 | Suzuki,K | |
| 22.69 | 810755 | 10.7 | M | | 1.8 | 4 | | | 0.16 | N | 6.3 | 80 | 6 | Y | 1 | Mitsuma,S | Q |
| 22.70 | 810756 | 10.0 | M | | 3.4 | 4 | | | 0.16 | N | 6.3 | 31 | 6 | Y | 1 | Mitsuma,S | Q |
| 22.729 | 810757 | 10.9 | S | Y TAU | | | | | 0.065 | R | 7.7 | 27 | 5.0 | Y | 1 | Date,M | |
| 22.75 | 810758 | 10.6 | S | | 2.5 | 6 | | | 0.26 | N | 5 | 53 | 5.5 | Y | 1 | Kanai,K | |
| 22.76 | 810759 | 9.6 | S | AAVSO | 4.5 | 4 | | | 0.20 | N | 5.6 | 44 | 5.0 | Y | 2 | Nakamura,A | |
| 22.76 | 810760 | 10.0 | B | AAVSO | | | | | 0.20 | N | 5.6 | 44 | | Y | | Nakamura,A | |
| 22.78 | 810761 | 11.2 | S | AAVSO | 1.3 | 4 | | | 0.13 | N | 6.3 | 64 | 5.5 | Y | 1 | Hayashi,A | |
| 22.92 | 810762 | 10.1 | B | AAVSO | 3.7 | 4 | | | 0.12 | R | 5 | 35 | | | | Chernis,K | |
| 22.947 | 810763 | 10.2 | S | SU TAU | 2 | 5 | | | 0.152 | N | 5 | 44 | 5.7 | Y | 2 | Moeller,M | R |
| 22.95 | 810764 | 10.0 | B | AAVSO | 2.5 | 5 | | | 0.20 | N | 5 | 35 | | | | Tsvetkov,L | |

NOTE A Coma diameter approximate.
NOTE B 2.7' coma, averted vision.
NOTE C Coma diameter uncertain.
NOTE D Coma maybe slightly elongated.
NOTE E Small nucleus. Magnification of 57 also used.
NOTE F Round coma with central condensation.
NOTE G 2.4' coma, averted vision.
NOTE H Central condensation magnitude.
NOTE I 2.9' coma, averted vision.
NOTE J Circular with strong well-defined central condensation (diameter ≈ 1') brighter toward middle (190x). Extremely diffuse outer coma. 114x: star-like nuclear region of magnitude approximately 12.0, but difficult for the bright and strong central condensation
NOTE K Stellar nucleus.
NOTE L Just easily detected. [sic]
NOTE M Large, bright object.
NOTE N Cond. (0.1-0.2'), mag. 11.5.
NOTE O Exc. see.
NOTE P Comet seems to have dimmed noticeably. The nuclear condensation more prominent at low power (80x) but still visible at 222x. Coma diameter remains at larger value, even though it is not as bright, 0.48' arc. The "nucleus" is not as prominent this observing run.
NOTE Q Tail not seen.
NOTE R Condens. 11.8 mag. Moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.125 | 830108 | 0.28 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | A |
| 22.157 | 830109 | 0.05 | 0.83 | R | 19.7 | 800 | 10 | 5.1 | 3 | Soc. Astro. de France | B |
| 22.380 | 830110 | | 0.44 | N | 4.5 | 222 | 15 | 5.2 | 1 | Falvo,S.A | |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Jet at PA 35, 9" long; jet at PA 185, 14" long; jet at PA 60, 13" long. Drawing made by Alain Perez.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.346 | 850074 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | S | 4/P | 1 | Dilsizian,R | |
| 22.422 | 850075 | 0.305 | 2.5 | 0.122 | 6.8 x 4.5 | 4.00 | Kodak Tri-X | 400/ | N | S | 45/P | 1 | Minton,R.B | A |
| 22.451 | 850076 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 38.00 | Kodak Tri-X | | N | M | 5/S | 1 | Webb,R | B |
| 22.776 | 850077 | 0.850 | 3.4 | 0.25 | 2.4 x 1.6 | 10.00 | Kodak 6415 | | Y | C | 1/P | 1 | Kojima,T | C |

NOTE A (Print submitted by observer is a composite of two 2 min. exposures separated by 6 min. Ed.)
NOTE B Inner coma and starlike central condensation visible on all original negatives. Film push processed slightly. (Observer indicated C-type guiding as well as M. Ed.)
NOTE C Instrument is Wright-Schmidt. Large format (120 size) film used.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.000 | 810765 | 11 | S | CZ | | 5 | | | 0.16 | R | | 50 | 5.4 | Y | 1 | Silhan,J | A |
| 23.007 | 810766 | 10.5 | S | SU TAU | 1.4 | 3 | | | 0.25 | N | 6 | 120 | 4.4 | Y | 1 | Gainsford,M.J | B |
| 23.01 | 810767 | 8.8 | S | Y TAU | 5.5 | 4 | | | 0.156 | N | 5 | 24 | 6 | Y | 2 | Bouma,R.J | |
| 23.021 | 810768 | 10.5 | M | CZ ORI | 1.4 | 6 | | | 0.15 | N | 4 | 50 | 5.8 | Y | 1 | Fleet,R.W | C |
| 23.035 | 810769 | 10.7 | M | CZ ORI | 1.5 | | | | 0.22 | N | 8 | 90 | 5.8 | Y | 1 | Fleet,R.W | D |
| 23.052 | 810770 | 10.4 | M | CZ ORI | 1.8 | 6 | | | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | C |
| 23.083 | 810771 | 10.0 | B | | 2.5 | 5 | | | 0.200 | N | 7.2 | 36 | 5.0M | Y | 1 | Lipski,P | E |
| 23.097 | 810772 | 10.1 | S | Y TAU | 2.3 | 4 | | | 0.203 | SC | 10 | 50 | 5 | Y | 1 | Tanti,T | F |
| 23.10 | 810773 | 9.1 | S | | 6 | 5 | | | 0.254 | N | 4.5 | 46 | 6.4 | Y | 2 | Zanotta,M.V | G |
| 23.11 | 810774 | 9.2 | S | | 6 | 5 | | | 0.080 | B | | 20 | 6.4 | Y | 2 | Zanotta,M.V | |
| 23.16 | 810775 | 8.9 | S | Y TAU | 6 | 3 | 0.15 | 260 | 0.100 | N | 9 | 23 | 6.6 | Y | 1 | van de Weg,R.L.W | H |
| 23.16 | 810776 | 9.4 | B | Y TAU | 6 | 3 | 0.15 | 260 | 0.100 | N | 9 | 23 | 6.6 | Y | 1 | van de Weg,R.L.W | |
| 23.27 | 810777 | 9.1 | S | Y TAU | | | | | 0.203 | N | 6 | 116 | | | | Green,D.W.E | |
| 23.28 | 810778 | 8.8 | M | Y TAU | | | | | 0.203 | N | 6 | 116 | | | | Green,D.W.E | |
| 23.35 | 810779 | 8.5 | M | Y TAU | 7.8 | 6 | | | 0.203 | N | 6 | 38 | | | | Green,D.W.E | I |
| 23.35 | 810780 | 8.7 | S | Y TAU | 7.8 | 6 | | | 0.203 | N | 6 | 38 | | | | Green,D.W.E | I |
| 23.354 | 810781 | 11.5 | M | 59 | 0.5 | 6 | | | 0.44 | N | 4.5 | 222 | 5.2 | Y | 1 | Falvo,S.A | J |
| 23.36 | 810782 | 8.6 | S | SU TAU | 8 | 2 | | | 0.080 | B | | 20 | | | | Bortle,J.E | |
| 23.36 | 810783 | 8.7 | S | Y TAU | 7.8 | 3 | | | 0.080 | B | | 20 | | | | Green,D.W.E | I |
| 23.36 | 810784 | 9.0 | S | SU TAU | 4.0 | 7 | | | 0.317 | N | 6 | 68 | | | | Bortle,J.E | K |
| 23.42 | 810785 | 8.8 | S | Y TAU | 7 | 2 | | | 0.080 | B | | 20 | 6.5 | Y | 6 | Morris,C.S | |
| 23.42 | 810786 | 8.9 | S | NPS | | | | | 0.080 | B | | 20 | 6.5 | Y | 6 | Morris,C.S | |
| 23.552 | 810787 | 11.3 | M | | 1.1 | 6 | | | 0.44 | N | 4.5 | 90 | 5.5 | Y | 1 | Fabre,R | |
| 23.71 | 810788 | 10.0 | S | 59 | 2 | 0 | | | 0.15 | N | 5.3 | 32 | 5.5 | Y | 1 | Oka,A | |
| 23.71 | 810789 | 9.3 | S | 59 | 1.8 | 6 | | | 0.152 | N | 5 | 76 | 6.2 | Y | 1 | Seargent,D | |
| 23.71736 | 810790 | 10.5 | B | 59 | 2.2 | 3 | | | 0.25 | N | 8 | 63 | 6.0 | Y | 2 | Okumura,S | |
| 23.76 | 810791 | 9.9 | S | AAVSO | 4 | 4 | | | 0.20 | N | 5.6 | 44 | 6.0 | Y | 5 | Nakamura,A | |
| 23.76 | 810792 | 10.3 | B | AAVSO | | | | | 0.20 | N | 5.6 | 44 | | Y | | Nakamura,A | |
| 23.79 | 810793 | 11.2 | S | AAVSO | 1.3 | 4 | | | 0.13 | N | 6.3 | 64 | 5.0 | Y | 1 | Hayashi,A | |
| 23.958 | 810794 | 10.7 | M | AAVSO | 1 | 2 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | |

NOTE A Coma dia. 10/5.
NOTE B Misty.
NOTE C 3.0' coma, averted vision.
NOTE D 2.7' coma, averted vision.
NOTE E Small nucleus.
NOTE F Seeing good, transparency good. Clouds.
NOTE G Circular; at 114x central condensation and star-like nuclear region of magnitude approximately 12.0.
NOTE H Also visible in 12x60 mm binoculars.
NOTE I Coma diameter approximate.
NOTE J It seems even more unlikely, but the comet appears to have gotten still dimmer. Defocusing a stellar image to the coma size, demonstrated a brightness barely above background, which was duplicated nicely by an 11.5 mag. star. Nucleus appeared prominently, almost stellar, when in focus.
NOTE K Stellar nuc. of 13.3. Coma diameter = 4.0+ arc min.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 23.161 | 830111 | 0.26 | 0.356 | SC | 11 | 200 | 15 | | 1 | Verdenet,M |
| 23.365 | 830112 | | 0.44 | N | 4.5 | 80,150,222 | 30 | 5.2 | 1 | Falvo,S.A |

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.349 | 850078 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | S | 5/P | 1 | Dilsizian,R |

DATE: 24 OCT 1985

DATE: 24 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.010 | 810795 | 10.6 | S | 59 | 1.2 | 3 | | | 0.250 | N | 6 | 55 | 5.5 | N | 1 | Lunde,R | |
| 24.01 | 810796 | 9.7 | S | Y TAU | 3 | 3 | | | 0.150 | R | 15 | 110 | 4.5M | Y | 1 | Geenen,J.J | |
| 24.05 | 810797 | 9.4 | S | Y TAU | | 3 | | | 0.110 | N | 5 | 31 | 6 C | Y | 1 | Feijth,H | |
| 24.052 | 810798 | 12.6 | | CZ ORI | | | | | 0.15 | N | 4 | 50 | 5.6 | Y | 1 | Fleet,R.W | A |
| 24.056 | 810799 | 10.7 | M | CZ ORI | 0.9 | 6 | | | 0.15 | N | 4 | 50 | 5.6 | Y | 1 | Fleet,R.W | B |
| 24.059 | 810800 | 10.0 | S | 59 | 1.5 | 2 | | | 0.09 | M | 11 | 56 | 5.5 | Y | 2 | Westlund,M | C |
| 24.06 | 810801 | 9.1 | S | Y TAU | 6 | 3 | | | 0.250 | N | 5.6 | 56 | 6 | Y | 1 | van Loo,F.R | |
| 24.06 | 810802 | 9.8 | B | Y TAU | | | | | 0.250 | N | 5.6 | 56 | 6 | Y | 1 | van Loo,F.R | |
| 24.062 | 810803 | 11.5: | | | 4 | 3 | | | 0.13 | R | 10 | 50 | | Y | 1 | Morrisby,A | D |
| 24.069 | 810804 | 11 : | | CZ | | | | | 0.16 | R | | 50 | 6.1 | Y | 1 | Silhan,J | E |
| 24.08 | 810805 | 9.8 | S | SU TAU | 3 | | | | 0.080 | B | | 20 | 6.0 | N | 1 | Schmeer,P | |
| 24.080 | 810806 | 12.7 | | CZ ORI | | | | | 0.22 | N | 8 | 90 | 5.7 | Y | 1 | Fleet,R.W | A |
| 24.083 | 810807 | 10.6 | M | CZ ORI | 0.9 | 6 | | | 0.22 | N | 8 | 90 | 5.7 | Y | 1 | Fleet,R.W | F |
| 24.0937 | 810808 | 10.0 | S | Y TAU | 4 | 6 | | | 0.11 | R | 11 | 36 | 5.8 | Y | 1 | Znasik,M | |
| 24.094 | 810809 | 10.7 | M | CZ ORI | 1.1 | | | | 0.35 | N | 5.5 | 100 | 5.6 | Y | 1 | Fleet,R.W | G |
| 24.10 | 810810 | 9.8 | B | SU TAU | 2.4 | 6 | | | 0.203 | SC | 10 | 50 | 5.5 | N | 1 | Schmeer,P | |
| 24.104 | 810811 | 10.1 | S | Y TAU | 2.3 | 4 | | | 0.203 | SC | 10 | 50 | 5.5 | Y | 1 | Tanti,T | H |
| 24.11 | 810812 | 8.7 | S | Y TAU | 5 | 5 | | | 0.156 | N | 5 | 24 | 6.5 | Y | 2 | Bouma,R.J | I |
| 24.125 | 810813 | 9.9 | B | SAOSA74 | 2.7 | 4 | | | 0.250 | N | 6 | 75 | 5.5 | Y | 1 | Guthier,O | J |
| 24.125 | 810814 | 9.6 | S | | 2.5 | 2 | | | 0.089 | R | 5.5 | 18 | 5.5 | N | 1 | Ventura,F | |
| 24.16 | 810815 | 9.6 | S | SU TAU | 2.5 | 6 | | | 0.254 | N | 5.6 | 70 | 6 C | Y | 1 | Kuipers,G | |
| 24.16 | 810816 | 9.6 | S | SU TAU | 2.5 | 6 | | | 0.254 | N | 5.6 | 70 | 6 C | Y | 1 | Kroon,B | |
| 24.17 | 810817 | 10.1 | S | SU TAU | 5.5 | 5 | | | 0.150 | R | 8 | 68 | 6 C | Y | 1 | Aerts,L | I |
| 24.17 | 810818 | | V | SU TAU | | | | | 0.150 | R | 8 | 150 | 6 C | Y | 1 | Aerts,L | K |
| 24.17 | 810819 | 9.0 | S | Y TAU | 6 | 3 | | | 0.100 | B | | 14 | 6.5 | Y | 1 | van Loo,F.R | |
| 24.18 | 810820 | 8.8 | S | Y TAU | 5 | 3 | 0.12 | 270 | 0.100 | N | 9 | 23 | 6.7 | Y | 1 | van de Weg,R.L.W | |
| 24.18 | 810821 | 9.3 | B | Y TAU | 5 | 3 | 0.12 | 270 | 0.100 | N | 9 | 23 | 6.7 | Y | 1 | van de Weg,R.L.W | |
| 24.36 | 810822 | 8.8 | S | Y TAU | 5.8 | 3 | | | 0.203 | N | 6 | 38 | | | | Green,D.W.E | I |
| 24.36 | 810823 | 8.8 | S | Y TAU | 4.9 | 5 | | | 0.203 | N | 6 | 116 | | | | Green,D.W.E | I |
| 24.38 | 810824 | 8.8 | M | Y TAU | | | | | 0.203 | N | 6 | 38 | | | | Green,D.W.E | |
| 24.38 | 810825 | 8.5 | S | Y TAU | 8.7 | 4 | | | 0.080 | B | | 20 | | | | Green,D.W.E | I |
| 24.469 | 810826 | 8.4 | B | 59 | 5 | 4 | | | 0.203 | R | 13 | 85 | 4.9 | Y | 1 | Fox,J.H | L |
| 24.745 | 810827 | 10.3 | S | | 3.0 | 3 | | | 0.16 | N | 6.3 | 31 | 6 | Y | 1 | Mitsuma,S | M |
| 24.76 | 810828 | 10.6 | M | | 1.9 | 4 | | | 0.16 | N | 6.3 | 80 | 6 | Y | 1 | Mitsuma,S | M |
| 24.78 | 810829 | 11.0 | S | AAVSO | 1.7 | 4 | | | 0.13 | N | 6.3 | 64 | 6.0 | Y | 1 | Hayashi,A | |
| 24.79 | 810830 | 10.8 | S | AAVSO | 2.8 | 5 | | | 0.13 | N | 6.3 | 44 | 6.0 | Y | 1 | Hayashi,A | |
| 24.938 | 810831 | 10.5 | S | | 2 | 7 | | | 0.20 | SC | 10 | 111 | 5.5 | Y | 1 | Bremseth,P.-J | |
| 24.948 | 810832 | 10.0 | S | Y TAU | | | | | 0.15 | N | 6.6 | 100 | 4.4M | | 1 | Dal Santo,M | |
| 24.979 | 810833 | 10.0 | S | SU TAU | 2 | 5 | | | 0.203 | SC | 10 | 50 | 5.1 | | 1 | Foulkes,M | N |

NOTE A Central condensation magnitude.
NOTE B 2.3' coma, averted vision.
NOTE C Milky Way.
NOTE D No tail.
NOTE E Uncertain (faint star in coma).
NOTE F 2.4' coma, averted vision.
NOTE G 2.6' coma, averted vision.
NOTE H Seeing good, transparency excellent.
NOTE I Coma diameter approximate.
NOTE J Inner coma = 40 arc sec.
NOTE K Magnitude of "stellar" condensation 13.0:.
NOTE L Ml comparison.
NOTE M Tail not seen.
NOTE N Moon up.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.054 | 830113 | 1.6 | 0.090 | M | 11 | 56 | 15 | 5.5 | 2 | Westlund,M | A |
| 24.137 | 830114 | 0.04 | 0.83 | R | 19.7 | 800 | 14 | 5.9 | 3 | Soc. Astro. de France | B |
| 24.151 | 830115 | 0.05 | 0.83 | R | 19.7 | 800 | 14 | 5.9 | 3 | Soc. Astro. de France | C |
| 24.467 | 830116 | 0.6 | 0.203 | R | 13 | 85 | 5 | 4.9 | 1 | Fox,J.H | |

NOTE A Background sky lights: Milky Way.
NOTE B Jet at PA 57, 14" long; streamer at PA 200, 30" long; ion tail at PA 255, 32" long; streamer at PA 300, 22" long; jet at PA 345, 10" long. Jet at PA 57 uncertain. Drawing made by Serge Thebault.
NOTE C Jet at PA 10, 9" long; jet at PA 62, 8" long; streamer at PA 188, 15" long; streamer at PA 240, 27" long; streamer at PA 297, 18" long. Drawing made by Alain Perez.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.076 | 850079 | 0.750 | 6.3 | | 2.7 x 1.8 | 28.00 | ORWO | 400/27 | N | C | 1/N | 1 | Znasik,M | A |

NOTE A Large format (11.8x8.6 cm) film used.

DATE: 25 OCT 1985

DATE: 25 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.050 | 810834 | 9.6 | S | Y TAU | 1.5 | | 5 | | 0.203 | SC | 10 | 81 | 4.5C | Y | 1 | Kammerer,A | |
| 25.063 | 810835 | 10.2 | M | CZ ORI | 1.1 | 6 | | | 0.15 | N | 4 | 50 | 5.7 | Y | 5 | Fleet,R.W | A |
| 25.069 | 810836 | 12.6 | | CZ ORI | | | | | 0.15 | N | 4 | 50 | 5.7 | Y | 5 | Fleet,R.W | B |
| 25.104 | 810837 | 9.5 | B | 59 | 2.0 | 4 | | | 0.10 | B | | 14 | 6.0 | Y | 1 | Hasubick,W | |
| 25.12 | 810838 | 10.6 | | VAS 132 | 0.6 | 2 | | | 0.205 | N | 6 | 80 | 5.5 | Y | 1 | Germann,R | |
| 25.122 | 810839 | 9.4 | S | Y TAU | 3.7 | 3 | | | 0.07 | B | | 20 | 5 | Y | 1 | Tanti,T | C |
| 25.145 | 810840 | 10.5 | M | AAVSO | 2 | 3 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | |
| 25.15 | 810841 | 8.6 | S | Y TAU | 5 | 3 | | | 0.100 | N | 9 | 23 | 6.6 | Y | 1 | van de Weg,R.L.W | |
| 25.15 | 810842 | 9.3 | | SAOC | 4 | 4 | 0.08 | 270 | 0.355 | SC | 11 | 200 | | | 1 | Verdenet,M | |
| 25.18 | 810843 | 9.9 | B | SU TAU | 1.9 | 5 | | | 0.203 | SC | 10 | 50 | 5.5 | N | 1 | Schmeer,P | |
| 25.19 | 810844 | 10.1 | S | SU TAU | 5.5 | 5 | | | 0.150 | R | 8 | 34 | 5.5C | Y | 1 | Aerts,L | D |
| 25.201 | 810845 | 10.3 | M | CZ ORI | 1 | 4 | | | 0.080 | B | | 20 | 5.8 | Y | 1 | Stott,D | |
| 25.210 | 810846 | 10.8 | B | CZ ORI | 1.0 | 2 | | | 0.20 | SC | 10 | 77 | 5.5 | Y | 1 | Ward,A | E |
| 25.292 | 810847 | 9.8 | S | Y TAU | 1.5 | 6 | | | 0.30 | R | 15 | 225 | 5.0M | Y | 2 | Franch,J | F |
| 25.369 | 810848 | 10.2 | S | Y TAU | 2.4 | 3 | | | 0.15 | R | 5 | 62 | 6.7 | Y | 3 | Morrison,W | G |
| 25.44 | 810849 | 9.3 | B | | 3.0 | 7 | | | 0.335 | N | 4.5 | 84 | 5.5 | Y | | Kronk,G | H |
| 25.47 | 810850 | 8.4 | | Y TAU | 11 | 2 | | | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | I |
| 25.49 | 810851 | 8.8 | M | Y TAU | 10 | 5 | | | 0.032 | N | 4 | 80 | 6.0 | Y | 1 | Keen,R | |
| 25.49 | 810852 | 8.7 | S | Y TAU | 8 | 2 | | | 0.080 | B | | 20 | 6.0 | Y | 6 | Morris,C.S | |
| 25.49 | 810853 | 8.8 | S | NPS | | | | | 0.080 | B | | 20 | 6.0 | Y | 6 | Morris,C.S | |
| 25.755 | 810854 | 11.6 | M | 59 | 3.2 | 5 | | | 0.1 | N | 10 | 56 | 4.0 | Y | 1 | Ichikawa,K | |

NOTE A 3.0' coma, averted vision.
NOTE B Central condensation magnitude.
NOTE C Seeing good, transparency good.
NOTE D Coma diameter approximate.
NOTE E Much fainter than expected.
NOTE F Strong moonlight.
NOTE G Involved with a group of stars. SU Tau and CZ Ori also used for comparison stars.
NOTE H Exceptionaly clear.
NOTE I Modified Sidgwick method used.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.156 | 830117 | 0.25 | 0.356 | SC | 11 | 200 | 30 | | 1 | Verdenet,M | |
| 25.158 | 830118 | 0.04 | 0.83 | R | 19.7 | 800 | 14 | 5.7 | 3 | Soc. Astro. de France | A |

NOTE A Jet at PA 120, 12" long; streamer at PA 210, 40" long; ion tail at PA 260, 40" long; streamer at PA 310, 40" long; jet at PA 355, 15" long. Drawing made by Serge Thebault.

DATE: 26 OCT 1985

DATE: 26 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.132 | 810855 | 9.6 | S | | 3 | 2 | | | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | |
| 26.139 | 810856 | 9.6 | B | SAOSA74 | 3.2 | 4 | | | 0.250 | N | 6 | 75 | 5.3 | Y | 1 | Guthier,O | A |
| 26.140 | 810857 | 8.1 | S | SAO | | | | | 0.31 | N | 5 | 62 | | | | Giampaolo,G | |
| 26.151 | 810858 | 10.3 | M | AAVSO | 2 | 3 | | | 0.063 | R | 13.5 | 52 | | | | Kosa-Kiss,A | |
| 26.17 | 810859 | 9.1 | S | | 6.2 | 5 | | | 0.080 | B | | 20 | 6.4 | Y | 2 | Zanotta,M.V | B |
| 26.18 | 810860 | 9.2 | B | U ORI | 4.0 | 4 | 0.03 | 284 | 0.400 | N | 5 | 81 | 6.5 | Y | 2 | Merlin,J.-C | |
| 26.18 | 810861 | 8.4 | S | Y TAU | 6 | 3 | | | 0.100 | N | 9 | 23 | 6.5 | Y | 1 | van de Weg,R.L.W | |
| 26.18 | 810862 | 8.8 | B | Y TAU | 6 | 3 | | | 0.100 | N | 9 | 23 | 6.5 | Y | 1 | van de Weg,R.L.W | |
| 26.19 | 810863 | 9.0 | | SAOC | 7 | 4 | 0.13 | 260 | 0.355 | SC | 11 | 200 | | | 1 | Verdenet,M | |
| 26.28 | 810864 | 8.2 | M | Y TAU | 4.0 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | C |
| 26.28 | 810865 | 8.3 | S | Y TAU | 4.0 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | C |
| 26.333 | 810866 | 9.7 | S | Y TAU | 1.6 | 6 | | | 0.30 | R | 15 | 225 | 5.0M | Y | 2 | Franch,J | D |
| 26.372 | 810867 | 9.5 | M | SU TAU | 1.2 | 4 | | | 0.254 | N | 4.5 | 46 | 5.0 | Y | 3 | DeYoung,J.A | |
| 26.38 | 810868 | 8.8 | S | Y TAU | 2.5 | 6 | | | 0.203 | N | 6 | 116 | | | | Green,D.W.E | C |
| 26.41 | 810869 | 8.5 | S | Y TAU | 8 | 6 | | | 0.203 | N | 6 | 38 | | | | Green,D.W.E | C |
| 26.41 | 810870 | 8.9 | S | SU TAU | 3.2 | 6 | | | 0.317 | N | 6 | 68 | | | | Bortle,J.E | E |
| 26.416 | 810871 | 9.7 | S | Y TAURI | 2.3 | 1 | | | 0.25 | N | 5.6 | 56 | 6 M | Y | 1 | Jordan,J | F |
| 26.52 | 810872 | 8.7 | S | Y TAU | 8 | | | | 0.080 | B | | 20 | 6.0 | Y | 6 | Morris,C.S | |
| 26.52 | 810873 | 8.8 | S | NPS | | | | | 0.080 | B | | 20 | 6.0 | Y | 6 | Morris,C.S | |
| 26.5424 | 810874 | 9.8 | S | U ORI | 4.0 | 7 | | | 0.254 | N | 3.8 | 64 | 6.2 | | 1 | Machholz,D | |
| 26.82 | 810875 | 9.6 | M | 59 | 4.1 | 5 | | | 0.150 | N | 6 | 51 | 4.5C | Y | 1 | Watanabe,N | |
| 26.83 | 810876 | 8.9 | S | 59 | 3 | 4 | | | 0.15 | N | 5.3 | 32 | 5.5 | Y | 1 | Oka,A | |

NOTE A Inner coma 40 arc sec.
NOTE B The comet was visible in a 9x60 finder scope. With my 30.5 cm f/5 Newtonian at 60x I saw a strong central condensation (diameter 0.7') and a star-like nuclear region (magnitude = 12.0). Probable coma extension on PA = 98 deg.
NOTE C Coma diameter approximate.
NOTE D Strong moonlight.
NOTE E Cond. mag. 11.1.
NOTE F Comet seen under excellent skies, although moonlight was troublesome at beginning of observation. Coma still circular with slight degree of condensation surrounding nucleus.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.188 | 830119 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | A |
| 26.193 | 830120 | 0.09 | 0.40 | N | 5 | 81,254 | 15 | 6.5 | 2 | Merlin,J.-C | B |
| 26.392 | 830121 | | 0.44 | N | 4.5 | 150,222,444 | 70 | 4.5 | 1 | Falvo,S.A | |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Jet at PA 75, then curved toward PA 125; jet at PA 125; jet at PA 159. Tail at PA 259, PA given = axis of parabolic hood nearly tailward. Tail at PA 284, straight, narrow and bright. Denser area continuing jets #1-2-3, to south-east. Quasi stellar center.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.277 | 850080 | 2.000 | 10 | 0.203 | 1.0 x 0.7 | 3.00 | Kodak Tri-X | | N | | 91/P | | Gianforte,J.S | A |
| 26.296 | 850081 | 2.000 | 10 | 0.203 | 1.0 x 0.7 | 9.00 | Kodak Tri-X | | N | | 94/P | | Gianforte,J.S | B |
| 26.380 | 850082 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | S | 6/P | 1 | Dilsizian,R | |

NOTE A (Observer's image identifier is 99-1. Ed.) (Observer listed emulsion speed as ASA 800. Ed.)
NOTE B (Observer's image identifier is 99-4. Ed.) (Observer listed emulsion speed as ASA 800. Ed.)

DATE: 27 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.135 | 810877 | 8.6 | S | SAO | | | | | 0.31 | N | 5 | 62 | | | | Giampaolo,G | |
| 27.18 | 810878 | 9.0 | S | | 6.3 | 3 | | | 0.080 | B | | 20 | 6.4 | Y | 2 | Zanotta,M.V | A |
| 27.37 | 810879 | 8.2 | M | Y TAU | 4 | 7 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | B |
| 27.37 | 810880 | 8.4 | S | Y TAU | 4 | 7 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | B |
| 27.446 | 810881 | 11.6 | S | 59,Y TAU | 0.1 | 1 | | | 0.15 | N | 8 | 100 | 5.0MZ | Y | 1 | Donth,D | |
| 27.619 | 810882 | 10.2 | M | | 1 | | | | 0.10 | N | 10 | 111 | 4.5M | Y | 1 | Kato,T | C |
| 27.67 | 810883 | 10.3 | S | Y TAU | 2 | | | | 0.317 | N | 5 | 86 | 4.3 | Y | | Jones,A | |

NOTE A Diffuse moonlight.
NOTE B Coma diameter approximate.
NOTE C Condensation mag. = 12.5.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.456 | 830122 | 0.2 | 0.15 | N | 8 | 100 | 30 | 5.0 | 1 | Donth,D | A |

NOTE A The comet appeared as a small circular hazy patch approximately 12 arc seconds in diameter and it appeared to be fainter than the 11.1 mag. star located a few arc seconds west of it. I could not detect any indication of a tail or nucleus and I would estimate the degree of coma condensation to be "0". As noted, however, the moon and morning twilight did interfere with this observation.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.418 | 850083 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | S | 7/P | 1 | Dilsizian,R |

DATE: 28 OCT 1985

DATE: 28 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.36 | 810884 | 8.2 | M | Y TAU | 4 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 28.36 | 810885 | 8.2 | S | Y TAU | 4 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 28.73 | 810886 | 9.7 | S | | 3.1 | 4 | | | 0.16 | N | 6.3 | 31 | 5.5 | Y | 1 | Mitsuma,S | B |
| 28.73 | 810887 | 8.9 | M | 59 | 2.6 | 5 | | | 0.150 | N | 6 | 51 | 6.5 | Y | 2 | Watanabe,N | |
| 28.740 | 810888 | 10.4 | M | 59 | 2.0 | 6 | | | 0.1 | N | 10 | 56 | 5.5 | Y | 1 | Ichikawa,K | |
| 28.74 | 810889 | 10.3 | M | | 2.0 | 4 | | | 0.16 | N | 6.3 | 80 | 5.5 | Y | 1 | Mitsuma,S | C |
| 28.75 | 810890 | 8.6 | S | Y TAU | 5 | 7 | | | 0.20 | N | 6.3 | 50 | 6.0T | Y | 1 | Lovejoy,T | D |
| 28.75 | 810891 | 8.2 | S | 59 | | | | | 0.08 | B | | 15 | 6 | Y | 1 | Seargent,D | E |
| 28.75 | 810892 | 9 | | | 2 | 3 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Speil,J | |
| 28.77 | 810893 | 9.3 | S | | 2.9 | 6 | | | 0.26 | N | 5 | 53 | 5.5 | Y | 1 | Kanai,K | |
| 28.78 | 810894 | 10.6 | S | AAVSO | 3 | 4 | | | 0.13 | N | 6.3 | 44 | 5.5M | Y | 1 | Hayashi,A | |
| 28.78 | 810895 | 9.3: | B | AAVSO | 3 | | | | 0.12 | R | 5 | 35 | | | | Chernis,K | A |

NOTE A Coma diameter approximate.
NOTE B A total eclipse of the moon.
NOTE C A total eclipse of the moon. Tail not seen.
NOTE D Coma diameter is lower limit. During lunar eclipse.
NOTE E Lunar eclipse. (PA value may have been incorrectly determined. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.415 | 830123 | | 0.44 | N | 4.5 | 75,222 | 45 | 4.2 | 1 | Falvo,S.A | A |

NOTE A Faint star seen shining through edge of coma.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.706 | 850084 | 0.850 | 3.4 | 0.25 | 2.4 x 1.6 | 10.00 | Kodak 6415 | | Y | C | 2/P | 1 | Kojima,T | A |
| 28.766 | 850085 | 0.300 | 1.5 | | 6.9 x 4.6 | 10.00 | Kodak 2415 | | Y | S | 1/P | 2 | Nassr,J.L | B |

NOTE A Instrument is Wright-Schmidt. Large format (120 size) film used.
NOTE B Conjunction of comet with M1 nebula photographed during a total eclipse visible from the Philippines.

DATE: 29 OCT 1985

DATE: 29 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | m1 | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.30 | 810896 | 9.8: | M | Y TAU | 2 | 3 | | | 0.32 | N | 4 | 40 | 3.0 | Y | 1 | Keen,R | A |
| 29.354 | 810897 | 9.2 | M | AAVSO | 93 | | | | 0.23 | R | 12 | 120 | | | | O'Meara,S.J | B |
| 29.38 | 810898 | 8.4 | M | Y TAU | 3 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | C |
| 29.38 | 810899 | 8.6 | M | Y TAU | 2 | 6 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | C |
| 29.38 | 810900 | 8.6 | S | Y TAU | 3 | 6 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | C |
| 29.38 | 810901 | 8.8 | S | Y TAU | 2 | 6 | | | 0.229 | R | 12 | 261 | | | | Green,D.W.E | C |
| 29.43 | 810902 | 7.8 | S | Y TAU | 5 | 3 | | | 0.080 | B | | 20 | | | | Green,D.W.E | C |

NOTE A Bright moon and cirrus clouds.
NOTE B Nuclear mag. 14.8.
NOTE C Coma diameter approximate.

DATE: 30 OCT 1985

DATE: 30 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.05 | 810903 | 8.3 | B | AAVSO | 10 | | | | 0.25 | R | 17 | 300 | | | | Churyumov,K | A |
| 30.17 | 810904 | 8.1 | S | Y TAU | 3 | 5 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 30.568 | 810905 | 9.8 | M | | 1 | 6 | | | 0.20 | SC | 10 | 100 | 5.0M | Y | 1 | Kato,T | |

NOTE A Coma diameter approximate.

DATE: 30 OCT 1985

DATE: 30 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.05 | 810903 | 8.3 | B | AAVSO | 10 | | | | 0.25 | R | 17 | 300 | | | | Churyumov,K | A |
| 30.17 | 810904 | 8.1 | S | Y TAU | 3 | 5 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 30.568 | 810905 | 9.8 | M | | 1 | 6 | | | 0.20 | SC | 10 | 100 | 5.0M | Y | 1 | Kato,T | |

NOTE A Coma diameter approximate.

DATE: 31 OCT 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

DATE: 31 OCT 1985

| Date(UT) | AON# | ml | | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.153 | 810906 | 11 | : | S | | 0.7 | 2 | | | 0.15 | N | 8 | 96 | 5.0 | Y | 1 | Bottger,B |

DATE: 1 NOV 1985

DATE: 1 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.20 | 810907 | 8.8: | S | Y TAU | 3 | 2 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 1.583 | 810908 | 10 | S | | | | | | 0.20 | SC | 10 | 160 | M | Y | 1 | Kato,T | B |

NOTE A Coma diameter approximate.
NOTE B Moon approaches. Faintest star by 20 cm = 11.0.

DATE: 2 NOV 1985

DATE: 2 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | m1 | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.22 | 810909 | 8.4: | M | Y TAU | | | | | | 0.20 | N | 6 | 61 | 5 M | Y | 2 | Hale,A | A |
| 2.22 | 810910 | 8.5: | S | SAO | | | 3 | | | 0.080 | B | | 20 | 3.0M | Y | 13 | Morris,C.S | B |
| 2.235 | 810911 | | | 59 | 1 | | 3 | | | 0.279 | SC | 10 | 166 | 4 | Y | 1 | Kemble,L.J | C |
| 2.2944 | 810912 | 9.3 | S | AA | 2.5 | | 4 | | | 0.152 | N | 8.0 | 76 | 5.0 | | 3 | Machholz,D | D |
| 2.390 | 810913 | 8.9 | S | SU TAU | 3.5 | | | | | 0.15 | R | 5 | 62 | 5.0M | N | 3 | Morrison,W | E |
| 2.517 | 810914 | 8.9 | | 59 | 3.0 | | 5 | | | 0.150 | B | | 25 | 3.0 | Y | 1 | Nakamura,Y | F |
| 2.545 | 810915 | 9.8 | M | 59 | 2.3 | | 4 | | | 0.16 | N | 6.3 | 31 | 4 M | Y | 1 | Mitsuma,S | |
| 2.55 | 810916 | 10.0 | M | 59 | 2.1 | | 5 | | | 0.16 | N | 6.3 | 80 | 4 M | Y | 1 | Mitsuma,S | |
| 2.59 | 810917 | 9.3 | B | | 6.0 | | 6 | | | 0.15 | N | 8 | 43 | 5.0 | N | 1 | Uda,K | |
| 2.619 | 810918 | 10.2 | M | RR TAU | 3.2 | 2.5 | 6 | | | 0.1 | N | 10 | 56 | 5.5 | Y | 1 | Ichikawa,K | G |
| 2.644 | 810919 | 8.3 | M | | 2 | | 5 | | | 0.20 | SC | 10 | 100 | 5.0M | Y | 1 | Kato,T | |
| 2.72 | 810920 | 9.6 | S | 58 | 2.0 | | 6 | | | 0.26 | N | 5 | 53 | 4.5M | Y | 1 | Kanai,K | |
| 2.750 | 810921 | 8.0 | M | | | | | | | 0.10 | N | 10 | 55 | 5.0M | Y | 1 | Kato,T | |
| 2.767 | 810922 | 4.9 | M | 59 | 25 | | 4 | | | 0.05 | B | | 20 | | Y | 4 | Gallego,J | H |
| 2.825 | 810923 | 7.9 | S | 59 | 4.0 | | 5 | | | 0.08 | B | | 15 | 4.2M | Y | 3 | Haver,R | |
| 2.89 | 810924 | 8.0 | | SAOC | 4 | | 4 | | | 0.355 | SC | 11 | 200 | | | 1 | Verdenet,M | I |
| 2.915 | 810925 | 8.7 | S | SAO | | | | | | 0.31 | N | 5 | 62 | | | | Giampaolo,G | |
| 2.915 | 810926 | 8.8 | S | 58 | 3 | | 4 | | | 0.152 | N | 5 | 44 | 4.3 | N | 2 | Moeller,M | J |
| 2.958 | 810927 | 8.0 | B | 59 | 3 | | 5 | | | 0.20 | SC | 10 | 117 | 5.5 | Y | 1 | Ward,A | K |
| 2.962 | 810928 | 8.7 | S | Y TAU | 2.8 | | 5 | | | 0.26 | N | 6 | 55 | 4.0M | Y | 1 | Hurst,G.M | |

NOTE A Comet only 4 deg. from waning gibbous moon which rendered observation difficult. Magnitude estimate suspect.
NOTE B Comet very near nearly full moon.
NOTE C My 13th observation. Notable in that the moon was only about 7 deg. away. Could not see M1 on previous night but did see Halley. Mag. estimation impossible. Comets Hartley-Good and Thiele seen in same half-hour.
NOTE D 83% moon 9 degrees away.
NOTE E Moon 13 deg. away.
NOTE F Moonlight.
NOTE G CQ Tau also used for comparison stars.
NOTE H Light pollution.
NOTE I Near moon.
NOTE J Moon.
NOTE K Moon made magnitude estimate difficult.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.767 | 830124 | | 0.050 | B | | 20 | | | 4 | Gallego,J | A |
| 2.885 | 830125 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | B |
| 2.974 | 830126 | 0.66 | 0.26 | N | 6 | 55 | 45 | 4.0 | 1 | Hurst,G.M | C |

NOTE A Like a globular cluster. Very condensed. (Duration not indicated. Time of observation is assumed to be end time. Ed.)
NOTE B Near moon. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Moon close to field but comet still easy to d.v. in telescope as a well condensed, circular object. Hint of structure in coma but too difficult at high powers to draw due to moonlight.

DATE: 3 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.00 | 810929 | 7.8 | S | U ORI | 5.6 | | 4 | | | 0.080 | B | | 20 | 5.0M | N | 1 | Schmeer,P | |
| 3.01 | 810930 | 8.6 | M | U ORI | 2.5 | | 6 | | | 0.203 | SC | 10 | 80 | 6.0 | Y | 1 | Granslo,B.H | |
| 3.010 | 810931 | 8.0 | B | 59 | 3 | | 5 | | | 0.20 | SC | 10 | 117 | 5.5 | Y | 1 | Ward,A | A |
| 3.049 | 810932 | 10.2 | S | 59SUTAU | 1.6 | | 3 | | | 0.21 | N | 5.0 | 66 | 5.4CM | Y | 1 | Taylor,M.D | B |
| 3.130 | 810933 | | | 59 | 4 | | 5 | | | 0.203 | R | 13 | 85 | 3.0 | Y | 1 | Fox,J.H | C |
| 3.22 | 810934 | 8.9 | B | 59 | 4.4 | | 6 | | | 0.154 | N | 8.0 | 68 | 5.0 | Y | | Kronk,G | |
| 3.3104 | 810935 | 9.1 | S | AA | 3 | | 4 | | | 0.152 | N | 8.0 | 76 | 5.0 | | 3 | Machholz,D | D |
| 3.36 | 810936 | 7.5 | S | Y TAU | 9 | | 3 | | | 0.080 | B | | 20 | 5.0M | Y | 5 | Morris,C.S | |
| 3.36 | 810937 | 7.6 | S | 59 | | | | | | 0.080 | B | | 20 | 5.0M | Y | 5 | Morris,C.S | |
| 3.403 | 810938 | 9.0 | M | 59 | 2.5 | | 6 | | | 0.33 | N | 4.5 | 70 | 6.0 | Y | 2 | Fabre,R | |
| 3.48 | 810939 | 8.3 | S | 59 | 5 | | 6 | | | 0.15 | N | 5.3 | 32 | 5.0C | Y | 1 | Oka,A | |
| 3.531 | 810940 | 8.4 | | 59 | 6.0 | | 5 | | | 0.150 | B | | 25 | 4.0 | Y | 1 | Nakamura,Y | E |
| 3.675 | 810941 | 10.0 | M | RR TAU | 3 | 2 | 6 | | | 0.1 | N | 10 | 56 | 5.5 | Y | 1 | Ichikawa,K | F |
| 3.71 | 810942 | 9.3 | M | 59 | 3.2 | | 3 | | | 0.16 | N | 6.3 | 31 | 5 M | Y | 1 | Mitsuma,S | |
| 3.715 | 810943 | 8.7 | B | 59 | 10 | | 3 | | | 0.25 | SC | 10 | 100 | 4.9 | Y | 3 | Bembrick,C | G |
| 3.72 | 810944 | 9.8 | M | 59 | 2.0 | | 4 | | | 0.16 | N | 6.3 | 80 | 5 M | Y | 1 | Mitsuma,S | |
| 3.806 | 810945 | 9.2 | B | 59 | 2.0 | | 3 | | | 0.165 | N | 8.7 | 57 | 6.0 | Y | 1 | Bohme,D | |
| 3.81 | 810946 | 10.0 | S | AAVSO | 2.5 | | 4 | | | 0.13 | N | 6.3 | 44 | 4.0M | Y | 1 | Hayashi,A | |
| 3.81 | 810947 | 7.7 | S | DCS 2B | 15 | | 4 | | | 0.060 | B | | 12 | 5.5 | Y | 3 | van de Weg,R.L.W | H |
| 3.82 | 810948 | 9 : | | 59 | 2 | | 3 | | | 0.200 | SC | 10 | 80 | 3.0 | Y | 1 | Kraling,W | H |
| 3.83 | 810949 | 8.7 | B | E | | | 4 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 3.844 | 810950 | 8.7 | B | | 4.0 | 2.0 | 5 | | | 0.063 | R | 13.3 | 44 | 6.0M | Y | 1 | Bartnik,M | |
| 3.85 | 810951 | 7.5 | | SAOC | 5 | | 5 | | | 0.355 | SC | 11 | 200 | | | 1 | Verdenet,M | |
| 3.855 | 810952 | 9.0 | | | 2 | | 5 | | | 0.130 | N | 8 | 40 | 4.0M | Y | 1 | Lieder,F | |
| 3.865 | 810953 | 9.0 | S | Y TAU | 13.0 | | 5 | | | 0.08 | B | | 30 | 5.4 | Y | 3 | Campos,J | I |
| 3.90 | 810954 | 8.2 | S | DCS 2B | | | 4 | | | 0.100 | B | | 14 | 5.5M | Y | 1 | van Loo,F.R | |
| 3.90 | 810955 | 8.5 | B | AAVSO | 10 | | 4 | | | 0.25 | R | 17 | 300 | | | | Churyumov,K | H |
| 3.903 | 810956 | 9.0 | S | 59 | 2.5 | | 1 | | | 0.09 | M | 11 | 56 | 4.0MC | Y | 1 | Westlund,M | |
| 3.906 | 810957 | 9.4: | | CD TAU | | | | | | 0.36 | SC | 11 | 156 | 4 | Y | | Korth,S | J |
| 3.92 | 810958 | 9 : | S | | | | | | | 0.20 | R | 12 | 40 | 5.0 | | 1 | Shanklin,J.D | K |
| 3.95 | 810959 | 8.5 | M | U ORI | 2.5 | | 6 | | | 0.203 | SC | 10 | 80 | 6.0 | Y | 1 | Granslo,B.H | |
| 3.96 | 810960 | 8.3 | B | AAVSO | | | | | | 0.25 | R | 17 | 300 | | | | Churyumov,K | |

NOTE A Moon made magnitude estimate difficult.
NOTE B Bright sky.
NOTE C Strong moonlight.
NOTE D 75% moon 27 degrees away.
NOTE E Moonlight.
NOTE F CQ Tau also used for comparison stars.
NOTE G Coma diameter uncertain.
NOTE H Coma diameter approximate.
NOTE I Round coma with central condensation.
NOTE J 13 mag. stellar object near center of condensation. Coma diameter 4-5 arc min.
NOTE K Cloud.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.130 | 830127 | 0.6 | 0.203 | R | 13 | 85 | 5 | 3.0 | 1 | Fox,J.H | A |
| 3.854 | 830128 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | B |
| 3.899 | 830129 | 1.6 | 0.090 | M | 11 | 56 | 10 | 4.0 | 1 | Westlund,M | C |

NOTE A Nucleus almost starlike. Coma difficult to discern due to strong moonlight.
NOTE B (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Backgound sky light: moon, city lights.

DATE: 4 NOV 1985

DATE: 4 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.00 | 810961 | 8.3 | S | 59 | 2 | | 6 | | | 0.203 | N | 6 | 38 | 4.9M | Y | 1 | Glowinski,C | |
| 4.042 | 810962 | | | | | | 6 | 0.03 | 30 | 0.200 | SC | 10 | 85 | 4 | Y | 1 | Gelinas,M.A | |
| 4.042 | 810963 | 6.3 | B | 54 | | | | | | 0.05 | B | | 10 | | | | Gelinas,M.A | |
| 4.13 | 810964 | 8.7 | B | 59 | 5.2 | | 7 | | | 0.335 | N | 4.5 | 56 | 5.0 | Y | | Kronk,G | |
| 4.16 | 810965 | 7.5 | | 59 | 13 | | 3 | | | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | A |
| 4.354 | 810966 | 8.6 | S | 59 | 2.5 | | 6 | | | 0.108 | N | 4 | 24 | 5.0M | Y | 2 | Franch,J | B |
| 4.55 | 810967 | 8.9 | M | 59 | 3 | | 4 | | | 0.31 | N | 5.7 | 55 | 4.0M | Y | 2 | Suzuki,K | C |
| 4.61 | 810968 | 8.8 | S | SU TAUE | 3 | | 5 | | | 0.20 | N | 6 | 60 | 6.3 | Y | 2 | Clark,M.L | |
| 4.635 | 810969 | 9.7 | M | RR TAU | 2.5 | | 5 | | | 0.1 | N | 10 | 56 | 5.5 | Y | 1 | Ichikawa,K | D |
| 4.64 | 810970 | 9.0 | S | Y TAU | 1.5 | | 5 | | | 0.317 | N | 5 | 86 | 4.6 | Y | | Jones,A | E |
| 4.785 | 810971 | 8.9: | B | 59 | 3.1 | | 4 | | | 0.10 | B | | 14 | 5.0 | Y | 2 | Hasubick,W | F |
| 4.788 | 810972 | 8.8 | S | 59 | 4.7 | | 6 | | | 0.080 | B | | 20 | 5.0 | Y | 2 | Koch,V | |
| 4.809 | 810973 | 8.9 | B | 59 | 2.2 | 1.8 | 5 | | | 0.165 | N | 8.7 | 57 | 6.5 | Y | 1 | Bohme,D | |
| 4.83 | 810974 | 8.5 | B | E | 4.0 | | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 4.83 | 810975 | 8.5 | B | E | | | | | | 0.05 | B | | 7 | | | | Poroshin,A | |
| 4.830 | 810976 | 8.2 | S | 59 | 6.5 | | 4 | | | 0.07 | B | | 20 | 5.5 | Y | 1 | Tanti,T | G |
| 4.835 | 810977 | 8.8 | | | | | 5 | | | 0.130 | N | 8 | 40 | 5.0 | Y | 1 | Lieder,F | H |
| 4.84 | 810978 | 9.0 | B | AAVSO | 2.0 | | 3 | | | 0.08 | R | | 8 | | | | Shirokov,A | |
| 4.844 | 810979 | 8.7 | B | | 4.0 | 2.0 | 5 | | | 0.063 | R | 13.3 | 44 | 6.0M | Y | 1 | Bartnik,M | |
| 4.851 | 810980 | 9.0 | M | Y TAU | | | 6 | | | 0.15 | N | 4 | 50 | 4.9 | Y | 1 | Fleet,R.W | I |
| 4.860 | 810981 | 7.8 | S | 59 | 8.5 | | 5 | | | 0.08 | B | | 15 | 6.0 | Y | 3 | Haver,R | J |
| 4.861 | 810982 | 9.0 | M | Y TAU | 1.8 | | | | | 0.08 | B | | 11 | 4.9 | Y | 1 | Fleet,R.W | K |
| 4.875 | 810983 | 8.8: | | | | | 3 | | | 0.10 | R | 10 | 25 | 4.5M | N | 1 | Paradowski,M | |
| 4.882 | 810984 | 8.8 | | 59 | 4 | | 4 | | | 0.254 | N | 7 | 116 | 5 | Y | 1 | Sternwarte Hof | |
| 4.89 | 810985 | 9.7 | B | AAVSO | | | | | | 0.25 | R | 17 | 300 | | | | Churyumov,K | |
| 4.897 | 810986 | 8.4 | S | SAO | | | | | | 0.31 | N | 5 | 62 | | | | Giampaolo,G | |
| 4.92 | 810987 | 9.7 | B | AAVSO | | | | | | 0.25 | R | 17 | 300 | | | | Churyumov,K | |
| 4.95 | 810988 | 9.0 | B | E | 2.5 | | | | | 0.07 | N | 8 | 33 | | | | Bezrodniy,A | |
| 4.96 | 810989 | 8.4 | B | E | 2.5 | | | | | 0.08 | R | | 29 | | | | Nesterov,Yu | |

NOTE A Modified Sidgwick method used.
NOTE B Strong moonlight & haze.
NOTE C Cloud.
NOTE D CQ Tau also used for comparison stars.
NOTE E Coma diameter approximate. Moon 21d., sky fair.
NOTE F Coma diameter approximate.
NOTE G Seeing good, transparency good/excellent. Low.
NOTE H Coma diameter 2-3 arc min.
NOTE I 4.5' coma, averted vision, between clouds.
NOTE J Tail fan-shaped (spanning?) 130 deg.-310 deg. Central condensation diameter approximately 1.0 arc min. (Translated by IHW staff. Ed.)
NOTE K 6' coma, averted vision.

DATE: 5 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.06 | 810990 | 8.6 | B | E | 2.5 | | | | 0.08 | R | | 29 | | | | Nesterov,Yu | |
| 5.063 | 810991 | 8.2 | S | AAVSO | 2 | 6 | | | 0.32 | N | 4.4 | 56 | 5.3 | Y | 1 | Ariail,R.B | |
| 5.094 | 810992 | 8.5 | M | 59 | 5 | 3 | | | 0.08 | B | | 10 | 5.8 | Y | 1 | McBain,J | |
| 5.108 | 810993 | 8.1 | S | AAVSO | 2 | 6 | | | 0.32 | N | 4.4 | 56 | 5.5 | Y | 1 | Ariail,R.B | |
| 5.15 | 810994 | 8.7 | B | 59 | 4.8 | 8 | | | 0.335 | N | 4.5 | 56 | 4.5 | Y | | Kronk,G | |
| 5.174 | 810995 | 8.6 | S | Y TAU | 3 | 6 | | | 0.203 | SC | 10 | 67 | 4.5 | Y | 1 | Jacobs,T | |
| 5.176 | 810996 | 7.8 | B | 59 | | 5 | | 120 | 0.203 | N | 6 | 75 | 5.7 | Y | 1 | Troiani,D.M | A |
| 5.191 | 810997 > | 8.4 | B | 59 | 6 | 6 | | | 0.203 | R | 13 | 85 | 4.6 | Y | 1 | Fox,J.H | B |
| 5.195 | 810998 | 8.6 | M | Y TAU | 6.9 | 7 | | | 0.15 | N | 8 | 30 | 5.5 | N | 1 | McBride,P | C |
| 5.22 | 810999 | 7.3 | M | Y TAU | 10 | 4 | 1.0 | 302 | 0.080 | B | | 20 | 6.0 | Y | 6 | Morris,C.S | D |
| 5.22 | 811000 | 7.4 | M | 59 | | | | | 0.080 | B | | 20 | 6.0 | Y | 6 | Morris,C.S | |
| 5.24 | 811001 | 7.6 | M | Y TAU | 8 | 7 | 0.33 | 125 | 0.256 | N | 4.5 | 45 | 6.0 | Y | 6 | Morris,C.S | E |
| 5.26 | 811002 | 8.6 | M | Y TAU | 2.5 | 8 | | | 0.256 | N | 4.5 | 156 | 6.0 | Y | 6 | Morris,C.S | |
| 5.292 | 811003 | 8.0 | S | 59 | 4.5 | 6 | | | 0.108 | N | 4 | 24 | 5.0M | Y | 2 | Franch,J | F |
| 5.51 | 811004 | 8.4 | S | 59 | 5 | 6 | | | 0.15 | N | 5.3 | 32 | 5.0C | Y | 1 | Oka,A | |
| 5.60 | 811005 | 8.1 | S | 58 | 2.2 | 5 | | | 0.317 | N | 5 | 86 | 4.9 | Y | | Jones,A | G |
| 5.67 | 811006 | 8.5 | B | E | 5.0 | 5 | | | 0.10 | R | | 15 | | | | Churyumov,K | |
| 5.75 | 811007 | 8.6 | S | 59 | 3.5 | 6 | | | 0.20 | N | 6 | 60 | 6.3 | Y | 2 | Clark,M.L | |
| 5.75 | 811008 | 8.5 | | | 2 | 1 | | | 0.08 | B | | 20 | 5.0 | Y | 1 | Speil,J | |
| 5.83 | 811009 | 8.0 | S | DCS 2B | 7 | 4 | | | 0.100 | B | | 14 | 5.5C | Y | 1 | van Loo,F.R | |
| 5.832 | 811010 | 8.3 | M | AAVSO | 7 | 6 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | H |
| 5.833 | 811011 | 8.4 | M | Y TAU | 3.8 | 6 | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | I |
| 5.85 | 811012 | 8.0 | S | DCS 2B | | 3 | | | 0.080 | B | | 15 | 5.5C | N | 1 | Scholten,A | |
| 5.85 | 811013 | 8.2 | B | DCS 2B | 8 | 7 | | | 0.115 | N | 8 | 45 | 6 | Y | 1 | van Munster,T | |
| 5.854 | 811014 | 9.5: | | | 7.5 | 3 | 0.5 | 270 | 0.13 | R | 10 | 50 | | Y | 1 | Morrisby,A | J |
| 5.857 | 811015 | 8.2 | S | Y TAU | 3.1 | | | | 0.26 | N | 6 | 55 | 5.0 | Y | 1 | Hurst,G.M | |
| 5.86 | 811016 | 7.4 | S | DCS 2B | 18 | 4 | 0.38 | 280 | 0.060 | B | | 12 | 6.4 | Y | 3 | van de Weg,R.L.W | |
| 5.86 | 811017 | 7.7 | B | DCS 2B | 18 | 4 | 0.38 | 280 | 0.060 | B | | 12 | 6.4 | Y | 3 | van de Weg,R.L.W | |
| 5.87 | 811018 | 9.0 | B | E | 10.0 | | | | 0.10 | N | 10 | 50 | | | | Zinvyev,V.A | |
| 5.872 | 811019 | 8.4 | M | Y TAU | 4.7 | 6 | | | 0.15 | N | 4 | 25 | 5.5 | Y | 1 | Fleet,R.W | K |
| 5.873 | 811020 | 8.3 | M | AAVSO | 7 | 6 | | | 0.063 | R | 13.3 | 52 | | | | Csukas,M | |
| 5.885 | 811021 | 7.8 | S | 58 | | | | | 0.050 | B | | 7 | | Y | 1 | Luthen,H | L |
| 5.885 | 811022 | | | | 5 | 6 | | | 0.203 | SC | 10 | 80 | | Y | | Luthen,H | |
| 5.887 | 811023 | 7.6 | S | Y TAU | 6.0 | 3 | | | 0.08 | B | | 15 | 5.0 | Y | 1 | Hurst,G.M | |
| 5.889 | 811024 | 8.4 | S | 59 | 7 | 7 | | | 0.04 | B | | 12 | 6.1 | Y | 1 | Henshaw,C | |
| 5.891 | 811025 | 8.2 | S | 58 | 4.5 | 6 | | | 0.152 | N | 5 | 44 | 5.8 | Y | 2 | Moeller,M | |
| 5.899 | 811026 | 8.0 | S | 59 | 7 | 4 | | | 0.07 | B | | 20 | 5 | Y | 1 | Tanti,T | M |
| 5.903 | 811027 | 8.8 | S | Y TAU | 10.0 | 6 | | | 0.13 | R | 4 | 21 | 5.6 | Y | 2 | Campos,J | N |
| 5.904 | 811028 | 7.4 | S | Y TAU | 6.0 | 3 | 0.33 | | 0.05 | B | | 10 | 5.5 | Y | 1 | Hurst,G.M | O |
| 5.910 | 811029 | 8.9 | S | VYTAU58 | 3 | 6 | | | 0.203 | SC | 10 | 80 | 5.1 | Y | 1 | Foulkes,M | |
| 5.917 | 811030 | 8.2 | S | 58 | 3 | 6 | | | 0.25 | N | 6 | 60 | 4.9 | Y | 1 | Gainsford,M.J | |
| 5.92 | 811031 | 8.7 | S | 59 | | | | | 0.050 | B | | 7 | 5.5 | Y | 1 | Spalding,G.H | |
| 5.931 | 811032 | 8.7 | S | Y TAU | 14.0 | 6 | | | 0.08 | B | | 30 | 5.6 | Y | 2 | Campos,J | P |
| 5.931 | 811033 | 8.3 | M | Y TAU | 2.8 | 6 | | | 0.15 | N | 4 | 50 | 5.8 | Y | 1 | Fleet,R.W | Q |
| 5.946 | 811034 | 7.5 | B | 59 | 4 | 6 | | | 0.20 | SC | 10 | 117 | 5 | Y | 1 | Ward,A | R |
| 5.95 | 811035 | 8.4 | | 59 | 3 | 6 | | | 0.08 | B | | 15 | 5.5MC | Y | 1 | Glowinski,C | S |
| 5.958 | 811036 | 7.2 | B | 59 | | 4 | | | 0.05 | B | | 10 | 5 | Y | 1 | Ward,A | |
| 5.96 | 811037 | | | 59 | 9 | 3 | | | 0.080 | B | | 20 | C | Y | 1 | Jannink,D.W | T |
| 5.962 | 811038 | 8.0 | B | 59 | 5 | 4 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | U |
| 5.97 | 811039 | 8.6 | S | 59 | | | | | 0.20 | R | 12 | 40 | 5.7 | | 1 | Shanklin,J.D | |
| 5.98 | 811040 | 8.2 | S | 59 | | | | | 0.08 | B | | 20 | 5.7 | | 1 | Shanklin,J.D | |
| 5.990 | 811041 | 9.3 | S | 59 | 2.0 | 5 | | | 0.21 | N | 5.0 | 43 | 5.5CM | Y | 1 | Taylor,M.D | |
| 5.993 | 811042 | 8.4 | S | 59 | 3.0 | 3 | | | 0.07 | B | | 16 | 5.5CM | Y | 1 | Taylor,M.D | |

NOTE A Tail length = 3". [sic]
NOTE B Ml plus SAO 076975 comparison star.
NOTE C Round.
NOTE D Straight and narrow tail.
NOTE E Tails were broad, diffuse and very faint. m2 = 8.6:.
NOTE F Strong moonlight.
NOTE G Gaps between clouds.
NOTE H (Observer calls coma diameter value halo diameter. Ed.)
NOTE I 9.5' coma, averted vision, between clouds.
NOTE J Central condensation seen with averted vision.
NOTE K 8.5' coma, averted vision.
NOTE L Also visible in 9x30.
NOTE M Seeing good, transparency good. Clouds.
NOTE N Round coma with central condensation.
NOTE O Tail length uncertain; PA 290-310? [sic]
NOTE P Fan shaped coma. No tail.
NOTE Q 7.5' coma, averted vision.
NOTE R Coma diameter is lower limit.
NOTE S (Observer indicated "K" [Keen?] method. Ed.)
NOTE T Telescopic limit is 11.
NOTE U (Observer gave limit as 12.5. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.028 | 830130 | | 0.210 | N | 5.7 | 40, 66,133 | 50 | 4.0 | 1 | Temprano,J | A |
| 5.182 | 830131 | | 0.152 | N | 4.5 | 18 | 11 | 5.7 | 5 | Troiani,D.M | |
| 5.191 | 830132 | 0.6 | 0.203 | R | 13 | 85 | 10 | 4.6 | 1 | Fox,J.H | B |
| 5.196 | 830133 | | 0.203 | N | 6 | 75 | 14 | 5.5 | 5 | Troiani,D.M | C |
| 5.231 | 830134 | 0.19 | 0.254 | N | 5.6 | 53, 60,120 | 5 | 5.2 | 1 | Knisely,D | D |
| 5.832 | 830135 | 0.89 | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | E |
| 5.873 | 830136 | | 0.063 | R | 13.3 | 52 | | | | Csukas,M | F |
| 5.895 | 830137 | 0.33 | 0.26 | N | 6 | 55 | 177 | 5.0 | 1 | Hurst,G.M | G |
| 5.911 | 830138 | | 0.356 | SC | 11 | 200 | 75 | | 1 | Verdenet,M | H |
| 5.922 | 830139 | 1.3 | 0.05 | B | | 10 | 99 | 5.0 | 1 | Hurst,G.M | I |

NOTE A Without tail. City lights interfered with the observation.
NOTE B V-shaped nucleus elongated E-W. Dark lane intermittently visible through nucleus.
NOTE C DC = 5.5. Tail PA = 120 deg. Tail was short (3-4") and was fan shape. There was a slight glow around the tail area.
NOTE D Last quarter moon rising. Visible in 7x35 binoculars. Slightly fainter than M32 but slightly larger. Central condensation is small and better defined than last month. City lights present.
NOTE E Schematic drawing. (Duration not indicated. Time of observation is assumed to be end time. Ed.)
NOTE F (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE G Inner condensed diameter estimate 1.0'. Star involved south edge. Central condensation offset to north.
NOTE H (Additional drawing supplied made using 11x80 binoculars. Ed.)

DATE: 5 NOV 1985

NOTE I Tail suspected. PA 310 edge brighter than PA 290 edge.

DATE: 5 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.00 | 811043 | 8.2 | B | E | 3.5 | | | | 0.08 | R | | 29 | | | | Nesterov,Yu | |
| 6.010 | 811044 | 7.5 | B | 59 | 4 | 6 | | | 0.20 | SC | 10 | 117 | 5 | Y | 1 | Ward,A | |
| 6.014 | 811045 | 7.8 | M | U ORI | 2 | 5 | | | 0.080 | B | | 20 | 6.5 | Y | 1 | Stott,D | |
| 6.062 | 811046 | 8.4 | B | 58 | | 3 | | | 0.05 | B | | 20 | 6.0 | Y | 3 | da Silva,L.A.L | |
| 6.11 | 811047 | 7.7 | S | BAA | | | | | 0.05 | B | | 7 | 5.5 | | 1 | Shanklin,J.D | |
| 6.132 | 811048 | 8.2 | B | SAO | 2.9 | 5 | | | 0.125 | R | 6 | 35 | 5.8 | Y | 1 | Guthier,O | |
| 6.15 | 811049 | 8.6 | B | 59 | 8 | 5 | | | 0.080 | B | | 20 | 5.0 | Y | | Kronk,G | |
| 6.170 | 811050 | 7.8 | S | 58 | 4.8 | 2 | | | 0.25 | N | 5.6 | 56 | 6 | Y | 1 | Jordan,J | A |
| 6.21 | 811051 | 7.2 | M | 59 | 11 | 4 | 0.25 | 150 | 0.080 | B | | 20 | 5.5 | Y | 6 | Morris,C.S | B |
| 6.219 | 811052 | 8.0 | M | Y TAU | 7.4 | 7 | | | 0.15 | N | 8 | 30 | 5.0 | Y | 1 | McBride,P | C |
| 6.23 | 811053 | 6.9 | S | 59 | 5 | 5 | | | 0.200 | SC | 10 | 64 | 5.0 | Y | 1 | Spratt,C.E | |
| 6.24 | 811054 | 6.7 | S | 59 | 11 | 4 | | | 0.080 | B | | 11 | 5.1 | Y | 1 | Spratt,C.E | D |
| 6.271 | 811055 | 8.0 | S | 58 | 15 | 0 | | | 0.08 | R | 6 | 20 | 4.6 | Y | 1 | Bracken,R | |
| 6.2757 | 811056 | 8.8 | S | SAO | 5 | 7 | | | 0.152 | N | 8.0 | 76 | 5.4 | | 3 | Machholz,D | |
| 6.28 | 811057 | 7.3 | M | Y TAU | | | | | 0.108 | N | 4 | 20 | 6.5 | Y | 2 | Hale,A | |
| 6.2847 | 811058 | 8.3 | S | SAO | 8 | 5 | | | 0.080 | B | | 20 | 5.4 | | 3 | Machholz,D | |
| 6.29 | 811059 | 7.1 | M | Y TAU | | | | | 0.05 | B | | 10 | 6.5 | Y | 2 | Hale,A | |
| 6.30 | 811060 | 7.4 | M | Y TAU | | | 0.25 | 90 | 0.20 | N | 6 | 61 | 6.5 | Y | 2 | Hale,A | E |
| 6.4306 | 811061 | 7.4 | M | 59 | 12 | 6 | | | 0.05 | B | | 7 | 6.0 | Y | 2 | Cook,A.J | F |
| 6.51 | 811062 | 8.8 | B | | 7.0 | 5 | | | 0.15 | N | 8 | 43 | 5.5 | N | 1 | Uda,K | |
| 6.74 | 811063 | 7.6 | B | M | 7.5 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 6.75 | 811064 | 8.1 | B | E | 3.0 | 4 | | | 0.08 | R | 10 | 28 | | | | Zagaynov,V.A | |
| 6.75 | 811065 | 8.7 | B | 58 | 3 | 2 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Speil,J | G |
| 6.77 | 811066 | 8.2 | B | E | 3.0 | 4 | | | 0.08 | R | 10 | 28 | | | | Zagaynov,V.A | |
| 6.78 | 811067 | 8.4 | B | E | 2.0 | 3 | | | 0.08 | R | 10 | 28 | | | | Zagaynov,V.A | |
| 6.781 | 811068 | 9.1 | M | CZ | 3 | 4 | | | 0.31 | N | 8 | 62 | 5.6 | Y | 1 | Hajek,P | |
| 6.823 | 811069 | 8.0 | B | 59 | | 3 | | | 0.08 | B | | 11 | 6.0 | Y | 1 | Gubo,H | |
| 6.83 | 811070 | 7.8 | B | 58 | 3 | 3 | | | 0.100 | B | | 14 | 4.5 | Y | 1 | Kraling,W | |
| 6.83 | 811071 | 7.5 | V | 58 | | | | | 0.056 | B | | 8 | 4.5 | Y | 1 | Kraling,W | |
| 6.851 | 811072 | 8.2 | M | Y TAU | 5.0 | 6 | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | H |
| 6.851 | 811073 | 8.1 | M | AAVSO | 7 | 6 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | I |
| 6.854 | 811074 | 8.5 | B | 58 | 5.4 | 6 | | | 0.140 | SN | 3.6 | 25 | 5.0 | Y | 1 | Linder,J | J |
| 6.858 | 811075 | 8.0 | B | 59 | 8.3 | 4 | | | 0.10 | B | | 14 | 6.0 | Y | 1 | Hasubick,W | |
| 6.86 | 811076 | 7.8 | B | 59 | 12.0 | 2 | | | 0.050 | B | | 7 | 6.5 | Y | 2 | Merlin,J.-C | |
| 6.86 | 811077 | 7.8 | B | 59 | 6.0 | 4 | 0.08 | | 0.150 | N | 5 | 25 | 6.5 | Y | 2 | Merlin,J.-C | |
| 6.861 | 811078 | 8.6 | M | Y TAU | 3.4 | 6 | | | 0.15 | N | 4 | 50 | 5.6 | Y | 1 | Fleet,R.W | K |
| 6.865 | 811079 | 8.0 | M | 58 | 12 | 3 | | | 0.08 | B | | 11 | 6.0 | Y | 1 | Gubo,H | |
| 6.868 | 811080 | 8.0 | B | 58 | 12.5 | 5 | | | 0.050 | B | | 7 | 5.0 | Y | 1 | Linder,J | L |
| 6.872 | 811081 | | | | 5.2 | 5 | | | 0.127 | SC | 10 | 60 | 6.0 | Y | 1 | Hasubick,W | |
| 6.880 | 811082 | 7.6 | S | 59 | 8.0 | 5 | | | 0.08 | B | | 15 | 5.9 | Y | 3 | Haver,R | M |
| 6.880 | 811083 | 9.7 | M | CZ | | | | | 0.10 | B | | 25 | 5.3C | Y | 1 | Valasek,V | N |
| 6.882 | 811084 | 9.0 | | | 2.5 | 5 | | | 0.350 | SC | 11 | 120 | 5.5C | N | 1 | Marx,H | O |
| 6.882 | 811085 | 8.3 | B | 58 | 3.6 | 5 | | | 0.113 | N | 8 | 22 | 5.5 | Y | 1 | Schambeck,C.M | |
| 6.889 | 811086 | 8.7 | M | Y TAU | 1.7 | 6 | | | 0.075 | R | 16 | 50 | 5.6 | Y | 1 | Fleet,R.W | P |
| 6.889 | 811087 | 9.8 | B | CZ | 7 | 4 | | | 0.16 | R | | 50 | 6.2 | Y | 1 | Silhan,J | |
| 6.89 | 811088 | 7.5 | M | AA | 6 | 5 | | | 0.106 | R | 5.7 | 24 | | | | Keszthelyi,S | Q |
| 6.896 | 811089 | 8.5 | B | CZ | 15 | 3 | | | 0.080 | B | | 10 | 6.0 | Y | 1 | Bilek,V | |
| 6.90 | 811090 | 8.3 | M | 58 | 2.4 | 5 | | | 0.15 | N | 8 | 30 | 4.5 | Y | 1 | Bottger,B | |
| 6.910 | 811091 | 9.1 | M | Y TAU | 2.8 | 6 | | | 0.22 | N | 8 | 90 | 5.6 | Y | 1 | Fleet,R.W | P |
| 6.913 | 811092 | 7.6: | S | Y TAU | 13.5 | 4 | | | 0.08 | B | | 15 | 4.5 | Y | 1 | Hurst,G.M | R |
| 6.917 | 811093 | 9.0 | B | CZ | | | | | 0.06 | R | 5 | 15 | 6.0 | | 1 | Vaclik,F | S |
| 6.920 | 811094 | 10.1 | M | Y TAU | 2.8 | 6 | | | 0.35 | N | 5.5 | 100 | 5.6 | Y | 1 | Fleet,R.W | P |
| 6.924 | 811095 | 8.3 | B | 59 | 7.1 | 6 | | | 0.080 | B | | 20 | 6.0 | Y | 1 | Koch,B.O | |
| 6.924 | 811096 | 8.2 | B | SAO | 2.9 | 6 | | | 0.250 | N | 6 | 75 | 5.5 | Y | 1 | Guthier,O | T |
| 6.924 | 811097 | 8.8 | S | 58 | 2 | 6 | | | 0.20 | N | 5 | 33 | 6.0 | Y | 1 | Vanin,G | |
| 6.926 | 811098 | 8.0 | M | 58 | 11 | 6 | | | 0.04 | B | | 12 | 6.1 | Y | 1 | Henshaw,C | |
| 6.927 | 811099 | 8.0 | S | 59 | 16.1 | 6 | | | 0.080 | B | | 20 | 6.0 | Y | 1 | Koch,V | |
| 6.927 | 811100 | 8.1 | S | | 3 | 6 | | | 0.114 | N | 8.7 | 38 | 5.2 | Y | 1 | Nolle,M | |
| 6.936 | 811101 | 8.0 | B | 58 | 5 | 4 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | U |
| 6.94 | 811102 | 8.7 | B | 58 | 13 | 3 | | | 0.080 | B | | 20 | C | Y | 1 | Jannink,D.W | V |
| 6.951 | 811103 | 8.4 | S | 59 | | | | | 0.050 | B | | 7 | 6.0 | N | 1 | Lunde,R | |
| 6.973 | 811104 | 7.6 | S | Y TAU | 18 | 4 | | | 0.08 | B | | 15 | 5.0 | Y | 1 | Hurst,G.M | R |
| 6.975 | 811105 | 7.3 | S | Y TAU | 13.5 | 4 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Hurst,G.M | R |
| 6.997 | 811106 | 7.7: | M | 58 | 8.5 | 5 | | | 0.080 | B | | 11 | 5 | Y | 1 | Rossi,L | W |

NOTE A Comet observed under partly cloudy skies this evening, thus making observations difficult.
NOTE B Tails were broad, diffuse and very faint. The straight and narrow tail of Nov. 5.22 was also suspected. Southwest tail was brighter than southeast tail.
NOTE C Thin haze.
NOTE D Diffuse oval-shaped. Hint of tail at perhaps PA 260 deg.
NOTE E Use of Swan Band comet filter accentuated the tail at PA 135 deg. but rendered the other tail almost invisible.
NOTE F Moon 1 day past L.Q. 30 deg. up.
NOTE G Auroras.
NOTE H 10' coma, averted vision.
NOTE I (Observer calls coma diameter value halo diameter. Ed.).
NOTE J Light haze.
NOTE K 5.1' coma, averted vision.
NOTE L Coma-halo.
NOTE M Tail fan-shaped. Central condensation diameter approximately 1 arc min. (Translated by IHW staff. Ed.)
NOTE N Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE O Comparison star SAO 76842. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE P 4.5' coma, averted vision.
NOTE Q + 7x50 B and 10x50 B. [sic]
NOTE R Passing cloud.
NOTE S Probably well adapted, not dark adapted, of course - there is no dark sky in Czechoslovakia.
NOTE T Coma eccentric.
NOTE U (Observer gave limit as 12.5. Ed.)
NOTE V Telescopic limit is 10.
NOTE W Slight haze.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.005 | 830140 | 0.79 | 0.050 | B | | 12 | 6 | 5.0 | 1 | Donatiello,G | |
| 6.007 | 830141 | 0.13 | 0.298 | N | 5 | 65,179 | 10 | 6.5 | 1 | Stott,D | A |
| 6.026 | 830142 | 0.33 | 0.067 | R | 13.3 | 35,133 | 14 | 5.0 | 1 | Donatiello,G | |
| 6.432 | 830143 | 3 | 0.050 | B | | 7 | 5 | 6.0 | 2 | Cook,A.J | B |
| 6.896 | 830144 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | C |
| 6.910 | 830145 | 1 | 0.106 | R | 5.7 | 24 | 60 | | 1 | Keszthelyi,S | |
| 6.965 | 830146 | 0.05 | 0.83 | R | 19.7 | 800 | 10 | 5.5 | 3 | Soc. Astro. de France | D |

DATE: 6 NOV 1985

DATE: 6 NOV 1985

NOTE A DOC = 5. [sic] Circular coma. No tail seen.
NOTE B Last quarter moon 30 deg. high.
NOTE C (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Jet at PA 105, 12" long; streamer at PA 165, 24" long; streamer at PA 225, 33" long; streamer at PA 300, 27" long; jet at PA 350, 10" long. Drawing made by Alain Perez.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.043 | 850086 | 0.500 | 5.6 | | 4.1 x 2.7 | 6.83 | Ilford XP1 | | N | X | 1/P | 1 | Ward,A | A |
| 6.051 | 850087 | 0.500 | 5.6 | | 4.1 x 2.7 | 5.17 | Ilford XP1 | | N | X | 2/P | 1 | Ward,A | A |
| 6.260 | 850088 | 2.54 | 8 | 0.318 | 0.8 x 0.5 | 30.00 | Kodak 098-04 | | N | O | 00/P | 1 | Lilge,A | |
| 6.975 | 850089 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 11.00 | Kodak 2415 | | Y | | 2/P | 1 | Conrad,R | B |
| 6.995 | 850090 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 8.00 | Agfachr. Pro 1000/ | | N | | 17/P | 1 | Conrad,R | C |

NOTE A Cloud interfered. Processed for 1600 ASA. UV filter used.
NOTE B City lights interfered with the observation; Vienna, from room!
NOTE C City lights interfered with the observation; Vienna, from the room! Film "pushed" to 4000 ISO/37 DIN.

DATE: 7 NOV 1985

DATE: 7 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.007 | 811107 | 9.5 | B | CZ | 5 | 6 | | | 0.16 | R | | 50 | 5.9M | Y | 1 | Silhan,J | |
| 7.010 | 811108 | 7.2 | S | 58 | 11.3 | 4 | | | 0.050 | B | | 7 | 5.8 | Y | 1 | Rossi,L | |
| 7.014 | 811109 | | S | 58 | 2.3 | 6 | | | 0.25 | N | 6 | 60 | 5 | N | 1 | Gainsford,M.J | A |
| 7.042 | 811110 | 8.5: | B | AAVSO | 4 | 3 | | | 0.115 | N | 8 | 30 | 4.5 | Y | 1 | Alves,A.A | B |
| 7.063 | 811111 | 8.0 | M | 58 | | | | | 0.06 | R | 4.5 | 10 | 4.6M | Y | 1 | Chodorowski,F | |
| 7.076 | 811112 | | | | 5 | 1 | | | 0.06 | R | 4.5 | 50 | | Y | 1 | Chodorowski,F | |
| 7.119 | 811113 | 8.9 | B | 58 | 12 | 6 | | | 0.152 | N | 8 | 60 | 5.5 | Y | 1 | Stephan,C | |
| 7.132 | 811114 | 8.0 | M | 58 | 3.2 | 5 | | | 0.203 | N | 8 | 128 | 5.5 | Y | | Hannon,J | |
| 7.18 | 811115 | | | | 10 | 5 | 0.4 | 125 | 0.080 | B | | 20 | | | | Bortle,J.E | C |
| 7.18 | 811116 | 7.1 | S | USNOC | 12 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 7.18 | 811117 | | | | 7.5 | 6 | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | |
| 7.20 | 811118 | 6.4 | S | 59 | 12 | 5 | | | 0.080 | B | | 11 | 5.1 | Y | 1 | Spratt,C.E | |
| 7.204 | 811119 | 7.6 | B | 58 | 4 | 5 | | | 0.06 | R | | 35 | 5 | Y | 1 | Ward,A | |
| 7.21 | 811120 | 6.6 | S | 58, 59 | 9 | 4 | | | 0.140 | SN | 3.6 | 28 | 5.2 | Y | 1 | Spratt,C.E | D |
| 7.215 | 811121 | 8.4 | M | 58 | 3.8 | 5 | | | 0.254 | N | 4.5 | 46 | 4.5 | Y | 3 | DeYoung,J.A | |
| 7.22 | 811122 | 7.1 | M | 59 | 15 | 4 | | | 0.080 | B | | 20 | 6.0 | Y | 6 | Morris,C.S | |
| 7.24 | 811123 | | | | | | 0.20 | 160 | 0.256 | N | 4.5 | 67 | 6.0 | Y | 6 | Morris,C.S | E |
| 7.271 | 811124 | 8.5 | B | 59, 58 | | 2 | | | 0.050 | B | | 10 | 5.5C | Y | 1 | Stapleton,J | F |
| 7.29 | 811125 | 7.2 | | 59 | 13 | 3 | | | 0.040 | B | | 8 | 7.0 | Y | 1 | Keen,R | G |
| 7.292 | 811126 | 7.9 | S | 58 | 15 | 0 | | | 0.08 | R | 6 | 20 | 4.6 | Y | 1 | Bracken,R | |
| 7.336 | 811127 | 8.5 | | 58 | | 5 | | | 0.279 | SC | 10 | 166 | | Y | 1 | Kemble,L.J | H |
| 7.38 | 811128 | | | 59 | 1.3 | 3 | | | 0.203 | SC | 10 | 51 | 6.0 | Y | 1 | Sanchez,A | |
| 7.396 | 811129 | 8.5 | M | 58 | 3.5 | 6 | 0.03 | 280 | 0.33 | N | 4.5 | 70 | 6.0 | Y | 2 | Fabre,R | I |
| 7.4083 | 811130 | 8.5 | S | SAO | 9 | 8 | | | 0.254 | N | 3.8 | 32 | 5.7 | | 1 | Machholz,D | J |
| 7.41 | 811131 | > 6.5 | V | UMI | | | | | | EY | | | | Y | 14 | Edberg,S.J | K |
| 7.50 | 811132 | 8.8 | B | | 7 | 5 | | | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 7.542 | 811133 | 7.3 | M | | 3 | 6 | | | 0.070 | B | | 10 | 5.0C | Y | 1 | Kato,T | |
| 7.590 | 811134 | 8.8 | B | 58 | | | | | 0.07 | B | | 10 | 5.5 | Y | 1 | Date,M | |
| 7.62 | 811135 | 8.0 | S | 58 | | | | | 0.045 | R | 6 | 13 | 5.1 | Y | | Jones,A | |
| 7.62 | 811136 | 8.2 | S | AA | | | | | 0.078 | R | 7.5 | 30 | | Y | | Jones,A | |
| 7.62 | 811137 | 7.9 | S | V TAU | | | | | 0.045 | R | 6 | 13 | | Y | | Jones,A | |
| 7.63 | 811138 | 8.0 | S | V TAU | 3.5 | 7 | | | 0.078 | R | 7.5 | 30 | | | | Jones,A | |
| 7.66 | 811139 | 8.7 | B | AAVSO | 7 | 6 | | | 0.20 | N | 5.6 | 44 | 4.5 | Y | 2 | Nakamura,A | |
| 7.71 | 811140 | 8.7 | B | 58 | 15 | 8 | | | 0.16 | N | 6.2 | 25 | 5.5 | Y | 4 | Makino,J | |
| 7.785 | 811141 | 8.8 | M | 58 | 4.0 | 6 | | | 0.16 | N | 6.3 | 31 | 5.5M | Y | 1 | Mitsuma,S | L |
| 7.815 | 811142 | 8.5 | M | 58 | | | | | 0.08 | B | | 11 | 5.5M | Y | 1 | Mitsuma,S | |
| 7.819 | 811143 | 8.0 | | 58 | 4.0 | 2 | | | 0.08 | B | | 15 | 4.5 | Y | 1 | Dietrich,M | M |
| 7.83 | 811144 | 9.2 | | VAS 131 | 0.6 | 3 | | | 0.205 | N | 6 | 80 | 5.0 | Y | 1 | Germann,R | |
| 7.837 | 811145 | 8.7 | B | 76806 | 2.5 | 3 | | | 0.24 | N | | 120 | 5.7 | Y | 1 | Eltri,M | N |
| 7.84 | 811146 | 8.4 | B | AAVSO | 5.0 | 4 | | | 0.10 | R | | 15 | | | | Churyumov,K | |
| 7.854 | 811147 | 7.4 | S | 58 | | | | | 0.030 | B | | 9 | | Y | 1 | Luthen,H | |
| 7.86 | 811148 | 8.4 | B | AAVSO | | | | | 0.10 | R | | 15 | | | | Churyumov,K | |
| 7.871 | 811149 | 8.7 | M | AAVSO | 7 | 6 | | | 0.063 | R | 13.3 | 52 | | | | Csukas,M | |
| 7.88 | 811150 | 7.0 | B | DCS 2B | | | | | 0.05 | B | | 10 | 6.5 | Y | 2 | Bouma,R.J | |
| 7.88 | 811151 | 6.5 | S | DCS 2B | 20 15 | 4 | | | 0.05 | B | | 10 | 6.5 | Y | 2 | Bouma,R.J | |
| 7.88 | 811152 | | | | | | 0.25 | 95 | 0.156 | N | 5 | 24 | 6.5 | Y | 2 | Bouma,R.J | O |
| 7.88 | 811153 | 8.2 | S | DCS 2B | | 5 | | | 0.145 | N | 8 | 30 | 5.5C | N | 1 | van der Laan,T.A | |
| 7.882 | 811154 | 8.4 | B | CZ | 15 | 3 | | | 0.080 | B | | 10 | 5.5 | N | 1 | Bilek,V | |
| 7.889 | 811155 | 8.7 | M | AAVSO | 6 | 6 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | P |
| 7.89 | 811156 | 7.1 | B | DCA 2B | | | | | 0.040 | B | | 7 | 6.5 | Y | 2 | Bus,E.P | |
| 7.89 | 811157 | 6.5: | S | DCS 2B | 20 | 3 | | | 0.018 | B | | 3 | 6.5 | Y | 2 | Bus,E.P | Q |
| 7.89 | 811158 | 6.7 | S | DCS 2B | 20 | 4 | | | 0.040 | B | | 4 | 6.5 | Y | 2 | Bus,E.P | R |
| 7.89 | 811159 | 8.3 | B | 58 | | | | | 0.050 | B | | 12 | 4.5 | Y | 1 | Mosch,J | |
| 7.892 | 811160 | 8.9 | M | CZ | 4 | 3 | | | 0.31 | N | 8 | 62 | 5.1 | Y | 1 | Hajek,P | |
| 7.895 | 811161 | 8.5 | | | | 5 | | | 0.130 | N | 8 | 40 | 5.5 | Y | 1 | Lieder,F | S |
| 7.90 | 811162 | 8.0: | B | BD | 2.0 | 4 | | | 0.07 | B | | 22 | | | | Kabalin,V | |
| 7.903 | 811163 | 8.1 | S | 58 | 4.5 | 6 | | | 0.152 | N | 5 | 44 | 5.9 | Y | 2 | Moeller,M | |
| 7.913 | 811164 | 8.7 | B | 58 | 2.5 | 5 | | | 0.15 | N | 6.6 | 33 | 4.6 | Y | 1 | Dal Santo,M | T |
| 7.92 | 811165 | 7.9 | S | DCS 2B | | 6 | | | 0.100 | B | | 14 | 6 | Y | 1 | van Loo,F.R | |
| 7.925 | 811166 | | | 58 | 3 | 4 | | | 0.15 | N | 8 | 56 | 5.0 | Y | 1 | Sardini,D | U |
| 7.9375 | 811167 | 7.8 | S | AAVSO | | 3 | | | 0.08 | B | | 20 | 5.5 | N | 1 | Sicoli,P | |
| 7.944 | 811168 | 7.5: | S | Y TAU | 13.5 | 4 | | | 0.08 | B | | 15 | 5.0 | Y | 1 | Hurst,G.M | V |
| 7.961 | 811169 | 8.6 | B | | 3 | 5 | | | 0.063 | R | 13 | 34 | 6.0 | Y | 1 | Zische,E | |
| 7.97 | 811170 | 7.9 | S | DCS 2B | 8 | 3 | | | 0.155 | N | 8 | 33 | 4.5C | N | 1 | Zanstra,W.T | |
| 7.979 | 811171 | | | | 1 | 3 | | | 0.20 | N | 4.7 | 104 | 4.5 | Y | 1 | Cappellari,M | |
| 7.98 | 811172 | 7.1 | S | DCS 2B | 15 | 6 | 0.30 | 100 | 0.100 | N | 9 | 23 | 6.5 | Y | 1 | van de Weg,R.L.W | W |
| 7.98 | 811173 | 7.9 | S | DCS 2B | 12 | 2 | | | 0.060 | R | | 12 | 4.5C | N | 1 | Zanstra,W.T | |
| 7.983 | 811174 | 7.2 | M | 58 | 9.1 | 6 | | | 0.050 | B | | 10 | 6.5 | Y | 1 | Rossi,L | |
| 7.99 | 811175 | 8.0 | S | DCS 2B | | 3 | | | 0.080 | B | | 15 | 6 C | Y | 1 | Scholten,A | |
| 7.99 | 811176 | 6.9 | S | DCS 2B | 25 15 | 5 | 0.42 | | 0.060 | B | | 12 | 6.5 | Y | 3 | van de Weg,R.L.W | X |
| 7.99 | 811177 | 7.2 | B | DCS 2B | 25 15 | 5 | 0.42 | 270 | 0.060 | B | | 12 | 6.5 | Y | 3 | van de Weg,R.L.W | |
| 7.990 | 811178 | 8.6 | S | 58 | 2 | 6 | | | 0.20 | N | 5 | 33 | 6.0 | Y | 1 | Vanin,G | |
| 7.993 | 811179 | | | 58 | 3.5 | 6 | | | 0.150 | R | 15 | 90 | 5.5C | Y | 1 | Richert,M | |
| 7.997 | 811180 | 8.8 | S | SAO | | | | | 0.31 | N | 5 | 62 | | | | Giampaolo,G | |

NOTE A Cloud.
NOTE B Coma diameter approximate. (Translated by IHW staff.)
NOTE C Too large for defocus of 20x80 binoculars.
NOTE D DC approximate.
NOTE E Tails remain stubby and faint. Southeast tail brighter than southwest tail.
NOTE F In Taurus.
NOTE G Modified Sidgwick method used.
NOTE H My 14th observation. Coma diameter 8'-10'. Limit = 13. Very easy in binoculars. Coma very large on av. vis. No elongation noted. Sky very light with ice crystalling. [sic]
NOTE I (PA value appears to be measured incorrectly. Ed.)
NOTE J 34% moon 90 degrees away.
NOTE K Stars in bowl of Ursa Minor used for comparison.
NOTE L Tail not seen.
NOTE M (Observer indicated "A" method [Argelander?]. Ed.)
NOTE N SAO 76806 used for magnitude comparison.
NOTE O PA approximate.
NOTE P (Observer calls coma diameter value halo diameter. Ed.)
NOTE Q Comet not visible to the naked eye. Coma diameter is lower limit.
NOTE R Coma diameter is lower limit.
NOTE S Coma diameter 2-3 arc min.
NOTE T Sky with haze.
NOTE U Nuclear magnitude 0.6'. [sic]
NOTE V Passing cloud.
NOTE W Coma diameter approximate. Observations are showing differences caused by the magnification effect.
NOTE X Observations are showing differences caused by the magnification effects. Tail PA 90-270.

DATE: 7 NOV 1985

DATE: 7 NOV 1985

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.136 | 830147 | 0.50 | 0.102 | R | 15 | 50 | 50 | 5.8 | 2 | Cuthill,D.D | A |
| 7.167 | 830148 | 0.5 | 0.102 | R | 15 | 63 | | 5.6 | 1 | Cuthill,L | B |
| 7.175 | 830149 | 0.33 | 0.20 | N | 8 | 70 | 53 | 5 | 1 | Vargas B.,A.G | C |
| 7.198 | 830150 | 0.25 | 0.200 | N | 8 | 120 | 10 | 5 | 1 | Vargas B.,A.G | C |
| 7.200 | 830151 | 0.19 | 0.254 | N | 5.6 | 53, 60,120 | 7 | 6.4 | 3 | Knisely,D | D |
| 7.871 | 830152 | | 0.063 | R | 13.3 | 52 | | | | Csukas,M | E |
| 7.93 | 830153 | 0.23 | 0.15 | N | 8 | 56, 40 | 4 | 5.0 | 1 | Sardini,D | |

NOTE A Coma has attained a diam. of 6.5'. Centrally condensed or stellar object is apparent during seconds of good seeing. Total mag. was estimated to be 8.0. Coma appears symmetrical.
NOTE B A 5' coma shows a strong intensity at the center; DC 5; estimated mag. using 10x50 binoculars 8.0 (Morris method).
NOTE C The PA was difficult, the DC is estimate in 3, the mag. was estimate in 8.1, B method. [sic] Reference chart 58.
NOTE D Broad tail? at PA 220? Ray tail? at PA 220? Star-like central condensation less than 5" arc across. Magnitude of condensation +11? Hints of very faint narrow spike-like feature less than 3' arc long with very faint broad outer tail 7' long from PA 180 to PA 260. Tail existence questionable. Magnifications of 180x and 240x also used.
NOTE E (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.333 | 850091 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 30.00 | Kodak Tri-X | | N | M | 6/S | 1 | Webb,R | A |
| 7.902 | 850092 | 1.800 | | 0.28 | 1.1 x 0.8 | 7.00 | Kodak Tri-X | 400/27 | N | | 31/N | 1 | Darvann,T.A | B |
| 7.907 | 850093 | 1.800 | | 0.28 | 1.1 x 0.8 | 3.50 | Kodak Tri-X | 400/27 | N | | 32/N | 1 | Darvann,T.A | B |
| 7.910 | 850094 | 1.800 | | 0.28 | 1.1 x 0.8 | 1.50 | Kodak Tri-X | 400/27 | N | | 33/N | 1 | Darvann,T.A | B |
| 7.951 | 850095 | 1.800 | | 0.28 | 1.1 x 0.8 | 6.50 | Kodak Tri-X | 400/27 | N | | 36/N | 1 | Darvann,T.A | B |
| 7.956 | 850096 | 1.800 | | 0.28 | 1.1 x 0.8 | 3.50 | Kodak Tri-X | 400/27 | N | | 37/N | 1 | Darvann,T.A | B |
| 7.972 | 850097 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 6.00 | 3M 1000 | 1000/ | N | X | 1/S | 1 | Vanin,G | |
| 7.984 | 850098 | 0.500 | 6.3 | 0.080 | 4.1 x 2.7 | 15.00 | ORWO NP 27 | 400/27 | N | | 432/P | 1 | Richert,M | C |

NOTE A Inner coma and starlike central condensation visible on all original negatives. Film push processed slightly. (Observer indicated C-type guiding as well as M. Ed.)
NOTE B (Instrument FL of 2.800 and separately specified effective FL of approximately 1.800 don't match. Ed.)
NOTE C City lights interfered with the observation. (Observer's image identifier is 84 32. Ed.)

DATE: 8 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.01 | 811181 | 7.7 | B | DCS 2B | 20 | 4 | | | 0.050 | B | | 7 | 6.5 | Y | 1 | Kuipers,G | A |
| 8.01 | 811182 | 7.7 | B | DCS 2B | 20 | 4 | | | 0.050 | B | | 7 | 6.5 | Y | 1 | Kroon,B | A |
| 8.02 | 811183 | 8.0 | M | 58 | 3 | 7 | | | 0.203 | SC | 10 | 80 | 6.0 | Y | 1 | Granslo,B.H | |
| 8.05 | 811184 | 7.2 | S | DCS 2B | 13 10 | 4 | | | 0.050 | B | | 10 | 6 | Y | 3 | Comello,G | |
| 8.05 | 811185 | | | | | | 0.05 | 245 | 0.203 | C | 10 | 50 | 6 | Y | 3 | Comello,G | |
| 8.053 | 811186 | 8.3 | S | AAVSO | 2.5 | 6 | | | 0.32 | N | 4.4 | 56 | 6.7 | Y | 1 | Arisil,R.B | |
| 8.125 | 811187 | 7.7 | M | AAVSO | 24 | | | | 0.050 | B | | 10 | | | | O'Meara,S.J | |
| 8.135 | 811188 | 8.2 | M | 58 | 2.4 | 1 | | | 0.076 | R | 15 | 45 | 5.4 | Y | 1 | Smith,A | |
| 8.165 | 811189 | 7.8 | S | 58 | 5.3 | 1 | | | 0.05 | B | | 10 | 6 | Y | 2 | House,R.R | |
| 8.167 | 811190 | 7.3 | S | 60 | 10.3 | 7 | | | 0.108 | N | 4 | 24 | 5.5 | Y | 2 | Franch,J | |
| 8.170 | 811191 | 7.4 | S | 58 | 5 | 2 | | | 0.25 | N | 5.6 | 56 | 6 | Y | 1 | Jordan,J | B |
| 8.1736 | 811192 | 8.2 | B | 58 | 5 | 0 | | | 0.080 | B | | 11 | 6.0 | Y | 1 | Brogioni,A | C |
| 8.202 | 811193 | 7.7 | S | 58 | 12 | 3 | | | 0.035 | B | | 7 | 6.7 | Y | 3 | Morrison,W | |
| 8.208 | 811194 | 7.0 | B | 58 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | |
| 8.226 | 811195 | 7.8 | M | 58 | 2.7 | 5 | | | 0.08 | B | | 11 | 4.5 | Y | 1 | Glassett,W | D |
| 8.23 | 811196 | 8.5 | B | 58 | 8.3 | 8 | | | 0.335 | N | 4.5 | 56 | 4.5 | Y | | Kronk,G | |
| 8.24 | 811197 | 7.8 | S | Y TAU | 7.6 | 8 | | | 0.15 | N | 8 | 30 | 5.5 | Y | 1 | McBride,P | E |
| 8.262 | 811198 | 7.3 | B | 58 | | 5 | | 90 | 0.203 | N | 6 | 75 | 5.5 | Y | 1 | Troiani,D.M | F |
| 8.2916 | 811199 | 8.3 | | 58 | 8 | 6 | | | 0.279 | SC | 10 | 166 | 4 | Y | 1 | Kemble,L.J | G |
| 8.30 | 811200 | 8.1 | B | E | 21 | | | | 0.04 | R | 6 | 18 | | | | Drapun,I | |
| 8.3090 | 811201 | 7.3 | M | 59 | 15 | 5 | | | 0.05 | B | | 7 | 6.1 | Y | 2 | Cook,A.J | |
| 8.3292 | 811202 | 8.4 | S | SAO | 6 | 7 | | | 0.152 | N | 8.0 | 76 | 5.0 | | 3 | Machholz,D | H |
| 8.37 | 811203 | 8.6 | S | 58 | 2.6 | 5 | | | 0.203 | SC | 10 | 51 | 6.0 | Y | 1 | Sanchez,A | |
| 8.375 | 811204 | 7.7 | B | 58 | 4 | 5 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Krisciunas,K | I |
| 8.41 | 811205 | 6.3: | | 58, 59 | 35 | 2 | | | | EY | | | 7.5 | Y | 11 | Morris,C.S | |
| 8.52500 | 811206 | 8.0 | B | | 5.5 | 7 | | | 0.15 | N | 6 | 28 | 5.5 | Y | 1 | Okumura,S | |
| 8.538 | 811207 | 8 : | S | 58 | 2.3 | 4 | | | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | J |
| 8.565 | 811208 | 6.8 | S | 58 | 10 | 7 | | | 0.08 | B | | 15 | 6.5 | Y | 1 | Lovejoy,T | |
| 8.58 | 811209 | 6.9 | S | 58 | | 6 | | | 0.08 | B | | 15 | 6.1 | Y | 1 | Seargent,D | |
| 8.60 | 811210 | 8.2 | S | AAVSO | 5 | 5 | | | 0.13 | N | 6.3 | 24 | 6.5 | Y | 1 | Hayashi,A | K |
| 8.604 | 811211 | 8.7 | S | 58 | | 3 | | | 0.065 | R | 7.7 | 27 | 5.5 | Y | 1 | Date,M | |
| 8.605 | 811212 | 8.2 | M | 58 | 6.5 | 5 | | | 0.08 | B | | 11 | 6 | Y | 1 | Mitsuma,S | |
| 8.608 | 811213 | 9.0 | M | 58 | 4.2 | 5 | 0.17 | 225 | 0.1 | N | 10 | 56 | 5.0 | Y | 1 | Ichikawa,K | |
| 8.61 | 811214 | 8.5 | M | 58 | 5.9 | 6 | | | 0.16 | N | 6.3 | 31 | 6 | Y | 1 | Mitsuma,S | |
| 8.62 | 811215 | 7.5 | S | SAO, 58 | | | | | 0.045 | R | 6 | 13 | | Y | | Jones,A | |
| 8.62 | 811216 | 7.7 | S | 58 | 5 | | | | 0.078 | R | 7.5 | 30 | | Y | | Jones,A | |
| 8.62 | 811217 | | | | | 6 | | | 0.317 | N | 5 | 86 | | Y | | Jones,A | |
| 8.63 | 811218 | 8.3 | S | AAVSO | 5 | 5 | | | 0.13 | N | 6.3 | 24 | 6.5 | Y | 1 | Hayashi,A | |
| 8.632 | 811219 | 8.5 | B | 58 | | | | | 0.07 | B | | 10 | 5.5 | Y | 1 | Date,M | |
| 8.64 | 811220 | 8.4 | B | AAVSO | 6.5 | 5 | | | 0.20 | N | 5.6 | 44 | 6.5 | Y | 1 | Nakamura,A | |
| 8.667 | 811221 | 8.0 | S | 58 | 1.0 | 3 | | | 0.12 | N | 6 | 36 | 4.0 | Y | 1 | Kishi,A | |
| 8.68 | 811222 | 7.8 | B | E | 15 | 4 | | | 0.05 | B | | 7 | | | | Zagaynov,V.A | |
| 8.69 | 811223 | 8.2 | S | | | 5 | | | 0.08 | B | | 11 | 4.5 | N | 1 | Momose,M | |
| 8.80 | 811224 | 8.1 | B | E | 21 | 0 | | | 0.04 | R | 6 | 18 | | | | Maydik,A | |
| 8.813 | 811225 | 7.9 | M | 58 | | | | | 0.06 | R | 4.5 | 10 | 5.4 | Y | 1 | Chodorowski,F | |
| 8.819 | 811226 | | | | 6 | 3 | | | 0.064 | R | 12 | 32 | | Y | 1 | Chodorowski,F | |
| 8.823 | 811227 | 8.2 | M | 58 | 12 | 3 | | | 0.067 | R | 12 | 60 | 5.8 | Y | 1 | Kosinski,J | |
| 8.83 | 811228 | 7.5 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 8.832 | 811229 | 8.5 | B | | 3 | 5 | | | 0.063 | R | 13 | 34 | 5.5 | N | 1 | Zische,E | |
| 8.833 | 811230 | 8 | | 58 | | 4 | | | 0.10 | R | 10 | 25 | 5 C | N | 1 | Paradowski,M | |
| 8.840 | 811231 | | | | 3 | 6 | | | 0.20 | SC | 10 | 111 | 5.5 | Y | 1 | Bremseth,P.-J | |
| 8.840 | 811232 | 8.0 | S | | | | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Bremseth,P.-J | |
| 8.87 | 811233 | 7.5 | B | E | 12 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 8.87 | 811234 | 7.7 | B | AAVSO | 8 | 5 | | | 0.12 | R | 4 | 35 | | | | Chernis,K | |
| 8.872 | 811235 | 8.5 | S | 58 | 4 | 3 | | | 0.09 | M | 11 | 56 | 5.0 | Y | 2 | Westlund,M | |
| 8.8750 | 811236 | 8.3 | S | 58 | 8 | 5 | | | 0.11 | R | 11 | 36 | 5.4 | Y | 1 | Znasik,M | |
| 8.8854 | 811237 | 8.0 | S | 58 | 12 | 3 | | | 0.08 | B | | 10 | 5.4 | Y | 1 | Znasik,M | |
| 8.89 | 811238 | 7.8 | S | DCS 2B | 6.5 | 6 | | | 0.100 | B | | 14 | 6 | Y | 1 | van Loo,F.R | A |
| 8.896 | 811239 | 7.3 | M | 58, 59 | 7 | 4 | | | 0.07 | B | | 20 | 4.5 | Y | 1 | Tanti,T | L |
| 8.910 | 811240 | 7.6 | B | 58 | 9 7 | 5 | 0.2 | 165 | 0.200 | R | 15 | 120 | 6.0 | Y | 1 | Kalauch,K.-D | |
| 8.9166 | 811241 | 7.8 | S | AAVSO | | 3 | | | 0.08 | B | | 20 | 5.0 | N | 1 | Sicoli,P | |
| 8.92 | 811242 | 8.2 | B | 58 | | | | | 0.050 | B | | 12 | 4.0 | Y | 1 | Mosch,J | |
| 8.924 | 811243 | 7.9 | S | 58 | 6.5 | 4 | | | 0.089 | R | 5.5 | 18 | 5.5 | N | 1 | Ventura,F | |
| 8.948 | 811244 | 8.0 | B | 58 | | 5 | | | 0.08 | B | | 20 | 5.5 | N | 2 | Knain,E | |
| 8.993 | 811245 | 8.0 | M | Y TAU | 5.5 | 6 | | | 0.08 | B | | 11 | 5.8 | Y | 1 | Fleet,R.W | M |

NOTE A Coma diameter approximate.
NOTE B Sky conditions good.
NOTE C No detail visible. (Roughly translated by IHW staff. Ed.)
NOTE D Windy!
NOTE E 10 mag. nucleus.
NOTE F Tail length = 4°. [sic]
NOTE G Heavy ice fog, light sky.
NOTE H Some haze.
NOTE I Comparison stars 75, 85. Coma diameter is lower limit.
NOTE J Through cloud.
NOTE K Tail detected?
NOTE L Seeing good, transparency good.
NOTE M 9.0' coma, averted vision.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.022 | 830154 | 0.20 | 0.400 | N | 5 | 40,222 | 16 | 5.8 | 2 | Sarocchi,D | A |
| 8.075 | 830155 | 0.20 | 0.400 | N | 5 | 40,222 | 16 | 5.8 | 2 | Sarocchi,D | |
| 8.174 | 830156 | 0.33 | 0.20 | N | 8 | 70 | 56 | 5.5 | 1 | Vargas B.,A.G | B |
| 8.205 | 830157 | 0.25 | 0.20 | N | 8 | 120 | 30 | 5.5 | 1 | Vargas B.,A.G | B |
| 8.242 | 830158 | | 0.203 | N | 6 | 75 | 14 | 5.5 | 1 | Troiani,D.M | C |
| 8.311 | 830159 | 3 | 0.050 | B | | 7 | 5 | 6.1 | 2 | Cook,A.J | D |
| 8.853 | 830160 | 0.23 | 0.20 | SC | 10 | 111 | 27 | 5.5 | 3 | Bremseth,P.-J | E |
| 8.868 | 830161 | 1.6 | 0.090 | M | 11 | 56 | 10 | 5.0 | 2 | Westlund,M | |
| 8.938 | 830162 | 1.2 | 0.080 | B | | 20 | 10 | 5.5 | 1 | Knain,E | F |
| 8.938 | 830163 | 1 | 0.333 | N | 4.5 | 115 | 120 | 5.2 | 1 | Wisniewski,P | G |

NOTE A DC = 2, coma diameter 5.2'.
NOTE B PA was impossible because the coma appear almost round. The total magnitude was estimating in 7.9 by B method. [sic] The comet was observable in binoculars 7x50 like a globular cluster.
NOTE C DC = 5.9. Tail PA = 80 deg. Tail was a slight glow to one side of coma.
NOTE D Very clear, only slight light pollution as city was covered by low clouds.
NOTE E Coma was round, and very weak in the outer parts, but bright in the inner. The central condensation was star-like.

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NOTE F Coma slightly elongated to the north.
NOTE G City lights interfered with the observation. (Two drawings submitted. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.855 | 850099 | 0.750 | 6.3 | | 2.7 x 1.8 | 17.00 | ORWO | 400/27 | N | C | 2/N | 1 | Znasik,M | A |
| 8.970 | 850100 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 8.00 | Kodak 103a-F | | N | M | 9/P | 1 | Guarro,J | |
| 8.977 | 850101 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 2.50 | Kodak 103a-F | | N | M | 10/P | 1 | Guarro,J | |

NOTE A Large format (88x63 mm) sheet film used.

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NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.000 | 811246 | | S | | 8 | | | | 0.08 | B | | 11 | 5 | Y | 1 | Gainsford,M.J | |
| 9.004 | 811247 | 6.5 | B | 101 | 6.7 | 3 | | | 0.06 | R | 15 | 72 | 5 | Y | 1 | Rodriguez,V | A |
| 9.007 | 811248 | 8.0 | M | Y TAU | 5.5 | 6 | | | 0.15 | N | 4 | 25 | 5.8 | Y | 1 | Fleet,R.W | B |
| 9.007 | 811249 | 7.2 | B | 58 | 8.4 | 6 | | | 0.050 | B | | 10 | 5.8 | Y | 1 | Rossi,L | |
| 9.018 | 811250 | 8.0 | S | 58 | 2.8 | 6 | | | 0.25 | N | 6 | 60 | 5 | Y | 1 | Gainsford,M.J | |
| 9.02 | 811251 | 8.3 | B | AAVSO | 8 | 5 | | | 0.20 | N | 5 | 35 | | | | Tsvetkov,L | |
| 9.02 | 811252 | 9.7 | B | AA | 4.5 | 3 | | | 0.318 | N | 5 | 62 | 6.5 | Y | 1 | Simmons,K | |
| 9.052 | 811253 | 7.3 | S | Y TAU | 18 | 5 | 0.5 | 310 | 0.08 | B | | 15 | 5.0 | Y | 1 | Hurst,G.M | |
| 9.056 | 811254 | 7.1 | S | Y TAU | 13.5 | 5 | 0.5 | 355 | 0.05 | B | | 10 | 5.0 | Y | 1 | Hurst,G.M | |
| 9.101 | 811255 | 8.3 | S | AAVSO | 2.5 | 6 | | | 0.32 | N | 4.4 | 56 | 5.5 | Y | 1 | Ariail,R.B | |
| 9.112 | 811256 | 7.2 | M | 58 | | 5 | | | 0.05 | B | | 7 | 5.5 | Y | 5 | DeYoung,J.A | |
| 9.112 | 811257 | | | 58 | 5.2 | | | | 0.254 | N | 4.5 | 46 | 5.5 | Y | 5 | DeYoung,J.A | |
| 9.132 | 811258 | 8.0 | S | 58 | | 6 | | | 0.318 | N | 8 | 40 | 6.2 | Y | 1 | Hathaway,W | C |
| 9.136 | 811259 | 6.9 | | 58 | 5 | 3 | | | 0.050 | B | | 10 | 5.4 | Y | 1 | Sabia,J.D | |
| 9.137 | 811260 | 7.5 | S | 58 | 12 | | | | 0.035 | B | | 7 | 6.5 | Y | 3 | Morrison,W | |
| 9.142 | 811261 | 8.0 | B | 58 | 10 | 2 | | | 0.05 | B | | 7 | 5.5 | Y | 1 | Chmielewski,W | |
| 9.15 | 811262 | 6.1 | S | 58 | 20 | 5 | | | 0.108 | N | 4 | 17 | 5.0 | Y | 1 | Harrington,P | |
| 9.15 | 811263 | 7.0 | B | E | 6 | 1 | | | 0.07 | N | 8 | 33 | | | | Pashko,D | |
| 9.167 | 811264 | 8.0 | | 58 | 3.5 | 6 | | | 0.203 | N | 8 | 128 | 5.0 | Y | | Hannon,J | |
| 9.17 | 811265 | 6.9: | B | AA | 17 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | D |
| 9.17 | 811266 | 6.4 | S | AA | 17 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | D |
| 9.18 | 811267 | 6.1 | M | AA | 22 | 6 | | | 0.050 | B | | 7 | | | | Green,D.W.E | D |
| 9.18 | 811268 | 6.3 | S | AA | 22 | 6 | | | 0.050 | B | | 7 | | | | Green,D.W.E | D |
| 9.18 | 811269 | 6.8 | S | USNOC | 15 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 9.18 | 811270 | | | | 12.5 | 5 | | | 0.080 | B | | 20 | | | | Bortle,J.E | E |
| 9.18 | 811271 | | | | 8 | 7 | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | |
| 9.18 | 811272 | 7.5 | B | AA | | | | | 0.050 | B | | 7 | 6.5 | Y | 1 | Simmons,K | |
| 9.18 | 811273 | 9.0 | B | AA | 4.0 | 7 | | | 0.318 | N | 5 | 62 | 6.5 | Y | 1 | Simmons,W | |
| 9.18 | 811274 | 7.5 | B | AA | | 0 | | | 0.050 | B | | 7 | 6.5 | Y | 1 | Simmons,W | |
| 9.184 | 811275 | 7.1 | M | 58 | 8.0 | 6 | | | 0.05 | B | | 12 | 6.4 | Y | 1 | Knight,S | |
| 9.189 | 811276 | 8.6 | B | 58 | 12 | 6 | 0.33 | | 0.152 | N | 8 | 60 | 5.5 | Y | 1 | Stephan,C | F |
| 9.20 | 811277 | 6.5 | M | 58 | 17 | 6 | | | 0.080 | B | | 20 | 7.0 | Y | 1 | Morris,C.S | |
| 9.20 | 811278 | 6.0: | | 58 | | | | | | EY | | | 7.0 | Y | 1 | Morris,C.S | |
| 9.208 | 811279 | 7.0 | B | 58 | | | | | 0.080 | B | | 20 | 5.0 | Y | | Smith,D | |
| 9.21 | 811280 | 6.2 | S | 58, 59 | 8 | 5 | | | 0.140 | SN | 3.6 | 28 | 5.0 | Y | 1 | Spratt,C.E | G |
| 9.212 | 811281 | 7.8 | M | 58 | 2.8 | 1 | | | 0.152 | N | 5 | 19 | 5.8 | Y | 1 | Smith,A | |
| 9.22 | 811282 | 6.0 | S | 58, 59 | 12 | 4 | | | 0.080 | B | | 11 | 5.0 | Y | 1 | Spratt,C.E | H |
| 9.23 | 811283 | 6.2 | S | 58, 59 | 8 | 5 | | | 0.200 | SC | 10.0 | 64 | 5.0 | Y | 1 | Spratt,C.E | I |
| 9.276 | 811284 | 7.4 | B | 58 | | | | | 0.203 | N | 6 | 75 | 5.5 | Y | 1 | Troiani,D.M | |
| 9.278 | 811285 | 8.4 | S | 58 | 20 | 1 | | | 0.035 | B | | 7 | 4.5C | Y | 1 | Gronek,J.D | J |
| 9.292 | 811286 | 8.0 | S | 58 | 12 | 5 | | | 0.20 | SC | 6 | 30 | 6.0 | Y | 1 | Saxon,V.P | |
| 9.3257 | 811287 | 8.2 | S | SAO | 7 | 8 | | | 0.152 | N | 8.0 | 76 | 5.2 | | 3 | Machholz,D | K |
| 9.38 | 811288 | | | 58 | 5.4 | 6 | | | 0.203 | SC | 10 | 51 | 6.0 | Y | 1 | Sanchez,A | |
| 9.389 | 811289 | 7.9 | M | 58 | 4.0 | 6 | 0.03 | 280 | 0.33 | N | 4.5 | 70 | 6.0 | Y | 2 | Fabre,R | L |
| 9.396 | 811290 | 7.3 | B | 58 | 9 | 5 | | | 0.050 | B | | 7 | 6.0 | Y | 2 | Krisciunas,K | M |
| 9.436 | 811291 | 10.7 | S | 58 | 2.4 | 3 | | | 0.15 | N | 8 | 50 | 5.5MZ | Y | 1 | Donth,D | |
| 9.52 | 811292 | 8.1 | B | 58 | 2.8 | 5 | | | 0.20 | N | 5 | 36 | | Y | 1 | Curtis,D | N |
| 9.531 | 811293 | 8.0 | S | 58 | 5.0 | 1 | | | 0.050 | B | | 12 | 6 | Y | 1 | Batza,H | |
| 9.537 | 811294 | 8.5 | S | 58 | 5.0 | 1 | | | 0.11 | N | 8 | 45 | 6 | Y | 1 | Batza,H | |
| 9.542 | 811295 | 7.3 | M | | 3 | 5 | | | 0.070 | B | | 10 | 5.0C | Y | 1 | Kato,T | |
| 9.60 | 811296 | 8.7 | B | AA | 2 | 3 | | | 0.06 | B | | 20 | | Y | 1 | Campbell,R.N | O |
| 9.625 | 811297 | 7.5 | M | | 3 | 6 | | | 0.10 | N | 10 | 55 | 4.0C | Y | 1 | Kato,T | P |
| 9.67 | 811298 | 8.3 | S | 58 | 8 | 7 | | | 0.41 | C | 4.2 | 86 | 6.6 | Y | 4 | Clark,M.L | Q |
| 9.679 | 811299 | 8.0 | B | 58 | 15 | 4 | | | 0.25 | SC | 10 | 100 | 4.3 | Y | 3 | Bembrick,C | R |
| 9.76 | 811300 | 8.1 | B | 58 | 4 | 3 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Speil,J | |
| 9.77 | 811301 | 8.2: | B | AAVSO | | | | | 0.15 | N | 5 | 25 | | | | Korneev,V | |
| 9.79 | 811302 | 7.9 | M | AAVSO | 15 | 4 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 9.806 | 811303 | 8.0 | | 58 | 5.2 | 3 | | | 0.08 | B | | 15 | 4.7 | Y | 1 | Dietrich,M | S |
| 9.81 | 811304 | 7.4 | B | E | 13.0 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 9.812 | 811305 | 8.9 | B | 58 | 7 | 5 | | | 0.07 | B | | 20 | 5.8 | Y | 1 | Filimon,E | |
| 9.821 | 811306 | 9.3 | M | 58 | 1.3 | 3 | | | 0.153 | N | 8.5 | 52 | | Y | 1 | Torres,E | T |
| 9.83 | 811307 | 7.8 | B | DCS 2B | 5.5 | 7 | | | 0.115 | N | 8 | 45 | 4.5 | Y | 1 | van Munster,T | D |
| 9.83 | 811308 | 7.8 | S | E | 4.6 | 4 | | | 0.11 | N | 7 | 32 | | | | Aleynikov,A | |
| 9.844 | 811309 | 7.7 | B | 58 | 8 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | U |
| 9.85 | 811310 | 7.4 | B | E | 13.0 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 9.85 | 811311 | 6.1 | S | E | 1.0 | 3 | | | 0.07 | N | 8 | 33 | | | | Shitikov,A | |
| 9.858 | 811312 | 7.5 | S | 58 | 21.6 | 5 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Hurst,G.M | |
| 9.858 | 811313 | 7.0 | M | 58, 59 | 7.5 | 4 | | | 0.07 | B | | 20 | 5 | Y | 1 | Tanti,T | V |
| 9.86 | 811314 | 7.3 | B | E | 4.0 | | | | 0.08 | R | | 29 | | | | Nesterov,Yu | W |
| 9.868 | 811315 | 7.8 | M | Y TAU | 2.7 | 6 | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | X |
| 9.88 | 811316 | 8.2 | B | M | | | | | 0.15 | N | 5 | 25 | | | | Korneev,V | |
| 9.882 | 811317 | 7.8 | M | Y TAU | 4.5 | 6 | | | 0.15 | N | 4 | 25 | 5.6 | Y | 1 | Fleet,R.W | X |
| 9.885 | 811318 | 8.5 | B | 58 | 8 | 5 | 0.5 | 300 | 0.13 | R | 10 | 50 | | Y | 1 | Morrisby,A | Y |
| 9.89 | 811319 | 6.9 | S | 58 | | | | | 0.08 | B | | 10 | 6.0 | | 1 | Shanklin,J.D | |
| 9.892 | 811320 | 9.3: | | 58 | 1.3 | 3 | | | 0.153 | N | 8.5 | 52 | | Y | 1 | Torres,E | Z |
| 9.920 | 811321 | 7.8 | S | 58 | 6 | 3 | | | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | |
| 9.924 | 811322 | 9.1 | M | 58 | 2.4 | 5 | | | 0.090 | R | 14 | 46 | 5.3 | Y | 1 | Hirth,G | |
| 9.924 | 811323 | 7.0: | B | 58 | 10 | | | | 0.035 | B | | 7 | | Y | 1 | Rodriguez C.,J.A | |
| 9.925 | 811324 | 7.6 | M | AAVSO | 7 | 6 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | a |
| 9.926 | 811325 | 8.3 | B | 58 | | 4 | | | 0.05 | B | | 10 | C | Y | 1 | Frosina,A | b |
| 9.951 | 811326 | 7.1 | S | Y TAU | 21 | 5 | 0.3 | | 0.05 | B | | 10 | 5.0 | Y | 1 | Hurst,G.M | c |
| 9.955 | 811327 | 8.3 | B | 58 | | 5 | | | 0.080 | R | 6.3 | 20 | 5.5C | N | 2 | Richert,M | |
| 9.96 | 811328 | | | | | | | | | EY | | | 6.0 | | 1 | Shanklin,J.D | d |
| 9.983 | 811329 | 6.5 | | | 20 | 5 | | | 0.080 | B | | 15 | 5.3 | Y | 2 | Lucius,D | e |
| 9.993 | 811330 | 6.5 | | | 20 | 5 | | | 0.200 | SC | 10 | 200 | 5.3 | Y | 2 | Lucius,D | e |
| 9.997 | 811331 | 7.1 | B | 58 | 10.5 | 5 | | | 0.050 | B | | 7 | 5.8 | Y | 1 | Rossi,L | |

NOTE A Also calculated the diameter of the apparent nucleus: 0.84 arc min. (Translated by IHW staff. Ed.)
NOTE B 10' coma, averted vision.
NOTE C Very clear sky.
NOTE D Coma diameter approximate.
NOTE E Tails suspected in 110 deg. and 270 deg.
NOTE F Magnification of 90 also used: seem to be two nuclei. One dim at approx. PA 200. Tail PA approximate, very dim and diffuse. Fan shape spans PA 130-180.
NOTE G DC approximate.
NOTE H Oval shaped. DC approximate.
NOTE I Coma speckled like M13, unusual.
NOTE J Exc. see.
NOTE K Coma shows an irregular shape.
NOTE L (PA value appears to be measured incorrectly. Ed.)
NOTE M Comparison stars 75, 85. Coma diameter approximate.

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NOTE N Semi urban sky.
NOTE O Dark and clear.
NOTE P Diffuse cloud.
NOTE Q Very large strong c.c.
NOTE R Coma diameter uncertain.
NOTE S (Observer indicated "A" method [Argelander?]. Ed.)
NOTE T Without tail. (Translated by IHW staff. Observer gave limit as 10.5. Ed.)
NOTE U (Observer gave limit as 12.5. Ed.)
NOTE V Seeing good, transparency good.
NOTE W Brightness flash.
NOTE X 9' coma, averted vision.
NOTE Y Easy object in 8x50 binoculars.
NOTE Z Without tail. (Translated by IHW staff. Observer gave limit as 11.0. Ed.)
NOTE a (Observer calls coma diameter value halo diameter. Ed.)
NOTE b Limit = 9.4. h0 approximately 55 deg.
NOTE c Coma diameter approximate. Tail PA = W? [sic].
NOTE d Possibly visible to naked eye. Fainter than M33.
NOTE e (Observer indicated "A" method [Argelander?]. Ed.) Coma diameter approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.040 | 830164 | 2.3 | 0.05 | B | | 10 | 55 | 5.0 | 1 | Hurst,G.M | A |
| 9.059 | 830165 | | 0.200 | SC | 10 | 80,100 | | | 1 | Ulbricht,S | B |
| 9.180 | 830166 | 0.33 | 0.20 | N | 8 | 70 | 61 | 6 | 1 | Vargas B.,A.G | |
| 9.206 | 830167 | 0.25 | 0.20 | N | 8 | 120 | 5 | 6 | 1 | Vargas B.,A.G | |
| 9.219 | 830168 | | 0.203 | SC | 10 | 50 | 30 | 5 | 1 | Arpin,P | C |
| 9.441 | 830169 | 0.3 | 0.15 | N | 8 | 50 | 14 | 5.5 | 1 | Donth,D | D |
| 9.860 | 830170 | 2.3 | 0.05 | B | | 10 | 44 | 5.0 | 1 | Hurst,G.M | E |
| 9.920 | 830171 | | 0.035 | B | | 7 | 10 | | 1 | Rodriguez C.,J.A | |
| 9.925 | 830172 | 0.89 | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | F |
| 9.981 | 830173 | 1.49 | 0.080 | B | | 15 | 15 | 5.3 | 2 | Lucius,D | |
| 9.998 | 830174 | 0.93 | 0.200 | SC | 10 | 200 | 25 | 5.3 | | Lucius,D | |

NOTE A Tail at PA 310 and tail at PA 355. Tails suspected & drawn but very near limit. Apparently easier in 10x50 binoculars than 15x80 binoculars. A suggestion of diffuse material between two main tails but uncertain.
NOTE B Intensity about mag. 8.2. Nucleus judged bright in relation to coma. Diffuse tail extension. (Duration not indicated. Time of observation is assumed to be start time. Translated by IHW staff. Ed.)
NOTE C Jet (very faint) at PA 0.
NOTE D This drawing shows Tau Tauri at north and C. Halley to the south at 10.7 mag. The coma diameter is 2.4 min. of arc with a bright (but not stellar) nucleus at the center. I would estimate the degree of coma condensation at 3. Although the nucleus was easily visible at 50x, higher magnification didn't offer any more detail.
NOTE E Tail very faint and uncertain. Difficult to observe because of passing clouds. Fan shaped, 20' length, to west? Stars involved in coma.
NOTE F Schematic drawing. (Duration not indicated. Time of obsrevation is assume to be end time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.114 | 850102 | 0.300 | 4 | | 6.9 x 4.6 | 9.00 | Fotopan HL | 400/27 | N | O | 1/P | 1 | Slusarczyk,J | |
| 9.143 | 850103 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 231/P | 1 | Sabia,J.D | |
| 9.146 | 850104 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | S | 1/P | 1 | Dilsizian,R | |
| 9.186 | 850105 | 0.050 | 4.0 | | 39.6 x27.0 | 5.00 | Kodak Tri-X | | N | | 101/P | | Gianforte,J.S | A |
| 9.247 | 850106 | 0.200 | 4 | | 10.3 x 6.9 | 12.00 | Kodak Tri-X | 400/ | N | M | 1/P | 1 | Laroche,Y | |
| 9.247 | 850107 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 232/P | 1 | Sabia,J.D | |
| 9.253 | 850108 | 0.305 | 4 | | 6.8 x 4.5 | 30.00 | Kodak IIa-F | | N | | 1/P | 1 | Mitchell,R.C | |
| 9.274 | 850109 | 0.30 | 4 | 0.075 | 6.9 x 4.6 | 30.00 | IIa-F | | N | X | 1/P | 1 | Mitchell,R.C | |
| 9.712 | 850110 | 0.268 | 2.6 | 0.102 | 7.7 x 5.1 | 10.00 | Fuji | 400/ | N | T | 1/S | 1 | Richardson,C | B |
| 9.884 | 850111 | 0.210 | 5.6 | | 9.8 x 6.5 | 10.00 | Ilford Pan F | | N | T | 1/P | | Emrich,G | |
| 9.958 | 850112 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 7.00 | Kodak 103a-F | | N | M | 11/P | 1 | Guarro,J | |

NOTE A (Observer's image identifier is 100-1. Ed.) (Observer listed emulsion speed as ASA 800. Ed.)
NOTE B Instrument is Meade Schmidt camera.

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NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.00 | 811332 | 8.2 | B | M | | | | | 0.15 | N | 5 | 25 | | | | Korneev,V | A |
| 10.00 | 811333 | 8.2 | S | 58 | | | | | 0.050 | B | | 7 | 5.5 | Y | 1 | Spalding,G.E | |
| 10.008 | 811334 | 6.5 | B | 58 | 10 | 5 | | | 0.256 | N | 5.6 | 45 | 5.4 | Y | 2 | Gomez,A | |
| 10.01 | 811335 | 8.4 | B | E | 4.0 | | 0.2 | | 0.07 | N | 8 | 33 | | | | Bezrodniy,A | |
| 10.014 | 811336 | 7.0: | B | 58 | 4 | | | | 0.06 | R | 5.7 | 20 | 5.3 | Y | 2 | Cardiel,N | |
| 10.015 | 811337 | 7.0: | B | 58 | 10 | | | | 0.256 | N | 5.6 | 80 | 5.4 | Y | 2 | Pedraz,S | |
| 10.017 | 811338 | 8.0 | M | 58 | | 3 | | | 0.089 | R | 13.7 | 32 | C | Y | 1 | Linger,S | B |
| 10.021 | 811339 | 7.0: | B | 58 | 4 | | | | 0.06 | R | 5.7 | 40 | 5.3 | Y | 2 | Cardiel,N | |
| 10.028 | 811340 | 8.5 | M | 58 | | 7 | | | 0.254 | N | 6.4 | 65 | | Y | 3 | Abbott,J | C |
| 10.045 | 811341 | 8.3 | S | AAVSO | 2.5 | 6 | | | 0.32 | N | 4.4 | 56 | 5.4 | Y | 1 | Ariail,R.B | |
| 10.056 | 811342 | 8.2 | M | Y TAU | 2.2 | 6 | | | 0.075 | R | 16 | 50 | 5.6 | Y | 1 | Fleet,R.W | D |
| 10.059 | 811343 | 6.5 | | | 20 | 5 | | | 0.200 | SC | 10 | 200 | 5.3 | Y | 2 | Lucius,D | E |
| 10.063 | 811344 | 8.0: | B | 58 | 5 | | | | 0.15 | N | 5 | 75 | | Y | 2 | Velasco,P | |
| 10.07 | 811345 | 7.2 | B | M | 4.0 | | | | 0.08 | R | | 29 | | | | Nesterov,Yu | |
| 10.080 | 811346 | 9.1 | M | Y TAU | 2.9 | 6 | | | 0.35 | N | 5.5 | 100 | 5.6 | Y | 1 | Fleet,R.W | F |
| 10.08 | 811347 | 6.8 | B | M | 5.0 | 2 | | | 0.07 | N | 8 | 33 | | | | Pashko,D | |
| 10.083 | 811348 | 7.0 | B | 58 | 7 | | | | 0.256 | N | 5.6 | 80 | 5.4 | Y | 3 | Gallego,J | |
| 10.123 | 811349 | 7.3 | S | 58 | 5 | 2 | | | 0.25 | N | 5.6 | 56 | 6 | Y | 1 | Jordan,J | G |
| 10.125 | 811350 | 7.9 | S | 58 | | 3 | | | 0.318 | N | 8 | 40 | | | | Hathaway,W | |
| 10.132 | 811351 | 7.9 | B | 58 | 10 | 2 | | | 0.05 | B | | 7 | 5.5 | Y | 2 | Chmielewski,W | |
| 10.146 | 811352 | | | 58 | 22.5 | | | | 0.050 | B | | 7 | 6.2 | Y | 3 | Will,M | |
| 10.177 | 811353 | 8.5: | B | 58 | 12 | 0 | | | 0.05 | B | | 7 | 4.0 | | | Lairet,R | |
| 10.181 | 811354 | 7.1 | M | 58 | 4 | 4 | | | 0.15 | N | 8 | 48 | 5.8 | Y | 2 | Robertson,T | H |
| 10.202 | 811355 | 8.0 | B | 58 | 12 | 4 | | | 0.313 | N | 5.6 | 50 | 5.1 | Y | 2 | Saxon,V.P | I |
| 10.229 | 811356 | 7.2 | B | 58 | | | | | 0.080 | B | | 20 | 5.0 | Y | | Smith,D | |
| 10.233 | 811357 | 8.1 | B | 58 | 12 | 6 | | | 0.035 | B | | 7 | 5.0 | Y | 1 | Stephan,C | J |
| 10.244 | 811358 | 8.1 | M | 58 | 14.4 | 2 | | | 0.06 | B | | 20 | 5.0 | N | 1 | de la Rosa Jr,A | K |
| 10.250 | 811359 | 6.9 | S | | 7 | 3 | | | 0.080 | B | | 11 | | Y | 3 | Pryal,J | L |
| 10.257 | 811360 | 8.3 | S | 58 | 20 | 1 | | | 0.035 | B | | 7 | 4.5C | Y | 1 | Gronek,J.D | M |
| 10.2785 | 811361 | 7.7 | S | SAO | 8 | 5 | | | 0.080 | B | | 20 | 5.2 | | 3 | Machholz,D | |
| 10.319 | 811362 | 7.5 | M | 58 | 6.0 | 6 | 0.03 | 280 | 0.33 | N | 4.5 | 70 | 6.0 | Y | 2 | Fabre,R | N |
| 10.48 | 811363 | 7.8 | | | 7 | 6 | | | 0.12 | B | | 20 | 5.8 | Y | 1 | Washi,S | O |
| 10.51 | 811364 | 8.1 | B | | 7.0 | 5 | | | 0.15 | N | 8 | 43 | 5.5 | N | 1 | Uda,K | |
| 10.545 | 811365 | 7.5 | B | | 14 | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 10.552 | 811366 | 8.5 | B | 58 | | | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Date,M | |
| 10.556 | 811367 | 7.8 | B | 58 | | 5 | | | 0.050 | B | | 7 | 6.4 | Y | 1 | Krisciunas,K | P |
| 10.559 | 811368 | 8.3 | S | 58 | 4 | 3 | | | 0.153 | N | 8.6 | 52 | 4.5 | Y | 1 | Iwaki,Y | |
| 10.56 | 811369 | 8.1 | M | 58 | 8.0 | 6 | | | 0.16 | N | 6.3 | 31 | 6 | Y | 1 | Mitsuma,S | Q |
| 10.57 | 811370 | 6.6 | S | 58 | 18 | 6 | | | 0.05 | B | | 10 | 6.2 | Y | 1 | Seargent,D | R |
| 10.58 | 811371 | 7.9 | M | 58 | 11 | 5 | | | 0.08 | B | | 11 | 6 | Y | 1 | Mitsuma,S | S |
| 10.59 | 811372 | 7.1 | S | 58 | 8 | 6 | | | 0.07 | B | | 10 | 5.5 | Y | 1 | Yasuki,M | |
| 10.67 | 811373 | 8.0 | B | M | | | | | 0.25 | N | 6 | 75 | | | | Savelyev,A | |
| 10.70 | 811374 | 7.8 | B | 58 | 10.0 | 6 | | | 0.15 | N | 6 | 28 | 5.5 | Y | 1 | Kanai,K | |
| 10.70 | 811375 | 7.5 | S | 58 | 10.0 | 6 | | | 0.15 | N | 6 | 28 | 5.5 | Y | 1 | Kanai,K | |
| 10.70 | 811376 | 7.5 | M | 58 | 10.0 | 6 | | | 0.15 | N | 6 | 28 | 5.5 | Y | 1 | Kanai,K | |
| 10.77 | 811377 | 6.9 | S | 58 | 16.6 | 5 | | | 0.05 | B | | 7 | 5.5 | Y | 1 | Kanai,K | |
| 10.78 | 811378 | 7.7 | B | 58 | | 5 | | | 0.203 | SC | 10 | 63 | 4.5 | Y | 1 | Wagner,G | |
| 10.819 | 811379 | 7.3 | B | 58 | 10 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | T |
| 10.823 | 811380 | 7.5 | S | USNOC | 16 | 2 | | | 0.08 | B | | 15 | 4.5 | Y | 1 | Hurst,G.M | U |
| 10.826 | 811381 | 6.8 | S | USNOC | | | | | 0.05 | B | | 10 | 4.5 | Y | 1 | Hurst,G.M | U |
| 10.83 | 811382 | 7.9 | S | DCS 2B | | 3 | | | 0.080 | B | | 15 | 5.5C | N | 1 | Scholten,A | |
| 10.83 | 811383 | 6.7 | S | DCS 2B | 8 | 6 | | | 0.100 | B | | 14 | 6 | Y | 1 | van Loo,F.R | |
| 10.837 | 811384 | 6.8 | B | 58 | 15 | 6 | | | 0.050 | B | | 7 | 5 | Y | 1 | Linder,J | V |
| 10.84 | 811385 | 8.1: | M | 58 | 3.8 | 6 | | | 0.15 | N | 8 | 30 | 5.0 | Y | 1 | Bottger,B | W |
| 10.840 | 811386 | | | 58 | | 1 | | | 0.07 | B | | 10 | 5.3 | N | 4 | Deconinck,M | |
| 10.844 | 811387 | 7.3 | S | 58 | 5 | 7 | | | 0.152 | N | 5 | 44 | 5.8 | Y | 2 | Moeller,M | X |
| 10.847 | 811388 | 6.5 | M | 58, 59 | 12 | 4 | | | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | Y |
| 10.85 | 811389 | 6.2 | S | DCS 2B | 22 | 4 | | | 0.040 | B | | 7 | 6.5 | Y | 2 | Bus,E.P | Z |
| 10.854 | 811390 | 8.3 | S | 58 | 6.5 | 3 | | | 0.070 | B | | 16 | 5.4C | Y | 1 | Taylor,M.D | |
| 10.87 | 811391 | 7.9 | B | 58 | | | | | 0.050 | B | | 12 | 5.0 | Y | 1 | Mosch,J | |
| 10.873 | 811392 | 7.6 | B | 58 | 8 | 4 | | | 0.08 | B | | 11 | 5 | Y | 1 | Gainsford,M.J | a |
| 10.885 | 811393 | 7.8 | S | 58 | 2.5 | 6 | | | 0.25 | N | 6 | 60 | 5.0 | Y | 1 | Gainsford,M.J | |
| 10.885 | 811394 | | | | 6.4 | 7 | | | 0.26 | N | 6 | 55 | 5.0 | Y | 1 | Hurst,G.M | |
| 10.889 | 811395 | 6.7 | S | USNOC | 10 | 4 | 0.6 | 302 | 0.05 | B | | 10 | 5.5 | Y | 1 | Hurst,G.M | b |
| 10.901 | 811396 | 6.6 | B | 58 | 4 | 6 | | | 0.20 | SC | 10 | 117 | 5.5 | Y | 1 | Ward,A | |
| 10.91 | 811397 | 6.2 | S | DCS2B3A | 23 | 4 | | | 0.046 | R | 4 | 8 | 6.6 | Y | 3 | van de Weg,R.L.W | c |
| 10.91 | 811398 | 6.7 | B | DCS2B3A | 23 | 4 | | | 0.046 | R | 4 | 8 | 6.6 | Y | 3 | van de Weg,R.L.W | c |
| 10.91 | 811399 | 7.9 | B | 58 | 4 | 4 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Speil,J | |
| 10.917 | 811400 | 7.5 | M | 58 | | 4 | | | 0.08 | B | | 20 | 5.3 | Y | 2 | Falorni,M | |
| 10.92 | 811401 | 6.7 | S | 58 | | | | | 0.08 | B | | 10 | 5.5 | | 1 | Shanklin,J.D | d |
| 10.92 | 811402 | 6.2 | S | DCS 2B | 17 | 4 | | | 0.05 | B | | 10 | 6.5 | Y | 2 | Bouma,R.J | |
| 10.92 | 811403 | 6.4 | S | DCS2B3A | 21 | 6 | 0.42 | 250 | 0.060 | B | | 12 | 6.6 | Y | 3 | van de Weg,R.L.W | c |
| 10.92 | 811404 | 6.8 | B | DCS2B3A | 21 | 6 | 0.42 | 250 | 0.060 | B | | 12 | 6.6 | Y | 3 | van de Weg,R.L.W | e |
| 10.93 | 811405 | 6.5 | B | U ORI | 10 | 5 | | | 0.050 | B | | 7 | 5.5 | N | 1 | Schmeer,P | |
| 10.93 | 811406 | 6.8 | S | DCS2B3A | 8 | 5 | | | 0.100 | B | | 14 | 6 C | Y | 1 | Aerts,L | |
| 10.93 | 811407 | 7.3 | B | AAVSO | 20.0 | 3 | | | 0.05 | B | | 7 | | | | Churyumov,K | |
| 10.93 | 811408 | 8.2 | S | 58 | | | | | 0.050 | B | | 7 | 5.5 | Y | 1 | Spalding,G.E | |
| 10.938 | 811409 | 7.8 | M | 58 | | 5 | | | 0.37 | R | 14.3 | 132 | 5.3 | Y | 2 | Falorni,M | |
| 10.94 | 811410 | 7.9 | S | 58 | 8 | 6 | | | 0.08 | B | | 15 | 5.5C | Y | 1 | Glowinski,C | |
| 10.944 | 811411 | 8.6 | S | 58 | 3 | 3 | 0.17 | 120 | 0.076 | R | 12 | 37 | 5.4C | Y | 1 | Taylor,M.D | |
| 10.945 | 811412 | 6.9 | S | 58 | 7.5 | 5 | | | 0.08 | B | | 15 | 5.2 | Y | 1 | Haver,R | f |
| 10.95 | 811413 | 7.3 | B | 58 | 12.8 | 4 | | | 0.05 | B | | 10 | 5.4 | Y | 1 | Bottger,B | |
| 10.95 | 811414 | 7.2 | B | 58 | 16.0 | 3 | | | 0.050 | B | | 7 | 6.0 | Y | 2 | Merlin,J.-C | |
| 10.95 | 811415 | 6.5 | S | DCS 2B | 15 | 4 | | | 0.050 | B | | 10 | 6 | Y | 6 | Comello,G | |
| 10.95 | 811416 | 7.9 | B | DCS 2B | 7 | 8 | | | 0.115 | N | 8 | 45 | 6.5 | Y | 1 | van Munster,T | |
| 10.955 | 811417 | 7.9 | S | 58 | | 3 | | | 0.040 | B | | 8 | 5.4C | Y | 1 | Taylor,M.D | |
| 10.958 | 811418 | 7.8 | B | 58 | 6.5 | 3 | | | 0.070 | B | | 16 | 5.4C | Y | 1 | Taylor,M.D | |
| 10.979 | 811419 | 7.8 | M | 58 | 5.2 | 5 | | | 0.20 | SC | 10 | 80 | 5.3 | Y | 2 | Falorni,M | |
| 10.99 | 811420 | 7.2 | B | U ORI | 6 | 5 | | | 0.080 | B | | 20 | 5.5 | N | 1 | Schmeer,P | |
| 10.997 | 811421 | 8.6 | S | 58 | 0.8 | 4 | | | 0.063 | R | 13.3 | 34 | 4.5C | N | 1 | Skjaeraasen,O | g |

NOTE A Faint stellar condensation.
NOTE B Clear and windy. First sighting. (Observer gave limit as 10.0. Ed.)
NOTE C Comparison stars 7.5 and 8.5. 9 magnitude star very close.
NOTE D 6.5' coma, averted vision.
NOTE E (Observer indicated "A" method [Argelander?]. Ed.) Coma diameter approximate.
NOTE F 4.2' coma, averted vision.
NOTE G Comet seen under average sky conditions. High winds made observations difficult.
NOTE H Saddleback Butte, 20 mi. east of Lancaster, CA.
NOTE I City lights.
NOTE J Much fog except at zenith. Didn't get telescopes out due to fog. Brightening considerable each day. [sic]

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NOTE K Slight haze, light pollution.
NOTE L Partly cloudy. (Observer gave limit as 10. Ed.)
NOTE M Exc. see.
NOTE N (PA value appears to be measured incorrectly. Ed.)
NOTE O (Observer indicated "Y" method. Ed.)
NOTE P Coma size from full coma maps using photometer: 13 arc min. NS, 9 arc min. EW.
NOTE Q Tail not seen.
NOTE R Near-stellar false nucleus m2 = 10.5: in 15.2 cm reflector at 76x (Nov. 10.58).
NOTE S Tail not seen.
NOTE T (Observer gave limit as 12.5. Ed.)
NOTE U Area low.
NOTE V Hazy. Coma diameter approximate.
NOTE W Observation time short on account of clouds. (Translated by IHW staff. Ed.)
NOTE X Cloudy.
NOTE Y Seeing good, transparency good.
NOTE Z Comet visible to naked eye in black box. Maximum extra focal star images equal approximately 22 arc minutes in 7x40 binoculars. Coma diameter is lower limit.
NOTE a Coma diameter is lower limit.
NOTE b Tail at PA 302 definite. 2nd tail at PA 345 uncertain.
NOTE c Comet definitely visible to naked eye. Observations are showing differences caused by the magnification effect.
NOTE d Cloud.
NOTE e Comet definitely visible to naked eye. In 0.225 Newtonian at 100x DC = 7. Observations are showing differences caused by the magnification effect.
NOTE f Central condensation diameter approximately 1.0 arc min. (Translated by IHW staff. Ed.)
NOTE g The site is in a city with severe light pollution and many streetlights nearby, so my eyes could not dark adapt very well. Because of the bad "seeing", I probably only saw the innermost, brightest part of the coma (which showed no particular peculiarities). It was extremely difficult to distinguish between the background sky and the outermost, faintest part of the coma. Hence the numbers on the coma diameter may be rather uncertain.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.006 | 830175 | | 0.256 | N | 5.6 | 45 | 8 | 5.4 | 2 | Gomez,A | A |
| 10.011 | 830176 | | 0.256 | N | 5.6 | 80 | 12 | 5.4 | 2 | Pedraz,S | B |
| 10.014 | 830177 | | 0.06 | R | 5.7 | 20 | | 5.3 | 2 | Cardiel,N | C |
| 10.021 | 830178 | | 0.06 | R | 5.7 | 40 | | 5.3 | 2 | Cardiel,N | D |
| 10.052 | 830179 | 0.95 | 0.200 | SC | 10 | 200 | 30 | 5.3 | 2 | Lucius,D | |
| 10.063 | 830180 | | 0.15 | N | 5 | 75 | | | 2 | Velasco,P | E |
| 10.080 | 830181 | | 0.256 | N | 5.6 | 80 | 10 | 5.4 | 3 | Gallego,J | F |
| 10.125 | 830182 | 0.22 | 0.203 | R | 13 | 110 | | | 1 | Phillips,J | G |
| 10.157 | 830183 | 1.75 | 0.050 | B | | 7 | 30 | 6.2 | 3 | Will,M | H |
| 10.186 | 830184 | | 0.40 | | 28 | 280 | | | 2 | Lohvinenko,T.W | I |
| 10.190 | 830185 | | 0.127 | R | | 50 | | | 2 | Lohvinenko,T.W | J |
| 10.205 | 830186 | | 0.40 | | 28 | 280 | | | 2 | Lohvinenko,T.W | K |
| 10.410 | 830187 | 8 | 0.33 | N | 4.5 | 50,150 | 20 | 6.5 | 2 | Fabre,R | L |
| 10.43 | 830188 | 0.49 | 0.063 | R | 13.3 | 34, 53 | 86 | 4.0 | 1 | Skjaeraasen,O | M |
| 10.863 | 830189 | 0.32 | 0.26 | N | 6 | 55 | 114 | 5.0 | 1 | Hurst,G.M | N |
| 10.863 | 830190 | 2.0 | 0.05 | B | | 10 | 114 | 5.5 | 1 | Hurst,G.M | O |
| 10.875 | 830191 | 0.13 | 0.40 | N | 5 | 81,254 | 20 | 6.0 | 2 | Merlin,J.-C | P |
| 10.885 | 830192 | 0.25 | 0.356 | SC | 11 | 200 | 90 | | 1 | Verdenet,M | Q |
| 10.944 | 830193 | | 0.360 | R | 14.7 | 130,240 | 22 | 5.4 | 3 | Sarocchi,D | R |
| 10.998 | 830194 | 0.19 | 0.298 | N | 5 | 65,179 | 14 | 5.7 | 1 | Stott,D | S |

NOTE A Spherical and uniform. It was clearly visible the proper movement of the comet during 3 hours of observation. [sic] Bright central condensation.
NOTE B Field: 45'.
NOTE C (Duration not indicated. Time of observation is assumed to be mid time. Ed.)
NOTE D Without details. (Duration not indicated. Time of observation is assumed to be mid time. Drawing data inferred from magnitude report form. Ed.)
NOTE E Diameter of the central condensation 30" to 1'. (Duration not indicated. Time of observation is assumed to be end time. Ed.)
NOTE F Field 45'. Considerable movement.
NOTE G City lights. Still a blur of light but much easier to see. Small star on following side. Some condensation centrally. Condensation close to stellar on low power. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE H Coma diameter 22.5'. Gradual brightening toward the center of the coma, although not very apparent at all. Comet appears rather diffuse, especially toward the edge of the coma, but maintains a circular appearance.
NOTE I Comet Halley is seen here with an integrated magnitude of 7.8 (check star: SAO 76017). (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE J The comet is seen as a grayish white with no real sharp features such as a nucleus. It is difficult to say what is there, but it does seem elongated. North and east positions are not given in this drawing. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE K (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE L The nucleus is well defined with a patch of less bright material surrounding it. This circular area is brighter than the outer portions of the coma. The tail is very broad in shape and fan like.
NOTE M Severe light pollution and very thin, diffuse clouds affected my image of the comet. Absolutely no peculiarities were seen in or around the coma, and no tail was observed. The decreases in luminosity outwards from the innermost brightest central condensation were totally smooth and gradual as usual. Due to the small size of the telescope used, I suppose only the densest, brightest portion of the coma was visible.
NOTE N Coma slightly elongated in PA 135-155. Displaced bright central area 0.5' diameter to north preceding gradient of coma.
NOTE O Tail at PA 302 certain, straight narrow and easy in 10x50 binoculars although not seen for sure in 15x80 binoculars. Tail at perhaps PA 345 and rather uncertain. Possibly broader and much fainter. E.A. Hurst assisted with observations.
NOTE P Jet at PA 38; jet at PA 201, then curved to PA 228; jet at PA 244. Tail at PA 220, large and diffuse; PA of the axis. Jet at PA 334, diffuse. Diffuse condensation (flakes) glimpsed with averted vision. Darker westward.
NOTE Q (Additional drawing supplied made using 11x80 binoculars. Ed.)
NOTE R Magnitude estimate by 20x80 binocular = 7.5. Coma diameter = 5.3'. Degree condensation 3. At left of comet there is a little nebouoluse around a star. [sic] Seem to see a dark part into the coma. [sic] (Two drawings supplied, one at 0.47 arc min./mm and one marked "Particulars at 240x Hi. Res". Ed.)
NOTE S Beginnings of tail seen to PA 83 deg.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.064 | 850113 | 0.200 | 3.8 | | 10.3 x 6.9 | 15.00 | Fujichrome | 400/ | N | X | 1/P | 2 | Lucius,D | |
| 10.109 | 850114 | 0.200 | 4.5 | | 10.3 x 6.9 | 3.00 | Kodak Tri-X | | N | T | 0/C | 1 | Priester,D.C | A |
| 10.112 | 850115 | 0.200 | 4.5 | | 10.3 x 6.9 | 1.50 | Kodak Tri-X | | N | T | 1/C | 1 | Priester,D.C | B |
| 10.115 | 850116 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | Kodak Tri-X | | N | T | 2/C | 1 | Priester,D.C | A |
| 10.126 | 850117 | 0.200 | 4.5 | | 10.3 x 6.9 | 5.17 | Kodak Tri-X | | N | T | 3/C | 1 | Priester,D.C | A |
| 10.136 | 850118 | 0.200 | 4.5 | | 10.3 x 6.9 | 0.75 | Kodak Tri-X | | N | T | 4/C | 1 | Priester,D.C | A |
| 10.394 | 850119 | 0.500 | 5 | | 4.1 x 2.7 | 5.00 | Sakura 1600 | 1600/ | N | S | 4/P | 1 | Sanford,J | C |
| 10.934 | 850120 | 0.500 | 5.6 | | 4.1 x 2.7 | 14.50 | Ilford XP1 | | N | X | 3/P | 1 | Ward,A | D |
| 10.952 | 850121 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M | 1000/ | N | O | 1/T | 1 | Martin,D | |
| 10.955 | 850122 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 10.00 | Ilford HP5 | 400/27 | N | O | 3/C | 1 | Paolinetti,R | E |
| 10.962 | 850123 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | 3M | 1000/ | N | O | 2/T | 1 | Martin,D | |
| 10.965 | 850124 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 20.00 | Ilford HP5 | 400/27 | N | O | 4/C | 1 | Paolinetti,R | E |
| 10.970 | 850125 | 0.200 | 4.5 | | 10.3 x 6.9 | 3.00 | Kodak Tri-X | 400/ | N | O | 16/C | 1 | Martin,D | |
| 10.977 | 850126 | 0.200 | 4.5 | | 10.3 x 6.9 | 5.00 | Kodak Tri-X | 400/ | N | O | 17/C | 1 | Martin,D | |

DATE: 10 NOV 1985

DATE: 10 NOV 1985

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.978 | 850127 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 2.00 | Ilford HP5 | 400/27 | N | O | 5/C | 1 | Paolinetti,R | E |
| 10.983 | 850128 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | Kodak Tri-X | 400/ | N | O | 18/C | 1 | Martin,D | |

NOTE A Push processed to 800 ASA.
NOTE B Start time uncertain. Push processed to 800 ASA.
NOTE C Fog, dew, ice; cold camera pulled helical focuser out slightly.
NOTE D Yellow filter also used. Processed for 1600 ASA. UV filter used.
NOTE E (Observer's image identifier is followed by suffix A. Ed.)

DATE: 11 NOV 1985

DATE: 11 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.00 | 811422 | 8.4 | B | AAVSO | 6.0 | 4 | | | 0.20 | N | 5 | 35 | | | | Tsvetkov,L | |
| 11.01 | 811423 | 7.2 | M | 58 | 6 | 5 | | | 0.06 | R | 4 | 10 | 6.0 | Y | 1 | Granslo,B.H | |
| 11.01 | 811424 | | | | | 7 | | | 0.203 | SC | 10 | 80 | 6.0 | Y | 1 | Granslo,B.H | |
| 11.010 | 811425 | 6.8 | S | 58 | 12 | 4 | | | 0.050 | B | | 10 | 6.4 | Y | 2 | Rogers,J.H | |
| 11.015 | 811426 | 6.5 | B | 58 | 5 | 6 | | | 0.20 | SC | 10 | 77 | 5.5 | Y | 1 | Ward,A | |
| 11.016 | 811427 | 7.9 | M | 58 | 5.6 | 3 | | | 0.089 | R | 13.7 | 32 | C | Y | 1 | Linger,S | A |
| 11.021 | 811428 | 7 : | B | 58 | 7 | 5 | | | 0.256 | N | 5.6 | 80 | | Y | 1 | Losada,R | |
| 11.05 | 811429 | 6.8 | S | DCS 2B | 12 | 5 | | | 0.050 | B | | 10 | 6.5 | Y | 1 | van Loo,F.R | |
| 11.125 | 811430 | 7.8 | S | 58 | | 3 | | | 0.318 | N | 8 | 40 | | | | Hathaway,W | B |
| 11.126 | 811431 | 7.2 | S | 58, 57 | 5 | 2 | | | 0.25 | N | 5.6 | 56 | 6 | Y | 1 | Jordan,J | C |
| 11.133 | 811432 | | | | | | | | 0.362 | N | 5 | 302 | 6.0 | Y | 1 | Stephan,C | D |
| 11.15 | 811433 | 5.8 | S | 58 | 11 | 3 | | | 0.080 | R | 3.7 | 19 | 5.5 | Y | 3 | Spratt,C.E | E |
| 11.22 | 811434 | 6.3 | | 58 | 17 | 4 | | | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | F |
| 11.278 | 811435 | 7.5 | M | 58 | 2.7 | 5 | | | 0.08 | B | | 11 | 5.2 | Y | 1 | Glassett,W | G |
| 11.28 | 811436 | 6.3 | | 58 | 22 | 4 | | | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | F |
| 11.28 | 811437 | 6.3 | V | 58 | | | | | | EY | | | 6.5 | Y | 1 | Keen,R | |
| 11.2903 | 811438 | 7.8 | S | SAO | 7 | 3 | | | 0.080 | B | | 20 | 4.6 | | 3 | Machholz,D | H |
| 11.31 | 811439 | 5.7 | S | 58 | 12 | 3 | | | 0.080 | B | | 11 | 5.9 | Y | 1 | Spratt,C.E | I |
| 11.337 | 811440 | 8.4 | S | 58 | | 3 | | | 0.15 | N | 8 | 30 | 6.0 | Y | 1 | Foster,G | |
| 11.482 | 811441 | 6.7 | B | 58 | | 5 | | | 0.050 | B | | 7 | 6.4 | Y | 1 | Krisciunas,K | J |
| 11.51 | 811442 | 7.1 | S | 58 | 10 | 6 | | | 0.07 | B | | 10 | 5.5 | Y | 1 | Yasuki,M | |
| 11.52 | 811443 | 7.0 | S | 58 | 10 | 6 | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Yasuki,M | |
| 11.54 | 811444 | 7.8 | M | 58 | 10 | 5 | | | 0.08 | B | | 11 | 5.5 | Y | 1 | Mitsuma,S | K |
| 11.552 | 811445 | 8.7 | S | 58 | 4 | 3 | | | 0.153 | N | 8.6 | 52 | 4.5 | Y | 1 | Iwaki,Y | |
| 11.555 | 811446 | 8.0 | M | 58 | 10 | 7 | | | 0.16 | N | 6.3 | 31 | 5.5 | Y | 1 | Mitsuma,S | K |
| 11.563 | 811447 | 8.1 | B | 58 | | | | | 0.07 | B | | 10 | 4.0 | Y | 1 | Date,M | |
| 11.57 | 811448 | 8.8 | B | SAO | 15 | 5 | | | 0.15 | N | 5.7 | 34 | 5.0 | Y | 7 | Tanikawa,M | |
| 11.587 | 811449 | 8.2 | S | 58 | 1.0 | 3 | | | 0.12 | N | 6 | 36 | 3.0C | Y | 1 | Kishi,A | |
| 11.590 | 811450 | 8.0 | S | 58 | 4 | 3 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 11.595 | 811451 | | | | 4 | 9 | 0.2 | 355 | 0.15 | N | 8 | 50 | 5.0 | Y | 1 | Williams,P.F | L |
| 11.625 | 811452 | 8.9 | M | UY TAU | 3 | 7 | | | 0.1 | N | 10 | 40 | 5.5 | Y | 1 | Ichikawa,K | |
| 11.764 | 811453 | 7.9 | B | 58 | 4.5 | 5 | | | 0.10 | B | | 14 | 5.0 | Y | 1 | Hasubick,W | |
| 11.77 | 811454 | 7.7 | S | AAVSO | 6 | 5 | | | 0.13 | N | 6.3 | 24 | 4.5 | Y | 1 | Hayashi,A | M |
| 11.77 | 811455 | 7.2 | B | AAVSO | 10.0 | 4 | | | 0.05 | B | | 7 | | | | Churyumov,K | |
| 11.774 | 811456 | 7.1 | B | 58 | 5.4 | | | | 0.080 | B | | 20 | 5.0 | Y | 1 | Koch,B.O | |
| 11.78 | 811457 | 7.5 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 11.78 | 811458 | 8.0 | B | AAVSO | | | | | 0.20 | R | | 7 | | | | Churyumov,K | |
| 11.78 | 811459 | 6.1 | | AAVSO | | | | | | EY | | | | | | Churyumov,K | |
| 11.790 | 811460 | 8.3 | B | 58 | 4 | 4 | | | 0.03 | B | | 8 | 5.0 | Y | 1 | Bretschneider,H | |
| 11.802 | 811461 | 8.5 | M | CZ | 5 | 4 | | | 0.31 | N | 8 | 62 | 4.9 | Y | 1 | Hajek,P | |
| 11.802 | 811462 | 8.0 | | 58 | | | | | 0.064 | R | 6.3 | 40 | C | N | 1 | Kieltyka,G | N |
| 11.81 | 811463 | 7.1 | S | 58 | 12.2 | 5 | | | 0.05 | B | | 7 | 5.0 | Y | 1 | Kanai,K | |
| 11.81 | 811464 | 7.1 | B | 58 | 8.0 | 3 | | | 0.050 | B | | 7 | 6.0 | Y | 2 | Merlin,J.-C | |
| 11.813 | 811465 | 7.8: | | 58 | | 4 | | | 0.064 | R | 6.3 | 25 | 5 C | N | 1 | Paradowski,M | O |
| 11.819 | 811466 | 7.8 | S | 58 | 4.1 | 6 | | | 0.080 | B | | 20 | 5.0 | Y | 1 | Koch,V | |
| 11.819 | 811467 | 9.0 | M | CZ | | | | | 0.10 | B | | 25 | 5 C | Y | 1 | Valasek,V | P |
| 11.82 | 811468 | 6.2 | S | DCS 2B | 12 | 5 | | | 0.08 | B | | 20 | 6 | Y | 2 | Bouma,R.J | |
| 11.82 | 811469 | 7.5 | S | DCS 3A | 8 | 5 | | | 0.080 | B | | 15 | 5 C | Y | 1 | Wils,P | |
| 11.82 | 811470 | 6.6 | B | 58 | 10.0 | 3 | | | 0.050 | B | | 7 | 6.0 | Y | 2 | Merlin,J.-C | |
| 11.822 | 811471 | 8.2 | B | 58 | 1.9 | 3 | | | 0.060 | R | 15 | 41 | 6.0 | Y | 1 | Castino,R | |
| 11.823 | 811472 | 7.9 | B | 58 | 5.6 | 5 | | | 0.03 | B | | 8 | 5.0 | Y | 1 | Hasubick,W | |
| 11.83 | 811473 | 7.2 | B | 58 | 5 | 5 | | | 0.100 | B | | 14 | 4.2 | Y | 1 | Kraling,W | Q |
| 11.83 | 811474 | 8.1 | B | 58 | 3 | 4 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Speil,J | |
| 11.833 | 811475 | 8.6 | B | 58 | 2.0 | 6 | | | 0.113 | N | 8 | 22 | 5.5 | Y | 1 | Schambeck,C.M | |
| 11.833 | 811476 | 7.5 | | 58 | 6 | 7 | | | 0.081 | B | | 22 | 5 | Y | 1 | Sternwarte Hof | |
| 11.840 | 811477 | | | 58 | | 7 | | | 0.254 | N | 7 | 116 | 5 | Y | 1 | Sternwarte Hof | R |
| 11.847 | 811478 | 8.6 | S | VYTAU58 | 3 | 5 | | | 0.203 | SC | 10 | 80 | 5.2 | Y | 1 | Foulkes,M | S |
| 11.854 | 811479 | 8.9 | B | | 4 | 5 | | | 0.200 | N | 6 | 60 | 5.5 | Y | 2 | Kellner,A | |
| 11.854 | 811480 | 7.0 | M | 58 | | 5 | | | 0.07 | B | | 20 | 5 | Y | 1 | Tanti,T | T |
| 11.86 | 811481 | 8.1 | B | DCS 3A | 5 | 8 | | | 0.115 | N | 8 | 45 | 5.5 | Y | 1 | van Munster,T | |
| 11.8680 | 811482 | 7.8 | S | 58 | 11 | 7 | | | 0.11 | R | 11 | 36 | 5.6 | Y | 1 | Znasik,M | |
| 11.8702 | 811483 | 7.6 | S | 58 | 14 | 6 | | | 0.08 | B | | 10 | 5.6 | Y | 1 | Znasik,M | |
| 11.875 | 811484 | | | 58 | | 1 | | | 0.07 | B | | 10 | 4.2 | N | 1 | Deconinck,M | |
| 11.88 | 811485 | 7.3 | S | DCS 3A | 10 | 5 | | | 0.150 | R | 8 | 34 | 5 C | Y | 1 | Aerts,L | |
| 11.881 | 811486 | 8.2 | B | | 4 | 6 | | | 0.063 | R | 13 | 34 | 5.5 | Y | 1 | Zische,E | |
| 11.882 | 811487 | 8.5 | B | CZ | 12 | 3 | | | 0.080 | B | | 10 | 5.3 | N | 1 | Bilek,V | U |
| 11.885 | 811488 | 8.1 | B | 58 | 3.0 | 6 | | | 0.050 | B | | 7 | 5.5 | Y | 1 | Koschny,D | |
| 11.89 | 811489 | 8.6 | B | 58 | 7 | 5 | | | 0.080 | B | | 20 | C | Y | 1 | Jannink,D.W | V |
| 11.896 | 811490 | 7.7 | M | 58 | 10 | 4 | | | 0.08 | B | | 11 | 5.5 | Y | 1 | Gubo,H | |
| 11.896 | 811491 | 7.0 | S | 58 | 6.5 | 5 | | | 0.089 | R | 5.5 | 18 | 5.5 | N | 1 | Ventura,F | |
| 11.902 | 811492 | 8.0 | B | 58 | 3.5 | 5 | | | 0.07 | B | | 20 | 5.5 | Y | 2 | Filimon,E | |
| 11.904 | 811493 | 7.5 | S | 58 | | 5 | | | 0.05 | B | | 10 | 4.5C | Y | 1 | Giuntoli,M | |
| 11.906 | 811494 | 8.7 | S | 58 | 1.5 | 4 | | | 0.070 | B | | 16 | 5.4C | Y | 1 | Taylor,M.D | |
| 11.910 | 811495 | 7.6 | S | | 3.5 | 5 | | | 0.050 | B | | 16 | 5.2 | Y | 1 | Nolle,M | |
| 11.91 | 811496 | 8.4 | B | E | 3.0 | | | | 0.07 | N | 8 | 33 | | | | Bezrodniy,A | |
| 11.913 | 811497 | 8.5 | M | 58 | 2.1 | 7 | | | 0.254 | N | 6.4 | 41 | 5.5 | Y | 3 | Abbott,J | W |
| 11.958 | 811498 | 8.5 | B | 58 | 4 | 4 | | | 0.067 | R | 12 | 53 | 6.0C | Y | 1 | Sciezor,T | X |
| 11.962 | 811499 | 6.8 | B | 58 | | 2 | | | 0.28 | SC | 5 | 70 | 4.3 | Y | 1 | Amoretti,M | |

NOTE A Clear and windy. Star in coma (mag. 10). (Observer gave limit as 10.5. Ed.)
NOTE B Light haze high humidity.
NOTE C Partly clouding skies made observations difficult.
NOTE D Averted vision - nucleus looks like multiple pin points.
NOTE E Large! DC approximate.
NOTE F Modified Sidgwick method used.
NOTE G Windy!
NOTE H Thin high clouds.
NOTE I DC approximate.
NOTE J Comparison stars 64, 75.
NOTE K Tail not seen.
NOTE L Tail only suspected.
NOTE M Tail detected?
NOTE N Clouds.
NOTE O Wind 60 km/h.
NOTE P Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE Q Nucleus approximately magnitude 10.5.
NOTE R Perhaps 3 or 4 jets.
NOTE S Clear.
NOTE T Seeing good, transparency good. Bright star near comet.
NOTE U Interfered by Kappa Tau.
NOTE V Telescopic limit is 11.

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NOTE W Comparison stars (8.3, 8.7), (7.5, 8.5). 4.2 star very close.
NOTE X Very good weather.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.021 | 830195 | | 0.256 | N | 5.6 | 80 | | | 5 | Losada,R | A |
| 11.147 | 830196 | 0.33 | 0.20 | N | 8 | 70 | 28 | 5 | 1 | Vargas B.,A.G | B |
| 11.169 | 830197 | 0.25 | 0.20 | N | 8 | 120 | 13 | 5 | 1 | Vargas B.,A.G | C |
| 11.488 | 830198 | 0.7 | 0.063 | R | 13.3 | 34, 53 | 6 | 4.5 | 1 | Skjaeraasen,O | D |
| 11.57 | 830199 | 1.38 | 0.15 | N | 5.7 | 34 | 14 | 5.0 | 2 | Tanikawa,M | |
| 11.911 | 830200 | | 0.356 | SC | 11 | 200 | 45 | | 1 | Verdenet,M | E |
| 11.936 | 830201 | 0.37 | 0.254 | N | 6.4 | 65,130 | 6 | 5.5 | 3 | Abbott,J | F |

NOTE A Dense nucleus, high DC (5 or more). (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE B An oval coma was appreciated. [sic]
NOTE C Unspecified feature at approximatley PA 71. The coma present an oval aspect 2.78'x3.24' in they're axis. A PA 71 was estimated at DC = 5. [sic]
NOTE D Severe light pollution and extremely thin clouds worsened the seeing. I was not able to observe any kind of features, and the coma was circular and the brightness changes outward from the innermost, densest part of the coma were rather smooth/gradual. Because of the light pollution, the background sky was bright, so the contrast was low. No visible tail. Total field of drawing: 1 deg. 9'.
NOTE E (Additional drawing submitted made using 11x80 binoculars. Ed.)
NOTE F Coma extension at PA 75 deg. Coma extension very faint. Close proximity of Kappa Tauri (4.2) made detail difficult to discern.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.006 | 850129 | 0.500 | 5.6 | | 4.1 x 2.7 | 25.00 | Ilford XP1 | | N | X | 4/P | 1 | Ward,A | A |
| 11.008 | 850130 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | Kodak Tri-X | 400/ | N | O | 19/C | 1 | Martin,D | |
| 11.013 | 850131 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.03 | Kodak Tri-X | 400/ | N | O | 20/C | 1 | Martin,D | |
| 11.016 | 850132 | 0.200 | 4.5 | | 10.3 x 6.9 | 3.00 | Kodak Tri-X | 400/ | N | O | 21/C | 1 | Martin,D | |
| 11.017 | 850133 | 1.780 | 5 | 0.356 | 1.2 x 0.8 | 18.37 | Fuji 1600 | 1600/ | N | M | 1/P | 1 | Mobberley,M | B |
| 11.021 | 850134 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.05 | Kodak Tri-X | 400/ | N | O | 22/C | 1 | Martin,D | |
| 11.034 | 850135 | 0.200 | 4.5 | | 10.3 x 6.9 | 5.00 | Kodak Tri-X | 400/ | N | O | 23/C | 1 | Martin,D | |
| 11.090 | 850136 | 0.400 | 6.3 | | 5.2 x 3.4 | 5.00 | 3M | 1000/ | N | O | 3/T | 1 | Martin,D | |
| 11.130 | 850137 | 0.200 | 4.5 | | 10.3 x 6.9 | 15.00 | Kodak Tri-X | | N | T | 5/C | 1 | Priester,D.C | C |
| 11.168 | 850138 | 0.200 | 4.5 | | 10.3 x 6.9 | 10.00 | Kodak Tri-X | | N | T | 8/C | 1 | Priester,D.C | C |
| 11.211 | 850139 | 0.200 | 3.5 | | 10.3 x 6.9 | 9.00 | Agfa | 1000/ | N | | 3/S | | Pryal,J | |
| 11.212 | 850140 | 0.058 | 1.4 | | 34.5 x23.4 | 15.00 | Kodak Tri-X | | N | T | 11/C | 1 | Priester,D.C | C |
| 11.222 | 850141 | 0.058 | 1.4 | | 34.5 x23.4 | 10.00 | Kodak Tri-X | | N | T | 12/C | 1 | Priester,D.C | C |
| 11.528 | 850142 | 1.270 | 5 | 0.254 | 1.6 x 1.1 | 10.00 | Kodak 2415 | | Y | O | 19/P | 1 | Johnstone,G.F | |
| 11.893 | 850143 | 0.300 | 4 | | 6.9 x 4.6 | 5.00 | Fotopan HL | 400/27 | N | O | 2/P | 1 | Slusarczyk,J | |
| 11.949 | 850144 | 1.780 | 5 | 0.356 | 1.2 x 0.8 | 8.40 | 3M 1000 | 1000/ | N | M | 2/P | 1 | Mobberley,M | B |
| 11.963 | 850145 | 1.780 | 5 | 0.356 | 1.2 x 0.8 | 17.32 | 3M 1000 | 1000/ | N | M | 02/P | 1 | Mobberley,M | B |
| 11.971 | 850146 | 1.000 | 5.6 | | 2.1 x 1.4 | 75.00 | Kodak Tri-X | 320/26 | N | O | 2/N | 1 | Zimnikoval,P | D |
| 11.983 | 850147 | 1.780 | 5 | 0.356 | 1.2 x 0.8 | 19.20 | 3M 1000 | 1000/ | N | M | 002/P | 1 | Mobberley,M | B |

NOTE A Yellow filter also used; has filter factor of 1.5x on black and white film. Processed for 1600 ASA. UV filter used.
NOTE B This color slide film was processed as a negative.
NOTE C Push processed to 800 ASA.
NOTE D Large format (6x6 cm) film used.

DATE: 12 NOV 1985

DATE: 12 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.003 | 811500 | 7.8 | S | 58 | 2.6 | 6 | | | 0.25 | N | 6 | 60 | 5.6 | Y | 1 | Gainsford,M.J | |
| 12.020 | 811501 | 7.9 | | | 1.5 | 2 | | | 0.050 | R | 11 | 22 | 6.0 | Y | 1 | Kliche,J | |
| 12.049 | 811502 | 9.4 | B | CZ | 8 | 6 | | | 0.10 | B | | 25 | 5.6 | N | | Silhan,J | |
| 12.06 | 811503 | 8.7 | | | 3 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | A |
| 12.06 | 811504 | 8.5 | B | AA | | 3 | | | 0.100 | B | | 14 | 6.0 | Y | 1 | Simmons,K | |
| 12.06 | 811505 | 9.0 | B | AA | | 3 | | | 0.100 | B | | 14 | 6.0 | Y | 1 | Simmons,W | |
| 12.07 | 811506 | 6.4 | S | DCS 2B | 15 | 5 | | | 0.050 | B | | 10 | 6.5 | Y | 3 | Comello,G | |
| 12.07 | 811507 | | | | | | 0.08 | 115 | 0.203 | C | 10 | 50 | 6.5 | Y | 3 | Comello,G | B |
| 12.08 | 811508 | 7.2 | S | 58 | 8 | 7 | | | 0.08 | B | | 15 | 5.8C | Y | 1 | Glowinski,C | |
| 12.085 | 811509 | 6.9 | S | 58 | 7.0 | 5 | | | 0.08 | B | | 15 | 5.0 | Y | 1 | Haver,R | |
| 12.090 | 811510 | | | | 16 | 6 | | | 0.08 | B | | 15 | 6.0 | Y | 1 | Hurst,G.M | |
| 12.097 | 811511 | 6.7 | S | USNOC | 16.8 | 4 | | | 0.05 | B | | 10 | 6.0 | Y | 1 | Hurst,G.M | |
| 12.104 | 811512 | 7.7 | B | 58 | 10 | 2 | | | 0.05 | B | | 7 | 5.0 | Y | 3 | Chmielewski,W | |
| 12.113 | 811513 | | | | | | | | 0.152 | N | 8 | 90 | 5.0 | Y | 1 | Stephan,C | C |
| 12.13 | 811514 | 6.7 | S | 58 | | | | | 0.08 | B | | 10 | 6.0 | | 1 | Shanklin,J.D | D |
| 12.16 | 811515 | 7.3 | B | U ORI | 6 | 4 | | | 0.050 | B | | 7 | 5.0 | N | 1 | Schmeer,P | |
| 12.16 | 811516 | 5.7 | S | 57, 58 | 10 | 3 | | | 0.080 | B | | 11 | 5.1 | Y | 3 | Spratt,C.E | |
| 12.174 | 811517 | | | 58 | 16 | 0 | | | 0.05 | B | | 7 | 4.3 | | | Lairet,R | |
| 12.180 | 811518 | 8.2 | | | 3 | 5 | | | 0.130 | N | 8 | 40 | 5.0 | Y | 1 | Lieder,F | |
| 12.21 | 811519 | 7.7 | S | BAA | | | | | 0.20 | R | 12 | 40 | 6.0 | | 1 | Shanklin,J.D | |
| 12.215 | 811520 | 6.9 | M | 58 | 10.0 | 6 | | | 0.05 | B | | 12 | 6.3 | Y | 1 | Knight,S | |
| 12.22 | 811521 | 6.6 | S | BAA | | | | | 0.05 | B | | 7 | 5.7 | | 1 | Shanklin,J.D | |
| 12.226 | 811522 | 6.9 | B | 58 | 15 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | E |
| 12.226 | 811523 | 6.7 | M | 58 | 5 | 4 | | | 0.050 | B | | 7 | 5.4 | Y | 1 | Robertson,T | |
| 12.24 | 811524 | 6.2 | | 58 | 25 | 4 | | | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | F |
| 12.2563 | 811525 | 7.6 | S | SAO | 7 | 5 | | | 0.080 | B | | 20 | 4.8 | | 3 | Machholz,D | |
| 12.361 | 811526 | 7.5 | B | 58 | | 1 | | | 0.08 | R | 6.3 | 16 | 2.6 | Y | 1 | Burch,J.Q | G |
| 12.361 | 811527 | 6.9 | M | 58 | 12 | 6 | 0.05 | 280 | 0.05 | B | | 10 | 6.0 | Y | 2 | Fabre,R | H |
| 12.375 | 811528 | 7.7 | B | 58 | | 1 | | | 0.08 | R | 6.3 | 25 | 2.6 | Y | 1 | Burch,J.Q | G |
| 12.486 | 811529 | 6.4 | S | 58 | 16 | 2 | | | 0.050 | B | | 10 | | Y | 2 | Tregaskis,T.B | I |
| 12.497 | 811530 | | S | 58 | 6.5 | 4 | | | 0.102 | N | 6 | 24 | | Y | 2 | Tregaskis,T.B | J |
| 12.50 | 811531 | 7.4 | M | 58 | 11 | 5 | | | 0.08 | B | | 11 | 5.5 | Y | 1 | Mitsuma,S | K |
| 12.51 | 811532 | 8.0 | B | | 7.0 | 5 | | | 0.15 | N | 8 | 43 | 5.5 | N | 1 | Uda,K | |
| 12.52 | 811533 | 7.5 | M | 58 | 11 | 7 | | | 0.16 | N | 6.3 | 31 | 5.5 | Y | 1 | Mitsuma,S | |
| 12.52 | 811534 | 8.8 | B | SAO | 12 | 5 | | | 0.15 | N | 5.7 | 34 | 4.0 | Y | 7 | Tanikawa,M | |
| 12.531 | 811535 | 7.5 | S | 58 | 6.0 | 1 | | | 0.050 | B | | 12 | 5 | Y | 1 | Batza,H | L |
| 12.54 | 811536 | 6.3 | S | 58 | 10 | | | | 0.08 | B | | 15 | 6.5 | Y | 1 | Lovejoy,T | M |
| 12.552 | 811537 | 8.0 | B | 58 | | | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Date,M | |
| 12.58 | 811538 | 8.0 | B | 58 | 11 | 7 | | | 0.15 | N | 8.6 | 41 | 6.0 | Y | 4 | Makino,J | |
| 12.590 | 811539 | 7.8 | M | | 4.5 | 7 | | | 0.10 | N | 10 | 55 | 5.5C | Y | 1 | Kato,T | |
| 12.59 | 811540 | 6.0 | B | | 10 | 5 | | | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 12.61 | 811541 | 8.0 | B | SAO | 7.5 | 6 | | | 0.20 | N | 5.6 | 44 | 5.5 | Y | 6 | Nakamura,A | |
| 12.61 | 811542 | 7.5 | M | SAO | 9.5 | | | | 0.06 | R | 12 | 22 | | Y | | Nakamura,A | |
| 12.618 | 811543 | 7.0 | M | | 5 | | | | 0.030 | B | | 8 | 5.5C | Y | 1 | Kato,T | |
| 12.625 | 811544 | 7.8 | M | 58 | 4 | | | | 0.1 | N | 10 | 40 | 6.0 | Y | 1 | Ichikawa,K | |
| 12.658 | 811545 | 7.9 | S | 58 | 1.2 | 5 | | | 0.12 | N | 6 | 36 | 4.0 | Y | 1 | Kishi,A | |
| 12.74 | 811546 | 6.8 | S | 58 | 16.6 | 5 | | | 0.05 | B | | 7 | 6.0 | Y | 1 | Kanai,K | |
| 12.74 | 811547 | 7.4 | B | AAVSO | 6 | 5 | | | 0.08 | R | | 8 | | | | Shirokov,A | |
| 12.75 | 811548 | 8.5 | B | 58 | | 7 | | | 0.15 | N | 8.6 | 41 | 6.0 | Y | 4 | Makino,J | |
| 12.75 | 811549 | 7.8 | B | E | | | | | 0.10 | R | | | | | | Poroshin,A | |
| 12.76 | 811550 | 7.6 | S | AAVSO | 6 | 5 | 0.17 | | 0.13 | N | 6.3 | 24 | 6.5 | Y | 1 | Hayashi,A | N |
| 12.788 | 811551 | 7.6 | S | 58 | 2.9 | 5 | | | 0.080 | B | | 20 | 4.3 | Y | 2 | Storey,D | O |
| 12.81 | 811552 | 7.6 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 12.812 | 811553 | 7.9 | B | 58 | | 3 | | | 0.090 | N | 7.2 | 26 | 5.5 | Y | 1 | Vohla,F | |
| 12.83 | 811554 | 6.9 | S | DCS 3A | 8 | 3 | | | 0.080 | B | | 15 | 5.5 | Y | 2 | Zanstra,W.T | |
| 12.832 | 811555 | | | | 10.8 | 5 | | | 0.08 | B | | 15 | 5.5 | Y | 1 | Hurst,G.M | |
| 12.833 | 811556 | 7.3: | B | | | | | | 0.125 | R | 6 | 35 | 5.6 | Y | 1 | Guthier,O | P |
| 12.834 | 811557 | 7.5 | S | Y TAU | 15.0 | 6 | | | 0.08 | B | | 30 | 5.5 | Y | 2 | Campos,J | |
| 12.839 | 811558 | 6.0 | S | USNOC | | | | | 0.05 | B | | 10 | 6.0 | Y | 1 | Hurst,G.M | |
| 12.84 | 811559 | 5.9 | S | DCS 2B | 17 | 4 | | | 0.05 | B | | 10 | 6.5 | Y | 2 | Bouma,R.J | Q |
| 12.84 | 811560 | 7.5 | B | AAVSO | 7 | 3 | | | 0.08 | R | | 8 | | | | Shirokov,A | |
| 12.840 | 811561 | 6.8 | M | 58 | 8 | 4 | | | 0.05 | B | | 12 | 5 | Y | 1 | Tanti,T | R |
| 12.847 | 811562 | | | | 4 | 5 | | | 0.090 | M | 11 | 40 | 5.4 | N | 7 | Foulkes,M | S |
| 12.85 | 811563 | 8.0 | B | 58 | | | | | 0.050 | B | | 12 | 4.0 | Y | 1 | Mosch,J | |
| 12.86 | 811564 | 6.5 | B | DCS2B3A | | | | | 0.040 | B | | 7 | 6.5 | Y | 2 | Bus,E.P | |
| 12.86 | 811565 | 5.9 | S | DCS2B3A | 22 | 4 | | | 0.040 | B | | 7 | 6.5 | Y | 2 | Bus,E.P | T |
| 12.86 | 811566 | 7.7 | S | DCS 3A | 10 | 4 | | | 0.110 | N | 8 | 45 | 4.5C | N | 1 | Douma,H | |
| 12.86 | 811567 | 7.9 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 12.88 | 811568 | 5.8 | S | DCS2B3A | 25 | 4 | | | 0.018 | B | | 3 | 6.5 | Y | 2 | Bus,E.P | U |
| 12.88 | 811569 | 6.4 | S | DCS 2B | 15 | 5 | | | 0.045 | B | | 9 | 6 | Y | 3 | Comello,G | |
| 12.885 | 811570 | 7.8 | M | 58 | | 7 | | | 0.254 | N | 6.4 | 41 | | Y | 3 | Abbott,J | V |
| 12.897 | 811571 | 8.0 | B | | 4 | 5 | | | 0.063 | R | 13 | 34 | 5.5 | Y | 1 | Zische,E | |
| 12.90 | 811572 | 7.1 | S | DCS 2B | 7 | 6 | | | 0.100 | B | | 14 | 6.5 | Y | 1 | van Loo,F.R | |
| 12.903 | 811573 | 6.8 | S | 58 | 8 | 5 | | | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | |
| 12.903 | 811574 | 7.0 | M | 58 | 6 | 4 | | | 0.09 | M | 11 | 56 | 6.0 | Y | 10 | Westlund,M | |
| 12.906 | 811575 | 7.4 | S | 58 | 10 | 4 | | | 0.030 | R | 4 | 6 | 5.4 | Y | 1 | Foulkes,M | W |
| 12.915 | 811576 | 7.4 | S | Y TAU | 20.0 | 6 | | | 0.05 | B | | 7 | 5.8 | Y | 2 | Campos,J | |
| 12.915 | 811577 | 6.1 | B | 58 | 5 | 6 | | | 0.20 | SC | 10 | 117 | 6 | Y | 1 | Ward,A | W |
| 12.92 | 811578 | 8.4 | B | 58 | 7 | 4 | | | 0.080 | B | | 20 | C | Y | 1 | Jannink,D.W | X |
| 12.92 | 811579 | 6.7 | B | 58 | 13.0 | 3 | | | 0.050 | B | | 7 | 6.0 | Y | 2 | Merlin,J.-C | |
| 12.928 | 811580 | 6.3 | B | 58 | | 6 | | | 0.050 | B | | 10 | 6 | Y | 1 | Ward,A | W |
| 12.931 | 811581 | 6.0 | S | 58 | 21 | 5 | | | 0.05 | B | | 10 | 6.5 | Y | 1 | Hurst,G.M | |
| 12.932 | 811582 | 5.5: | | 58 | | | | | | EY | | | 6.5 | Y | 1 | Hurst,G.M | Y |
| 12.938 | 811583 | 7.3 | B | 58 | | | | | 0.050 | B | | 7 | 5.5 | N | 1 | Lunde,R | |
| 12.94 | 811584 | 6.5 | S | BAA | | | | | 0.08 | B | | 10 | 5.7 | | 1 | Shanklin,J.D | |
| 12.94 | 811585 | 6.3 | B | U ORI | 12 | 4 | | | 0.050 | B | | 7 | 5.0 | N | 1 | Schmeer,P | |
| 12.946 | 811586 | 7.8 | S | 58 | 2.3 | 7 | 0.17 | 60 | 0.25 | N | 6 | 60 | 5.6 | Y | 1 | Gainsford,M.J | Z |
| 12.946 | 811587 | | | | 3 | 7 | | | 0.203 | SC | 10 | 80 | 5.5 | Y | 1 | Foulkes,M | W |
| 12.95 | 811588 | 5.6 | S | 58 | | | | | | EY | | | 5.7 | | 1 | Shanklin,J.D | |
| 12.95 | 811589 | 7.6 | S | 58 | | | | | 0.050 | B | | 7 | 5.7 | Y | 1 | Spalding,G.H | |
| 12.957 | 811590 | 6.8 | S | 58 | 7 | 4 | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Gainsford,M.J | |
| 12.958 | 811591 | 5.2 | B | 101 | | 5 | | | 0.05 | B | | 10 | 4 | N | 1 | Gelinas,M.A | |
| 12.958 | 811592 | 7 | | 58 | 5 | 4 | | | 0.050 | B | | 10 | 3.5 | N | 1 | Marekfia,G | a |
| 12.969 | 811593 | 7.9 | S | 58 | 2.6 | 5 | | | 0.080 | R | 15 | 30 | 5.3 | Y | 2 | Storey,D | |
| 12.972 | 811594 | 8.5 | S | 58 | 2.5 | 5 | | | 0.063 | R | 13.3 | 53 | 4.5C | N | 1 | Skjaeraasen,O | b |
| 12.990 | 811595 | 8.5 | S | 58 | 4 | 3 | | | 0.153 | N | 8.6 | 33 | 5.0 | Y | 1 | Iwaki,Y | |
| 12.997 | 811596 | 7.4 | S | 58VYTAU | 10 | 5 | | | 0.065 | B | | 12 | 5.5 | Y | 1 | Foulkes,M | W |

NOTE A (Observer gave limit as 8.8. Ed.)
NOTE B PA approximate.
NOTE C Some haze tonight. Comet definitely dimmer tonight than last night. Coma diameter possibly a little smaller. 7x35 binoculars

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also used.
NOTE D Sharp central condensation.
NOTE E (Observer gave limit as 13.0. Ed.)
NOTE F Modified Sidgwick method used.
NOTE G Inner city lights and low fog.
NOTE H Best view 10x50's. (PA value appears to be measured incorrectly. Ed.)
NOTE I Faintest star seen in instrument approximately 9.
NOTE J Faintest star seen in instrument approximately 11.
NOTE K Tail not seen.
NOTE L Haze.
NOTE M Glimpsed with naked eye.
NOTE N Tail detected.
NOTE O Low altitude when observed. Street lighting.
NOTE P Comet bright. Halo around coma. (Translated by IHW staff. Ed.)
NOTE Q Comet definitely seen with naked eye. (Observer also used chart DCS 3a. Ed.)
NOTE R Seeing good, transparency good.
NOTE S Streetlights.
NOTE T Comet well visible to naked eye. Coma diameter is lower limit.
NOTE U Maximum extra focal star images = about 30 arc minutes in 3x18 binoculars.
NOTE V Comparison stars 7.6 and 8.3.
NOTE W Very clear.
NOTE X Telescopic limit is 10.
NOTE Y Suspected only.
NOTE Z Tail length and PA uncertain.
NOTE a (Observer indicated "A" method [Argelander?]. Ed.)
NOTE b The site is in a city with severe light pollution and many streetlights nearby, so my eyes could not dark adapt very well. Because of the bad "seeing", I probably only saw the innermost, brightest part of the coma (which showed no particular peculiarities). It was extremely difficult to distinguish between the background sky and the outermost, faintest part of the coma. Hence the numbers on the coma diameter may be rather uncertain.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.140 | 830202 | 0.33 | 0.20 | N | 8 | 70 | 34 | 5 | 1 | Vargas B.,A.G | A |
| 12.159 | 830203 | 0.25 | 0.20 | N | 8 | 120 | 18 | 5 | 1 | Vargas B.,A.G | B |
| 12.53 | 830204 | 1.38 | 0.15 | N | 5.7 | 34 | 14 | 4.0 | 2 | Tanikawa,M | |
| 12.885 | 830205 | 1.2 | 0.08 | B | | 15 | 151 | 5.5 | 1 | Hurst,G.M | |
| 12.905 | 830206 | 1.6 | 0.090 | M | 11 | 56 | 5 | 5.5 | 10 | Westlund,M | |
| 12.906 | 830207 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | C |
| 12.942 | 830208 | 0.15 | 0.298 | N | 5 | 65,179 | 13 | 6.3 | 1 | Stott,D | D |
| 12.982 | 830209 | 0.41 | 0.063 | R | 13.3 | 34, 53 | 32 | 4.5 | 1 | Skjaerasen,O | E |

NOTE A The coma present a regular aspect around central condensation. [sic]
NOTE B The coma present a regular aspect around central condensation. The DC was estimated in 5. [sic]
NOTE C (Additional drawing submitted made using 11x80 binoculars. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Tail at PA 68 deg. Coma extension at PA 195 deg. Coma elongated but not on the same axis as the tail, which is still very short and difficult to define.
NOTE E Field: 48'. The coma appeared rather similar to a globular cluster, it was totally circular and symmetric and showed no peculiarities at all. A bright, tiny, almost star-like "nucleus" (central condensation) was observed, although the changes of brightness outwards from the "nucleus" were smooth and gradual. This observation was severely affected by light pollution, which made the background sky a lot brighter than desireable. Besides, no filter was used, so the contrast was not very good.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.075 | 850148 | 0.300 | 4 | | 6.9 x 4.6 | 11.00 | Fotopan HL | 400/27 | N | O | 6/P | 1 | Slusarczyk,J | |
| 12.125 | 850149 | 0.300 | 4 | | 6.9 x 4.6 | 10.00 | Fotopan HL | 400/27 | N | O | 3/P | 1 | Slusarczyk,J | |
| 12.465 | 850150 | 0.75 | 5 | 0.15 | 2.7 x 1.8 | 20.00 | Ilford HP5 | | N | | 4/P | 1 | Barclay,J | A |
| 12.503 | 850151 | 0.055 | 1.2 | | 36.2 x24.6 | 2.00 | Fujichrome | 400/ | N | X | 1/S | 2 | Tregaskis,T.B | |
| 12.739 | 850152 | 1.760 | 5.8 | 0.300 | 1.2 x 0.8 | 20.00 | Kodak 2415 | | Y | | 101/P | 1 | Niijima,T | B |
| 12.760 | 850153 | 1.760 | 5.8 | 0.300 | 1.2 x 0.8 | 31.00 | Kodak 2415 | | Y | | 102/P | 1 | Niijima,T | B |
| 12.922 | 850154 | 0.700 | 5 | 0.14 | 2.9 x 2.0 | 30.00 | Kodak IIa-F | | N | M | 26/P | 1 | Ridley,H.B | C |

NOTE A (Photographer rated film at ISO 5000. Ed.)
NOTE B Observer's image identifier is preceded by prefix Nj. Ed.)
NOTE C This astrograph uses photographic plates. (Observer's image identifier is ZA 26. Ed.)

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DATE: 13 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.008 | 811597 | 7.7 | M | 58 | | 4 | | | 0.089 | R | 13.7 | 32 | | Y | 1 | Linger,S | A |
| 13.02 | 811598 | 7.1 | S | BAA | | | | | 0.20 | R | 12 | 40 | 6.0 | | 1 | Shanklin,J.D | |
| 13.035 | 811599 | | | | 8 | 7 | | | 0.200 | R | 14 | 40 | 6.4 | Y | 1 | Rogers,J.H | B |
| 13.04 | 811600 | 7.2 | M | SC 2000 | 4 | | | | 0.06 | R | 4 | 10 | 6.0 | Y | 1 | Granslo,B.H | |
| 13.04 | 811601 | | | | 3.0 | 7 | | | 0.203 | SC | 10 | 80 | 6.0 | Y | 1 | Granslo,B.H | C |
| 13.06 | 811602 | 8.2 | | | 4 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | D |
| 13.073 | 811603 | 7.0 | S | 58 | 9 | 6 | | | 0.080 | B | | 10 | 6.4 | Y | 1 | Rogers,J.H | E |
| 13.083 | 811604 | 7.6 | B | 58 | 12 | 2 | | | 0.05 | B | | 7 | 5.0 | Y | 4 | Chmielewski,W | |
| 13.10 | 811605 | 5.6 | S | 58 | | | | | | EY | | | 6.0 | | 1 | Shanklin,J.D | |
| 13.10 | 811606 | 7.8 | B | DCS 3A | 12 | 2 | | | 0.080 | B | | 15 | 5.5C | N | 1 | Keijmel,P.C | |
| 13.118 | 811607 | 6.8 | S | 58 | 9 | | | | 0.050 | B | | 10 | 6.4 | Y | 2 | Rogers,J.H | |
| 13.139 | 811608 | 7.5 | B | 58 | 20 | | | | 0.035 | B | | 7 | 5.0 | Y | 1 | Stephan,C | |
| 13.14 | 811609 | 5.5 | S | 58 | 14 | 3 | | | 0.080 | B | | 11 | 5.8 | Y | 3 | Spratt,C.E | F |
| 13.14 | 811610 | 5.6 | S | 58 | 10 | 3 | | | 0.080 | R | 3.7 | 19 | 5.8 | Y | 3 | Spratt,C.E | F |
| 13.146 | 811611 | 8.4 | S | | 6.5 | 3 | 0.12 | | 0.30 | N | 4.5 | 84 | 4 | Y | 1 | Fernandez,Y | G |
| 13.16 | 811612 | 5.1: | S | 58 | 20 | 1 | | | | | | | 6.2 | Y | 3 | Spratt,C.E | H |
| 13.167 | 811613 | 6.9 | B | 58 | | | | | 0.080 | B | | 20 | 5.0 | Y | | Smith,D | |
| 13.201 | 811614 | 7.8 | S | 58 | 5.7 | 4 | | | 0.070 | B | | 16 | 5.4C | Y | 1 | Taylor,M.D | |
| 13.215 | 811615 | 7.8 | B | 58 | | 2 | | | 0.050 | B | | 10 | 5.5C | Y | 1 | Stapleton,J | I |
| 13.2507 | 811616 | 7.2 | S | SAO | 7 | 6 | | | 0.080 | B | | 20 | 5.4 | | 3 | Machholz,D | |
| 13.274 | 811617 | 6.9 | S | 57 | 5 | 2 | | | 0.25 | N | 5.6 | 56 | 6 | Y | 1 | Jordan,J | J |
| 13.29 | 811618 | 6.2 | | 58 | 23 | 4 | | | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | K |
| 13.302 | 811619 | 7.6 | S | 58 | 20 | 3 | | | 0.08 | R | 6 | 20 | 5.4 | Y | 1 | Bracken,R | |
| 13.32 | 811620 | 6.8 | M | 58 | | | | | 0.05 | B | | 10 | 6 | Y | 3 | Hale,A | |
| 13.354 | 811621 | 6.7 | M | 58 | 4 | 4 | | | 0.15 | N | 8 | 48 | 5.4 | Y | 1 | Robertson,T | |
| 13.368 | 811622 | 6.6 | S | | 13 | 3 | | | 0.080 | B | | 11 | | Y | 3 | Pryal,J | L |
| 13.435 | 811623 | 7.4 | M | | | 7 | | | 0.10 | N | 10 | 55 | 5.0C | Y | 1 | Kato,T | |
| 13.462 | 811624 | 7.2 | B | 58 | | 5 | | | 0.08 | R | 6.3 | 16 | 6.5 | Y | 3 | Burch,J.Q | M |
| 13.490 | 811625 | 6.9 | S | 58 | | 2 | | | 0.050 | B | | 10 | | Y | 1 | Tregaskis,T.B | N |
| 13.497 | 811626 | | S | 58 | 3.2 | 3 | | | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | O |
| 13.507 | 811627 | 7.5 | B | | | | | | 0.035 | B | | 7 | | N | 1 | Okada,M | |
| 13.52 | 811628 | 7.7 | B | 58 | 3 | 6 | | | 0.20 | N | 5 | 36 | | Y | 1 | Curtis,D | P |
| 13.52 | 811629 | 7.8 | B | M | 3.5 | 6 | | | 0.21 | N | | 80 | | | | Knyazyuk,N | |
| 13.53 | 811630 | 7.4 | M | 58 | 9.5 | 6 | | | 0.08 | B | | 11 | 6 | Y | 1 | Mitsuma,S | Q |
| 13.531 | 811631 | 7.3 | S | 58 | 8.0 | 1 | | | 0.050 | B | | 12 | 5.5 | Y | 1 | Batza,H | |
| 13.54 | 811632 | 6.2 | S | 57 | 10 | | | | 0.08 | | | | 6.5 | Y | 1 | Lovejoy,T | R |
| 13.541 | 811633 | 7.5 | S | 58 | 8.0 | 2 | | | 0.20 | N | 10 | 70 | 5.5 | Y | 1 | Batza,H | |
| 13.549 | 811634 | 8.0 | B | 58 | | | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Date,M | |
| 13.55 | 811635 | 6.3 | S | 58 | | | | | 0.05 | B | | 10 | | Y | 1 | Seargent,D | |
| 13.55 | 811636 | 7.5 | | | 8 | 6 | | | 0.08 | B | | 11 | 5.0 | Y | 2 | Washi,S | S |
| 13.57 | 811637 | 7.8 | S | | | 6 | | | 0.08 | B | | 11 | 4.0 | N | 1 | Momose,M | |
| 13.578 | 811638 | 7.6 | S | 58 | 5 | 3 | | | 0.153 | N | 8.6 | 52 | 5.5 | Y | 1 | Iwaki,Y | |
| 13.58 | 811639 | 7.8 | S | 58 | 8 | 7 | | | 0.41 | N | 4.2 | 86 | 6.2 | Y | 4 | Clark,M.L | |
| 13.58 | 811640 | 8.0 | B | | 7.5 | 5 | | | 0.15 | N | 8 | 43 | 5.5 | N | 1 | Uda,K | |
| 13.59 | 811641 | 7.4 | S | 58 | | | | | 0.03 | R | | 6 | 6.2 | | | Clark,M.L | T |
| 13.60 | 811642 | 7.2 | S | 58 | 12 | 5 | | | 0.05 | B | | 7 | 6.2 | Y | 4 | Clark,M.L | U |
| 13.625 | 811643 | 6.9 | S | 58 | 6.0 | 5 | | | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | V |
| 13.626 | 811644 | 7.5 | M | 58 | 5.7 | | | | 0.1 | N | 10 | 56 | 5.5 | Y | 1 | Ichikawa,K | |
| 13.670 | 811645 | 7.0 | M | | 8 | | | | 0.030 | B | | 8 | 5.5C | Y | 1 | Kato,T | |
| 13.673 | 811646 | 7.5 | M | | 4.0 | 7 | | | 0.10 | N | 10 | 55 | 5.5C | Y | 1 | Kato,T | |
| 13.70 | 811647 | 7.5 | M | | 8 | 7 | | | 0.05 | B | | 7 | 6.0 | Y | 2 | Hiraga,M | |
| 13.72 | 811648 | 8.0 | B | 58 | | 7 | | | 0.15 | N | 8.6 | 41 | 6.0 | Y | 1 | Makino,J | |
| 13.722 | 811649 | 6.8 | M | | 8 | | | | 0.030 | B | | 8 | 5.5C | Y | 1 | Kato,T | |
| 13.73 | 811650 | 7.8 | B | SAO | 8 | 6 | | | 0.20 | N | 5.6 | 44 | 5.5 | Y | 6 | Nakamura,A | |
| 13.75 | 811651 | 7.4 | S | AAVSO | 7 | 5 | 0.17 | | 0.13 | N | 6.3 | 24 | 6.0 | Y | 1 | Hayashi,A | |
| 13.78 | 811652 | 6.7 | S | 58 | 18.4 | 6 | 0.3 | 45 | 0.05 | B | | 7 | 6.0 | Y | 1 | Kanai,K | |
| 13.785 | 811653 | 8.0 | M | 58 | 6 | 5 | | | 0.065 | B | | 20 | 5.4 | Y | 1 | McBain,J | |
| 13.79 | 811654 | 7.3 | S | | | | | | 0.08 | B | | 11 | 4.5 | N | 1 | Momose,M | |
| 13.79 | 811655 | 7.4 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 13.81 | 811656 | 7.5 | B | 58 | 4 | 6 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Speil,J | |
| 13.813 | 811657 | | S | | 6.0 | | | | 0.26 | N | 6 | 55 | 5.0 | Y | 1 | Hurst,G.M | |
| 13.833 | 811658 | 5.9 | S | 58 | 17.1 | 5 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Hurst,G.M | W |
| 13.84 | 811659 | 8.0 | M | Y TAU | 6.5 | 6 | | | 0.08 | B | | 11 | 5.4 | Y | 1 | Fleet,R.W | X |
| 13.843 | 811660 | | | | 11.4 | 5 | | | 0.08 | B | | 15 | 5.0 | Y | 1 | Hurst,G.M | |
| 13.844 | 811661 | | | 58 | 5 | 3 | | | 0.114 | N | 8.7 | 50 | 6.0C | Y | 1 | Villa,M | |
| 13.847 | 811662 | 6.8 | M | 58 | 10 | 4 | | | 0.05 | B | | 12 | 5 | Y | 1 | Tanti,T | Y |
| 13.851 | 811663 | 7.5 | S | 58 | | | | | 0.030 | B | | 8 | 6.0C | Y | 1 | Villa,M | |
| 13.854 | 811664 | | | | 6 | 5 | | | 0.127 | SC | 10 | 50 | 5.4 | Y | 4 | Foulkes,M | Z |
| 13.868 | 811665 | 7.1 | B | 58 | | | | | 0.050 | B | | 7 | 5.5 | N | 1 | Lunde,R | |
| 13.875 | 811666 | | | | 4 | 6 | | | 0.356 | SC | 10 | 100 | 5.4 | Y | 4 | Foulkes,M | |
| 13.878 | 811667 | 8.8 | M | 58 | 2.8 | 4 | 0.03 | 165 | 0.153 | N | 8.5 | 65 | | Y | 2 | Torres,E | a |
| 13.88 | 811668 | 7.8 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 13.882 | 811669 | | | | 5 | 6 | | | 0.20 | SC | 10 | 111 | 6.0 | Y | 1 | Bremseth,P.-J | |
| 13.882 | 811670 | 7.0 | S | | | | | | 0.05 | B | | 10 | 6.0 | Y | 1 | Bremseth,P.-J | |
| 13.882 | 811671 | 7.7 | B | 58 | 3.9 | 6 | | | 0.15 | N | 6.6 | 33 | 5.4C | Y | 1 | Dal Santo,M | |
| 13.889 | 811672 | 6.9 | | 58 | 10 | 7 | | | 0.050 | B | | 10 | 5.8C | Y | 1 | Kaila,K | b |
| 13.89 | 811673 | 6.6 | B | 58 | 10.0 | 2 | 0.17 | 236 | 0.050 | B | | 7 | 6.0 | Y | 2 | Merlin,J.-C | |
| 13.91 | 811674 | 7.4 | S | 58 | | | | | 0.050 | B | | 7 | 5.0 | Y | 1 | Spalding,G.H | |
| 13.913 | 811675 | 7.5 | S | 58 | 2.9 | 6 | | 60 | 0.25 | N | 6 | 60 | 5.6 | Y | 1 | Gainsford,M.J | c |
| 13.913 | 811676 | 7.0 | M | 58 | 6 | 4 | | | 0.09 | M | 11 | 56 | 5.5 | Y | 10 | Westlund,M | |
| 13.914 | 811677 | 7.0 | M | 58 | 9 | 7 | | | 0.04 | B | | 12 | 6.0 | Y | 1 | Henshaw,C | |
| 13.916 | 811678 | 5.9 | S | 58 | 17 | 5 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Hurst,G.M | W |
| 13.920 | 811679 | 6.6 | B | 58 | 0.3 | 6 | 0.01 | | 0.28 | SC | 5 | 70 | 4.4 | Y | 1 | Amoretti,M | |
| 13.921 | 811680 | 6.7 | S | 58 | 8.7 | | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Gainsford,M.J | |
| 13.938 | 811681 | 7.4 | S | 58 | 12 | 6 | | | 0.065 | B | | 12 | 5.5 | Y | 4 | Foulkes,M | |
| 13.941 | 811682 | 6.1: | S | 58 | 9 | 5 | | | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | d |
| 13.95 | 811683 | 7.3 | S | 58 | | | | | 0.20 | R | 12 | 40 | 6.0 | | 1 | Shanklin,J.D | |
| 13.95 | 811684 | 6.3 | S | 58 | | | | | 0.08 | B | | 10 | 6.0 | | 1 | Shanklin,J.D | |
| 13.95 | 811685 | 5.7 | S | DCS2B3A | 22 | 5 | | | 0.046 | R | 4 | 8 | 6.3 | Y | 3 | van de Weg,R.L.W | e |
| 13.95 | 811686 | 6.1 | B | DCS2B3A | 22 | 5 | | | 0.046 | R | 4 | 8 | 6.3 | Y | 3 | van de Weg,R.L.W | f |
| 13.95 | 811687 | 6.0 | S | DCS2B3A | 17 | 6 | 0.25 | 107 | 0.060 | B | | 12 | 6.3 | Y | 3 | van de Weg,R.L.W | f |
| 13.95 | 811688 | 6.4 | B | DCS2B3A | 17 | 6 | 0.25 | 107 | 0.060 | B | | 12 | 6.3 | Y | 3 | van de Weg,R.L.W | f |
| 13.972 | 811689 | 6.8 | S | 58, 57 | 10 | 3 | | | 0.050 | B | | 10 | 6.4 | Y | 2 | Rogers,J.E | g |
| 13.98 | 811690 | 7.2 | B | 58 | 7 | 6 | | | 0.08 | B | | 15 | 4.5C | Y | 1 | Glowinski,C | W |
| 13.983 | 811691 | 7.1 | B | 58 | | | | | 0.050 | B | | 7 | 5.5 | N | 1 | Lunde,R | |

NOTE A Clear then cloud. (Observer gave limit as 10.5. Ed.)
NOTE B Still a distinct "nucleus" at 170x.
NOTE C Possible nucleus mag. 13.5.
NOTE D (Observer gave limit as 8.8. Ed.)
NOTE E Comet circular at all mag'n.

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NOTE F DC approximate.
NOTE G The observation was also made by 20x80 binoculars which showed a larger coma than the telescope but did not show nucleus changes. (Translated by IHW staff. Ed.)
NOTE H Naked eye! Urban area. DC approximate.
NOTE I In Taurus.
NOTE J Seeing average due to excess sky glow. Coma still circular with slight condensation.
NOTE K Modified Sidgwick method used.
NOTE L (Observer gave limit as 10. Ed.)
NOTE M Dark location 20 miles to west of city lights.
NOTE N Faintest star seen in instrument approximately 9.
NOTE O Faintest star seen in instrument approximately 12.
NOTE P Semi urban sky.
NOTE Q Tail not seen.
NOTE R PA = SW.
NOTE S (Observer indicated "Y" method. Ed.)
NOTE T Finder scope.
NOTE U Very large.
NOTE V Faintest star seen in instrument approximately 13.
NOTE W Coma diameter approximate.
NOTE X 11' coma, averted vision, between clouds.
NOTE Y Seeing good, transparency good. Clouds.
NOTE Z Very clear.
NOTE a (Observer gave limit as 11.0. Ed.)
NOTE b Bright auroras.
NOTE c Tail length = ?. PA uncertain.
NOTE d Clouds and mist.
NOTE e Coma diameter is lower limit. Comet definitely visible to naked eye. Observations are showing differences caused by the magnification effect.
NOTE f Coma diameter is lower limit. Observations are showing differences caused by the magnification effect.
NOTE g Diffuse and still circular.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.634 | 830210 | 0.34 | 0.152 | N | 8 | 64 | 1 | | 1 | Tregaskis,T.B | A |
| 13.863 | 830211 | 0.23 | 0.20 | SC | 10 | 111 | 46 | 6 | 3 | Bremseth,P.-J | B |
| 13.870 | 830212 | 0.75 | 0.26 | N | 6 | 55 | 165 | 5.0 | 1 | Hurst,G.M | C |
| 13.878 | 830213 | 0.20 | 0.356 | SC | 10 | 100 | 10 | 5.4 | 4 | Foulkes,M | D |
| 13.889 | 830214 | 0.7 | 0.153 | N | 8.5 | 65 | 40 | | 2 | Cifuentes,E | E |
| 13.901 | 830215 | 0.37 | 0.406 | N | 5 | 68 | 20 | | 2 | Farroni,G | F |
| 13.910 | 830216 | 1.6 | 0.090 | M | 11 | 56 | 10 | 5.5 | 10 | Westlund,M | |
| 13.964 | 830217 | 0.05 | 0.83 | R | 19.7 | 800 | 10 | 5.7 | 3 | Soc. Astro. de France | G |

NOTE A Almost stellar-like nucleus at limit. Limit approximately mag. 12.5.
NOTE B The central cond. was this time bigger, with a diam.: 17 arc sec. The outer coma very weak, but brighter in the inner. The southern part of the inner coma was a little brighter than the northern. The coma brightness was steadily decreasing from center and outwards.
NOTE C Elongated coma, nucleus magnitude 10 displaced PA 317 deg. Vertex distance 1.5'. Semi latus rectum P1, P2, estimated 2.9' each. Nucleus embedded in inner condensed area of diameter 0.4'. Outer halo extending to 6.0'. No tail detected.
NOTE D Comet disk spread over a larger area with this telescope. 4' disk observed with a fairly distinct edge. Beyond this, the coma was very diffuse and decreased rapidly in brightness. Central bright spot appeared elliptical in direction PA 135-315 deg. Brighter spot within this. Not much more observed than with the 0.127 m aperture telescope earlier this evening. DC = 6.
NOTE E Shows a tail as a continuation of the coma, and other thinner (lines) less well seen; a pair appears on either side of the coma. The two tails are aligned on a N-S line, principally on PA 165. (Observer gave limit as 11.0. Translated by IHW staff. Ed.)
NOTE F Apparent dimension of the comet 5.6'.
NOTE G Jet at PA 85, 12" long; jet at PA 135, 10" long; streamer at PA 180, 42" long; streamer at PA 204, 45" long; streamer at PA 265, 37" long; jet at PA 317, 15" long. Drawing made by Alain Perez.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.003 | 850155 | 1.780 | 5 | 0.356 | 1.2 x 0.8 | 46.00 | 3M 1000 | 1000/ | N | M | 3/P | 1 | Mobberley,M | A |
| 13.142 | 850156 | 0.050 | 4.0 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | | N | | 112/P | | Gianforte,J.S | B |
| 13.473 | 850157 | 0.605 | 1.7 | 0.356 | 3.4 x 2.3 | 15.00 | Kodak 2415 | | N | T | 000/P | 1 | Levy,A | C |
| 13.630 | 850158 | 2.500 | 10 | 0.254 | 0.8 x 0.6 | 15.00 | Fuji | 400/ | N | X | 3/S | 1 | Richardson,C | D |
| 13.668 | 850159 | 0.268 | 2.6 | 0.102 | 7.7 x 5.1 | 5.00 | Fuji | 400/ | N | X | 4/S | 1 | Richardson,C | E |
| 13.853 | 850160 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 7.00 | Kodak 103a-F | | N | M | 12/P | 1 | Guarro,J | |
| 13.862 | 850161 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 1.50 | Kodak 103a-F | | N | M | 13/P | 1 | Guarro,J | |
| 13.999 | 850162 | 0.135 | 2.8 | | 15.2 x10.2 | 20.00 | Kodak 2415 | | Y | S | 2/P | | Izquierdo,J | |
| 13.999 | 850163 | 1.780 | 5 | 0.356 | 1.2 x 0.8 | 36.00 | 3M 1000 | 1000/ | N | M | 4/P | 1 | Mobberley,M | A |

NOTE A This color slide film was processed as a negative.
NOTE B (Observer's image identifier is 101-2. Observer listed emulsion speed as ASA 800. Ed.)
NOTE C Good transparency. Wind 0-10 miles per hour, S-W.
NOTE D Instrument is Meade Schmidt-Cassegrain.
NOTE E Instrument is Meade Schmidt camera.

DATE: 14 NOV 1985

DATE: 14 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.010 | 811692 | 6.3 | B | 58 | 15 | 7 | | | 0.206 | N | 6.0 | 60 | 5.5 | Y | 3 | Gomez,A | |
| 14.04 | 811693 | 5.6 | S | 58 | | | | | | EY | | | 6.3 | | 1 | Shanklin,J.D | |
| 14.045 | 811694 | 7.7 | M | Y TAU | 4.0 | 6 | | | 0.15 | N | 4 | 50 | 5.4 | Y | 1 | Fleet,R.W | A |
| 14.057 | 811695 | 6.5: | B | 58 | 9 | | | | 0.114 | N | 8.7 | 100 | | Y | 1 | Rodriguez C.,J.A | B |
| 14.06 | 811696 | 6.7 | S | DCS 2B | 12 | 6 | | | 0.100 | B | | 14 | 6 | Y | 1 | van Loo,F.R | |
| 14.06 | 811697 | 8.0 | | | 4 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | C |
| 14.07 | 811698 | 6.5 | B | USNOC | | | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 14.07 | 811699 | 6.3 | S | USNOC | 14 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 14.081 | 811700 | 7.9: | S | 58 | | | | | 0.05 | B | | 20 | 4.0 | Y | 1 | da Silva,L.A.L | |
| 14.083 | 811701 | 8 : | M | 58 | 0.8 | 1 | | | 0.10 | N | 8.6 | 21 | 5.5 | N | 1 | Gaucher,C | |
| 14.109 | 811702 | 7.1 | B | 58 | 15 | | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Stephan,C | D |
| 14.146 | 811703 | 6.2 | M | 58 | 11.0 | 6 | | | 0.05 | B | | 12 | 6.6 | Y | 1 | Knight,S | E |
| 14.15 | 811704 | 5.8 | S | DCS 2B | 18 | 4 | | | 0.05 | B | | 10 | 6 | Y | 8 | Bouma,R.J | F |
| 14.170 | 811705 | 7.5 | | 58 | 4.5 | 8 | | | 0.203 | N | 8 | 128 | 5.5 | Y | | Hannon,J | |
| 14.177 | 811706 | 7.5 | B | 58 | 14 | 3 | | | 0.05 | B | | 7 | 5.5 | Y | 5 | Chmielewski,W | |
| 14.21 | 811707 | 7.1 | M | SC 2000 | | | | | 0.03 | R | | 6 | 5.5 | Y | 1 | Granslo,B.H | |
| 14.21 | 811708 | | | | 4.0 | 7 | | | 0.203 | SC | 10 | 80 | 5.5 | Y | 1 | Granslo,B.H | |
| 14.23 | 811709 | 6.1 | | 58 | 12 | 4 | | | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | G |
| 14.23 | 811710 | 5.6 | S | 58 | 16 | 3 | | | 0.080 | B | | 11 | 5.0 | Y | 4 | Spratt,C.E | H |
| 14.29 | 811711 | 6.6 | M | 58 | | | 1 | 80 | 0.05 | B | | 10 | 6 | Y | 3 | Hale,A | |
| 14.333 | 811712 | 6.5 | M | 58 | 5 | 4 | | | 0.050 | B | | 7 | 5.4 | Y | 1 | Robertson,T | |
| 14.344 | 811713 | 6.7 | M | 58 | 5.8 | 4 | | | 0.15 | N | 8 | 68 | 5.4 | Y | 1 | Robertson,T | I |
| 14.35 | 811714 | 6.0 | S | AA | 18 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | B |
| 14.3861 | 811715 | 6.0 | M | 58 | 20 | 6 | | | 0.05 | B | | 7 | 6.3 | Y | 2 | Cook,A.J | |
| 14.4056 | 811716 | 6.9 | S | SAO | 8 | 4 | | | 0.050 | R | | 8 | 6.0 | | 1 | Machholz,D | |
| 14.406 | 811717 | 6.7 | M | 58 | 15 | 6 | 0.07 | 280 | 0.05 | B | | 10 | 5.0 | Y | 1 | Fabre,R | J |
| 14.412 | 811718 | 7.0 | M | | 5 | 6 | | | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | |
| 14.417 | 811719 | 7.8 | B | 58 | | 1 | | | 0.08 | R | 6.3 | 16 | 5 | Y | 1 | Burch,J.Q | K |
| 14.47 | 811720 | 8.0 | B | SAO | 10 | 7 | | | 0.15 | N | 5.7 | 34 | 5.0 | Y | 7 | Tanikawa,M | L |
| 14.510 | 811721 | 8.2 | B | 58 | 7.0 | 6 | | | 0.150 | B | | 25 | 6.0 | Y | 1 | Nakamura,Y | |
| 14.519 | 811722 | 7.5 | B | 58 | | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Hasegawa,T | |
| 14.563 | 811723 | 9.0 | S | 58 | 0.7 | 6 | | | 0.15 | N | 6 | 45 | 3.5C | Y | 1 | Wakatsuki,M | |
| 14.59 | 811724 | 6.9 | S | 58 | 7.5 | 6 | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Yasuki,M | |
| 14.594 | 811725 | 7.8 | S | 58 | 3.5 | 3 | | | 0.153 | N | 8.6 | 52 | 5.0 | Y | 1 | Iwaki,Y | |
| 14.601 | 811726 | 7.3 | M | | 3 | 7 | | | 0.050 | R | | 7 | 5.0C | Y | 1 | Kato,T | |
| 14.651 | 811727 | 7.9 | M | 58 | 1.4 | 6 | | | 0.12 | N | 6 | 36 | 4.0 | Y | 1 | Kishi,A | |
| 14.657 | 811728 | 7.0 | M | | 5 | 7 | | | 0.10 | N | 10 | 55 | 5.0C | Y | 1 | Kato,T | |
| 14.670 | 811729 | 6.7 | M | | 8 | | | | 0.030 | B | | 8 | 5.0C | Y | 1 | Kato,T | |
| 14.69 | 811730 | 7.6 | S | | 10 | 5 | | | 0.08 | B | | 11 | 4.0 | N | 1 | Momose,M | |
| 14.71 | 811731 | 7.2 | S | AAVSO | 6 | 5 | | | 0.08 | R | | 8 | | | | Shirokov,A | |
| 14.71 | 811732 | | | | 10 | 3 | | | 0.03 | B | | 8 | | | | Shirokov,A | |
| 14.72 | 811733 | 8.1 | B | 58 | 11 | 7 | | | 0.15 | N | 8.6 | 41 | 6.0 | Y | 1 | Makino,J | |
| 14.75 | 811734 | 6.5 | S | 57 | 20.8 | 5 | | | 0.05 | B | | 7 | 6.0 | Y | 1 | Kanai,K | |
| 14.80 | 811735 | 6.3 | B | 58 | 15.0 | 3 | | | 0.050 | B | | 7 | 6.5 | Y | 2 | Merlin,J.-C | |
| 14.81 | 811736 | 7.0 | S | AAVSO | 5 | 3 | | | 0.08 | R | | 8 | | | | Shirokov,A | |
| 14.812 | 811737 | 7.2 | M | 58 | | | | | 0.030 | B | | 8 | 6.0C | Y | 1 | Villa,M | |
| 14.813 | 811738 | 8.7 | S | 58 | 3 | 7 | | | 0.114 | N | 7.9 | 45 | 4.5C | N | 1 | Bernardis,A | |
| 14.823 | 811739 | | | 58 | 4 | 3 | | | 0.114 | N | 8.7 | 110 | 6.0C | Y | 1 | Villa,M | |
| 14.8250 | 811740 | 7.5 | S | AAVSO | | 3 | | | 0.08 | B | | 20 | 5.0 | N | 1 | Sicoli,P | |
| 14.830 | 811741 | 6.3 | | 76438 | 7 | 3 | | | 0.08 | B | | 11 | 5.8 | Y | 1 | Eltri,M | M |
| 14.833 | 811742 | 6.5: | B | 58 | 7 | 4 | | | 0.10 | B | | 14 | 5.0 | Y | 1 | Hasubick,W | B |
| 14.833 | 811743 | 7.8 | B | 58 | 5 | 5 | | | 0.13 | R | 10 | 50 | | Y | 1 | Morrisby,A | N |
| 14.840 | 811744 | 6.2 | S | 57 | 12.0 | 5 | | | 0.08 | B | | 15 | 6.3 | Y | 3 | Haver,R | O |
| 14.840 | 811745 | 7.7 | B | 58 | 7 | 5 | | | 0.08 | B | | 20 | 6 | Y | 2 | Knain,E | |
| 14.844 | 811746 | 7.2 | S | 58 | 10 | 6 | | | 0.050 | B | | 10 | 5.5C | Y | 1 | Kaila,K | P |
| 14.860 | 811747 | 5.9 | S | 57 | 14.0 | 5 | | | 0.05 | B | | 7 | 6.3 | Y | 3 | Haver,R | |
| 14.861 | 811748 | 7.9 | M | Y TAU | 5.0 | 6 | | | 0.15 | N | 4 | 50 | 5.6 | Y | 1 | Fleet,R.W | Q |
| 14.865 | 811749 | 8.2 | S | 57 | | 2 | | 145 | 0.125 | N | 5.8 | 144 | 4.5C | Y | 1 | Riccabone,G | R |
| 14.87 | 811750 | 6.3 | M | AA | 11 | 3 | | | 0.106 | R | 5.7 | 24 | | | | Keszthelyi,S | S |
| 14.87 | 811751 | 7.8 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 14.872 | 811752 | 7.7 | M | Y TAU | 6.0 | 6 | | | 0.08 | B | | 11 | 5.7 | Y | 1 | Fleet,R.W | T |
| 14.875 | 811753 | 6.4: | S | 58 | 14.5 | 4 | | | 0.050 | B | | 7 | 5 | Y | 1 | Linder,J | U |
| 14.875 | 811754 | 7.8 | | 57 | 20 | 6 | | 40 | 0.070 | B | | 20 | 5.5 | Y | 1 | Thomas,A | V |
| 14.882 | 811755 | 8.3 | M | Y TAU | 6.0 | 6 | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | W |
| 14.885 | 811756 | 6.5 | S | 57 | | 4 | | | 0.076 | R | 5.5 | 17 | 4.3C | N | 1 | Piccinini,M | |
| 14.896 | 811757 | | | 58 | 5 | 3 | | | 0.08 | B | | 10 | 6.0C | Y | 3 | Melandri,F | |
| 14.896 | 811758 | 7.9 | M | Y TAU | 3.1 | 6 | | | 0.075 | R | 16 | 50 | 5.6 | Y | 1 | Fleet,R.W | X |
| 14.896 | 811759 | 7.0 | M | 58 | 6 | 4 | | | 0.09 | M | 11 | 56 | 5.5 | Y | 10 | Westlund,M | |
| 14.906 | 811760 | 6.5 | S | 58 | | 7 | | | 0.140 | SN | 3.6 | 19 | 6.4 | Y | 1 | Meozzi,D | Y |
| 14.910 | 811761 | 8.3 | M | Y TAU | 5.0 | 6 | | | 0.22 | N | 8 | 90 | 5.6 | Y | 1 | Fleet,R.W | Z |
| 14.91 | 811762 | 8.0 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 14.915 | 811763 | 7.3 | M | 58 | 10 | 7 | | | 0.04 | B | | 12 | 6.0 | Y | 1 | Henshaw,C | |
| 14.9166 | 811764 | 7.8: | B | 57 | 9 | 4 | | | 0.05 | B | | 10 | 6.4C | Y | 2 | Franciosi,C | a |
| 14.917 | 811765 | | | 57 | | 2 | | | 0.07 | B | | 10 | 4.3 | N | 1 | Deconinck,M | |
| 14.92 | 811766 | 6.9 | S | AAVSO | 5 | 3 | | | 0.08 | R | | 8 | | | | Shirokov,A | |
| 14.92 | 811767 | 7.4 | B | M | 4.5 | | | | 0.08 | R | | 29 | | | | Nesterov,Yu | |
| 14.924 | 811768 | 7.2: | S | 57 | 8 | 6 | | | 0.08 | B | | 20 | 5.0C | Y | 1 | Milani,G | b |
| 14.927 | 811769 | 6.6 | B | 57 | 4 | 6 | | | 0.05 | B | | 10 | 6.0 | Y | 1 | Vanin,G | |
| 14.930 | 811770 | 6.9 | B | BU TAU | | | | | 0.050 | B | | 10 | 6.5 | Y | 1 | Mao,A | |
| 14.930 | 811771 | 7.3: | B | 57 | | | | | 0.08 | B | | 20 | 5.0C | Y | 1 | Milani,G | b |
| 14.934 | 811772 | | | | 4 | 5 | 0.08 | 95 | 0.20 | SC | 10 | 111 | 6.5 | Y | 1 | Bremseth,P.-J | |
| 14.934 | 811773 | 6.8 | S | | | | | | 0.05 | B | | 10 | 6.5 | Y | 1 | Bremseth,P.-J | |
| 14.938 | 811774 | 6.0 | S | | 25 | 5 | | 290 | 0.08 | B | | 20 | 5.5 | Y | 3 | Parisio,R | |
| 14.947 | 811775 | 6.4 | S | 59 | 12 | 4 | | | 0.05 | B | | 10 | 5 C | Y | 1 | Giuntoli,M | |
| 14.951 | 811776 | 6.5 | S | 58 | 7.4 | 6 | | | 0.140 | SN | 3.6 | 16 | 5 | Y | 1 | Linder,J | c |
| 14.96 | 811777 | 7.6 | | | 3 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | d |
| 14.96 | 811778 | 7.6 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 14.965 | 811779 | 7.3 | B | SAO | 5.0 | 6 | | | 0.125 | R | 6 | 35 | 5.4 | Y | 1 | Guthier,O | e |
| 14.979 | 811780 | 7.5 | B | 57 | 3.2 | 4 | | | 0.15 | N | 6.6 | 33 | 5.4 | Y | 1 | Dal Santo,M | f |

NOTE A 6.5' coma, averted vision.
NOTE B Coma diameter approximate.
NOTE C (Observer gave limit as 8.8. Ed.)
NOTE D Tail first seen in 7x35 binoculars approx. 10'. In 36.2 cm f/5 Newtonian, at 145x tail is fan shaped, dim, diffuse. At 302x streaks appear where there is tail, then open space and stars, then another streak, etc. Also at 302x, nucleus has many pinpoint "grains" along with main stellar core. Nucleus definitely getting brighter. Tail PA 130-170.
NOTE E First naked eye sighting.
NOTE F (Observer also used chart DCS 3a. Ed.)
NOTE G Modified Sidgwick method used.
NOTE H DC approximate.
NOTE I Filar micrometer used for coma diameter.

NOTE J (PA value appears to be measured incorrectly. Ed.)
NOTE K Inner city lights.
NOTE L Core mag. (observer's symbol believed to mean "approximately equal to", Ed.) 11.5.
NOTE M SAO 76438 used for magnitude comparison.
NOTE N Central condens. of approximately mag. 11.5.
NOTE O Perhaps fan-shaped form. Nucleus of mag. 9. (Translated by IHW staff. Ed.)
NOTE P Aurora in north.
NOTE Q 9'x7' coma, averted vision.
NOTE R Intense city lights.
NOTE S + 7x50 B and 9 mag. nucleus. [sic]
NOTE T 11' coma, averted vision.
NOTE U Some fog.
NOTE V Coma elongated. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE W 9'x8' coma, averted vision.
NOTE X 8.0' coma, averted vision.
NOTE Y Ellipsoidal coma.
NOTE Z 8.0' coma, averted vision.
NOTE a 10x50 Zeiss Jena decarem. [sic] Coma diameter approximate.
NOTE b City lights.
NOTE c Coma elliptical.
NOTE d (Observer gave limit as 8.6. Ed.)
NOTE e Halo ca. 10 arc min.
NOTE f Excellent sky.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.010 | 830218 | | 0.206 | N | 6.0 | 60 | | | 3 | Gomez,A | A |
| 14.057 | 830219 | | 0.114 | N | 8.7 | 100 | | | 1 | Rodriguez C.,J.A | B |
| 14.115 | 830220 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | C |
| 14.122 | 830221 | | 0.203 | SC | 10 | 169 | | | 1 | Lohvinenko,T.W | D |
| 14.131 | 830222 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | E |
| 14.257 | 830223 | | 0.200 | SC | 10 | 167,500 | 29 | 6.1 | 1 | Ashley,J.B | F |
| 14.386 | 830224 | 3 | 0.050 | B | | 7 | | 6.3 | 2 | Cook,A.J | G |
| 14.48 | 830225 | 1.37 | 0.15 | N | 5.7 | 34, 92 | 14 | 5.0 | 2 | Tanikawa,M | H |
| 14.845 | 830226 | 0.23 | 0.15 | N | 8 | 56, 40 | 4 | 5.0 | 1 | Sardini,D | |
| 14.865 | 830227 | 1.2 | 0.080 | B | | 20 | 10 | 6 | 1 | Knain,E | I |
| 14.868 | 830228 | 0.18 | 0.40 | N | 5 | 81,254 | 20 | 6.5 | 2 | Merlin,J.-C | J |
| 14.870 | 830229 | 0.13 | 0.125 | N | 5.8 | 28, 40, 80 | 24 | 4.5 | 1 | Riccabone,G | K |
| 14.873 | 830230 | 1.02 | 0.106 | R | 5.7 | 24 | 9 | 5.7 | 1 | Keszthelyi,S | |
| 14.889 | 830231 | 1.6 | 0.090 | M | 11 | 56 | 20 | 5.5 | 10 | Westlund,M | |
| 14.896 | 830232 | 2.01 | 0.080 | B | | 11 | 60 | | 1 | Verdenet,M | L |
| 14.911 | 830233 | 1 | 0.12 | R | 15 | 53, 74,153 | 15 | 6.2 | 2 | Franciosi,C | M |
| 14.929 | 830234 | 0.17 | 0.36 | SC | 11 | 156 | 5 | 4 | 1 | Korth,S | N |
| 14.943 | 830235 | 0.23 | 0.20 | SC | 10 | 111 | 25 | 6.5 | 3 | Bremseth,P.-J | O |
| 14.987 | 830236 | 0.27 | 0.400 | N | 5 | 40 | 22 | 5.5 | 2 | Sarocchi,D | |

NOTE A Very big, high DC. Star within the bluish coma. (Duration not indicated. Time of observation is assumed to be roughly mid time. Drawing data inferred from magnitude report form. Ed.)
NOTE B (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE C Comet Halley is seen here with a definite nucleus and has an integrated magnitude of 6.9 (check star: HR 72, HR 69). I have observed the comet's coma with a mm reticle and have found it to be 93" in diameter. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Slight spike has been detected at PA 270 coming out of the comet and ending at PA 325.5. The spike is clearly visible and is most likely a part of a tail. By the way it looks I would call it the dust tail, but this is hard to say at this time. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F Reticle/PA eyepiece yielded 167x. 500x used in inspection for details. No specific structure could be seen. However, a very slight central condensation was apparent at 167x. The degree of condensation was less apparent when observing at 500x.
NOTE G (Duration not indicated. Time of observation is start time. Ed.)
NOTE H Core (observer's symbol believed to mean "approximately equal to", Ed.) 11.5.
NOTE I Star seen through coma at PA 90. Coma circular, steadily increasing brightness toward center.
NOTE J Jet at PA 175, then curved toward PA 180/185; jet at PA 199, then curved toward PA 180. Tail at PA 205, similar feature than Nov. 10's tail. [sic] Parabolic hood about sunward. Darker westward.
NOTE K Magnification of 60 and 144 also used. Two drawings included. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE L (Additional drawing supplied made using 0.356 m SC f/11, 200x. Ed.)
NOTE M Pseudo nucleus diameter 13.8"-20.4", VM = 10; coma diameter 5', VM about 7.8; 3' tail at PA 125, VM about 12.2; 3' tail at PA 145, VM about 12.2. [sic] (Two drawings included in this listing. Ed.)
NOTE N City lights interfered with the observation.
NOTE O Diffuse tail? at PA 95. The central condensation was this time smaller, about 6 arc sec. diameter. The outer coma was very weak. A diffuse glow from the coma pointing in PA 95 with a thinner "streak" in the middle, was observed, 4-5 arc min. long. The coma was a little bit brighter in the southern part.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.058 | 850164 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | 3M | 1000/ | N | O | 4/T | 1 | Martin,D | |
| 14.061 | 850165 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.83 | 3M | 1000/ | N | O | 5/T | 1 | Martin,D | |
| 14.067 | 850166 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M | 1000/ | N | O | 6/T | 1 | Martin,D | |
| 14.073 | 850167 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M | 1000/ | N | O | 7/T | 1 | Martin,D | |
| 14.077 | 850168 | 0.200 | 4.5 | | 10.3 x 6.9 | 3.00 | 3M | 1000/ | N | O | 8/T | 1 | Martin,D | |
| 14.181 | 850169 | 0.205 | 3.8 | | 10.0 x 6.7 | 5.00 | Kodak VR 200 | 200/24 | N | T | 11/P | 1 | Cunningham,J | |
| 14.188 | 850170 | 0.205 | 3.8 | | 10.0 x 6.7 | 10.00 | Kodak VR 200 | 200/24 | N | T | 12/P | 1 | Cunningham,J | |
| 14.199 | 850171 | 0.305 | 2.5 | 0.122 | 6.8 x 4.5 | 4.00 | Kodak Tri-X | 400/ | N | S | 98/P | 1 | Minton,R.B | A |
| 14.332 | 850172 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | 3M 1000 | 1000/ | N | S | 1/P | 2 | Cook,A.J | B |
| 14.350 | 850173 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | 3M 1000 | 1000/ | N | S | 2/P | 2 | Cook,A.J | |
| 14.362 | 850174 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 2.50 | Kodak 2415 | | Y | S | 2/P | 1 | Dilsizian,R | |
| 14.708 | 850175 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 31.00 | Kodak 2415 | | Y | | 3/P | 1 | Niijima,T | C |
| 14.866 | 850176 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 15.00 | Kodak 103a-O | | N | O | 1/C | 2 | Cimatti,A | D |
| 14.897 | 850177 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 15.00 | Kodak 103a-O | | N | O | 2/C | 2 | Cimatti,A | E |
| 14.907 | 850178 | 1.690 | 5.6 | 0.305 | 1.2 x 0.8 | 5.00 | Agfachrome | 1000/31 | N | | 1/S | 1 | Korth,S | F |
| 14.918 | 850179 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 15.00 | Kodak 103a-O | | N | O | 3/C | 2 | Cimatti,A | E |
| 14.954 | 850180 | 2.400 | 4 | 0.600 | 0.9 x 0.6 | 15.03 | Kodak 103a-O | | N | O | 001/T | 1 | Belli,V | |
| 14.979 | 850181 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 6.33 | Kodak 103a-F | | N | M | 14/P | 1 | Guarro,J | |
| 14.997 | 850182 | 0.100 | 2.9 | | 20.4 x13.7 | 20.00 | Kodak Tri-X | 400/ | N | T | 133/P | 1 | Bernschier,W | G |

NOTE A (Print submitted by observer is a composite of two 2 min. exposures separated by 6 min. Ed.) Instrument is Aero-Ektar aerial camera lens.
NOTE B Bi-tonal background sky color is due to a defect on the original slide's emulsion.
NOTE C (Observer's image identifier is 851114-6. Ed.) Large format (70 mm) film used. City lights interfered with the observation.
NOTE D Haze. Guided by G. Mengoli.
NOTE E Haze.
NOTE F City lights interfered with the observation. (Observer indicated both type O and type X guiding. Ed.)

DATE: 14 NOV 1985

DATE: 14 NOV 1985

NOTE G Lumicon Deep Sky filter used. (Observer's image identifier is followed by suffix "/85".) City lights interfered with the observation.

DATE: 15 NOV 1985 DATE: 15 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.03 | 811781 | 7.5 | S | 57 | 14 | | 3 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Zanut,S | |
| 15.031 | 811782 | 6.7 | S | 57 | 16.5 | | | | | 0.035 | B | | 7 | 6.3 | Y | 3 | Morrison,W | |
| 15.080 | 811783 | 5.8 | B | 57 | 15 | | 6 | | 235 | 0.203 | R | 13 | 85 | 5.2 | Y | 1 | Fox,J.H | A |
| 15.08 | 811784 | 6.6 | S | DCS 2B | 28 | | 6 | | | 0.050 | B | | 10 | 6 | Y | 1 | van Loo,F.R | |
| 15.083 | 811785 | 7.9: | M | 57 | 0.8 | | 1 | | | 0.10 | N | 8.6 | 21 | 5.7 | N | 1 | Gaucher,C | |
| 15.114 | 811786 | 7.3 | S | SAO | | | | | | 0.31 | N | 5 | 62 | | | | Giampaolo,G | |
| 15.13 | 811787 | 5.5 | S | DCS 3A | 24 | | 5 | | | 0.046 | R | 4 | 8 | 6.2 | Y | 1 | van de Weg,R.L.W | B |
| 15.13 | 811788 | 6.0 | B | DCS 3A | 24 | | 5 | | | 0.046 | R | 4 | 8 | 6.2 | Y | 1 | van de Weg,R.L.W | B |
| 15.15 | 811789 | 6.3 | M | 57 | 14 | | 6 | | | 0.080 | B | | 20 | 5.5 | Y | 6 | Morris,C.S | |
| 15.15 | 811790 | 6.6 | B | 57 | | | | | | 0.080 | B | | 20 | 5.5 | Y | 6 | Morris,C.S | |
| 15.167 | 811791 | 7.5 | S | 57 | 9 | | 1 | | | 0.080 | B | | 11 | 4.3C | N | 1 | Bailey,G | C |
| 15.17 | 811792 | 6.1 | S | SAO | 15 | | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 15.1701 | 811793 | 7.1 | B | 57 | 10 | | 3 | | | 0.080 | B | | 11 | 5.3 | Y | 1 | Brogioni,A | D |
| 15.219 | 811794 | 7.9 | S | 57 | 23 | | 2 | | | 0.203 | SC | 10 | 80 | 4.5C | Y | 1 | Gronek,J.D | E |
| 15.2278 | 811795 | 6.6 | S | SAO | 12 | | 8 | | | 0.254 | N | 3.8 | 32 | 6.2 | | 1 | Machholz,D | F |
| 15.33 | 811796 | 6.6 | M | 57 | | | | | | 0.05 | B | | 10 | 5 | Y | 2 | Hale,A | G |
| 15.337 | 811797 | 6.9 | M | 57 | 5 | | 4 | | | 0.050 | B | | 7 | 5.4 | Y | 1 | Robertson,T | |
| 15.344 | 811798 | 6.5 | M | 57 | 15 | | 6 | 0.08 | 280 | 0.05 | B | | 10 | 5.0 | Y | 1 | Fabre,R | H |
| 15.344 | 811799 | | | 57 | 5.3 | | 5 | | | 0.15 | N | 8 | 68 | 5.4 | Y | 1 | Robertson,T | I |
| 15.43 | 811800 | 6.7 | S | 57 | 5 | | | | | 0.045 | R | 6 | 13 | | Y | | Jones,A | J |
| 15.44 | 811801 | 5.6 | S | AA | 18 | | 4 | | | 0.080 | B | | 20 | | | | Green,D.W.E | K |
| 15.45 | 811802 | 6.6 | S | 57 | | | | | | 0.08 | B | | 11 | | Y | | Jones,A | |
| 15.465 | 811803 | 7.3 | M | | 5 | | 6 | | | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | |
| 15.47 | 811804 | 8.9 | B | SAO | 10 | | 7 | | | 0.30 | N | 7.0 | 52 | 7.0 | Y | 1 | Tanikawa,M | L |
| 15.476 | 811805 | 7.5 | M | 57 | 5 | | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,H | |
| 15.48 | 811806 | 7.5 | B | | 15 | | 8 | | | 0.23 | | 4.4 | 40 | 6.0 | Y | 1 | Washi,I | M |
| 15.49 | 811807 | 7.8 | B | | 7 | | 5 | | | 0.15 | N | 8 | 43 | 5.0 | N | 1 | Uda,K | |
| 15.50 | 811808 | 7.5 | B | 57 | 3 | | 7 | | | 0.20 | N | 5 | 36 | | Y | 1 | Curtis,D | N |
| 15.52 | 811809 | 7.5 | | | 20 | | 5 | | | 0.12 | B | | 20 | 6.0 | Y | 1 | Washi,S | O |
| 15.521 | 811810 | 7.5 | B | 57 | | | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Hasegawa,T | |
| 15.525 | 811811 | 7.1 | M | 57 | 12 | | 7 | | | 0.08 | B | | 11 | 5.5 | Y | 1 | Mitsuma,S | P |
| 15.53 | 811812 | 7.8 | S | 57 | 10 | | 5 | | | 0.15 | N | 5.3 | 32 | 5.5 | Y | 1 | Oka,A | |
| 15.53 | 811813 | 6.7 | S | 57 | 8 | | 7 | | | 0.07 | B | | 10 | 5.5 | Y | 1 | Yasuki,M | |
| 15.549 | 811814 | 7.0 | M | | 8 | | | | | 0.030 | B | | 8 | 4.5C | Y | 1 | Kato,T | |
| 15.55 | 811815 | 5.7 | S | 57 | 15 | | 7 | | | 0.03 | R | | 8 | 6.4 | Y | 1 | Lovejoy,T | |
| 15.583 | 811816 | 6.9 | S | 57 | | | 2 | | | 0.050 | B | | 10 | | Y | 1 | Tregaskis,T.B | Q |
| 15.60 | 811817 | 7.2 | S | | 9 | | 5 | | | 0.08 | B | | 11 | 3.5 | N | 1 | Momose,M | |
| 15.61 | 811818 | 6.6 | S | 57 | | | | | | 0.045 | R | 6 | 13 | | Y | | Jones,A | R |
| 15.61 | 811819 | | | | | | 7 | | | 0.317 | N | 5 | 86 | | Y | | Jones,A | |
| 15.615 | 811820 | 7.6 | B | 58, 57 | | | | | | 0.07 | B | | 10 | 5.5 | Y | 1 | Date,M | |
| 15.625 | 811821 | 6.5 | B | | | | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 15.64 | 811822 | 7.9 | B | SAO | 8 | | 6 | | | 0.20 | N | 5.6 | 44 | 6.5 | Y | 1 | Nakamura,A | |
| 15.64 | 811823 | 7.6 | M | SAO | 10 | | 6 | | | 0.06 | R | 12 | 22 | | Y | | Nakamura,A | |
| 15.72 | 811824 | 7.5 | S | AAVSO | 5 | | 5 | 0.08 | | 0.13 | N | 6.3 | 24 | 6.0 | Y | 1 | Hayashi,A | |
| 15.726 | 811825 | 8.0 | S | 58 | 2.5 | | 3 | | | 0.153 | N | 8.6 | 33 | 4.5 | Y | 1 | Iwaki,Y | |
| 15.778 | 811826 | 7.0 | B | 57 | 6 | | 6 | | | 0.08 | B | | 20 | 5.5M | Y | 2 | Knain,E | S |
| 15.778 | 811827 | 7.7 | S | 57 | 3.0 | | 5 | | | 0.080 | B | | 20 | 4.4 | Y | 2 | Storey,D | |
| 15.78 | 811828 | 7.1 | B | AAVSO | | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 15.798 | 811829 | 6.8 | S | 57 | | | 3 | | | 0.08 | B | | 11 | 4 C | Y | 1 | Gainsford,M.J | T |
| 15.802 | 811830 | 7.5 | M | 57 | 8 | | 5 | | | 0.065 | B | | 20 | 6.2 | Y | 1 | McBain,J | |
| 15.804 | 811831 | 6.3 | B | 57 | | | 5 | | | 0.06 | R | | 25 | 5 | Y | 1 | Ward,A | U |
| 15.808 | 811832 | | S | 57 | | | 7 | | | 0.25 | N | | 60 | 4 C | Y | 1 | Gainsford,M.J | T |
| 15.81 | 811833 | 7.6 | B | AAVSO | | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 15.828 | 811834 | 7.3 | B | 57 | | | 4 | | | 0.050 | B | | 10 | 5.5 | Y | 1 | Lehmann,T | |
| 15.830 | 811835 | | | | 5.1 | | 7 | | | 0.26 | N | 6 | 55 | 5.0 | Y | 1 | Hurst,G.M | |
| 15.838 | 811836 | 5.9 | S | 58 | 18 | | 5 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Hurst,G.M | |
| 15.840 | 811837 | 8.8 | M | 57 | 3.0 | | 4 | 0.03 | 170 | 0.153 | N | 8.5 | 65 | | Y | 2 | Torres,E | V |
| 15.840 | 811838 | 7.6 | B | 57 | 4 | | 4 | | | 0.090 | N | 7.2 | 26 | 5.0 | Y | 1 | Vohla,F | |
| 15.842 | 811839 | | | | 18 | | 5 | | | 0.08 | B | | 15 | 5.0 | Y | 1 | Hurst,G.M | |
| 15.844 | 811840 | 6.4 | B | 57 | 11 | | | 7 | | 0.063 | B | | 9 | 5.5 | Y | 3 | Kammerer,A | |
| 15.85 | 811841 | 7.0 | B | AAVSO | | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 15.851 | 811842 | 8.1 | M | 57 | 2 | | 6 | | | 0.210 | N | 5.0 | 43 | 5.5C | Y | 1 | Taylor,M.D | |
| 15.856 | 811843 | 5.9 | S | 58 | 18 | | 5 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Hurst,G.M | |
| 15.86 | 811844 | 6.6 | B | 57 | 10.8 | | 6 | | | 0.05 | B | | 10 | 6.0 | Y | | Bottger,B | |
| 15.868 | 811845 | 8.1 | M | 57 | 2 | | 6 | | | 0.076 | R | 12 | 37 | 5.4C | Y | 1 | Taylor,M.D | |
| 15.8750 | 811846 | 7.3 | S | AAVSO | | | 4 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Sicoli,P | |
| 15.88 | 811847 | 7.1 | B | M | 13 | | 7 | | | 0.08 | R | 10 | 28 | | | | Rudakov,G | |
| 15.88 | 811848 | 7.2 | S | 57 | | | | | | 0.050 | B | | 7 | 5.5 | Y | 1 | Spalding,G.H | W |
| 15.894 | 811849 | | M | 58 | 9 | | 7 | | | 0.04 | B | | 12 | 6.3 | Y | 1 | Henshaw,C | |
| 15.896 | 811850 | 6.7 | B | BU TAU | | | | | | 0.050 | B | | 10 | 6.3 | Y | 1 | Mao,A | |
| 15.897 | 811851 | 7.2 | | | | | | | | 0.08 | B | | 11 | 6.0 | Y | 1 | Eltri,M | X |
| 15.903 | 811852 | 6.8 | B | 57 | 5.5 | | 5 | | | 0.050 | B | | 7 | 5.5 | N | 1 | Lunde,R | |
| 15.906 | 811853 | 6.5 | | 57 | 7.5 | | 3 | | | 0.08 | B | | 15 | 3.5 | Y | 1 | Dietrich,M | Y |
| 15.910 | 811854 | 7.6 | B | 57 | 5 | | 6 | | | 0.080 | R | 6.3 | 50 | | Y | 1 | Pfitzner,E | Z |
| 15.92 | 811855 | 7.1 | B | M | 14 | | 7 | | | 0.08 | R | 10 | 28 | | | | Rudakov,G | |
| 15.924 | 811856 | 7.3 | B | 57 | 3.1 | | 6 | | | 0.15 | N | 6.6 | 33 | 5 C | Y | 1 | Dal Santo,M | |
| 15.927 | 811857 | 6.4 | S | 57 | 4 | | 6 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Vanin,G | |
| 15.93 | 811858 | 6.6 | M | AA | 10 | | 4 | | | 0.106 | R | 5.7 | 24 | | | | Keszthelyi,S | a |
| 15.937 | 811859 | 7.4: | S | 57 | | | 7 | | | 0.20 | N | 4 | 50 | 4.7C | Y | 1 | Milani,G | b |
| 15.94 | 811860 | 7.7 | | | 3 | | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | c |
| 15.944 | 811861 | 8.2 | M | Y TAU | 4.0 | 3.5 | 6 | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | d |
| 15.95 | 811862 | 5.9 | S | 57 | | | | | | 0.05 | B | | 7 | 4.7 | | 1 | Shanklin,J.D | |
| 15.96 | 811863 | 7.2 | B | M | 14.5 | | 7 | | | 0.08 | R | 10 | 28 | | | | Rudakov,G | |
| 15.962 | 811864 | 7.7 | M | Y TAU | 5.0 | | 6 | | | 0.08 | B | | 11 | 5.7 | Y | 1 | Fleet,R.W | e |
| 15.965 | 811865 | 7.3 | B | 57 | | | | | | 0.05 | B | | 7 | 5 | Y | 1 | Dal Santo,M | |
| 15.969 | 811866 | 7.8 | M | Y TAU | 5.0 | | 6 | | | 0.15 | N | 4 | 50 | 5.6 | Y | 1 | Fleet,R.W | f |
| 15.969 | 811867 | 7.5 | M | 57 | | | 6 | | | 0.089 | R | 13.7 | 32 | C | Y | 1 | Linger,S | g |
| 15.979 | 811868 | 7.1 | B | 57 | 3.6 | | 7 | | 60 | 0.25 | N | 6 | 60 | 5.2 | Y | 1 | Gainsford,M.J | h |
| 15.979 | 811869 | 7.1 | S | 57, 58 | 8.5 | | 6 | | | 0.065 | B | | 12 | 5.0 | Y | 1 | Foulkes,M | U |
| 15.980 | 811870 | 7.6 | B | | 4 | | 5 | | | 0.130 | N | 8 | 40 | 5.0 | Y | 1 | Lieder,F | |
| 15.986 | 811871 | 7.7 | M | Y TAU | 6.5 | | 6 | | | 0.075 | R | 16 | 50 | 5.6 | Y | 1 | Fleet,R.W | i |
| 15.987 | 811872 | 6.7 | B | 57 | 7 | | | | | 0.08 | B | | 11 | 5.2 | Y | 1 | Gainsford,M.J | |
| 15.993 | 811873 | | | | 4 | | 5 | | | 0.090 | M | 11 | 40 | 5.0 | Y | 1 | Foulkes,M | U |

NOTE A Fan coma, PA approximate. SAO 076339 comparison star.
NOTE B Comet definitely visible to naked eye.
NOTE C First view! Very faint.
NOTE D I perceive detail. (Roughly translated by IHW staff. Ed.)
NOTE E Exc. see.
NOTE F Inner (3' dia.) coma mag. = 7.8.
NOTE G Observed through thin cirrus.

DATE: 15 NOV 1985

NOTE H (PA value appears to be measured incorrectly. Ed.)
NOTE I Filar micrometer used for coma diameter.
NOTE J Clear. Moon 2d.
NOTE K Coma diameter approximate.
NOTE L Core mag. (observer's symbol believed to mean "approximately equal to", Ed.) 12.
NOTE M Instrument is Wright-Schmidt.
NOTE N Semi urban sky.
NOTE O (Observer indicated "Y" method. Ed.)
NOTE P Tail not seen.
NOTE Q Faintest star seen in instrument approximately 9.
NOTE R No moon.
NOTE S Moonglow northern horizon.
NOTE T Clouds.
NOTE U Some cloud.
NOTE V (Observer gave limit as 11.0. Ed.)
NOTE W Perhaps brighter.
NOTE X SAO 76308 and SAO 76275 used for magnitude comparison.
NOTE Y Misty. (Translated by IHW staff. Observer indicated "A" method [Argelander?]. Ed.)
NOTE Z Haze. (Observer gave limit as 10.5. Ed.)
NOTE a + 7x50 B and 9 mag. nucleus. [sic]
NOTE b City lights.
NOTE c (Observer gave limit as 8.6. Ed.)
NOTE d 7.0'x5.5' coma, averted vision.
NOTE e 11' coma, averted vision.
NOTE f 9' coma, averted vision.
NOTE g Very clear. (Observer gave limit as 10.5. Ed.)
NOTE h Tail length = ?. PA uncertain.
NOTE i 12' coma, averted vision.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.078 | 830237 | 0.6 | 0.203 | R | 13 | 85 | 6 | 5.2 | 1 | Fox,J.H | A |
| 15.150 | 830238 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | B |
| 15.48 | 830239 | 1.11 | 0.30 | N | 7 | 52 | 14 | 7.0 | 1 | Tanikawa,M | C |
| 15.769 | 830240 | 1.2 | 0.080 | B | | 20 | 15 | 5.5 | 1 | Knain,E | D |
| 15.830 | 830241 | 0.15 | 0.298 | N | 5 | 65,179 | 10 | 6.0 | 1 | Stott,D | E |
| 15.832 | 830242 | 0.21 | 0.203 | SC | 10 | 80,165 | 19 | 5.2 | 1 | Foulkes,M | F |
| 15.845 | 830243 | 0.7 | 0.153 | N | 8.5 | 65, 52 | 35 | | 2 | Cifuentes,E | G |
| 15.856 | 830244 | 0.53 | 0.26 | N | 6 | 55,145 | 85 | 5.0 | 1 | Hurst,G.M | H |
| 15.857 | 830245 | 0.12 | 0.125 | N | 5.8 | 28, 40, 60 | 22 | 4.0 | 1 | Riccabone,G | I |
| 15.918 | 830246 | 0.44 | 0.406 | N | 5 | 68 | 15 | | 2 | Farroni,G | J |
| 15.929 | 830247 | 1.05 | 0.106 | R | 5.7 | 24, 38, 48 | 16 | 5.5 | 1 | Keszthelyi,S | K |
| 15.93 | 830248 | 0.23 | 0.15 | N | 8 | 56, 40 | 6 | 5.0 | 1 | Sardini,D | |
| 15.958 | 830249 | 0.64 | 0.210 | N | 5.7 | 30, 66 | | | 1 | Temprano,J | L |

NOTE A NE "bow wave" definitely visible. Star visible through coma, W of nucleus.
NOTE B The nuclear magnitude of this comet is clearly 9.2 (check star: AGK 3+25 deg. 0220) however the integrated magnitude I am not sure of since it is hazy out and therefore I don't know how diffuse this object really is, my guess would be 6.9. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Core (observer's symbol believed to mean "approximately equal to", Ed.) 12.
NOTE D Star at PA 90. Coma very slightly elongated toward PA 300.
NOTE E Close approach to mag. 12 star. At 1952 the nucleus condensation and the star merged. The drawing shows the appearance at 1953. No tail visible but coma extended to the NNW. PA 316 deg.
NOTE F DC = 6. Disk circular. Bright spot at centre. Even brighter spot suspected within this.
NOTE G The tail has characteristics similar to those described on 13/11/85 except on the south side, where one branch (on the east side) is more intense than the other. (Observer gave limit as 11. Translated by IHW staff. Ed.)
NOTE H Magnitude 9-10 almost star-like point apparently at centre of coma, situated within inner condensed area of 1.5' diameter. Overall coma diameter 5.1'. No tail seen. Star involved 1' from nuclear region in PA 66 deg.
NOTE I Wedge-shaped light light zone at PA 82. The drawing was interrupted at 2044 UT owing to sudden clouding of the sky. Since I was unable to make a direct measurement of the apparent size I am reporting a scale as deduced by ratioing the drawing to an AAVSO chart, yielding dimensions which are only indicative. Magnifications of 60 and 144 also used. Two drawings. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE J Apparent dimensions of the comet 6.8'x5.9'.
NOTE K Magnifications of 60x and 150x also used. Coma "bumps" at PA 100 and at PA 320. (Translated by IHW staff. Ed.)
NOTE L Without tail. High DC (between nucleus and outer parts of the coma). (Duration not indicated. Time of observation is assumed to be roughly mid time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.072 | 850183 | 0.200 | 3.5 | | 10.3 x 6.9 | 2.50 | Kodak 2415 | | Y | T | 0/C | 2 | Woidyla,B | |
| 15.076 | 850184 | 0.200 | 3.5 | | 10.3 x 6.9 | 2.00 | Kodak 2415 | | Y | T | 1/C | 2 | Woidyla,B | |
| 15.081 | 850185 | 0.200 | 3.5 | | 10.3 x 6.9 | 2.00 | Kodak 2415 | | Y | T | 2/C | 2 | Woidyla,B | |
| 15.082 | 850186 | 0.200 | 3.5 | | 10.3 x 6.9 | 3.00 | Kodak 2415 | | Y | T | 3/C | 2 | Woidyla,B | |
| 15.086 | 850187 | 0.200 | 3.5 | | 10.3 x 6.9 | 1.25 | Kodak 2415 | | Y | T | 4/C | 2 | Woidyla,B | |
| 15.088 | 850188 | 0.200 | 3.5 | | 10.3 x 6.9 | 2.50 | Kodak 2415 | | Y | T | 5/C | 2 | Woidyla,B | |
| 15.091 | 850189 | 0.200 | 3.5 | | 10.3 x 6.9 | 3.50 | Kodak 2415 | | Y | T | 6/C | 2 | Woidyla,B | |
| 15.106 | 850190 | 0.050 | 4.0 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | | N | | 115/P | | Gianforte,J.S | A |
| 15.118 | 850191 | 0.400 | 7 | | 5.2 x 3.4 | 2.50 | Kodak 2415 | 125/ | Y | T | 9/C | 2 | Woidyla,B | |
| 15.127 | 850192 | 0.050 | 1.8 | | 39.6 x27.0 | 1.00 | Kodak 2415 | 125/ | Y | T | 10/C | 2 | Woidyla,B | |
| 15.129 | 850193 | 0.050 | 1.8 | | 39.6 x27.0 | 1.00 | Kodak 2415 | 125/ | Y | T | 11/C | 2 | Woidyla,B | |
| 15.215 | 850194 | 0.200 | 3.5 | | 10.3 x 6.9 | 2.00 | Kodak 2415 | 125/ | Y | T | 14/C | 2 | Woidyla,B | |
| 15.216 | 850195 | 0.200 | 3.5 | | 10.3 x 6.9 | 1.00 | Kodak 2415 | 125/ | Y | T | 15/C | 2 | Woidyla,B | B |
| 15.222 | 850196 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 1.00 | Kodacolor | 1000/ | N | S | 22/N | 1 | Gronek,J.D | C |
| 15.274 | 850197 | 0.135 | 2.8 | | 15.2 x10.2 | 4.00 | Kodak Tri-X | | N | C | 610/N | 1 | Lazerson,E | D |
| 15.294 | 850198 | 1.524 | 6 | 0.254 | 1.4 x 0.9 | 20.00 | Kodak 2415 | | Y | X | 85/P | 1 | Snyder,L.F | E |
| 15.302 | 850199 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 30.00 | Kodak Tri-X | | N | M | 8/S | 1 | Webb,R | F |
| 15.352 | 850200 | 1.524 | 6 | 0.254 | 1.4 x 0.9 | 60.00 | Kodak 2415 | | Y | X | 86/P | 1 | Snyder,L.F | |
| 15.904 | 850201 | 0.600 | 5.6 | | 3.4 x 2.3 | 13.00 | Kodak 103a-O | | N | S | 4/P | 1 | Dragesco,J | |
| 15.922 | 850202 | 1.270 | 5 | 0.254 | 1.6 x 1.1 | 10.50 | Kodak 2415 | | Y | O | 26/P | 1 | Johnstone,G.F | |
| 15.934 | 850203 | 0.135 | 3.2 | | 15.2 x10.2 | 8.00 | Agfa-Pan Pro | 400/27 | N | M | 14/C | 1 | Trixler,F | |
| 15.941 | 850204 | 0.200 | 2.8 | | 10.3 x 6.9 | 3.00 | Kodak 2415 | | Y | | 10/P | 1 | Conrad,R | G |
| 15.944 | 850205 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 11.00 | Kodak 2415 | | Y | | 3/P | 1 | Conrad,R | G |
| 15.964 | 850206 | 0.700 | 5 | 0.14 | 2.9 x 2.0 | 3.00 | Kodak IIa-F | | N | M | 29/P | 1 | Ridley,H.B | H |
| 15.969 | 850207 | 0.600 | 1.7 | 0.350 | 3.4 x 2.3 | 8.00 | Ilford HP5 | 400/ | N | O | 1/T | 1 | Molinari,L | I |
| 15.997 | 850208 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 6.00 | Kodak 2415 | | Y | O | 03/P | 7 | Linder,J | J |

NOTE A (Observer's image identifier is 101-5. Ed.) (Observer listed emulsion speed as ASA 800. Ed.)
NOTE B A car came by with its lights on.
NOTE C (Observer's image identifier is followed by suffix A. Ed.)
NOTE D (Observer's image identifier is 16-10. Ed.) "Push" processed to 800 ASA.
NOTE E Lines through negative are aircraft.
NOTE F Inner coma and starlike central condensation visible on all original negatives. Film push processed slightly. (Observer indicated C-type guiding as well as M. Ed.)

DATE: 15 NOV 1985

NOTE G City lights interfered with the observation; Vienna, from room!
NOTE H (Observer's image identifier is preceded by prefix ZA. Ed.) Instrument uses photographic plates.
NOTE I Instrument is Celestron Schmidt camera. 120 size film used.
NOTE J Instrument is Schmidt camera.

DATE: 16 NOV 1985

DATE: 16 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma | size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.000 | 811874 | 5.8 | | 57 | 15 | 12 | 7 | | | 0.081 | B | | 22 | 6 | Y | 2 | Sternwarte Hof | |
| 16.01 | 811875 | 5.1 | S | 57 | | | | | | | EY | | | 6.3 | | 1 | Shanklin,J.D | |
| 16.01 | 811876 | 7.5 | B | M | | | | | | 0.15 | N | 5 | 25 | | | | Korneev,V | |
| 16.028 | 811877 | 7.4 | B | 57 | | | 5 | | | 0.035 | B | | 7 | 4.0C | Y | 1 | Pilch,R | |
| 16.04 | 811878 | 6.9 | S | 57 | | | | | | 0.20 | R | 12 | 40 | 6.3 | | 1 | Shanklin,J.D | |
| 16.04 | 811879 | 7.5 | B | M | | | | 0.3 | | 0.15 | N | 5 | 25 | | | | Korneev,V | A |
| 16.042 | 811880 | 6.6 | S | 57 | 7 | | 4 | | | 0.050 | B | | 10 | 6.0 | Y | 2 | Rogers,J.H | B |
| 16.049 | 811881 | 6.0 | S | 57 | 20 | | 6 | | | 0.140 | SN | 3.6 | 16 | 6.0 | Y | 7 | Linder,J | C |
| 16.06 | 811882 | 6.3 | B | 57 | 16 | | 6 | | | 0.140 | SN | | 16 | 6.0 | Y | 3 | Wagner,G | |
| 16.097 | 811883 | 7.9 | B | 57 | 20 | | 0 | | | 0.05 | B | | 7 | 4.3 | | | Lairet,R | |
| 16.099 | 811884 | | | | | | | | | 0.035 | B | | 7 | 5.4 | Y | 1 | Stephan,C | D |
| 16.135 | 811885 | 7.4 | B | 57 | 14 | | 3 | | | 0.05 | B | | 7 | 5.0C | Y | 6 | Chmielewski,W | |
| 16.141 | 811886 | 7.6 | B | 57 | 1.5 | | 2 | | | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 16.15 | 811887 | 6.1 | | 57 | 15 | | 4 | | | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | E |
| 16.177 | 811888 | 6.9 | S | 57 | 8 | | 1 | | | 0.080 | B | | 11 | 4.3C | Y | 1 | Bailey,G | |
| 16.20 | 811889 | 5.7 | S | AA | 20 | | 3 | | | 0.050 | B | | 7 | | | | Green,D.W.E | F |
| 16.229 | 811890 | 7.3 | B | 57 | | | 6 | | | 0.200 | SC | 10 | 169 | 4 | Y | 1 | Gelinas,M.A | |
| 16.240 | 811891 | | B | | | | 2 | | | 0.08 | R | 6.3 | 16 | 3 | Y | 1 | Burch,J.Q | G |
| 16.257 | 811892 | | | 57 | 6.7 | | 5 | | | 0.15 | N | 8 | 68 | 5.4 | Y | 1 | Robertson,T | H |
| 16.260 | 811893 | 6.3 | M | 57 | 18 | | 7 | 0.10 | 290 | 0.05 | B | | 10 | 6.0 | Y | 2 | Fabre,R | I |
| 16.292 | 811894 | 7.2 | S | 57 | 25 | | 4 | | | 0.08 | R | 6 | 20 | 4 | Y | 1 | Bracken,R | J |
| 16.33 | 811895 | 5.9 | M | 57 | 14 | | 7 | 0.28 | 105 | 0.080 | B | | 20 | 6.0 | Y | 14 | Morris,C.S | |
| 16.333 | 811896 | 7.6 | S | 57 | 6 | | 6 | | | 0.20 | SC | 6 | 30 | 6.0 | Y | 1 | Saxon,V.P | |
| 16.34 | 811897 | 6.0 | M | 57 | 6.4 | | 7 | | | 0.256 | N | 4.5 | 45 | 6.0 | Y | 14 | Morris,C.S | |
| 16.35 | 811898 | 7.6 | M | 57 | 4.8 | | | | | 0.256 | N | 4.5 | 156 | 6.0 | Y | 12 | Morris,C.S | |
| 16.365 | 811899 | 6.8 | B | 57 | | | 2 | | | 0.050 | B | | 10 | 5.0C | Y | 1 | Stapleton,J | K |
| 16.368 | 811900 | | | 57 | 25 | | 6 | | | 0.279 | SC | 10 | 166 | 5.5 | Y | 1 | Kemble,L.J | L |
| 16.415 | 811901 | 9.0 | S | 57 | 2.7 | | 5 | | | 0.15 | N | 8 | 50 | 6.5 | Y | 1 | Donth,D | |
| 16.426 | 811902 | 7.0 | M | | 6 | | 6 | | | 0.10 | N | 10 | 55 | 4.0C | Y | 1 | Kato,T | M |
| 16.429 | 811903 | 7.5 | B | 57 | | | 5 | | | 0.10 | R | 16 | 65 | 6.0 | Y | 2 | Bembrick,C | |
| 16.462 | 811904 | | | 57 | 5 | | 1 | | | 0.035 | B | | 7 | 4 | Y | 1 | Watanabe,H | |
| 16.465 | 811905 | 7.5 | M | 57 | 5 | | 1 | | | 0.035 | B | | 7 | 4 | Y | 1 | Watanabe,A | |
| 16.48 | 811906 | 6.7 | S | 57 | 10 | | 7 | | | 0.07 | B | | 10 | 4.5 | Y | 1 | Yasuki,M | |
| 16.49 | 811907 | 5.6 | S | 57 | 16 | | 7 | | | 0.08 | B | | 15 | 6.0 | Y | 1 | Lovejoy,T | |
| 16.49 | 811908 | 7.4 | B | M | 3.7 | | 6 | | | 0.21 | N | | 80 | | | | Knyazyuk,N | |
| 16.51 | 811909 | 7.9 | B | | 7 | | 5 | | | 0.15 | N | 8 | 43 | 4.0 | N | 1 | Uda,K | |
| 16.58 | 811910 | 6.9 | M | 57 | 11 | | 6 | | | 0.08 | B | | 11 | 5 | Y | 1 | Mitsuma,S | N |
| 16.59 | 811911 | 7.2 | S | 57 | 15 | | 6 | | | 0.15 | N | 5.3 | 32 | 6.0 | Y | 2 | Oka,A | |
| 16.63 | 811912 | 7.5 | B | 57 | 11 | | 7 | | | 0.16 | N | 6.2 | 31 | 6.0 | Y | 1 | Makino,J | |
| 16.65 | 811913 | 7.5 | S | 57 | 9 | | 7 | | | 0.41 | N | 4.2 | 86 | 6.4 | Y | 4 | Clark,M.L | |
| 16.66 | 811914 | 7.1 | S | 57 | 10 | | 7 | | | 0.125 | R | 5 | 31 | 6.6 | Y | 4 | Clark,M.L | O |
| 16.66 | 811915 | 6.6 | S | 57 | 12 | | 5 | | | 0.03 | R | | 6 | 6.4 | Y | 4 | Clark,M.L | |
| 16.70 | 811916 | 6.8 | B | E | 10 | | 5 | | | 0.05 | B | | 7 | | | | Zagaynov,V.A | |
| 16.75 | 811917 | 6.8 | B | E | 12 | | 6 | | | 0.08 | R | 10 | 28 | | | | Gostev,A | |
| 16.76 | 811918 | 6.7 | B | E | | | | | | 0.05 | B | | 7 | | | | Zagaynov,V.A | |
| 16.78 | 811919 | 7.4 | B | M | 17 | | 0 | | | 0.04 | R | 6 | 18 | | | | Drapun,I | |
| 16.78 | 811920 | 7.4 | B | M | 17 | | | | | 0.04 | R | 6 | 18 | | | | Drapun,A | |
| 16.79 | 811921 | 6.9 | B | E | 12 | | 6 | | | 0.08 | R | 10 | 28 | | | | Gostev,A | |
| 16.795 | 811922 | 8.6 | M | 57 | 3.5 | | 4 | 0.17 | 190 | 0.153 | N | 8.5 | 65 | | Y | 1 | Torres,E | P |
| 16.80 | 811923 | 6.4 | B | AAVSO | 5 | | | | | 0.06 | R | | 30 | | | | Golubev,V | |
| 16.80 | 811924 | 6.8 | B | AAVSO | | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 16.801 | 811925 | 7.5 | M | CZ | | | | | | 0.10 | B | | 25 | 5 C | Y | 1 | Valasek,V | Q |
| 16.813 | 811926 | 6.8 | B | CZ | | | 3 | | | 0.08 | B | | 10 | 5.5 | Y | 1 | Elias,P | |
| 16.815 | 811927 | 6.9 | B | CZ | | | 3 | | | 0.10 | O | | 25 | 5.5 | Y | 1 | Janecek,V | |
| 16.82 | 811928 | 6.5 | B | 57 | 7 | | 4 | | | 0.056 | B | | 8 | 4.4 | Y | 1 | Kraling,W | |
| 16.82 | 811929 | 7.5 | B | AAVSO | | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 16.8264 | 811930 | 6.5 | S | | 19 | | 6 | | | 0.08 | B | | 10 | 5.0 | Y | 1 | Znasik,M | |
| 16.83 | 811931 | 6.8 | B | 57 | 6 | | 5 | | | 0.100 | B | | 14 | 4.4 | Y | 1 | Kraling,W | R |
| 16.83 | 811932 | 6.8 | B | E | 13 | | 6 | | | 0.08 | R | 10 | 28 | | | | Gostev,A | |
| 16.854 | 811933 | 7.8 | S | 57 | | | 5 | | | 0.080 | B | | 15 | 4.5C | Y | 1 | Korth,S | S |
| 16.858 | 811934 | 8.0 | S | 57 | 2.3 | | 4 | | | 0.076 | R | 12 | 23 | 5.4C | Y | 1 | Taylor,M.D | T |
| 16.86 | 811935 | 7.2 | S | 57 | 24 | | 2 | | | 0.05 | B | | 10 | 4 | Y | 1 | Zanut,S | |
| 16.872 | 811936 | 7.0 | M | 57 | 6 | | 4 | | | 0.09 | M | 11 | 56 | 5.0M | Y | 10 | Westlund,M | |
| 16.875 | 811937 | 7.2 | B | CZ | 15 | | 4 | | | 0.080 | B | | 10 | 5.3 | Y | 1 | Bilek,V | |
| 16.875 | 811938 | 7.6 | B | | 4 | | 5 | | | 0.130 | N | 8 | 40 | 4.0 | Y | 1 | Lieder,F | |
| 16.882 | 811939 | 7.2 | M | 57 | 15 | | 3 | | | 0.030 | B | | 8 | 5.6 | Y | 2 | Kosinski,J | |
| 16.885 | 811940 | 6.5: | B | 57 | 14 | | 5 | | | 0.050 | B | | 7 | 4.5 | Y | 1 | Linder,J | |
| 16.889 | 811941 | 7.1 | M | SC2000 | 9.0 | | 6 | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | U |
| 16.889 | 811942 | 6.6 | B | 57 | 7 | | 5 | 0.05 | | 0.08 | B | | 20 | 6 | N | 2 | Knain,E | |
| 16.896 | 811943 | 7.1 | B | 57 | 16 | | 3 | | | 0.07 | M | 10 | 58 | 5.7C | Y | 1 | Nieborek,T | |
| 16.896 | 811944 | | | | 4 | | 5 | | | 0.20 | SC | 10 | 111 | 6.0 | Y | 1 | Bremseth,P.-J | |
| 16.896 | 811945 | 6.7 | S | | | | | | | 0.05 | B | | 10 | 6.0 | Y | 1 | Bremseth,P.-J | |
| 16.899 | 811946 | 7.2 | M | 57 | | | | | | 0.060 | R | 4.5 | 10 | 5.2 | Y | 1 | Chodorowski,F | |
| 16.899 | 811947 | 7.3 | B | 57 | 6 | | 6 | | | 0.080 | R | 6.3 | 50 | | Y | 1 | Pfitzner,E | V |
| 16.903 | 811948 | 7.2 | M | SC2000 | 6.5 | | 6 | | | 0.15 | N | 4 | 50 | 5.6 | Y | 1 | Fleet,R.W | W |
| 16.903 | 811949 | 8.1 | M | CZ | 10 | | 7 | | | 0.16 | R | | 50 | 5.7 | Y | 1 | Silhan,J | |
| 16.903 | 811950 | 6.2 | S | 57 | 7 | | 6 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Vanin,G | |
| 16.906 | 811951 | 6.3 | B | 57 | 14 | | 5 | | | 0.050 | B | | 7 | 4.5 | Y | 1 | Linder,J | |
| 16.910 | 811952 | | | | 6 | | 3 | | | 0.064 | R | 12 | 32 | | Y | 1 | Chodorowski,F | |
| 16.911 | 811953 | 7.1 | M | 57 | 13 | | 7 | | | 0.04 | B | | 12 | 6.1 | Y | 1 | Henshaw,C | |
| 16.917 | 811954 | 7.8 | B | 57 | | | | | | 0.04 | B | | 8 | 4.5 | Y | 1 | Czerniewski,W | |
| 16.917 | 811955 | 7.2 | M | 57 | 20 | | 3 | | | 0.030 | B | | 8 | 5.6 | Y | 1 | Honko,M | |
| 16.917 | 811956 | 7.3 | M | 117 | 2.4 | | 4 | | | 0.114 | N | 8 | 36 | 5.5 | Y | 1 | Pennelli,G | |
| 16.918 | 811957 | 6.8 | B | 57 | 0.2 | | 5 | 0.01 | | 0.28 | SC | 5 | 70 | 5.2 | Y | 1 | Amoretti,M | |
| 16.928 | 811958 | 7.7 | M | CZ | 20 | | 5 | | | 0.10 | B | | 25 | 5.6 | Y | 1 | Silhan,J | |
| 16.93 | 811959 | 5.2 | S | DCS 3B | 23 | | 4 | | | 0.046 | R | 4 | 8 | 5.5 | Y | 1 | van de Weg,R.L.W | |
| 16.93 | 811960 | 5.6 | B | DCS 3B | 23 | | 4 | | | 0.046 | R | 4 | 8 | 5.5 | Y | 1 | van de Weg,R.L.W | |
| 16.93 | 811961 | 6.8 | B | AAVSO | | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 16.938 | 811962 | 6 : | B | 57 | 7 | | | | | 0.08 | B | | 15 | | N | 2 | Losada,R | X |
| 16.94 | 811963 | 6.5 | B | AA | 15 | | 5 | | | 0.050 | B | | 7 | 5.0 | N | 1 | Schmeer,P | |
| 16.94 | 811964 | 6.2 | B | 57 | | | 8 | | | 0.050 | B | | 10 | 4.5 | Y | 1 | Wagner,G | |
| 16.942 | 811965 | 7.1 | M | 57 | 1.3 | 1 | 1 | 0.04 | 112 | 0.125 | N | 5.8 | 28 | 5.5C | Y | 2 | Riccabone,G | |
| 16.944 | 811966 | 7.4 | M | SC2000 | 6.5 | | 6 | | | 0.075 | R | 16 | 50 | 5.6 | Y | 1 | Fleet,R.W | W |
| 16.944 | 811967 | 6.8 | M | 57 | 1.3 | 1 | 1 | 0.04 | 110 | 0.125 | N | 5.8 | 28 | 5.5C | Y | 2 | Riccabone,G | |
| 16.946 | 811968 | 6.9 | M | 57 | 1.3 | 1 | 1 | 0.04 | 112 | 0.125 | N | 5.8 | 28 | 5.5C | Y | 2 | Riccabone,G | |
| 16.947 | 811969 | 6.8 | M | 57 | 1.3 | 1 | 1 | 0.04 | 115 | 0.125 | N | 5.8 | 28 | 5.5C | Y | 2 | Riccabone,G | |
| 16.949 | 811970 | 6.8 | M | 57 | 1.3 | 1 | 1 | 0.04 | 110 | 0.125 | N | 5.8 | 28 | 5.5C | Y | 2 | Riccabone,G | |
| 16.956 | 811971 | 6.9 | | AAVSO | 10 | | 4 | | | 0.080 | B | | 11 | | Y | | Stomeo,E | |
| 16.96 | 811972 | 7.1 | | | 6 | | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | Y |
| 16.962 | 811973 | 7.6 | M | Y TAU | 6.5 | | 6 | | | 0.22 | N | 8 | 90 | 5.6 | Y | 1 | Fleet,R.W | W |
| 16.965 | 811974 | 7 | | 57 | 6 | | 3 | | | 0.050 | B | | 10 | 3.5 | N | 1 | Marekfia,G | Z |

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.969 | 811975 | 6.5: | B | 57 | 12 | | | | 0.15 | N | 5 | 38 | | N | 2 | Rodriguez C.,J.A | |
| 16.970 | 811976 | 6.8 | N | 57 | | 1 | | | 0.125 | N | 5.8 | 28 | 5.0C | Y | 2 | Riccabone,G | |
| 16.972 | 811977 | 6.8 | M | 57 | | 1 | | | 0.125 | N | 5.8 | 28 | 5.0C | Y | 2 | Riccabone,G | |
| 16.983 | 811978 | 6.8 | M | CZ | 30.2 | | | | 0.060 | B | | 12 | 6 | Y | 1 | Barak,R | |
| 16.993 | 811979 | 6.6 | B | 57 | 6.0 | 5 | | | 0.050 | B | | 7 | 5.5 | N | 1 | Lunde,R | |

NOTE A Tail length approximate.
NOTE B Diffuse and still circular.
NOTE C Coma diameter approximate. Jet or streamer?
NOTE D 0.362 f/5 Newtonian with magnifications 145 and 302 also used. At 302x nucleus stellar with pin points around it, almost grainy. Tail fan shape PA 110-170, dim.
NOTE E Modified Sidgwick method used.
NOTE F Coma diameter approximate.
NOTE G Neighbor put on outside light.
NOTE H Filar micrometer used for coma diameter.
NOTE I (PA value appears to be measured incorrectly. Ed.)
NOTE J Slight haze.
NOTE K Some high clouds, star close to coma? Interfered.
NOTE L Superb night; comet observed from Nov. 16.104 to 16.368 with varying optical aids. Seen naked eye at 0710 UT, confirmed repeatedly by fellow observer. Coma measured with declination vernier - surprisingly large; only slight elongation on N.
NOTE M Diffuse cloud.
NOTE N Tail not seen.
NOTE O Finder scope.
NOTE P (Observer gave limit as 11.5. Ed.)
NOTE Q Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE R Nucleus approximately magnitude 10.0.
NOTE S Coma diameter 10-15 arc min.
NOTE T Some haze.
NOTE U 16' coma, averted vision.
NOTE V Haze. (Observer gave limit as 10.5. Ed.)
NOTE W 12' coma, averted vision.
NOTE X Near M45.
NOTE Y (Observer gave limit as 8.3. Ed.)
NOTE Z Pleiades in field of view. (Translated by IHW staff. Observer indicated "A" method [Argelander?]. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.005 | 830250 | 1.76 | 0.050 | B | | 12 | 6 | 5.5 | 1 | Donatiello,G | |
| 16.026 | 830251 | 0.34 | 0.067 | R | 13.3 | 35,133 | 14 | 5.5 | 1 | Donatiello,G | |
| 16.094 | 830252 | 1 | 0.229 | R | 10 | 45,100 | 30 | 6.0 | 1 | Nowak,G.T | A |
| 16.144 | 830253 | | 0.203 | SC | 10 | 50 | 25 | 5 | 3 | Arpin,P | B |
| 16.436 | 830254 | 0.3 | 0.15 | N | 8 | 50 | 59 | 6.5 | 1 | Donth,D | C |
| 16.802 | 830255 | 0.70 | 0.153 | N | 8.5 | 65 | 30 | | 1 | Cifuentes,E | D |
| 16.866 | 830256 | 1.6 | 0.090 | M | 11 | 56 | 15 | 5.0 | 10 | Westlund,M | E |
| 16.887 | 830257 | 0.23 | 0.20 | SC | 10 | 111 | 15 | 6 | 3 | Bremseth,P.-J | F |
| 16.905 | 830258 | 0.08 | 0.125 | N | 5.8 | 28, 40, 80 | 23 | 5.5 | 2 | Riccabone,G | G |
| 16.911 | 830259 | 1.2 | 0.080 | B | | 20 | 15 | 6 | 1 | Knain,E | H |
| 16.938 | 830260 | 2.38 | 0.080 | B | | 15 | | | 4 | Losada,R | I |
| 16.958 | 830261 | 0.60 | 0.210 | N | 5.7 | 30, 66 | | | 1 | Temprano,J | J |
| 16.969 | 830262 | | 0.150 | N | 5 | 38 | | | 2 | Rodriguez C.,J.A | K |
| 16.970 | 830263 | 0.64 | 0.200 | SC | 10 | 50 | 4 | 4 | 1 | Schumacher,K | L |

NOTE A Jet at PA 135; jet at PA 190; jet at PA 230.
NOTE B The coma looks like an unresolved globular cluster and the condensation is almost stellar. A faint star (arrowed) is visible at the edge of the coma.
NOTE C This drawing shows a 9.0 mag. C. Halley among a small group of stars located southeast of the Pleiades, approximately 3hr, 51m, +22 deg. the degree of coma condensation I would estimate at 5 with a coma diameter of 2.7 min. of arc. A hazy nucleus was visible at 50x, but offered no detail at higher magnification.
NOTE D Two tails visible on south (PA 190), or one tail with a dark intermediate "aisle", and another to the north. Much growth of the northern tail as well as slightly increasing its inclination. Nucleus has become more extensive on east side. Nucleus less stellar on other occasions. Limiting magnitude 11.5.
NOTE E Moonlight.
NOTE F Central condensation very small, diameter 3 arc sec. No "dusty" east of the coma. [sic] The coma was round. The brightness steadily decreasing from the center.
NOTE G Area of white nebulosity at PA 131.5. Magnifications of 60 and 144 also used. Two drawings. (Translated by IHW staff. Ed.)
NOTE H Coma diffuse, brightness steadily decreasing from center toward edge. Tail very diffuse.
NOTE I Halley near Pleiades (M45). Observed against background light pollution. Scale is approximate. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE J Without tail. (Duration not indicated. Time of observation is assumed to be roughly mid time. Ed.)
NOTE K Traces of tail? (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE L Round, considerably strong condensation. No tail perceptible. (Translated by IHW staff. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.026 | 850209 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 102/P | | Jager,M | A |
| 16.086 | 850210 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.50 | Kodak Tri-X | | N | T | 13/C | 1 | Priester,D.C | B |
| 16.103 | 850211 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 1.00 | Kodak 2415 | | Y | | 564/S | | Alvarez,M.L | |
| 16.107 | 850212 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 1.00 | Kodak 2415 | | Y | | 565/S | | Alvarez,M.L | |
| 16.122 | 850213 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 10.00 | Kodak 2415 | | N | C | 567/P | | Alvarez,M.L | C |
| 16.123 | 850214 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 234/P | 1 | Sabia,J.D | D |
| 16.144 | 850215 | 1.8 | 3 | 0.6 | 1.1 x 0.8 | 10.00 | Kodak IIa-O | | N | | 000/P | 1 | Antal,M | |
| 16.146 | 850216 | 0.205 | 3.8 | | 10.0 x 6.7 | 5.00 | Kodak VR 200 | 200/24 | N | T | 13/P | 1 | Cunningham,J | |
| 16.155 | 850217 | 0.205 | 3.8 | | 10.0 x 6.7 | 15.00 | Kodak VR 200 | 200/24 | N | T | 14/P | 1 | Cunningham,J | |
| 16.163 | 850218 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 1.00 | Kodak 2415 | | Y | | 570/S | | Alvarez,M.L | |
| 16.189 | 850219 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | S | 3/P | 1 | Dilsizian,R | |
| 16.208 | 850220 | 0.610 | 3.5 | 0.174 | 3.4 x 2.3 | 30.00 | Kodak 098-04 | | N | O | 000/P | 1 | Lilge,A | E |
| 16.265 | 850221 | 0.135 | 2.8 | | 15.2 xl0.2 | 4.00 | Kodak Tri-X | | N | C | 613/N | 1 | Lazerson,H | F |
| 16.425 | 850222 | 0.75 | 5 | 0.15 | 2.7 x 1.8 | 25.00 | Ilford HP5 | | N | | 3/P | 1 | Barclay,J | G |
| 16.809 | 850223 | 0.400 | 5.5 | | 5.2 x 3.4 | 13.00 | ORWO NP 27 | 400/27 | N | O | 1/N | 1 | Kamenickj',M | H |
| 16.823 | 850224 | 0.400 | 5.5 | | 5.2 x 3.4 | 13.00 | ORWO NP 27 | 400/27 | N | O | 2/N | 1 | Kamenickj',M | H |
| 16.830 | 850225 | 0.135 | 1.8 | | 15.2 xl0.2 | 1.00 | Ilford HP-5 | 400/ | N | | 4/P | 1 | Olesen,J.O | I |
| 16.831 | 850226 | 0.135 | 1.8 | | 15.2 xl0.2 | 2.00 | Ilford HP-5 | 400/ | N | | 5/P | 1 | Olesen,J.O | I |
| 16.835 | 850227 | 0.135 | 1.8 | | 15.2 xl0.2 | 4.00 | Ilford HP-5 | 400/ | N | | 6/P | 1 | Olesen,J.O | I |
| 16.839 | 850228 | 0.135 | 1.8 | | 15.2 xl0.2 | 5.00 | Ilford HP-5 | 400/ | N | | 7/P | 1 | Olesen,J.O | I |
| 16.842 | 850229 | 0.400 | 5.5 | | 5.2 x 3.4 | 10.00 | ORWO NP 27 | 400/27 | N | O | 3/N | 1 | Kamenickj',M | H |
| 16.852 | 850230 | 0.400 | 5.5 | | 5.2 x 3.4 | 15.00 | ORWO NP 27 | 400/27 | N | O | 4/N | 1 | Kamenickj',M | H |
| 16.855 | 850231 | 0.750 | 6.3 | | 2.7 x 1.8 | 35.00 | ORWO | 400/27 | N | C | 3/N | 1 | Znasik,M | J |
| 16.871 | 850232 | 0.400 | 5.5 | | 5.2 x 3.4 | 12.00 | ORWO NP 27 | 400/27 | N | O | 5/N | 1 | Kamenickj',M | H |
| 16.884 | 850233 | 0.400 | 5.5 | | 5.2 x 3.4 | 15.00 | ORWO NP 27 | 400/27 | N | O | 6/N | 1 | Kamenickj',M | H |
| 16.888 | 850234 | 0.400 | 5.6 | | 5.2 x 3.4 | 7.00 | Fujichrome | 400/ | N | | 01/P | | Bremseth,P.-J | |

DATE: 16 NOV 1985

DATE: 16 NOV 1985

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.893 | 850235 | 1.690 | 5.6 | 0.305 | 1.2 x 0.8 | 3.00 | Agfachrome | 1000/31 | N | | 2/S | 1 | Korth,S | K |
| 16.904 | 850236 | 0.400 | 5.5 | | 5.2 x 3.4 | 10.00 | ORWO NP 27 | 400/27 | N | O | 7/N | 1 | Kamenickj',M | H |
| 16.919 | 850237 | 0.400 | 5.5 | | 5.2 x 3.4 | 10.00 | ORWO NP 27 | 400/27 | N | O | 8/N | 1 | Kamenickj',M | H |
| 16.927 | 850238 | 0.600 | 1.7 | 0.350 | 3.4 x 2.3 | 10.00 | Ilford HP5 | 400/27 | N | O | 001/T | 1 | Battaini,P | L |
| 16.934 | 850239 | 0.400 | 5.5 | | 5.2 x 3.4 | 15.00 | ORWO NP 27 | 400/27 | N | O | 9/N | 1 | Kamenickj',M | H |
| 16.968 | 850240 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 15.00 | 3M 1000 | 1000/ | N | X | 2/S | 1 | Vanin,G | |
| 16.984 | 850241 | 0.300 | 5.6 | | 6.9 x 4.6 | 6.00 | Agfachrome | 1000/31 | N | | 3/S | 1 | Korth,S | K |

NOTE A Coma 20 arc min.; magnitude 6.0; faint outer glow 40 arc min.; tails 30 arc min. at PA 30, 20 arc min. at PA 67, 15 arc min. at PA 270, 10 arc min. at PA 293. Instrument is Schmidt camera.
NOTE B Push processed to 800 ASA.
NOTE C Very good, computer guiding(!). [sic]
NOTE D Light cloud cover.
NOTE E Red Wr. 25 filter used.
NOTE F (Observer's image identifier is 16-13. Ed.) "Push" processed to 800 ASA.
NOTE G (Photographer rated film at ISO 5000. Ed.)
NOTE H 6x6 cm format film used.
NOTE I (Observer's image identifier is followed by suffix A. Ed.)
NOTE J Large format (11.8x8.6 cm) film used.
NOTE K City lights interfered with the observation. (Observer indicated both type O and type X guiding. Ed.)
NOTE L Instrument is Celestron 14 inch Schmidt camera.

DATE: 17 NOV 1985 DATE: 17 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.00 | 811980 | 7.5 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 17.015 | 811981 | 7.6 | B | 57 | | | | | 0.05 | B | | 20 | 4.5 | Y | 8 | da Silva,L.A.L | |
| 17.016 | 811982 | 6.3 | S | 57 | 8 | 3 | | | 0.25 | N | 5.6 | 56 | 6 M | Y | 1 | Jordan,J | A |
| 17.017 | 811983 | 6.9 | M | 57 | 6.7 | 5 | 0.50 | 24 | 0.070 | B | | 16 | 5.7C | Y | 1 | Taylor,M.D | |
| 17.031 | 811984 | 8.1 | B | | 6 | 6 | | | 0.07 | B | | 20 | 6 | Y | 1 | Filimon,E | |
| 17.031 | 811985 | 5.5 | | 57 | | 5 | | | 0.20 | SC | 10 | 70 | 5.0 | Y | 1 | Williams,D.J | B |
| 17.040 | 811986 | 6.8 | M | 57 | 1.2 | 2 | 0.03 | 144 | 0.125 | N | 5.8 | 28 | 4.5C | Y | 2 | Riccabone,G | |
| 17.042 | 811987 | 8 | B | 57 | | 5 | | | 0.08 | B | | 11 | 4.5 | Y | 1 | Gorski,L | |
| 17.042 | 811988 | 6.8 | M | 57 | 1.2 | 2 | 0.03 | 145 | 0.125 | N | 5.8 | 28 | 4.5C | Y | 2 | Riccabone,G | |
| 17.042 | 811989 | 6.8 | M | 57 | 1.2 | 2 | 0.03 | 140 | 0.125 | N | 5.8 | 28 | 4.5C | Y | 2 | Riccabone,G | |
| 17.044 | 811990 | 6.8 | M | 57 | 1.2 | 2 | 0.03 | 140 | 0.125 | N | 5.8 | 28 | 4.5C | Y | 2 | Riccabone,G | |
| 17.076 | 811991 | 6.0 | B | 57 | 17 | | | | 0.06 | R | 11.7 | 25 | | Y | 3 | Gallego,J | C |
| 17.076 | 811992 | | | 57 | 1.4 | 6 | | | 0.210 | N | 5.0 | 43 | 5.7C | Y | 1 | Taylor,M.D | |
| 17.083 | 811993 | 6.0 | S | 57 | 3 | 1 | | | 0.152 | N | 8 | 135 | 5 | Y | 1 | Lewis,D.E | D |
| 17.087 | 811994 | 6 : | B | 57 | 15 | | | | 0.256 | N | 5.6 | 45 | | Y | 2 | Pedraz,S | |
| 17.090 | 811995 | 6.0 | B | 57 | 17 | | | | 0.256 | N | 5.6 | 45 | | Y | 3 | Gallego,J | |
| 17.094 | 811996 | 7.0: | B | 57 | 5 | | | | 0.15 | N | 5 | 75 | | Y | 1 | Velasco,P | |
| 17.097 | 811997 | 7.3 | B | 57 | 1 | 5 | | | 0.035 | B | | 7 | 4.0C | Y | 1 | Pilch,R | |
| 17.104 | 811998 | 7.3 | B | 57 | 10.5 | 3 | | | 0.140 | SN | 3.6 | 28 | 4.3 | Y | 1 | Rousom,J | E |
| 17.132 | 811999 | 7.5 | B | 57 | 6.9 | 3 | | | 0.127 | SC | 10 | 50 | 4.3 | Y | 1 | Rousom,J | F |
| 17.142 | 812000 | 6.9 | S | 57 | 21.6 | 7 | | | 0.32 | N | 4.4 | 56 | 5.1 | Y | 1 | Ariail,R.B | |
| 17.15 | 812001 | 6.4 | B | 57 | 15 | 6 | | | 0.080 | B | | 20 | 4.5 | Y | | Kronk,G | |
| 17.167 | 812002 | 6.2 | S | 57 | 13.5 | 8 | | | 0.108 | N | 4 | 24 | 5.5 | Y | 2 | Franch,J | |
| 17.167 | 812003 | 5.3 | B | 57 | 20 | 8 | | | 0.20 | SC | 10 | 77 | 6.0 | Y | 5 | Hodonsky,K | G |
| 17.19 | 812004 | 7.8 | B | 57 | 10.8 | 8 | | | 0.335 | N | 4.5 | 56 | 4.5 | Y | | Kronk,G | |
| 17.20 | 812005 | 5.2 | S | 58 | 22 | 5 | | | 0.080 | B | | 11 | 5.6 | Y | 3 | Spratt,C.E | |
| 17.208 | 812006 | 6.8 | B | 57 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | |
| 17.22 | 812007 | 5.3 | S | 58 | 20 | 5 | | | 0.080 | R | 3.7 | 19 | 5.6 | Y | 3 | Spratt,C.E | |
| 17.24 | 812008 | 6.1 | | 57 | 22 | 5 | | | 0.040 | B | | 8 | 7.0 | Y | 1 | Keen,R | H |
| 17.24 | 812009 | 6.0 | V | 57 | | | | | | EY | | | 7.0 | Y | 1 | Keen,R | |
| 17.260 | 812010 | 6.2 | S | | 15 | 6 | | | 0.080 | B | | 11 | | Y | 10 | Pryal,J | I |
| 17.30 | 812011 | 5.4 | S | 58 | 18 | 4 | | | 0.140 | SN | 3.6 | 28 | 6.1 | Y | 1 | Spratt,C.E | J |
| 17.32 | 812012 | 5.0: | S | 58 | 22 | 2 | | | | EY | | | 6.2 | Y | 1 | Spratt,C.E | |
| 17.396 | 812013 | 6.1 | M | 57 | 18 | 7 | 0.13 | 290 | 0.05 | B | | 10 | 5.0 | Y | 1 | Fabre,R | K |
| 17.41 | 812014 | 5.9 | M | 57 | 14 | 7 | 0.25 | | 0.080 | B | | 20 | 6.0 | Y | 15 | Morris,C.S | |
| 17.44 | 812015 | 6.7 | S | 57 | 11.5 | 7 | | | 0.07 | B | | 10 | 5.0M | Y | 1 | Yasuki,M | |
| 17.488 | 812016 | 7.2 | M | | 5 | 6 | | | 0.10 | N | 10 | 55 | 4.0M | Y | 1 | Kato,T | L |
| 17.49 | 812017 | 6.4 | M | 57 | | | 1 | 125 | 0.05 | B | | 10 | 6.5 | Y | 2 | Hale,A | M |
| 17.49 | 812018 | | | | | | 1 | 125 | 0.20 | N | 6 | 61 | 6.5 | Y | 2 | Hale,A | |
| 17.51 | 812019 | 7.4 | B | M | 4.2 | 6 | | | 0.21 | N | | 80 | | | | Knyazyuk,N | |
| 17.521 | 812020 | 7.1 | B | 57 | 6 | 5 | | | 0.050 | B | | 7 | 5.8C | Y | 1 | Parkinson,M | N |
| 17.529 | 812021 | 7.0 | S | 57 | | | | | 0.06 | R | 15 | 91 | 4.0 | Y | 1 | Ichikawa,K | |
| 17.54 | 812022 | 6.8 | B | | 14 | 5 | | | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 17.542 | 812023 | 7.0 | S | 57 | 1.5 | 1 | | | 0.05 | R | 16 | 20 | 5.0C | Y | 1 | Feisheng,J | |
| 17.542 | 812024 | 7.0 | S | 57 | 5 | 5 | | | 0.153 | N | 8.6 | 33 | 5.0 | Y | 1 | Iwaki,Y | |
| 17.542 | 812025 | 7.5 | B | 57 | | | | | 0.05 | B | | 7 | 5.5 | Y | 2 | Hasegawa,T | |
| 17.549 | 812026 | 6.8 | S | 57 | | 6 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 17.549 | 812027 | 7.1 | B | 57 | | | | | 0.07 | B | | 10 | 5.5 | Y | 1 | Date,M | |
| 17.555 | 812028 | | | | 5 | 9 | 0.2 | 15 | 0.15 | N | 8 | 50 | 5.0 | Y | 1 | Williams,P.F | O |
| 17.575 | 812029 | 6.8 | M | 57 | 13 | 7 | | | 0.08 | B | | 11 | 6 | Y | 1 | Mitsuma,S | P |
| 17.59 | 812030 | 7.6 | B | M | | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 17.611 | 812031 | 6.5 | B | | 12 | | | | 0.035 | B | | 7 | | Y | 1 | Okada,M | |
| 17.66 | 812032 | 7.8 | B | 57 | 15 | 6 | | | 0.15 | N | 8.6 | 41 | 5.5 | Y | 2 | Makino,J | |
| 17.665 | 812033 | 6.2 | M | 57 | 8 | 6 | | | 0.030 | B | | 8 | 5.0C | Y | 1 | Kato,T | |
| 17.684 | 812034 | 6.5 | M | 57 | 5 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 17.70 | 812035 | 6.4 | B | 57 | 21.5 | 6 | | | 0.05 | B | | 7 | 6.0 | Y | 1 | Kanai,K | |
| 17.70 | 812036 | 6.2 | M | 57 | 21.5 | 6 | | | 0.05 | B | | 7 | 6.0 | Y | 1 | Kanai,K | |
| 17.70 | 812037 | 6.1 | S | 57 | 21.5 | 6 | | | 0.05 | B | | 7 | 6.0 | Y | 1 | Kanai,K | |
| 17.72 | 812038 | 7.2 | S | AAVSO | 8 | 5 | 0.17 | | 0.13 | N | 6.3 | 24 | 6.0 | Y | 1 | Hayashi,A | |
| 17.785 | 812039 | 7.1 | M | 57 | | | | | 0.06 | R | 4.5 | 10 | 5.2C | Y | 1 | Chodorowski,F | |
| 17.788 | 812040 | | | | 7 | 3 | | | 0.064 | R | 12 | 32 | | Y | 1 | Chodorowski,F | |
| 17.797 | 812041 | 6.7 | B | CZ | | 3 | | | 0.08 | B | | 10 | 5.5 | Y | 1 | Elias,P | |
| 17.800 | 812042 | 6.6 | B | CZ | | 3 | | | 0.08 | B | | 10 | 5.5 | Y | 1 | Janecek,V | |
| 17.80 | 812043 | 7.4 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 17.802 | 812044 | | | 57 | | 2 | | | 0.07 | B | | 10 | 4.2 | N | 1 | Deconinck,M | |
| 17.813 | 812045 | 6.7 | B | CZ | | 3 | | | 0.08 | B | | 10 | 5.5 | Y | 1 | Kral,M | |
| 17.829 | 812046 | 7.9 | B | 57 | 2.7 | 6 | | | 0.063 | R | 13.3 | 52 | 4.5 | Y | 1 | Bretschneider,H | |
| 17.83 | 812047 | 8.0 | B | 57 | 10 | 5 | | | 0.080 | B | | 20 | C | Y | 1 | Jannink,D.W | Q |
| 17.83 | 812048 | 7.3 | B | DCS 3B | | | | | 0.080 | B | | 15 | 5 CM | N | 1 | Keijmel,P.C | |
| 17.83 | 812049 | 7.6 | S | BD | 9 | 4 | | | 0.05 | B | | 7 | | | | Kabalin,V | |
| 17.830 | 812050 | 7.6 | M | CZ | 15 | 7 | | | 0.10 | B | | 25 | 6.2 | Y | 1 | Silhan,J | |
| 17.832 | 812051 | 6.3 | S | 57 | 5 | 6 | | | 0.060 | R | 8 | 12 | 5.7 | N | 2 | Moeller,M | R |
| 17.837 | 812052 | 7.1 | B | CZ | 15 | 4 | | | 0.080 | B | | 10 | 5.0 | Y | 1 | Bilek,V | |
| 17.837 | 812053 | 7.6 | M | CZ | 6 | 4 | | | 0.31 | N | 8 | 62 | 4.7 | Y | 1 | Hajek,P | |
| 17.844 | 812054 | 7.1 | | 57 | 15 | 6 | | | 0.070 | B | | 20 | 5.5 | Y | 1 | Thomas,A | S |
| 17.844 | 812055 | 7.5 | M | CZ | | | | | 0.10 | B | | 25 | 5 C | Y | 1 | Valasek,V | T |
| 17.8541 | 812056 | 6.3 | S | | 18 | 7 | | | 0.11 | R | 11 | 36 | 5.5 | Y | 1 | Znasik,M | |
| 17.86 | 812057 | 6.6 | S | DCS 3B | | 4 | | | 0.080 | B | | 15 | 5.5 | Y | 2 | Bril,H.J | |
| 17.861 | 812058 | 6.0 | B | 57 | 17 | 7 | | | 0.33 | N | 4.5 | 63 | 5.3 | Y | 4 | Gomez,A | |
| 17.865 | 812059 | 7.6 | S | 57 | 15 | 5 | | | 0.080 | B | | 15 | 5 C | Y | 1 | Korth,S | U |
| 17.868 | 812060 | 7.3 | B | 57 | 6 | 6 | | | 0.080 | R | 6.3 | 50 | | Y | 1 | Pfitzner,E | V |
| 17.87 | 812061 | 6.8 | B | DCS 3B | | | | | 0.080 | B | | 15 | 5.5 | Y | 2 | Bril,H.J | |
| 17.87 | 812062 | 7.5 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 17.871 | 812063 | 6.7 | M | AAVSO | 10 | 7 | | | 0.063 | R | 13.3 | 52 | | | | Csukas,M | |
| 17.8733 | 812064 | 6.2 | S | | 24 | 5 | | | 0.08 | B | | 10 | 5.5 | Y | 1 | Znasik,M | |
| 17.875 | 812065 | 6.8 | M | CZ | 20 | 6 | | | 0.05 | B | | 7 | 6.2 | Y | 1 | Silhan,J | |
| 17.875 | 812066 | 7.8 | B | CZ | | 3 | | | 0.06 | R | 5 | 15 | 5.5 | | 1 | Vaclik,F | W |
| 17.888 | 812067 | 6.8 | S | SAO | | | | | 0.31 | N | 5 | 62 | | | | Giampaolo,G | |
| 17.89 | 812068 | 6.7: | S | 57 | 6 | 6 | | | 0.08 | B | | 15 | 4.5C | Y | 1 | Glowinski,C | U |
| 17.89 | 812069 | 5.8 | S | DCS 3B | 12 | 3 | | | 0.080 | B | | 15 | 4.5C | Y | 1 | Wils,P | |
| 17.898 | 812070 | 6.6 | M | AAVSO | 9 | 7 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | X |
| 17.91 | 812071 | 7.4 | B | DCS 3B | 4.5 | 9 | | | 0.115 | N | 8 | 45 | 5.5C | Y | 1 | van Munster,T | |
| 17.92 | 812072 | 6.3: | S | 57 | 20 | 4 | | | 0.050 | B | | 7 | | | 1 | Luthen,H | |
| 17.92 | 812073 | 7.3 | S | DCS 3B | 10 | 4 | | | 0.102 | R | | 37 | 4.0C | Y | 1 | van Asperen,H | |
| 17.92 | 812074 | 6.4 | S | DCS 3A | 12 | 6 | | | 0.040 | R | | 10 | 5 C | Y | 1 | van Loo,F.R | |
| 17.93 | 812075 | 6.8 | B | DCS 3B | | 6 | | | 0.063 | B | | 9 | 4.5C | N | 1 | Swart,E.T | |
| 17.944 | 812076 | 7.0 | M | SC2000 | 8.5 | 6 | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | Y |
| 17.958 | 812077 | 5.5 | | 57 | 20 | 6 | | | 0.081 | B | | 11 | 5.5 | Y | 2 | Sternwarte Hof | |
| 17.96 | 812078 | 6.7 | | | 8 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | Z |
| 17.96 | 812079 | 6.8 | S | 57 | | | | | 0.050 | B | | 7 | 5.0 | Y | 1 | Spalding,G.H | a |
| 17.967 | 812080 | 8.4 | M | Y TAU | 4.2 | 6 | | | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | b |

DATE: 17 NOV 1985

DATE: 17 NOV 1985

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.97 | 812081 | 7.0 | S | DCS 3B | 12 | 3 | | | 0.150 | R | 15 | 31 | 4 C | N | 1 | Geenen,J.J | |
| 17.979 | 812082 | 7.6 | M | CZ | 10 | 7 | | | 0.16 | R | | 50 | 6.3 | Y | 1 | Silhan,J | |
| 17.98 | 812083 | 6.2 | B | AA | 18 | 5 | | | 0.050 | B | | 7 | 5.0 | N | 1 | Schmeer,P | |
| 17.997 | 812084 | 7.5 | M | SC2000 | 5.5 | 6 | | | 0.15 | N | | 50 | 5.6 | Y | 1 | Fleet,R.W | c |

NOTE A Skies partly cloudy and moonlit.
NOTE B Hazy, partly cloudy.
NOTE C Enormous.
NOTE D First sighting.
NOTE E Haze.
NOTE F Increasing haze.
NOTE G No tail seen.
NOTE H Modified Sidgwick method used.
NOTE I Coma very bright. (Observer gave limit as 9. Ed.)
NOTE J Strong nucleus. DC approximate.
NOTE K (PA value appears to be measured incorrectly. Ed.)
NOTE L Diffuse cloud.
NOTE M First naked-eye sighting was on this night.
NOTE N Star-like central condensation.
NOTE O Tail only suspected.
NOTE P Tail not seen.
NOTE Q Telescopic limit is 9.
NOTE R Cloudy.
NOTE S (Observer indicated "A" method [Argelander?]. Ed.)
NOTE T Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE U Coma diameter approximate.
NOTE V (Observer gave limit as 10.0. Ed.)
NOTE W Probably well adapted, not dark adapted, of course - there is no dark sky in Czechoslovakia.
NOTE X (Observer calls coma diameter value halo diameter. Ed.)
NOTE Y 15' coma, averted vision.
NOTE Z (Observer gave limit as 8.6. Ed.)
NOTE a Notably brighter.
NOTE b 8.0' coma, averted vision.
NOTE c 11' coma, averted vision.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.010 | 830264 | 1.76 | 0.050 | B | | 12 | 9 | 5.0 | 1 | Donatiello,G | |
| 17.026 | 830265 | 0.34 | 0.067 | R | 13.3 | 35,133 | 14 | 5.0 | 1 | Donatiello,G | |
| 17.031 | 830266 | | 0.203 | SC | 10 | 70 | | 5.0 | | Williams,D.J | A |
| 17.076 | 830267 | | 0.060 | R | 11.7 | 25 | | | 3 | Gallego,J | B |
| 17.078 | 830268 | | 0.06 | R | 5.7 | 20 | | 5.5 | 2 | Cardiel,N | C |
| 17.087 | 830269 | | 0.256 | N | 5.6 | 45 | | | 2 | Pedraz,S | D |
| 17.090 | 830270 | | 0.256 | N | 5.6 | 45 | | | 3 | Gallego,J | E |
| 17.094 | 830271 | | 0.15 | N | 5 | 75 | | | 1 | Velasco,P | F |
| 17.097 | 830272 | | 0.256 | N | 5.6 | 45 | | 5.5 | 2 | Cardiel,N | G |
| 17.116 | 830273 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | H |
| 17.128 | 830274 | 0.33 | 0.20 | N | 8 | 70 | 17 | 6 | 1 | Vargas B.,A.G | I |
| 17.139 | 830275 | 0.25 | 0.20 | N | 8 | 120 | 6 | 6 | 1 | Vargas B.,A.G | J |
| 17.214 | 830276 | 0.99 | 0.15 | N | 5 | 30 | 5 | | 1 | Zanette,D | |
| 17.246 | 830277 | 0.19 | 0.254 | N | 5.6 | 53, 60,120 | 12 | 6.5 | 3 | Knisely,D | K |
| 17.278 | 830278 | 3 | 0.050 | B | | 7 | | 6.0 | 4 | Cook,A.J | L |
| 17.861 | 830279 | | 0.33 | N | 4.5 | 63 | | | 4 | Gomez,A | M |
| 17.862 | 830280 | 0.89 | 0.063 | R | 13.3 | 52 | 104 | | | Kosa-Kiss,A | N |
| 17.871 | 830281 | | 0.063 | R | 13.3 | 52 | | | | Csukas,M | O |
| 17.911 | 830282 | 0.04 | 0.83 | R | 19.7 | 800 | 23 | | 3 | Soc. Astro. de France | P |
| 17.924 | 830283 | 0.05 | 0.83 | R | 19.7 | 800 | 22 | 5.6 | 3 | Soc. Astro. de France | Q |
| 17.927 | 830284 | | 0.356 | SC | 11 | 200 | 30 | | 1 | Verdenet,M | R |

NOTE A The nucleus was brighter and I think I caught a glimpse of a very faint tail! (Duration not indicated. Time of observation is start time. Ed.)
NOTE B Very big. Spherical. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE C The "false nucleus" appeared stellar. Coma very big. (Duration not indicated. Time of observation is assumed to be mid time. Drawing data inferred from magnitude report form. Ed.)
NOTE D Observed 3 H. after where marks the cross. [sic] Two "spots" in the stellar central condensation. (Drawing data inferred from magnitude report form. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE F Bright and condensed nucleus, <1'. Diffuse coma boundaries. Spherical. Observed with J.M. Cuadra. Temp. -3 C. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE G DC = 6. (Duration not indicated. Time of observation is assumed to be mid time. Drawing data inferred from magnitude report form. Ed.)
NOTE H The famous Halley is seen here much brighter than last observed. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE I Some instants during the observations a clear rays appear around the central condensations, the PA was estimated in 70 grades more less. [sic]. The coma present a large general aspect. Some times a diffuses filaments (like rays) in radial distribution appears around the central coma. [sic]
NOTE J Some instants during the observations a clear rays appear around the central condensations, the PA was estimated in 70 grades more less. The coma aspect was better with 120x. [sic] The air fluctuations permit a good vision in some times when a rays like filaments are very clear around the central nucleo. PA 70. [sic]
NOTE K Bright stellar central condensation (magnitude +9?). Darker portion of coma on north side of nucleus from about 4' arc out to 6 or 7 min. from nucleus. Area roughly circular. Faint tail as broad as coma out to approximately 20' arc from nucleus. 7x35 binoculars and star in Pleiades magn. 6.9 used for magnitude determination. Dark spot? (north of nucleus) at PA 30; broad faint tail at PA 110. Magnification of 240x also used.
NOTE L Comet was seen through high cirrus just as a storm moved in. (Duration not indicated. Time of observation is start time. Ed.)
NOTE M Very condensed. More extended than 3 days before (?). Perhaps a little tail pointing NE. (Duration not indicated. Time of observation is assumed to be roughly mid time. Drawing data inferred from magnitude report form. Ed.)
NOTE N Nucleus eccentric. Schematic drawing.
NOTE O The nucleus isn't in center. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE P Jet at PA 103, 13" long; jet at PA 155, 11" long; ion tail at PA 218, 132" long; jet at PA 237, 15" long; streamer at PA 238, 92" long; jet at PA 290, 17" long; jet at PA 340, 8" long. Drawing made by Serge Thebault.
NOTE Q Jet at PA 97, 18" long; jet at PA 120, 20" long; streamer at PA 150, 31" long; streamer at PA 201, 75" long; tail at PA 211, 105" long; streamer at PA 267, 33" long. Drawing made by Alain Perez.
NOTE R (Additional drawing submitted made with 11x80 binoculars (1.95'/mm). Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.035 | 850242 | 0.200 | 4.5 | | 10.3 x 6.9 | 9.00 | Kodak Tri-X | | N | T | 18/C | 1 | Priester,D.C | A |

DATE: 17 NOV 1985

DATE: 17 NOV 1985

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Eyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.047 | 850243 | 0.135 | 2.8 | | 15.2 x10.2 | 20.00 | Kodak 2415 | | Y | S | 1/P | 1 | de Luis,J | |
| 17.058 | 850244 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | 3M | 1000/ | N | O | 9/T | 1 | Martin,D | |
| 17.061 | 850245 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | 3M | 1000/ | N | O | 10/T | 1 | Martin,D | |
| 17.064 | 850246 | 0.200 | 4.5 | | 10.3 x 6.9 | 3.00 | 3M | 1000/ | N | O | 11/T | 1 | Martin,D | |
| 17.070 | 850247 | 0.200 | 4.5 | | 10.3 x 6.9 | 3.00 | 3M | 1000/ | N | O | 12/T | 1 | Martin,D | |
| 17.074 | 850248 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M | 1000/ | N | O | 13/T | 1 | Martin,D | |
| 17.081 | 850249 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M | 1000/ | N | O | 14/T | 1 | Martin,D | |
| 17.091 | 850250 | 2.400 | 4 | 0.600 | 0.9 x 0.6 | 40.00 | Kodak IV-F | | N | O | 003/T | 1 | Battaini,P | |
| 17.098 | 850251 | 0.400 | 6.3 | | 5.2 x 3.4 | 3.00 | 3M | 1000/ | N | O | 15/T | 1 | Martin,D | |
| 17.239 | 850252 | 0.305 | 2.5 | 0.122 | 6.8 x 4.5 | 20.00 | Kodak 2415 | | N | S | 139/P | 1 | Minton,R.B | B |
| 17.253 | 850253 | 0.135 | 2.8 | | 15.2 x10.2 | 4.00 | Kodak Tri-X | | N | C | 615/N | 1 | Lazerson,H | C |
| 17.398 | 850254 | 0.500 | 5 | | 4.1 x 2.7 | 6.00 | Sakura 1600 | 1600/ | N | S | 15/P | 1 | Sanford,J | D |
| 17.603 | 850255 | 0.850 | 3.4 | 0.25 | 2.4 x 1.6 | 15.00 | Kodak 6415 | | Y | C | 3/P | 1 | Kojima,T | E |
| 17.901 | 850256 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 5.00 | Kodak 2415 | | Y | | 4/P | 1 | Conrad,R | F |
| 17.964 | 850257 | 0.135 | 2.8 | | 15.2 x10.2 | 15.00 | HH 29 | | N | S | 1/P | 3 | Portela,A | G |

NOTE A Push processed to 800 ASA.
NOTE B (Prints submitted by observer are composites of two contiguous 10 min. Ed.) Instrument is Aero-Ektar aerial camera lens.
NOTE C (Observer's image identifier is 16-15. Ed.) "Push" processed to 800 ASA.
NOTE D Frontal obscuration ends exposure after 6 minutes.
NOTE E Instrument is Wright-Schmidt. Large format (120 size) film used.
NOTE F City lights interfered with the observation; Vienna, from room!
NOTE G Push processed to 1000 ASA.

DATE: 18 NOV 1985

DATE: 18 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.004 | 812085 | 6.0: | B | 57 | 11 | | | | 0.114 | N | 8.7 | 100 | | Y | 1 | Rodriguez C.,J.A | A |
| 18.010 | 812086 | 7.4 | M | SC2000 | 4.5 | 6 | | | 0.075 | R | 16 | 50 | 5.6 | Y | 1 | Fleet,R.W | B |
| 18.010 | 812087 | | | | 5 | 6 | | | 0.200 | R | 14 | 40 | 6.1 | Y | 1 | Rogers,J.E | C |
| 18.017 | 812088 | 6.6 | S | 57 | 10 | 3 | | | 0.080 | B | | 10 | 6.1 | Y | 1 | Rogers,J.E | |
| 18.05 | 812089 | 6.2 | S | 57 | | | | | 0.08 | B | | 10 | 6.0 | | 1 | Shanklin,J.D | |
| 18.058 | 812090 | 7.0 | B | 58 | | | | | 0.203 | N | 6 | 75 | 4.0 | Y | 10 | Troiani,D.M | |
| 18.06 | 812091 | 5.2 | S | 57 | | | | | | EY | | | 6.0 | | 1 | Shanklin,J.D | D |
| 18.07 | 812092 | | | 57 | | | | | 0.20 | R | 12 | 40 | 6.0 | | 1 | Shanklin,J.D | E |
| 18.073 | 812093 | 6.0 | S | 57 | 17 | 3 | | | 0.050 | B | | 10 | 6.1 | Y | 2 | Rogers,J.E | F |
| 18.09 | 812094 | 6.1 | | 57 | 12 | 4 | | | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | G |
| 18.108 | 812095 | 6.8 | S | 57 | 15 | 6 | | | 0.32 | N | 4.4 | 56 | 5.1M | Y | 1 | Ariail,R.B | |
| 18.133 | 812096 | 6.7 | M | 57 | 20.0 | 5 | | | 0.05 | B | | 7 | 6.3 | Y | 5 | DeYoung,J.A | H |
| 18.135 | 812097 | 6.3 | | 57 | 7 | 4 | | | 0.050 | B | | 10 | 5.4 | Y | 1 | Sabia,J.D | |
| 18.149 | 812098 | | | 57 | 24 | 1 | | | 0.05 | B | | 7 | 3.7 | | | Lairet,R | |
| 18.15 | 812099 | 5.4 | S | 58 | 20 | 3 | | | 0.080 | B | | 11 | 6.2 | Y | 1 | Spratt,C.E | I |
| 18.15 | 812100 | 5.5 | S | 58, 57 | 18 | 4 | | | 0.080 | R | 3.7 | 19 | 6.2 | Y | 1 | Spratt,C.E | I |
| 18.160 | 812101 | 6.0 | B | 57 | 20 | 6 | | | 0.035 | B | | 7 | 5.0 | Y | 1 | Stephan,C | J |
| 18.20 | 812102 | 5.8 | S | SAO | 20 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 18.20 | 812103 | 6.0 | S | SAO | | | | | | EY | | | | | | Bortle,J.E | K |
| 18.20 | 812104 | | | | 16 | 6 | | | 0.080 | B | | 20 | | | | Bortle,J.E | |
| 18.20 | 812105 | | | | 13 | 7 | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | L |
| 18.2132 | 812106 | 6.3 | S | SAO | 13 | 6 | | | 0.080 | B | | 20 | 5.6 | | 3 | Machholz,D | |
| 18.24 | 812107 | 5.5 | M | AA | 14 | 6 | | | 0.056 | R | 10 | 20 | | | | Green,D.W.E | M |
| 18.24 | 812108 | 6.1: | M | AA | 14 | 8 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | M |
| 18.24 | 812109 | 5.6 | S | AA | 14 | 6 | | | 0.056 | R | 10 | 20 | | | | Green,D.W.E | M |
| 18.273 | 812110 | 7.0 | M | 58 | 3 | 5 | | | 0.152 | N | 4.4 | 28 | 4.6 | Y | 5 | Glassett,W | N |
| 18.30 | 812111 | 6.3 | M | 57 | | | | | 0.05 | B | | 10 | 5.9 | Y | 21 | Hale,A | O |
| 18.30 | 812112 | 5.7 | S | AA | 18 | 6 | | | 0.080 | B | | 20 | | | | Green,D.W.E | M |
| 18.30 | 812113 | 5.6 | M | 57, 58 | 13 | 7 | | | 0.080 | B | | 20 | 6.0 | Y | 6 | Morris,C.S | |
| 18.313 | 812114 | 6.9 | S | 57 | 30 | 5 | | | 0.08 | R | 6 | 20 | 6.0 | Y | 1 | Bracken,R | P |
| 18.32 | 812115 | 5.5 | M | 57, 58 | 14 | 7 | | | 0.050 | R | | 8 | 6.0 | Y | 6 | Morris,C.S | |
| 18.34 | 812116 | | | | | | 0.67 | 101 | 0.256 | N | 4.5 | 45 | 6.0 | Y | 6 | Morris,C.S | |
| 18.351 | 812117 | 6.1: | | 57 | | | | | | EY | | | 5.9 | Y | 4 | Krisciunas,K | Q |
| 18.396 | 812118 | 5.9 | M | 57 | 18 | 7 | 0.13 | 290 | 0.05 | B | | 10 | 5.5 | Y | 1 | Fabre,R | R |
| 18.406 | 812119 | 7.7 | B | 57 | | 2 | | | 0.08 | R | 6.3 | 16 | 4.5 | Y | 1 | Burch,J.Q | S |
| 18.52 | 812120 | 5.5 | S | 57 | | | | | 0.025 | B | | 3 | 6 | Y | 1 | Seargent,D | T |
| 18.52 | 812121 | | | | 18 | 8 | | | 0.08 | B | | 15 | | | | Seargent,D | |
| 18.53 | 812122 | 6.5 | B | | 15 | 5 | | | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 18.54 | 812123 | 7.3 | B | | 7 | 5 | | | 0.15 | N | 8 | 43 | 5.0 | N | 1 | Uda,K | |
| 18.55 | 812124 | 6.8 | M | 57 | 14 | 7 | | | 0.08 | B | | 11 | 6 | Y | 1 | Mitsuma,S | U |
| 18.556 | 812125 | 6.4 | B | | 20 | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 18.558 | 812126 | 6.0 | M | 57 | 10 | 5 | | | 0.030 | B | | 8 | 5.0C | Y | 1 | Kato,T | |
| 18.56 | 812127 | 7.2 | S | | 5.6 | 6 | | | 0.15 | N | 8 | 43 | 3.5 | N | 1 | Uda,K | |
| 18.583 | 812128 | 7.0 | S | 57 | 1.5 | 1 | | | 0.05 | R | 16 | 20 | 5.0C | Y | 1 | Feisheng,J | |
| 18.60 | 812129 | 7.1 | B | 57 | 7 5 | 7 | 0.1 | 90 | 0.15 | N | 8.6 | 41 | 5.5 | Y | 1 | Makino,J | |
| 18.61 | 812130 | 7.3 | B | SAO | 10 | 6 | | | 0.20 | N | 5.6 | 44 | 6.5 | Y | 5 | Nakamura,A | |
| 18.61 | 812131 | 6.9 | M | SAO | 14 | 6 | | | 0.06 | R | 12 | 22 | | Y | | Nakamura,A | |
| 18.61 | 812132 | 8.3 | B | SAO | 10 | 7 | | | 0.15 | N | 5.7 | 34 | 4.0 | Y | 7 | Tanikawa,M | V |
| 18.615 | 812133 | 8.2 | S | 57 | 1.1 | 6 | | | 0.15 | N | 6 | 45 | 3.6C | Y | 1 | Wakatsuki,M | |
| 18.622 | 812134 | 6.8 | M | 57 | 19.4 | 6 | 0.33 | 100 | 0.1 | N | 10 | 40 | 6.5 | Y | 1 | Ichikawa,K | |
| 18.663 | 812135 | 7.5 | M | 57 | 2.4 | 6 | | | 0.12 | N | 6 | 36 | 4.0 | Y | 1 | Kishi,A | |
| 18.68 | 812136 | 7.0 | M | | 10 | 7 | | | 0.05 | B | | 7 | 6.0 | Y | 2 | Hiraga,M | |
| 18.681 | 812137 | 7.0 | B | 57 | | | | | 0.07 | B | | 10 | 5.5 | Y | 1 | Date,M | |
| 18.69 | 812138 | 5.9 | S | 57 | 19.1 | 6 | 0.3 | 20 | 0.05 | B | | 7 | 6.0 | Y | 1 | Kanai,K | |
| 18.69 | 812139 | 6.5 | B | 57 | 19.1 | 6 | 0.3 | 20 | 0.05 | B | | 7 | 6.0 | Y | 1 | Kanai,K | |
| 18.753 | 812140 | 7.2 | B | 57 | | 7 | | | 0.063 | R | 13.3 | 21 | 5.1C | N | 1 | Pilski,A | |
| 18.76 | 812141 | 7.1 | S | AAVSO | 7 | 5 | 0.1 | | 0.13 | N | 6.3 | 24 | 6.0 | Y | 1 | Hayashi,A | |
| 18.79 | 812142 | 6.9 | B | E | 14 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 18.83 | 812143 | 6.9 | B | E | 14 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 18.83 | 812144 | 6.5 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 18.844 | 812145 | | | 57 | | 2 | | | 0.07 | B | | 10 | 4.0 | N | 1 | Deconinck,M | |
| 18.85 | 812146 | 8.0 | B | M | 17 | | | | 0.03 | B | | 8 | | | | Zinvyev,V.A | |
| 18.87 | 812147 | 6.9 | B | E | 14 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 18.875 | 812148 | | | | 2.1 | 6 | | | 0.076 | R | 16 | 100 | 5.0C | Y | 1 | Kukkonen,I.T | W |
| 18.882 | 812149 | 6.0: | B | 57 | 13 | | | | 0.15 | N | 5 | 38 | | N | 2 | Rodriguez C.,J.A | A |
| 18.885 | 812150 | 7.3 | B | 57 | | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Kukkonen,I.T | |
| 18.896 | 812151 | 6.0: | B | 57 | 18 | | | | 0.05 | B | | 20 | | N | 4 | Gallego,J | M |
| 18.90 | 812152 | 5.7 | S | PLEIADE | | | | | 0.05 | B | | 7 | 4.5 | | 1 | Shanklin,J.D | X |
| 18.90 | 812153 | 5.9 | S | 57 | 20 | 5 | | | 0.050 | B | | 7 | | | 1 | Luthen,H | |
| 18.90 | 812154 | | | | 20 | 6 | 1 | 110 | 0.200 | SC | 10 | 36 | | Y | 1 | Luthen,H | Y |
| 18.90 | 812155 | 6.7 | B | M | 17.6 | 6 | | | 0.20 | R | 15 | 150 | | | | Gostev,A | |
| 18.906 | 812156 | 6 : | B | 57 | 6 | 4 | | | 0.114 | N | 3.7 | 47 | 4.0 | N | 3 | Gomez,T.L | Z |
| 18.92 | 812157 | 6.7 | B | M | 21 | 7 | | | 0.20 | R | 15 | 150 | | | | Gostev,A | |
| 18.93 | 812158 | 6.7 | B | M | 17.6 | 7 | | | 0.20 | R | 15 | 150 | | | | Gostev,A | |
| 18.98 | 812159 | 6.2 | S | 59 | 5.5 | 6 | | | 0.050 | R | 10 | 15 | 5.5 | N | 2 | Jahn,J | |
| 18.98 | 812160 | | | | 3.7 2.9 | | | | 0.050 | R | 10 | 67 | 5.5 | N | 2 | Jahn,J | |
| 18.99 | 812161 | 5.8 | S | USNOC | 14 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | a |

NOTE A Tail traces?
NOTE B 9.0' coma, averted vision.
NOTE C Still faint nucleus at 170x. Circular.
NOTE D Mist.
NOTE E Central condensation magnitude 7.8.
NOTE F Coma now asymmetric.
NOTE G Modified Sidgwick method used.
NOTE H Seen naked eye first time.
NOTE I DC approximate.
NOTE J Some haze in sky. Only 10 minutes dark adapted.
NOTE K Like a slightly diffuse star.
NOTE L Trace of blue to coma.
NOTE M Coma diameter approximate.
NOTE N Surprised to see it!
NOTE O Observed from within Los Angeles city limits, but would consider light pollution in this part of the sky as negligible. Magnitude estimate probably trustworthy.
NOTE P Very good seeing.
NOTE Q Comet suspected naked eye with 7 day moon still 10 deg. up, comet not seen naked eye for certain.
NOTE R (PA value appears to be measured incorrectly. Ed.)
NOTE S Inner city lights.
NOTE T Glimpsed with naked eye, Nov. 18.54.
NOTE U Tail not seen.
NOTE V Core mag. (observer's symbol believed to mean "approximately equal to", Ed.) 11.5.

DATE: 18 NOV 1985

NOTE W Coma diameter determined as an average of five transit time observations.
NOTE X Chart from Sky Telesc. V. 70, 465.
NOTE Y Tail length and PA approximate.
NOTE Z Light pollution.
NOTE a Moonlight.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(x) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.004 | 830285 | | 0.114 | N | 8.7 | 100 | | | 1 | Rodriguez C.,J.A | A |
| 18.005 | 830286 | 1.76 | 0.050 | B | | 12 | 6 | 5.0 | 1 | Donatiello,G | |
| 18.026 | 830287 | 0.33 | 0.067 | R | 13.3 | 35,133 | 14 | 5.0 | 1 | Donatiello,G | |
| 18.097 | 830288 | | 0.203 | R | 13 | 110 | | | 1 | Phillips,J | B |
| 18.271 | 830289 | | 0.200 | SC | 10 | 167,500 | 20 | 5.2 | 1 | Ashley,J.B | C |
| 18.62 | 830290 | 1.38 | 0.15 | N | 5.7 | 34 | 14 | 4.0 | 2 | Tanikawa,M | D |
| 18.882 | 830291 | | 0.15 | N | 5 | 38 | | | 2 | Rodriguez C.,J.A | A |
| 18.885 | 830292 | 0.39 | 0.076 | R | 16 | 100 | 10 | 5.0 | 1 | Kukkonen,I.T | |
| 18.896 | 830293 | | 0.050 | B | | 20 | | | 4 | Gallego,J | E |

NOTE A (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE B City lights. Comet noted in finder for the first time. Finder has an 80 mm lens. Halley now much easier to see. Movement noted for the first time. Comet position changed from 0140 to 0220 UT. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C No specific structure could be seen. However, a very slight central condensation was apparent at 167x. The degree of condensation was less pronounced when observing at 500x. Reticle/PA eyepiece yielded 167x. 500x used in inspection for details.
NOTE D Core (observer's symbol believed to mean "approximately equal to", Ed.) 11.5.
NOTE E Observation made inside Madrid (light pollution). (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.118 | 850258 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 236/P | 1 | Sabia,J.D | |
| 18.126 | 850259 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 237/P | 1 | Sabia,J.D | |
| 18.128 | 850260 | 0.210 | 3.5 | | 9.8 x 6.5 | 10.00 | Kodak 2415 | | Y | S | 33/C | 2 | Chester,G.R | |
| 18.166 | 850261 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | S | 4/P | 1 | Dilsizian,R | |
| 18.175 | 850262 | 0.050 | 1.8 | | 39.6 x27.0 | 5.00 | Kodak Tri-X | 400/ | N | | 1/P | 2 | Tatum,R | |
| 18.225 | 850263 | 0.135 | 2.8 | | 15.2 x10.2 | 4.00 | Kodak Tri-X | | N | C | 617/N | 1 | Lazerson,H | A |
| 18.274 | 850264 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | 3M 1000 | 1000/31 | N | O | 1/N | 3 | Edberg,S.J | |
| 18.274 | 850265 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | Ilford HP 5 | 500/ | N | O | 23/C | 3 | Edberg,S.J | |
| 18.280 | 850266 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/31 | N | O | 2/N | 3 | Edberg,S.J | |
| 18.280 | 850267 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | Ilford HP 5 | 500/ | N | O | 24/C | 3 | Edberg,S.J | |
| 18.292 | 850268 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | 3M 1000 | 1000/31 | N | O | 3/N | 3 | Edberg,S.J | |
| 18.298 | 850269 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/31 | N | O | 4/N | 3 | Edberg,S.J | |
| 18.322 | 850270 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/31 | N | O | 5/N | 3 | Edberg,S.J | |
| 18.322 | 850271 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | Ilford HP 5 | 500/ | N | O | 25/C | 3 | Edberg,S.J | |
| 18.328 | 850272 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | 3M 1000 | 1000/31 | N | O | 6/N | 3 | Edberg,S.J | |
| 18.328 | 850273 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | Ilford HP 5 | 500/ | N | O | 26/C | 3 | Edberg,S.J | |
| 18.332 | 850274 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | 3M 1000 | 1000/31 | N | O | 7/N | 3 | Edberg,S.J | |
| 18.332 | 850275 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | Ilford HP 5 | 500/ | N | O | 27/C | 3 | Edberg,S.J | |
| 18.340 | 850276 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/31 | N | O | 8/N | 3 | Edberg,S.J | |
| 18.345 | 850277 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.05 | 3M 1000 | 1000/31 | N | O | 9/N | 3 | Edberg,S.J | |
| 18.349 | 850278 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 4.00 | 3M 1000 | 1000/31 | N | O | 10/N | 3 | Edberg,S.J | |
| 18.355 | 850279 | 0.050 | 2 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/31 | N | O | 11/N | 3 | Edberg,S.J | |

NOTE A (Observer's image identifier is 16-17. Ed.) "Push" processed to 800 ASA.

DATE: 19 NOV 1985

DATE: 19 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.000 | 812162 | 7.1 | M | SC2000 | 4.0 | 6 | | | 0.08 | B | | 11 | 5.3 | Y | 1 | Fleet,R.W | A |
| 19.007 | 812163 | 7.2 | B | 57 | 17 | 3 | | | 0.05 | B | | 7 | 5.0C | Y | 7 | Chmielewski,W | |
| 19.024 | 812164 | 6.5 | S | 57 | 25 | 7 | | | 0.32 | N | 4.4 | 56 | 5.2 | Y | 1 | Ariail,R.B | B |
| 19.04 | 812165 | 6.9 | | | 5 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | C |
| 19.05 | 812166 | 6.3 | S | DCS 3B | 15 | 5 | | | 0.050 | B | | 10 | 6 | Y | 3 | Comello,G | D |
| 19.10 | 812167 | 5.4 | M | AA | 11 | 6 | | | 0.080 | B | | 20 | | | | Green,D.W.E | E |
| 19.104 | 812168 | 7.0 | | 57 | 4.5 | 8 | | | 0.203 | N | 8 | 128 | 5.0 | Y | | Hannon,J | F |
| 19.133 | 812169 | 5.3 | B | 57 | 15 | | | | 0.05 | B | | 7 | 5.3 | N | 1 | Fox,J.H | G |
| 19.146 | 812170 | 6.5 | B | 57 | | | | | 0.080 | B | | 20 | 5.5M | Y | | Smith,D | |
| 19.187 | 812171 | 6.0 | S | 57 | 10 8 | 3 | | | 0.25 | N | 5.6 | 56 | 6 | Y | 1 | Jordan,J | H |
| 19.208 | 812172 | 6.1 | M | 57 | 15.0 | 6 | | | 0.05 | B | | 12 | 6.3 | Y | 1 | Knight,S | |
| 19.23 | 812173 | 5.3 | S | AA | 25 | 5 | | | 0.050 | B | | 7 | | | | Green,D.W.E | E |
| 19.23 | 812174 | 5.7 | S | USNOC | 17 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | I |
| 19.23 | 812175 | | | | 15 | 5 | | | 0.080 | B | | 20 | | | | Bortle,J.E | |
| 19.23 | 812176 | | | | | 8 | | | 0.500 | N | 5 | 96 | | | | Bortle,J.E | J |
| 19.24 | 812177 | 5.4 | S | AA | 22 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | E |
| 19.247 | 812178 | | | 57 | 5.4 | 5 | | | 0.15 | N | 8 | 68 | 4.3 | Y | 1 | Robertson,T | K |
| 19.253 | 812179 | 6.4 | M | 57 | 5 | 5 | | | 0.050 | B | | 7 | 4.3 | Y | 1 | Robertson,T | |
| 19.260 | 812180 | 7.4 | S | 57 | 28 | 3 | | | 0.035 | B | | 7 | 4.5C | Y | 1 | Gronek,J.D | L |
| 19.32 | 812181 | 5.5 | M | 57, 58 | 10 | 7 | 0.67 | 90 | 0.080 | B | | 20 | 6.0 | Y | 14 | Morris,C.S | M |
| 19.357 | 812182 | 5.4 | S | 57 | 12.6 10 | 3 | | | 0.050 | B | | 20 | 6 | Y | 1 | Jordan,J | H |
| 19.4292 | 812183 | 5.9 | S | SAO | 21 | 8 | | | 0.131 | R | 7.1 | 27 | 6.2 | | 1 | Machholz,D | |
| 19.4313 | 812184 | 6.2 | S | SAO | 18 | 7 | | | 0.080 | B | | 20 | 6.2 | | 1 | Machholz,D | |
| 19.451 | 812185 | 5.7 | M | 57 | 18 | 7 | 0.17 | 290 | 0.05 | B | | 10 | 5.5 | Y | 1 | Fabre,R | N |
| 19.4583 | 812186 | 6.0 | | SAO | 45 | 1 | | | | EY | | | 6.2 | | 1 | Machholz,D | |
| 19.465 | 812187 | 7.2 | B | 57 | | | | | 0.07 | B | | 10 | 4.5M | Y | 1 | Date,M | |
| 19.500 | 812188 | 6.5 | S | 57 | 9.0 | 2 | | | 0.050 | B | | 12 | 5.3 | Y | 1 | Batza,H | |
| 19.505 | 812189 | 7.1 | S | 57 | | 8 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 19.517 | 812190 | 6.0 | M | 57 | 10 | 5 | | | 0.030 | B | | 8 | 4.5M | Y | 1 | Kato,T | |
| 19.545 | 812191 | 7.1 | B | 57 | 8 | 5 | | | 0.050 | B | | 7 | 5.8C | Y | 1 | Parkinson,M | O |
| 19.547 | 812192 | 6.6 | S | 57 | 5 | 4 | | | 0.153 | N | 8.6 | 33 | 4.0 | Y | 1 | Iwaki,Y | |
| 19.573 | 812193 | 6.4 | B | 57 | 10 | 6 | | | 0.060 | B | | 10 | 3.5 | Y | 1 | Moriya,M | P |
| 19.583 | 812194 | 7.0 | S | 57 | 1.5 | 1 | | | 0.05 | R | 16 | 20 | 5.0C | Y | 1 | Feisheng,J | |
| 19.61 | 812195 | 5.4 | S | 57 | | | | | 0.025 | B | | 3 | 6.1 | Y | 1 | Seargent,D | |
| 19.61 | 812196 | 6.5 | S | 57 | 10 | 7 | | | 0.07 | B | | 10 | 5.5 | Y | 1 | Yasuki,M | |
| 19.62 | 812197 | 8.0 | B | 57 | 15 | 7 | 0.1 | 150 | 0.15 | N | 8.6 | 41 | 6.0 | Y | 1 | Makino,J | |
| 19.757 | 812198 | 6.5 | B | 57 | 10 | 5 | | | 0.060 | B | | 10 | 2.5 | Y | 1 | Moriya,M | Q |
| 19.76 | 812199 | 6.8 | B | E | 7 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 19.771 | 812200 | 7.0 | M | 57 | | | | | 0.06 | R | 4.5 | 10 | 4.4M | Y | 1 | Chodorowski,F | |
| 19.771 | 812201 | 6.7 | B | 57 | 6 | 7 | 0.03 | | 0.08 | B | | 20 | 5 M | Y | 2 | Knain,E | R |
| 19.778 | 812202 | | | | 8 | 3 | | | 0.064 | R | 12 | 32 | | Y | 1 | Chodorowski,F | |
| 19.824 | 812203 | 7.4 | B | 57 | | 3 | | | 0.05 | B | | 10 | M | Y | 2 | Frosina,A | S |
| 19.865 | 812204 | 6.5 | | 57 | | 6 | | | 0.050 | B | | 10 | 5.6C | Y | 1 | Kaila,K | |
| 19.87 | 812205 | 6.7 | B | AAVSO | 16 | 6 | | | 0.12 | R | 5 | 35 | | | | Chernis,K | |
| 19.965 | 812206 | 7.3 | M | SC2000 | 8.5 | 6 | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | T |
| 19.969 | 812207 | 7.7 | M | SC2000 | 5.5 | 6 | | | 0.075 | R | 16 | 50 | 5.6 | Y | 1 | Fleet,R.W | U |
| 19.990 | 812208 | 7.6 | M | SC2000 | 6.0 | 6 | | | 0.15 | N | 4 | 50 | 5.6 | Y | 1 | Fleet,R.W | V |

NOTE A 13' coma, averted vision, between clouds.
NOTE B Possible jets. (Observer gives PA 250 and PA 280 for tail PA. Ed.)
NOTE C (Observer gave limit as 8.8. Ed.)
NOTE D Involved with bright star (Tau Ari). Coma diameter approximate.
NOTE E Coma diameter approximate.
NOTE F Hazy sky.
NOTE G Scattered clouds. Tau Arietis comparison star.
NOTE H Skies very clear and transparent, although air was turbulent due to high winds. Coma appeared oblong with nucleus off center in coma.
NOTE I Obs. made after moonset.
NOTE J Almost stellar nuc. of 9-10 mag.
NOTE K Filar micrometer used for coma diameter.
NOTE L Exc. see.
NOTE M Tail was straight and became narrower with distance from coma.
NOTE N (PA value appears to be measured incorrectly. Ed.)
NOTE O Star-like central condensation.
NOTE P Seeing 3/5.
NOTE Q Seeing 2/5.
NOTE R Moonlight.
NOTE S Limit = 9.4.
NOTE T 15' coma, averted vision.
NOTE U 8.5' coma, averted vision.
NOTE V 9.5' coma, averted vision.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.095 | 830294 | 0.25 | 0.203 | N | 8 | 128 | 4 | 5.0 | 1 | Hannon,J | A |
| 19.102 | 830295 | 0.99 | 0.15 | N | 5 | 30 | 5 | | 1 | Zanette,D | B |
| 19.157 | 830296 | 0.75 | 0.318 | N | 8 | 40 | 73 | 5.5 | 1 | Hathaway,W | |
| 19.767 | 830297 | 1.2 | 0.080 | B | | 20 | 12 | 5 | 1 | Knain,E | C |

NOTE A Central condensation observed offset.
NOTE B It's see perfectly circular. [sic]
NOTE C Not sure of tail. Movement among stars clearly seen.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.090 | 850280 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 1.00 | Kodak 2415 | | Y | X | 239/P | 1 | Sabia,J.D | A |
| 19.150 | 850282 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | S | 5/P | 1 | Dilsizian,R | |
| 19.167 | 850283 | 0.135 | 2.8 | | | 5.00 | Kodak Tri-X | 400/ | N | O | 9/P | 1 | Valeriani,G | |
| 19.179 | 850284 | 0.135 | 2.8 | | | 14.50 | Kodak Tri-X | 400/ | N | O | 10/P | 1 | Valeriani,G | |
| 19.293 | 850285 | 0.135 | 2.8 | | 15.2 x10.2 | 4.00 | Kodak Tri-X | | N | C | 621/N | 1 | Lazerson,H | B |

NOTE A Moon 20 deg. above western horizon.
NOTE B (Observer's image identifier is 16-21. Ed.) "Push" processed to 800 ASA.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.02 | 812209 | 6.5 | B | E | 14 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 20.076 | 812210 | 8.0 | S | 57 | 1.8 | 7 | | | 0.203 | N | 6 | 101 | 5.3M | Y | 1 | Budak,D.M | |
| 20.194 | 812211 | 7.0 | B | 57 | 17 | 3 | | | 0.05 | B | | 7 | 5.0M | Y | 8 | Chmielewski,W | A |
| 20.197 | 812212 | 6.0 | S | 56 | | 5 | | | 0.318 | N | 8 | 40 | | Y | 1 | Hathaway,W | |
| 20.240 | 812213 | 7.3 | S | 57 | 30 | 3 | | | 0.035 | B | | 7 | 4.5C | Y | 1 | Gronek,J.D | B |
| 20.240 | 812214 | 7.5 | S | 57 | 3.0 | 4 | | | 0.254 | N | 5.6 | 55 | 5 | Y | 2 | Swavely,M.E | C |
| 20.30 | 812215 | 6.9 | M | E | 18 | 5 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 20.36 | 812216 | 5.5 | M | 57, 58 | 11 | 7 | | | 0.080 | B | | 20 | 6.0 | Y | 6 | Morris,C.S | |
| 20.36 | 812217 | 5.4 | M | 57, 58 | 13 | 6 | | | 0.050 | R | | 8 | 6.0 | Y | 6 | Morris,C.S | D |
| 20.365 | 812218 | 7.1 | B | 57 | | 3 | | | 0.050 | B | | 10 | 6.0C | Y | 1 | Stapleton,J | E |
| 20.403 | 812219 | 6.7 | M | | 5 | 4 | | | 0.18 | N | 10 | 55 | 3.5M | Y | 1 | Kato,T | F |
| 20.41 | 812220 | 5.3: | S | AA | 14 | 2 | | | 0.080 | B | | 20 | | | | Green,D.W.E | G |
| 20.45 | 812221 | 6.1 | M | 57 | | | | | 0.05 | B | | 10 | 6.5 | Y | 2 | Hale,A | |
| 20.451 | 812222 | 6.5 | M | 57 | 5 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 20.451 | 812223 | 6.2 | M | 57 | 5 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,H | |
| 20.46 | 812224 | 5.9 | B | 57 | | | | | | EY | | | 6.5 | Y | 2 | Hale,A | |
| 20.46 | 812225 | | | | | | 0.67 | 105 | 0.20 | N | 6 | 61 | 6.5 | Y | 2 | Hale,A | |
| 20.483 | 812226 | 7.1 | B | 57 | | | | | 0.07 | B | | 10 | 4.5M | Y | 1 | Date,M | |
| 20.490 | 812227 | 6.2: | S | 57 | 11 | 3 | | | 0.050 | B | | 10 | | Y | 1 | Tregaskis,T.B | H |
| 20.50 | 812228 | 5.3 | S | 57 | | | | | | EY | | | 5.8M | Y | 1 | Lovejoy,T | |
| 20.521 | 812229 | 7.3 | B | 57 | | | | | 0.05 | B | | 7 | 3.0MC | Y | 1 | Hasegawa,T | |
| 20.541 | 812230 | 6.5 | S | 57 | 9.0 | 2 | | | 0.050 | B | | 12 | 5.5 | Y | 1 | Batza,H | |
| 20.59 | 812231 | 6.7 | S | 57 | 8 | | | | 0.045 | R | 6 | 13 | 3.5 | Y | | Jones,A | I |
| 20.59 | 812232 | | | | | 7 | | | 0.317 | N | 5 | 86 | | Y | | Jones,A | |
| 20.590 | 812233 | 7.9 | S | 57 | 1.3 | 6 | | | 0.15 | N | 6 | 32 | 3.6C | Y | 1 | Wakatsuki,M | |
| 20.615 | 812234 | 6.5 | M | 57 | 19.5 | 6 | 0.32 | 100 | 0.1 | N | 10 | 40 | 6.0 | Y | 1 | Ichikawa,K | |
| 20.63 | 812235 | 7.7 | B | 57 | 11 | 7 | | | 0.15 | N | 8.6 | 41 | 5.5 | Y | 2 | Makino,J | |
| 20.65 | 812236 | 6.8 | S | 57 | 20 | 6 | | | 0.15 | N | 5.3 | 32 | 6.0 | Y | 2 | Oka,A | |
| 20.65 | 812237 | 6.6 | M | 56 | 13 | 7 | 0.25 | 100 | 0.08 | B | | 11 | 6 | Y | 1 | Mitsuma,S | J |
| 20.65 | 812238 | 6.5 | S | | 11 | 7 | | | 0.08 | B | | 11 | 4.0 | N | 1 | Momose,M | |
| 20.65 | 812239 | 6.9 | M | 57 | 20 | 6 | | | 0.080 | B | | 11 | 5.5 | Y | 3 | Watanabe,N | |
| 20.66 | 812240 | 6.5 | S | 57 | 12 | 7 | | | 0.07 | B | | 10 | 5.5 | Y | 1 | Yasuki,M | |
| 20.669 | 812241 | 7.5 | M | 57 | 2.5 | 6 | | | 0.12 | N | 6 | 36 | 4.0 | Y | 1 | Kishi,A | |
| 20.70 | 812242 | 6.4 | B | M | | | | | 0.05 | B | | 7 | | | | Martis,A | |
| 20.72 | 812243 | 6.0 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 20.73 | 812244 | 6.9 | S | AAVSO | 8 | 5 | 0.17 | | 0.13 | N | 6.3 | 24 | 5.5 | Y | 1 | Hayashi,A | |
| 20.76 | 812245 | 6.2 | S | 57 | 12.1 | 6 | | | 0.05 | B | | 7 | 5.0 | Y | 1 | Kanai,K | |
| 20.76 | 812246 | 6.6 | B | 57 | 12.1 | 6 | | | 0.05 | B | | 7 | 5.0 | Y | 1 | Kanai,K | |
| 20.79 | 812247 | 6.0 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 20.896 | 812248 | | | 57 | 10 | 6 | | | 0.089 | R | 5.5 | 18 | 4.3 | N | 1 | Ventura,F | K |
| 20.902 | 812249 | 6.0 | S | 56 | 18 | 7 | | | 0.050 | B | | 7 | 5.0MC | N | 5 | Meozzi,D | |
| 20.92 | 812250 | 7.0 | B | 57 | 4 | 4 | | | 0.08 | B | | 20 | 5.0 | Y | 1 | Speil,J | L |
| 20.929 | 812251 | 6.8 | M | 57 | | 2 | | | 0.050 | B | | 10 | 4.2MC | Y | 1 | Lozano,L | |
| 20.938 | 812252 | 6.5 | B | 57 | 13 | | | | 0.08 | B | | 15 | | N | 2 | Losada,R | |
| 20.96 | 812253 | 6.8 | B | M | 5 | | 0.2 | | 0.08 | R | | 29 | | | | Nesterov,Yu | |
| 20.976 | 812254 | 6.1 | M | 57 | 13 | 5 | | | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | M |

NOTE A Coma elongated to east.
NOTE B Exc. see.
NOTE C Coma diameter timings were made using the eyepieces' of the field of view and the drift method. [sic] During this procedure I was unable to use averted vision and therefore the timings reflect the size of brighter central "directly viewed" regions. I could see no outstanding features or major tail formation, however, there was a slight but distinct "fanning" visible towards the wester or following edge. [sic].
NOTE D Fan shaped tail suspected.
NOTE E In Aries, moon set.
NOTE F Very poor condition.
NOTE G Coma diameter approximate.
NOTE H Broken cloud and moon. Faintest star seen in instrument approximately 8.
NOTE I Drifting clouds.
NOTE J 9.5
NOTE K Coma size is lower limit. Moon.
NOTE L Faint aurora and fog.
NOTE M Seeing good, transparency good.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.241 | 830298 | 0.44 | 0.254 | N | 5.6 | 55,155 | 26 | 5 | 2 | Swavely,M.E | A |
| 20.286 | 830299 | 0.19 | 0.254 | N | 5.6 | 53, 60,120 | 15 | 5.9 | 1 | Knisely,D | B |
| 20.938 | 830300 | | 0.080 | B | | 15 | | | 1 | Losada,R | C |

NOTE A (Two drawings included. The first at 55x should be considered primary (0.44'/mm). The second at 155x was included to better show coma shape. The coma showed a slight but distinct fanning-out towards the following or western edge. Timings of the coma by drift method measured only the brighter central area where averted vision was not needed and resulted in timings of 13 seconds average time or 3.04 arc min. The outer edges of the coma in the drawing were too faint to measure and are shown here as seen by averted vision. The second drawing is uncertain in scale and included as a better indication of coma size and shape as observed with direct and averted vision.
NOTE B Hint of very faint broad tail. Central condensation magnitude 9? Hint of coma brightening at PA 80 about 5' arc from nucleus. Nucleus centered in coma (stellar). City lights reflecting off recent snowfall made observations difficult. Tail? at PA 135.
NOTE C (Duration not indicated. Time of observation is assumed to be end time. Ed.)

DATE: 21 NOV 1985

DATE: 21 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.021 | 812255 | 6.1 | M | 57 | 17 | 5 | | | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | |
| 21.021 | 812256 | 5.5 | | 57 | | 6 | | | 0.106 | N | 4.4 | 16 | 4.6 | Y | 1 | Williams,D.J | A |
| 21.028 | 812257 | 7.1 | M | SC2000 | 7.5 | 6 | | | 0.08 | B | | 11 | 5.7 | Y | 1 | Fleet,R.W | B |
| 21.038 | 812258 | 7.2 | M | SC2000 | 6.0 | 6 | | | 0.075 | R | 16 | 50 | 5.7 | Y | 1 | Fleet,R.W | C |
| 21.049 | 812259 | 7.1 | M | SC2000 | 5.0 | | | | 0.15 | N | 4 | 50 | 5.6 | Y | 1 | Fleet,R.W | D |
| 21.060 | 812260 | 6.0 | B | 57 | 20 | 6 | | | 0.035 | B | | 7 | 4.5 | Y | 1 | Stephan,C | E |
| 21.062 | 812261 | 6.1 | B | 57 | 7.7 | 9 | | | 0.15 | N | 8 | 30 | 4.6 | N | 1 | McBride,P | F |
| 21.069 | 812262 | 7.4 | B | 57 | 5.8 | 3 | | | 0.127 | SC | 10 | 50 | 4.3 | Y | 1 | Rousom,J | G |
| 21.07 | 812263 | 6.4 | M | SC 2000 | 5 | 7 | | | 0.03 | R | | 6 | 5.5 | Y | 1 | Granslo,B.H | H |
| 21.07 | 812264 | | | | 5 | 7 | | | 0.203 | SC | 10 | 80 | 5.5 | Y | 1 | Granslo,B.H | |
| 21.07 | 812265 | 5.2 | S | AA | 22 | 2 | | | 0.050 | B | | 7 | | | | Green,D.W.E | I |
| 21.083 | 812266 | 6.0 | S | 56 | 3 | 1 | | | 0.152 | N | 8 | 135 | 5 | Y | 1 | Lewis,D.E | |
| 21.10 | 812267 | 6.4 | B | 56 | 14 | 8 | | | 0.080 | B | | 20 | 4.5 | Y | | Kronk,G | |
| 21.101 | 812268 | 7.1 | M | 56 | 55.4 | 3 | | | 0.06 | B | | 20 | 4.3 | N | 1 | de la Rosa Jr,A | J |
| 21.104 | 812269 | 6.5 | S | 56 | 10 | 6 | | | 0.203 | SC | 10 | 67 | 4.0 | Y | 1 | Jacobs,T | |
| 21.104 | 812270 | 5.7 | M | AAVSO | | | | | 0.050 | B | | 10 | | | | O'Meara,S.J | K |
| 21.156 | 812271 | 6.2 | M | 56 | 6 | 5 | | | 0.050 | B | | 7 | 4.3 | Y | 1 | Robertson,T | |
| 21.232 | 812272 | 5.8 | B | 57 | | 6 | | | 0.06 | R | | 35 | 5 | Y | 1 | Ward,A | L |
| 21.240 | 812273 | 6.2 | S | | 10 | 5 | | | 0.080 | B | | 11 | | Y | 6 | Pryal,J | M |
| 21.243 | 812274 | 7.2 | S | 57 | 31 | 3 | | | 0.035 | B | | 7 | 4 CM | Y | 1 | Gronek,J.D | N |
| 21.258 | 812275 | 6.9 | B | 56 | | 6 | | 110 | 0.152 | N | 4.5 | 45 | 6.0 | Y | 1 | Troiani,D.M | |
| 21.36 | 812276 | 5.3 | M | 57, 58 | 16 | 7 | | | 0.050 | R | | 8 | 6.0 | Y | 15 | Morris,C.S | |
| 21.365 | 812277 | 5.8 | S | 56 | 13.9 | 8 | | | 0.075 | R | 12 | 32 | 5.5 | Y | 2 | Franch,J | |
| 21.406 | 812278 | 6.2 | M | 56 | 3.5 | 4 | | | 0.10 | N | 10 | 55 | 3.0M | Y | 1 | Kato,T | O |
| 21.413 | 812279 | 5.5 | M | 56 | 18 | 7 | 0.25 | 290 | 0.05 | B | | 10 | 6.0 | Y | 2 | Fabre,R | P |
| 21.54 | 812280 | 7.0 | B | M | 5.2 | 5 | | | 0.21 | N | | 80 | | | | Knyazyuk,N | |
| 21.563 | 812281 | 6.9 | B | 56 | | | | | 0.05 | B | | 7 | 4.0M | Y | 2 | Hasegawa,T | |
| 21.572 | 812282 | 6.5 | S | 56 | 9.0 | 2 | | | 0.050 | B | | 12 | 5.2 | Y | 1 | Batza,E | |
| 21.60 | 812283 | 6.2 | S | 56 | 7.5 | | | | 0.045 | R | 6 | 13 | 4.6 | Y | | Jones,A | Q |
| 21.601 | 812284 | 6.6 | M | 56 | 11.6 | 6 | 0.25 | 95 | 0.1 | N | 10 | 40 | 4.5 | Y | 1 | Ichikawa,K | |
| 21.608 | 812285 | 7.0 | B | 56 | | | | | 0.07 | B | | 10 | 4.5M | Y | 1 | Date,M | |
| 21.64 | 812286 | 5.9 | B | E | 15 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 21.67 | 812287 | 6.1 | B | AAVSO | 8 | | | | 0.05 | B | | 7 | | | | Golubev,V | |
| 21.767 | 812288 | 6.9 | B | 56 | | 3 | | | 0.05 | B | | 10 | M | Y | 2 | Frosina,A | R |
| 21.813 | 812289 | 5.9 | B | 56 | 11.2 | 5 | | | 0.050 | B | | 7 | 4.5 | N | 1 | Lunde,R | S |
| 21.868 | 812290 | | | | 6 | 6 | | | 0.20 | SC | 10 | 50 | 5.3 | Y | 1 | Bremseth,P.-J | |
| 21.868 | 812291 | 6.5 | S | | | | | | 0.05 | B | | 10 | 5.3 | Y | 1 | Bremseth,P.-J | |
| 21.92 | 812292 | 5.5 | B | AAVSO | | | | | 0.03 | B | | 3 | | | | Churyumov,K | |
| 21.946 | 812293 | 6.8 | M | 56 | | | | | 0.050 | B | | 10 | 3.7MC | Y | 1 | Lozano,L | |
| 21.990 | 812294 | 6.3 | S | Y TAU | 32.0 | 5 | | | 0.08 | B | | 30 | 4.5 | Y | 1 | Campos,J | T |

NOTE A Seeing good, transparency excellent. Clouds.
NOTE B Clear, first quarter moon.
NOTE C 16' coma, averted vision.
NOTE D 11' coma, averted vision.
NOTE E 10' coma, averted vision.
NOTE F Haze and moon, sky not very clear.
NOTE G 8 mag. nucleus.
NOTE H Moonlight interfering.
NOTE I Coma diameter approximate.
NOTE J Street lights, moonlight.
NOTE K Jets at PA 90 deg. and PA 180 deg.
NOTE L Some cloud.
NOTE M Near first quarter moon. (Observer gave limit as 9. Ed.)
NOTE N Coma approx. 50% times larger than 11/9 + noticeably brighter. Ex. see.
NOTE O Diffuse clouds.
NOTE P (PA value appears to be measured incorrectly. Ed.)
NOTE Q Comet low altitude.
NOTE R Limit = 9.1.
NOTE S Moon interferes.
NOTE T Some haze.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.129 | 830301 | 0.38 | 0.203 | N | 6 | 61,116,183 | 10 | 6.0 | 1 | Williams,J | A |
| 21.135 | 830302 | | 0.060 | B | | 20 | 99 | 4.3 | 1 | de la Rosa Jr,A | |
| 21.273 | 830303 | 2.5 | 0.30 | R | 15 | 161 | 25 | 5.5 | 2 | Franch,J | B |
| 21.295 | 830304 | | 0.203 | N | 6 | 58 | 13 | 6.0 | 1 | Troiani,D.M | C |
| 21.872 | 830305 | | 0.20 | SC | 10 | 50 | 30 | 5.3 | 3 | Bremseth,P.-J | D |

NOTE A The center of the coma was definitely star-like. The coma appeared to slightly brighten towards the center. No further detail could be seen. Moonlight interfered with the observation.
NOTE B Tail PA 82. The comet's coma had begun to assume a strongly parabolic shape and had swelled in size to about 14'. The nucleus was seen to be very bright and not completely starlike. Only the first few minutes of arc of a gas tail were observed stretching east. Halley's total estimated magnitude was 5.8.
NOTE C Condensation in coma at PA 180 deg. Rays at PA 90 deg. DC = 5.5.
NOTE D Very special-looking Halley. Round coma, but with central condensation out off-center, to northwest. The northwestern part of coma was weak. The brightest parts of coma was between PA 95 and PA 180. A brighter "streak" against PA 180. Another structure against PA 95. A very weak "structure" was observed against PA 40. The central cond. was about 13-14 arc sec. in diameter. [sic]

DATE: 22 NOV 1985

DATE: 22 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.00 | 812295 | 6.7 | B | M | 4 | | | | | 0.08 | R | | 29 | | | | Nesterov,Yu | |
| 22.028 | 812296 | 6.9 | M | SC2000 | 8.5 | | 6 | | | 0.08 | B | | 11 | 5.7 | Y | 1 | Fleet,R.W | A |
| 22.030 | 812297 | 6.4 | S | 56 | 13 | | 1 | | | 0.05 | B | | 10 | 6 C | N | 4 | House,R.R | |
| 22.073 | 812298 | 6.0 | M | 57 | | | 4 | | | 0.05 | B | | 12 | 3 | Y | 1 | Tanti,T | B |
| 22.10 | 812299 | 4.9 | S | AA | 17 | | 4 | | | 0.050 | B | | 7 | | | | Green,D.W.E | C |
| 22.104 | 812300 | 6.0 | B | 56 | 20 | | 6 | | | 0.035 | B | | 7 | 4.5 | Y | 1 | Stephan,C | D |
| 22.108 | 812301 | 6.1 | S | 56 | 17 | | 3 | | | 0.035 | B | | 7 | 5.3M | N | 3 | Morrison,W | E |
| 22.15 | 812302 | 6.2 | | | 9 | | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | F |
| 22.16 | 812303 | 5.7 | | 56 | 17 | | 4 | | | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | G |
| 22.198 | 812304 | 6.8 | B | 56 | 18 | 14.5 | 4 | | 110 | 0.05 | B | | 7 | 5.5 | Y | 9 | Chmielewski,W | |
| 22.42 | 812305 | 5.3 | M | 57, BSC | 16 | | 6 | | | 0.050 | R | | 8 | 6.0 | Y | 14 | Morris,C.S | |
| 22.43 | 812306 | 5.5 | M | 57, BSC | 13 | | 7 | 0.33 | 75 | 0.080 | B | | 20 | 6.0 | Y | 14 | Morris,C.S | H |
| 22.4340 | 812307 | 5.3 | M | 56 | 24 | | 6 | 0.75 | 86 | 0.05 | B | | 7 | 6.4 | Y | 5 | Cook,A.J | |
| 22.469 | 812308 | 6.5 | S | 56 | 10 | | 2 | | | 0.050 | B | | 12 | 5.0 | Y | 1 | Batza,H | I |
| 22.497 | 812309 | 6.1 | S | 56 | 11 | | 2 | | | 0.050 | B | | 10 | | Y | 1 | Tregaskis,T.B | J |
| 22.503 | 812310 | | | 56 | 9.4 | | 4 | | | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | K |
| 22.519 | 812311 | | | 56 | 1.9 | | 5 | 0.5 | 70 | 0.32 | N | 8 | 150 | | Y | 1 | Tregaskis,T.B | L |
| 22.65 | 812312 | 5.8 | B | AAVSO | | | | | | 0.08 | B | | 20 | | | | Churyumov,K | |
| 22.743 | 812313 | 6.5 | B | 56 | 4 | | 5 | 0.06 | | 0.08 | B | | 20 | 5 M | Y | 2 | Knain,E | M |
| 22.83 | 812314 | 5.9 | B | E | 15 | | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 22.87 | 812315 | 5.9 | B | E | 15 | | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 22.91 | 812316 | 5.7 | B | AAVSO | | | | | | 0.08 | B | | 20 | | | | Churyumov,K | |
| 22.92 | 812317 | 6.7 | B | M | 5 | | | | | 0.07 | N | 8 | 33 | | | | Bezrodniy,A | |

NOTE A 14' coma, averted vision.
NOTE B Seeing good, transparency fair/poor. Clouds.
NOTE C Coma diameter approximate.
NOTE D Moon approx 70% sunlit. No tail visible in 7x35's.
NOTE E Moon nearby.
NOTE F (Observer gave limit as 9.2. Ed.)
NOTE G Modified Sidgwick method used.
NOTE H Main tail was stubby and ill-defined. Sunward tail appeared to wrap around the southern part of the coma and join with the main tail.
NOTE I Moon.
NOTE J Clear and moonlight. Faintest star seen in instrument 8.3.
NOTE K Clear and moonlight. (Observer gave limit as approximately 11.5. Ed.)
NOTE L Doubtful tail; length and PA uncertain. Bright moonlight. (Observer gave limit as approximately 13. Ed.)
NOTE M Moonlight.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.116 | 830306 | 3 | 0.050 | B | | 7 | 5 | 6.4 | 5 | Cook,A.J | A |
| 22.755 | 830307 | 1.2 | 0.080 | B | | 20 | 15 | 5 | 1 | Knain,E | B |

NOTE A Tail very diffuse and ghostly.
NOTE B Interfering moonlight. Coma diffuse. Conspicuous tail.

DATE: 23 NOV 1985

DATE: 23 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.01 | 812318 | 6.4 | | | 8 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | A |
| 23.031 | 812319 | 6.5 | M | SC2000 | 8.5 | 6 | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | B |
| 23.111 | 812320 | 5.9 | M | 57 | | 4 | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | C |
| 23.118 | 812321 | 7.0 | M | 56 | 6 | 3 | | | 0.09 | M | 11 | 56 | 4.5 | Y | 3 | Westlund,M | |
| 23.13 | 812322 | 5.5 | M | 56 | 15 | 6 | | | 0.06 | R | 4 | 10 | 5.5 | Y | 1 | Granslo,B.H | |
| 23.14 | 812323 | 5.4 | S | 57, 56 | 18 | 3 | | | 0.080 | B | | 11 | 4.5 | Y | 1 | Spratt,C.E | D |
| 23.16 | 812324 | 6.3 | M | 56 | 15 | 7 | | | 0.080 | B | | 20 | 4.5 | Y | | Kronk,G | E |
| 23.198 | 812325 | 8 | B | 56 | | 5 | | | 0.08 | B | | 11 | 4 | Y | 1 | Gorski,L | |
| 23.493 | 812326 | 6.1 | S | 56 | 12 | 2 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | F |
| 23.500 | 812327 | 6.5 | S | 56 | 10 | 2 | | | 0.050 | B | | 12 | 4.5 | Y | 1 | Batza,H | G |
| 23.507 | 812328 | | | 56 | | 6 | | | 0.32 | N | 8 | 150 | | Y | 1 | Tregaskis,T.B | H |
| 23.60 | 812329 | 8.6 | B | SAO | 10 | 5 | | | 0.15 | N | 5.7 | 34 | 4.0 | Y | 7 | Tanikawa,M | I |
| 23.632 | 812330 | 7.0 | M | 56 | 3.5 | 6 | | | 0.12 | N | 6 | 36 | 3.5M | Y | 1 | Kishi,A | |
| 23.962 | 812331 | 6.8 | M | 56 | 6 | 3 | | | 0.09 | M | 11 | 56 | 3.5M | Y | 3 | Westlund,M | J |
| 23.99 | 812332 | 5.0 | S | AA | 15 | 6 | | | 0.080 | B | | 20 | | | | Green,D.W.E | K |

NOTE A (Observer gave limit as 8.8. Ed.) Moonlight.
NOTE B 16' coma, averted vision.
NOTE C Seeing good, transparency excellent. Clouds.
NOTE D Moon. DC approximate.
NOTE E Mostly cloudy.
NOTE F Bright moonlight. (Observer gave limit as approximately 8.0. Ed.)
NOTE G Moon.
NOTE H Bright moonlight. (Observer gave limit as approximately 13. Ed.)
NOTE I Core mag. (observer's symbol believed to mean "approximately equal to", Ed.) 12.
NOTE J Bright moon.
NOTE K Coma diameter approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.113 | 830308 | 1.6 | 0.090 | M | 11 | 56 | 15 | 4.5 | 3 | Westlund,M | |
| 23.61 | 830309 | 1.36 | 0.15 | N | 5.7 | 34, 92 | 14 | 4.0 | 2 | Tanikawa,M | A |
| 23.957 | 830310 | 1.6 | 0.090 | M | 11 | 56 | 15 | 3.5 | 3 | Westlund,M | B |

NOTE A Core (observer's symbol believed to mean "approximately equal to", Ed.) 12.
NOTE B Bright moon.

DATE: 24 NOV 1985

DATE: 24 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.00 | 812333 | 5.7 | S | AAVSO | 10 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | A |
| 24.00 | 812334 | 5.8 | S | AAVSO | 7.5 | 5 | | | 0.080 | B | | 20 | | | | Bortle,J.E | A |
| 24.042 | 812335 | 5.9 | M | S6 | 10.6 | 4 | | | 0.05 | B | | 7 | 3.9 | Y | 1 | DeYoung,J.A | B |
| 24.049 | 812336 | 6.7 | M | SC2000 | 4.3 | 6 | | | 0.08 | B | | 11 | 4.5 | Y | 1 | Fleet,R.W | C |
| 24.313 | 812337 | 6.4 | S | | 7 | 3 | | | 0.080 | B | | 11 | 8 | Y | 3 | Pryal,J | D |
| 24.525 | 812338 | | | | 5 | 6 | 0.10 | 70 | 0.10 | N | 10 | 55 | 4.0M | Y | 1 | Kato,T | |
| 24.548 | 812339 | 5.7 | M | S6 | 6 | | | | 0.030 | B | | 8 | 4.0M | Y | 1 | Kato,T | |
| 24.552 | 812340 | 7.2 | B | S6 | | | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Date,M | |
| 24.597 | 812341 | 6.1 | B | S6 | 15 | 4 | | | 0.060 | B | | 10 | 3.0M | Y | 1 | Moriya,M | E |
| 24.70 | 812342 | 6.0 | B | AAVSO | | | | | 0.15 | N | | | | | | Korneev,V | F |
| 24.83 | 812343 | 5.8 | B | M | 2 | 3 | | | 0.07 | N | 8 | 33 | | | | Shitikov,A | |

NOTE A Moonlight.
NOTE B Moon close to field.
NOTE C 10' coma, averted vision, low altitude.
NOTE D Waxing gibbous moon approximately 20 deg. from Halley.
NOTE E Seeing 3/5.
NOTE F Brightness flash (851124.72).

DATE: 25 NOV 1985

DATE: 25 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.14 | 812344 | 4.8: | S | AA | 12 | 3 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |
| 25.57 | 812345 | 6.8 | S | AAVSO | 4 | 4 | | | 0.13 | N | 6.3 | 24 | 3.5M | Y | 1 | Hayashi,A | |
| 25.573 | 812346 | 6.3 | M | 56 | 10.7 | 6 | 0.33 | 90 | 0.1 | N | 10 | 40 | 5.0 | Y | 1 | Ichikawa,K | |
| 25.80 | 812347 | 7.4 | S | DCS 4B | 2 | 7 | | 190 | 0.254 | JB | 6 | 72 | 3 MC | Y | 5 | Bus,E.P | B |
| 25.847 | 812348 | | | | 3 | | | | 0.07 | B | | 16 | 5.0CM | Y | 1 | Taylor,M.D | C |
| 25.906 | 812349 | 5.4 | S | 56 | 9.9 | | | | 0.08 | B | | 15 | 2.6M | N | 1 | Hurst,G.M | |
| 25.94 | 812350 | 5.0 | S | AA | 12 | 6 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |

NOTE A Coma diameter approximate.
NOTE B Coma asymmetric in PA approximately 190 deg. Indicated tail PA is approximate.
NOTE C Moon - bright sky!

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.781 | 830311 | 1.6 | 0.090 | M | 11 | 56 | 10 | 3.0 | 3 | Westlund,M | A |

NOTE A Very bright moonlight.

DATE: 26 NOV 1985

DATE: 26 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.2910 | 812351 | 8.6 | S | SAO | 3 | 3 | | | 0.152 | N | 8.0 | 76 | 4.6 | | 3 | Machholz,D | A |
| 26.458 | 812352 | 7.1 | M | | 3.5 | 5 | | | 0.10 | N | 10 | 55 | 4.0M | Y | 1 | Kato,T | |
| 26.674 | 812353 | 7.1 | S | 55 | | | | | 0.12 | N | 6 | 36 | 1.0M | Y | 1 | Kishi,A | |
| 26.87 | 812354 | 7.0 | | | 2 | 4 | | | 0.08 | B | | 20 | 4.0M | Y | 1 | Speil,J | B |
| 26.920 | 812355 | 5.7 | S | 55 | 20 | 3 | | | 0.050 | B | | 7 | 4.8MC | N | 5 | Meozzi,D | |
| 26.975 | 812356 | 5.4 | S | 55 | 7.5 | 5 | | | 0.08 | B | | 15 | 4.0M | Y | 1 | Haver,R | C |
| 26.990 | 812357 | 5.4 | S | 55 | 8.0 | 4 | | | 0.05 | B | | 7 | 4.0M | Y | 1 | Haver,R | |

NOTE A 98.2% moon 15 deg. away.
NOTE B Full moon, bright skies.
NOTE C Nucleus of mag. 8. (Translated by IHW staff. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.828 | 830312 | 0.08 | 0.40 | N | 5 | 254 | 15 | 3.5 | 2 | Merlin,J.-C | A |

NOTE A Jet at PA 29; jet at PA 35; jet at PA 224, then curved toward PA 281; about sunward. Full moon at 25 deg. from the comet, only inner coma visible.

DATE: 27 NOV 1985

DATE: 27 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.067 | 812358 | 8.3: | B | 55 | 15 | 3 | | | 0.203 | R | 13 | 85 | 4.8 | N | 1 | Fox,J.H | A |
| 27.389 | 812359 | 6.5 | M | 55 | 5 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 27.43 | 812360 | 5.1 | S | 55 | | | | | 0.08 | B | | 15 | 5.8M | Y | 1 | Lovejoy,T | |
| 27.491 | 812361 | 6.5 | M | | 4 | 4 | | | 0.10 | N | 10 | 55 | 3.0M | Y | 1 | Kato,T | B |
| 27.512 | 812362 | 6.0 | S | 55 | | 1 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | C |
| 27.517 | 812363 | | | 55 | 6 | 3 | | | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | D |
| 27.517 | 812364 | | | 55 | | 1 | | | 0.03 | R | 7 | 8 | | Y | 1 | Tregaskis,T.B | E |
| 27.747 | 812365 | 6.6 | S | 55 | 6 | 3 | 0.1 | 55 | 0.07 | B | | 16 | 5.0CM | Y | 1 | Taylor,M.D | F |
| 27.752 | 812366 | 5.8 | S | 55 | 12 | 3 | | | 0.08 | B | | 11 | | N | 1 | Gainsford,M.J | G |
| 27.76 | 812367 | 5.6 | S | 55 | | | | | 0.08 | B | | 10 | 4.5 | | 1 | Shanklin,J.D | |
| 27.762 | 812368 | 6.0 | S | 55 | | 5 | | | 0.25 | N | 6 | 60 | 3.5 | N | 1 | Gainsford,M.J | G |
| 27.81 | 812369 | 7.2 | S | DCS 4B | 2.5 | 7 | | | 0.254 | JB | 6 | 73 | 4.5MC | Y | 5 | Bus,E.P | |
| 27.819 | 812370 | 5.2 | S | 56 | 12.0 | 6 | | | 0.05 | B | | 10 | 3.9M | N | 1 | Hurst,G.M | |
| 27.833 | 812371 | 5.9 | B | | 2.5 | 3 | | | 0.07 | B | | 20 | 3 M | N | 1 | Filimon,E | G |
| 27.836 | 812372 | | | | 10.0 | 7 | | | 0.08 | B | | 15 | 3.9M | N | 1 | Hurst,G.M | |
| 27.84 | 812373 | 5.0 | S | DCS 4B | 2.5 | 7 | | | 0.254 | JB | 6 | 72 | 4 MC | Y | 5 | Bus,E.P | |
| 27.892 | 812374 | | | | 4 | 6 | | | 0.127 | SC | 10 | 50 | 3.9 | N | 4 | Foulkes,M | G |
| 27.917 | 812375 | | | | 3 | 6 | | | 0.356 | SC | 10 | 100 | 3.9 | N | 4 | Foulkes,M | G |
| 27.927 | 812376 | 6.8 | S | 55 | 7.5 | 3 | 0.1 | 55 | 0.07 | B | | 16 | 5.0CM | Y | 1 | Taylor,M.D | H |
| 27.93 | 812377 | 4.9 | S | 55, 56 | 15 | 1 | | | 0.05 | B | | 10 | 4 MC | N | 9 | Bouma,R.J | I |
| 27.944 | 812378 | 6.5 | S | 55 | 9 | 5 | | | 0.065 | B | | 12 | 3.9 | N | 4 | Foulkes,M | G |
| 27.951 | 812379 | 5.6 | S | 55 | 14.2 | 5 | | | 0.050 | B | | 10 | 5.1M | Y | 3 | Abbott,J | J |
| 27.958 | 812380 | 5.1 | S | 56 | 15 | | | | 0.05 | B | | 10 | 3.9M | N | 1 | Hurst,G.M | K |

NOTE A Strong moonlight. SAO 092667 comparison star.
NOTE B Diffuse cloud; condensation mag.= 10.
NOTE C Full moon. Scattered cloud. (Observer gave limit as approximately 8. Ed.)
NOTE D Full moon. Scattered cloud. (Observer gave limit as approximately 11. Ed.)
NOTE E Comet just visible. Full moon. Scattered clouds. (Observer gave limit as approximately 7. Ed.)
NOTE F Seeing Antoniadi II. Moon full - bright.
NOTE G Full moon.
NOTE H Seeing Antoniadi III. Moon full - bright sky!
NOTE I Coma diameter is approximate lower limit. Comet definitely seen with naked eye.
NOTE J Comparison stars 6.8, 6.3, 5.2. Full moon.
NOTE K Coma diameter approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.066 | 830313 | 0.6 | 0.203 | R | 13 | 85 | 10 | 4.8 | 1 | Fox,J.H | A |

NOTE A Boundary of coma indistinct due to interfering moonlight.

DATE: 28 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.007 | 812381 | 6.2: | M | | 5.5 | 1 | | | 0.10 | N | 8.6 | 21 | 5.8 | N | 1 | Gaucher,C | A |
| 28.125 | 812382 | 6.0 | S | 55 | 3 | 2 | | | 0.152 | N | 8 | 135 | 5 | Y | 1 | Lewis,D.E | |
| 28.14 | 812383 | 5.3: | S | 55 | | | | | 0.050 | R | | 8 | 3.0M | Y | 6 | Morris,C.S | B |
| 28.488 | 812384 | 5.9 | S | 55 | 6 | 2 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | C |
| 28.510 | 812385 | 6.6 | S | 55 | | 6 | | | 0.05 | B | | 10 | 4.5M | Y | 1 | Williams,P.F | D |
| 28.514 | 812386 | 6.0 | S | 55 | 13 | 3 | | | 0.050 | B | | 12 | 5.0 | Y | 1 | Batza,H | E |
| 28.542 | 812387 | 7.0 | M | 55 | 5 | 7 | | | 0.060 | R | 15 | 45 | 4.3M | Y | 1 | Purvinskis,R | |
| 28.559 | 812388 | 6.2 | B | 55 | 10 | 5 | | | 0.060 | B | | 10 | 2.0M | Y | 1 | Moriya,M | F |
| 28.660 | 812389 | 5.3 | M | 55 | 12 | 6 | | | 0.070 | B | | 10 | 3.5M | Y | 1 | Kato,T | G |
| 28.667 | 812390 | 6.8 | S | 55 | 1.4 | 4 | | | 0.08 | R | 11.4 | 46 | 3.6M | Y | 1 | Wakatsuki,M | |
| 28.698 | 812391 | 6.4 | B | 55 | 15.4 | 5 | | | 0.165 | N | 8.7 | 57 | M | Y | 1 | Bohme,D | |
| 28.722 | 812392 | 6.3 | B | SAO | 6.5 | 4 | | | 0.125 | R | 6 | 17 | 4.0 | Y | 1 | Guthier,O | H |
| 28.729 | 812393 | 6.4 | B | SAO | | | | | 0.080 | B | | 20 | 4.0 | Y | 1 | Guthier,O | |
| 28.73 | 812394 | 5.3 | S | 55 | | | | | 0.08 | B | | 10 | 4.0 | | 1 | Shanklin,J.D | |
| 28.73 | 812395 | 5.7 | S | AA | 9 | 5 | | | 0.080 | B | | 20 | 4.0M | N | 1 | Schmeer,P | |
| 28.730 | 812396 | 6.0 | M | 55 | 25 | 6 | | | 0.103 | R | 13 | 25 | 3.6 | Y | 1 | McBain,J | |
| 28.736 | 812397 | 6.5 | B | 55 | 30 12 | 5 | | | 0.22 | N | 4 | 35 | 5.6 | Y | 2 | Vincent,J | I |
| 28.747 | 812398 | 7.4 | S | 55 | 3.8 | 7 | | | 0.08 | R | 15 | 30 | 4.0 | N | 2 | Storey,D | J |
| 28.75 | 812399 | 5.9 | S | DCS 4B | 10 | 6 | | | 0.050 | B | | 10 | 4.5CM | Y | 1 | Wils,P | |
| 28.760 | 812400 | 6.9 | B | 55 | | 2 | | | 0.07 | B | | 10 | 3.5 | N | 1 | Deconinck,M | K |
| 28.760 | 812401 | 7.0 | S | 55 | 6 | 5 | | | 0.114 | N | 3.7 | 47 | 3.9CM | N | 3 | Gomez,T.L | L |
| 28.76 | 812402 | 6.0: | B | 55 | 6 | 5 | | | 0.100 | B | | 14 | 3.5 | N | 1 | Kraling,W | M |
| 28.767 | 812403 | 5.6 | S | 55 | 20 | 5 | | | 0.050 | B | | 7 | 4.5MC | N | 5 | Meozzi,D | |
| 28.77 | 812404 | 5.2 | S | DCS 4B | 15 | 5 | | | 0.050 | B | | 10 | 5 MC | N | 1 | van Loo,F.R | |
| 28.79 | 812405 | 7.0 | B | 55 | 12 | 5 | | | 0.080 | B | | 20 | CM | N | 1 | Jannink,D.W | N |
| 28.792 | 812406 | 5.1 | M | 55 | 25 | 7 | | | 0.05 | B | | 20 | | N | 4 | Gallego,J | |
| 28.813 | 812407 | 6.1 | B | CZ | | 4 | | | 0.08 | B | | 10 | 4.6M | N | 1 | Kral,M | |
| 28.813 | 812408 | 4.9 | S | 55 | 15.0 | 7 | | | 0.05 | B | | 10 | 4.8 | Y | 1 | Hurst,G.M | |
| 28.816 | 812409 | 6.2 | B | CZ | | 4 | | | 0.08 | B | | 10 | 4.4M | N | 1 | Elias,P | |
| 28.822 | 812410 | | | | 15 | 7 | | | 0.08 | B | | 15 | 4.8 | Y | 1 | Hurst,G.M | O |
| 28.825 | 812411 | 6.0 | S | 55 | 5.8 | 4 | | | 0.08 | B | | 11 | 3.9 | Y | 1 | Gainsford,M.J | D |
| 28.832 | 812412 | 6.0 | S | 55 | 3.7 | 6 | | | 0.25 | N | 6 | 60 | 3.9 | Y | 1 | Gainsford,M.J | D |
| 28.833 | 812413 | 10.5: | | 55 | | | | | 0.15 | N | 6.6 | 100 | | Y | | Dal Santo,M | P |
| 28.837 | 812414 | 5.3 | S | 55 | 13.0 | 5 | | | 0.050 | B | | 7 | 4.0 | N | 1 | Lunde,R | Q |
| 28.858 | 812415 | 5.7 | S | 55 | 9.6 | 6 | | | 0.050 | B | | 10 | 4.9M | Y | 3 | Abbott,J | R |
| 28.865 | 812416 | | | 55 | 7 | 8 | | | 0.080 | R | 7.5 | 17 | 4.0M | N | 1 | Li Causi,G | S |
| 28.865 | 812417 | | | 55 | 5 | 4 | | | 0.080 | R | 6.3 | 31 | 3.0M | N | 2 | Richart,M | T |
| 28.896 | 812418 | 5.1 | S | 55 | 12 | 7 | | | 0.065 | B | | 12 | 4 | N | 5 | Foulkes,M | K |
| 28.903 | 812419 | 6.0 | S | 55 | 6 | 6 | | | 0.060 | R | 12 | 25 | 4.1 | N | 2 | Moeller,M | U |
| 28.906 | 812420 | 6.3 | | 55 | 4 | 6 | | | 0.100 | B | | 14 | 4.5 | Y | 2 | Weissferdt,F | V |
| 28.910 | 812421 | 6.0 | | 55 | 8 | 5 | | 220 | 0.08 | B | | 15 | 3.7 | Y | 1 | Dietrich,M | W |
| 28.917 | 812422 | 5.6 | S | | 30 | 6 | | | 0.20 | SC | 11 | 50 | 4.5M | Y | 3 | Parisio,R | |
| 28.93 | 812423 | 4.9 | S | DCS 4B | 18 | 4 | | | 0.040 | B | | 7 | 4.5MC | Y | 5 | Bus,E.P | X |
| 28.965 | 812424 | 6.1 | B | 55 | 6.6 | 6 | | | 0.050 | B | | 10 | 5.0M | N | 1 | Rossi,L | |
| 28.965 | 812425 | 6.0 | M | 55 | | | | | 0.050 | B | | 10 | | | 1 | Rossi,L | |
| 28.98 | 812426 | 4.5 | S | DCS4B5A | 15 | 4 | 0.33 | 70 | 0.046 | R | 4 | 8 | 5 M | Y | 1 | van de Weg,R.L.W | Y |
| 28.990 | 812427 | 6.3 | B | 55 | 15 | 4 | | | 0.05 | B | | 7 | 5.0C | Y | 10 | Chmielewski,W | |

NOTE A Coma diameter approximate.
NOTE B Very poor conditions.
NOTE C Bright moon. Clear. (Observer gave limit as approximately 8.5. Ed.)
NOTE D Full moon.
NOTE E Haze.
NOTE F Seeing 2/5.
NOTE G Diffuse cloud.
NOTE H Beginnings of tail. (Translated by IHW staff. Ed.)
NOTE I Moon up but shrouded by bank of heavy cloud. Comparison stars just above track.
NOTE J Full moon risen. High cirrus towards end of observation.
NOTE K Moon.
NOTE L Drawing 1.
NOTE M Coma diameter and DC approximate. Moonlight.
NOTE N Telescopic limit is 8.
NOTE O Coma diameter approximate.
NOTE P Moon (full). Haze. Central condensation magnitude.
NOTE Q Strong moon.
NOTE R Comparison stars 5.5, 6.3, 5.2. Full moon + 1 day.
NOTE S Magnification approximate.
NOTE T Moonphase: 1 day after full moon. (Translated by IHW staff. Ed.)
NOTE U Moon, hazy.
NOTE V Moon. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE W Tail length 8x12 arc min. Moon. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE X Comet visible in 3x18 binoculars.
NOTE Y In 12x60 binoculars, DC = 7.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.651 | 830314 | | 0.08 | R | 11.4 | 101 | 4 | 3.6 | 1 | Wakatsuki,M | |
| 28.655 | 830315 | | 0.08 | R | 11.4 | 33 | 5 | 3.6 | 1 | Wakatsuki,M | |
| 28.726 | 830316 | 0.06 | 0.125 | N | 5.8 | 28, 40, 60 | 26 | 1.5 | 1 | Riccabone,G | A |
| 28.792 | 830317 | | 0.050 | B | | 20 | | | 4 | Gallego,J | B |
| 28.875 | 830318 | 0.5 | 0.080 | R | 7.5 | 14 | | 4.0 | 1 | Li Causi,G | C |

NOTE A Diameter of the false nucleus is 31 arc sec. Magnification of 90 also used. Two drawings included. Moonlight and intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE B Nearly full moon at 30 deg. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE C Full moonlight interfered with the observation. Comet had no tail. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 29 NOV 1985

DATE: 29 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.113 | 812428 | > | 6.8 | B | 55 | 36 | | 1 | | | 0.05 | B | | 7 | 3.6 | | | Lairet,R | |
| 29.142 | 812429 | | 6.2 | S | 55 | 30 | | 8 | | 230 | 0.32 | N | 4.4 | 56 | 4.8M | Y | 1 | Ariail,R.B | A |
| 29.28 | 812430 | | 5.3 | | 55 | 15 | | 4 | | | 0.040 | B | | 8 | 5.0 | Y | 1 | Keen,R | B |
| 29.378 | 812431 | | 5.4 | M | 55 | 12 | | 5 | | | 0.030 | B | | 8 | 5.5M | Y | 1 | Kato,T | |
| 29.405 | 812432 | | | | | 8 | | 7 | 0.17 | 90 | 0.10 | N | 10 | 55 | 5.5M | Y | 1 | Kato,T | |
| 29.417 | 812433 | | 4.7 | S | 55 | 30 | | 7 | | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | C |
| 29.424 | 812434 | | 6.0 | M | 55 | 10 | | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 29.431 | 812435 | | 6 | M | 55 | 10 | | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,E | |
| 29.469 | 812436 | | 5.8 | S | 55 | | | 2 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | D |
| 29.476 | 812437 | | | | 55 | 7.2 | | 4 | | | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | E |
| 29.510 | 812438 | | 6.1 | B | 55 | 15 | | 6 | | | 0.060 | B | | 10 | 3.5M | Y | 1 | Moriya,M | F |
| 29.542 | 812439 | | 6.8 | M | 55 | | | 7 | | | 0.060 | R | 15 | 45 | 4.8M | Y | 1 | Purvinskis,R | |
| 29.55 | 812440 | | 6.0 | M | 55 | | | | | | 0.05 | B | | 7 | 4.5M | Y | 2 | Suzuki,K | |
| 29.58 | 812441 | | 6.0 | B | | 13 | | 5 | | | 0.05 | B | | 10 | 4.0 | N | 1 | Uda,K | |
| 29.597 | 812442 | | 6.5 | B | 55 | | | | | | 0.07 | B | | 10 | 4.5M | Y | 1 | Date,M | |
| 29.606 | 812443 | | 6.0 | S | 55 | 8 | | 5 | 0.17 | 80 | 0.07 | B | | 10 | 6.0 | Y | 1 | Kobayashi,J | |
| 29.625 | 812444 | | 5.4 | M | 55 | 15 | | 6 | | | 0.030 | B | | 8 | 5.0M | Y | 1 | Kato,T | |
| 29.630 | 812445 | | | | | 9 | | 7 | 0.15 | 80 | 0.10 | N | 10 | 55 | 5.0M | Y | 1 | Kato,T | |
| 29.67 | 812446 | | 5.5 | B | M | | | | | | | EY | | | | | | Poroshin,A | |
| 29.68 | 812447 | | 6.4 | B | E | 13 | | 4 | | | 0.05 | R | 8 | 20 | | | | Rudakov,G | |
| 29.697 | 812448 | | 6.8 | B | 55 | 18.7 | | 5 | | | 0.165 | N | 8.7 | 57 | M | Y | 1 | Bohme,D | |
| 29.698 | 812449 | | 5.9 | B | CZ | | | 4 | | | 0.08 | B | | 10 | 4.5 | N | 1 | Elias,P | |
| 29.698 | 812450 | | 5.8 | B | CZ | | | 4 | | | 0.08 | B | | 10 | 4.5 | Y | 1 | Janecek,V | |
| 29.701 | 812451 | | 6.0 | B | CZ | | | 4 | | | 0.08 | B | | 10 | 4.5 | Y | 1 | Kral,M | |
| 29.715 | 812452 | | 5.8 | M | 55 | 13 | | 6 | | | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | |
| 29.7152 | 812453 | | 5.5 | S | | 32 | 22 | 5 | | 76 | 0.08 | B | | 10 | 5.0M | Y | 1 | Znasik,M | G |
| 29.719 | 812454 | | 6.4 | M | CZ | | | | | | 0.10 | B | | 25 | 5 C | Y | 1 | Valasek,V | H |
| 29.720 | 812455 | | 6.5 | B | | 5 | | 4 | | | 0.080 | R | 6 | 12 | 4.0 | Y | 1 | Lieder,F | |
| 29.722 | 812456 | | 7.5 | M | CZ | 20 | | 4 | | | 0.10 | B | | 25 | 5.7M | N | 1 | Silhan,J | |
| 29.722 | 812457 | | 5.3 | M | 55 | | | 6 | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | I |
| 29.729 | 812458 | | 6.0 | M | 55 | 15 | 11 | 6 | | | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | J |
| 29.733 | 812459 | | 5.8 | | 55 | | | 9 | | | | EY | | | 6.0 | Y | 1 | Fleet,R.W | |
| 29.733 | 812460 | | 6.9 | M | CZ | 30 | | 3 | | | 0.05 | B | | 7 | 5.5M | Y | 1 | Silhan,J | |
| 29.736 | 812461 | | 5.7 | M | AAVSO | 12 | | 7 | 0.55 | 100 | 0.063 | R | 13.3 | 52 | | | | Csukas,M | |
| 29.736 | 812462 | | 5.7 | M | AAVSO | 14 | | 8 | 0.4 | 95 | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | K |
| 29.74 | 812463 | | 4.8 | S | 55, 56 | 15 | | 3 | | | 0.05 | B | | 10 | 4 MC | N | 9 | Bouma,R.J | L |
| 29.74 | 812464 | | 5.4 | B | 55 | 25 | | 4 | | | 0.050 | B | | 7 | 4.5 | Y | 2 | Merlin,J.-C | |
| 29.74 | 812465 | | 6.4 | B | E | 14 | | 4 | | | 0.05 | R | 8 | 20 | | | | Rudakov,G | |
| 29.740 | 812466 | | 6.1 | B | 55 | 35 | 12 | 5 | | | 0.25 | SC | 13.5 | 135 | 5.8 | Y | 2 | Vincent,J | M |
| 29.743 | 812467 | | 6.6 | B | 55 | | | 5 | | | 0.05 | B | | 10 | 2.5M | Y | 1 | Bretschneider,H | |
| 29.750 | 812468 | | 5.5 | | 55 | | | | | | | EY | | | 5.6 | Y | 1 | McBain,J | |
| 29.771 | 812469 | | 5.5 | B | 55 | 20 | | 3 | | | 0.04 | B | | 8 | | Y | 1 | Morrisby,A | N |
| 29.78 | 812470 | | 6.3 | B | M | 6 | | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 29.788 | 812471 | | 6.5 | B | CZ | 15 | | 5 | | | 0.10 | O | | 25 | 6.0MC | Y | 1 | Micek,I | |
| 29.799 | 812472 | | 7.5 | M | 55 | 4.4 | | 5 | 0.08 | 25 | 0.153 | N | 8.5 | 65 | | Y | 2 | Torres,E | O |
| 29.802 | 812473 | | 6.5 | M | CZ | 12 | | 4 | | | 0.10 | B | | 25 | 4.5M | Y | 1 | Hajek,P | |
| 29.851 | 812474 | | 7.0 | S | 55 | 5 | | 7 | | | 0.114 | N | 3.7 | 47 | 3.9C | Y | 3 | Gomez,T.L | P |
| 29.9166 | 812475 | | 6.1 | S | 55 | 3.5 | | 6 | | | 0.05 | B | | 10 | 5.4MC | | 2 | Franciosi,C | Q |
| 29.926 | 812476 | | 5.9 | S | 55 | 7.5 | | 5 | | | 0.060 | R | 12 | 25 | 4.3 | N | 2 | Moeller,M | G |
| 29.962 | 812477 | | 5.6 | M | 55 | 15.0 | | 5 | | | 0.05 | B | | 12 | 4.8M | Y | 1 | Knight,S | R |

NOTE A Possible ray.
NOTE B Modified Sidgwick method used.
NOTE C Tails seen through 20 cm reflector. PA of 0.5 deg. tail approximately 280. PA of second tail = approximately E.
NOTE D Hazy. (Observer gave limit as approximately 10. Ed.)
NOTE E Hazy. (Observer gave limit as approximately 12.5. Ed.)
NOTE F Seeing 3/5.
NOTE G Moon.
NOTE H Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE I Seeing good, transparency excellent. Moon.
NOTE J 20'x16' coma, averted vision.
NOTE K 7.4 mag. nucleus. (Observer calls coma diameter value halo diameter. Ed.)
NOTE L Coma diameter is approximate lower limit. Comet definitely seen with naked eye.
NOTE M Comp. star 6.3 mag. at 1h 43m + 20 deg.
NOTE N Just visible to the naked eye.
NOTE O (Observer gave limit as 11.8. Ed.)
NOTE P Stellar nucleus.
NOTE Q Veled ski. [sic]
NOTE R Aurora Borealis.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.057 | 830319 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | A |
| 29.068 | 830320 | | 0.203 | SC | 10 | 226 | | | 1 | Lohvinenko,T.W | B |
| 29.736 | 830321 | | 0.063 | R | 13.3 | | | | | Csukas,M | C |
| 29.736 | 830322 | 0.89 | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | D |
| 29.800 | 830323 | 0.7 | 0.153 | N | 8.5 | 65 | 35 | | 2 | Cifuentes,E | E |

NOTE A Comet Halley is seen here at a nuclear magnitude of 8.6 (check star: AGK 3+23 deg. 0199) and an integrated magnitude of 5.6 (check star: HR 69). There is a spectrum of the nucleus since the coma is too dim to be observed by the spectrum prism. It is interesting to note the large amount of yellow and green in the spectrum. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B A closer look at the comet gives a coma diameter of 108.60" and shows the comet leaning [sic] to the southwest; the PA of the tail is 30 east of north. The nucleus also seems to be elongated, ION TAIL??? (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Tail 0.55 deg. at PA 100 and tail 0.55 deg. at PA 131. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE D 0.4 degree feature at PA 95. 0.3 deg. feature at PA 60. Schematic drawing. (Duration not indicated. Time of observation is assumed to be end time. Ed.)
NOTE E The northern tail is more visible and more important than the southern. The coma has extended to the east. Clearly, fuzzily, both for this area. [sic] The appearance of the comet is similar to that of a total solar eclipse. Clearly visible in binoculars (8x and viewfinder (15x)). (Observer gave limit as 11.8. Translated by IHW staff. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.542 | 850286 | 0.268 | 2.6 | 0.102 | 7.7 x 5.1 | 10.00 | 3M 1000 | 1000/ | N | X | 2/S | 1 | Richardson,C | |
| 29.556 | 850287 | 0.268 | 2.6 | 0.102 | 7.7 x 5.1 | 10.00 | Fuji | 400/ | N | X | 1/S | 1 | Richardson,C | A |

DATE: 29 NOV 1985

DATE: 29 NOV 1985

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Eyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.705 | 850288 | 0.750 | 6.3 | | 2.7 x 1.8 | 11.00 | ORWO | 400/27 | N | C | 4/N | 1 | Znasik,M | B |
| 29.795 | 850289 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 3.00 | Kodak 2415 | | Y | | 5/P | 1 | Conrad,R | C |

NOTE A Instrument is Meade Schmidt camera.
NOTE B Large format (11.8x8.6 cm) film used.
NOTE C City lights interfered with the observation; Vienna, from room!

DATE: 30 NOV 1985

DATE: 30 NOV 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.021 | 812478 | 6.3 | B | 55 | 15 | | 4 | | | 0.05 | B | | 7 | 5.5C | Y | 10 | Chmielewski,W | |
| 30.042 | 812479 | | | | | | 6 | | | 0.05 | B | | 20 | 5.5 | Y | 3 | da Silva,L.A.L | |
| 30.219 | 812480 | 5.3 | M | 55 | 19 | | 7 | 0.33 | 290 | 0.05 | B | | 10 | 6.0 | Y | 2 | Fabre,R | A |
| 30.382 | 812481 | 5.7 | B | | 13 | | | | | 0.035 | B | | 7 | | N | 2 | Okada,M | |
| 30.40 | 812482 | 5.8 | S | 55 | 25 | | 7 | | | 0.15 | N | 5.3 | 32 | 5.0C | Y | 1 | Oka,A | |
| 30.40 | 812483 | 5.7 | M | 55 | 13 | | 6 | | | 0.08 | B | | 11 | 4.5M | N | 1 | Mitsuma,S | |
| 30.40 | 812484 | 6.0 | | | 25 | | 5 | | | 0.12 | B | | 20 | 5.5 | Y | 1 | Washi,S | B |
| 30.417 | 812485 | | | | 10 | | 7 | 0.13 | 85 | 0.10 | N | 10 | 55 | 4.5M | Y | 1 | Kato,T | |
| 30.420 | 812486 | 5.4 | M | 55 | 15 | | 6 | | | 0.030 | B | | 8 | 4.5M | Y | 1 | Kato,T | |
| 30.42 | 812487 | 5.0 | | | 30 | | 8 | 0.75 | | 0.23 | | 4.4 | 40 | 6.0 | Y | 1 | Washi,I | C |
| 30.422 | 812488 | 6 | S | 55 | 20 | | 5 | 0.42 | 75 | 0.07 | B | | 10 | 5.0 | Y | 1 | Kobayashi,J | |
| 30.44 | 812489 | 5.9 | B | | 13 | | 5 | | | 0.05 | B | | 10 | 5.0 | N | 1 | Uda,K | |
| 30.46 | 812490 | 5.8 | M | 55 | 8 | | | | | 0.080 | B | | 11 | 4 C | N | 1 | Watanabe,N | |
| 30.49 | 812491 | 6.2 | S | AAVSO | 8 | | 5 | | | 0.13 | N | 6.3 | 24 | 4.5M | Y | 1 | Hayashi,A | |
| 30.52 | 812492 | 5.8 | S | AAVSO | 10 | | 3 | | | 0.07 | B | | 10 | 4.5M | Y | 1 | Hayashi,A | |
| 30.55 | 812493 | 5.8 | B | M | 10 | | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 30.583 | 812494 | 5.8 | S | 55 | 8.5 | | 2 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | D |
| 30.597 | 812495 | 6.5 | B | 55 | | | | | | 0.07 | B | | 10 | 4.5M | Y | 1 | Date,M | |
| 30.604 | 812496 | 6.6 | M | 55 | 5 | | 7 | | | 0.1 | N | 10 | 56 | 4.0 | Y | 1 | Ichikawa,K | |
| 30.604 | 812497 | 7.0 | S | 55 | 5 | | 4 | | | 0.153 | N | 8.6 | 33 | 3.0 | Y | 1 | Iwaki,Y | |
| 30.708 | 812498 | 6.1 | B | 55 | 15 | | 4 | | | 0.060 | B | | 10 | 2.0M | Y | 1 | Moriya,M | E |
| 30.71 | 812499 | 4.6 | S | 55 | 20 | | 3 | | | 0.05 | B | | 10 | 4.5T | Y | 2 | Bouma,R.J | F |
| 30.71 | 812500 | 4.3 | S | DCS4B5A | 23 | | 3 | | | 0.018 | B | | 3 | 5 T | Y | 2 | Bus,E.P | G |
| 30.71 | 812501 | 6.0 | B | E | 20 | | 3 | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 30.715 | 812502 | 5.5 | S | 55 | 17 | | 6 | | | 0.05 | B | | 10 | 6.0 | Y | 3 | Vanin,G | |
| 30.719 | 812503 | 5.0 | S | 55 | 25 | | 4 | 0.5 | 120 | 0.050 | B | | 7 | 5.4 | Y | | Luthen,H | H |
| 30.719 | 812504 | 5.8 | S | 55 | 8.5 | | 6 | 1 | 80 | 0.152 | N | 5 | 44 | 5.1 | Y | 2 | Moeller,M | I |
| 30.722 | 812505 | 5.2 | S | 55 | 23 | | 5 | | | 0.050 | B | | 7 | 5.4 | Y | 1 | Meozzi,D | J |
| 30.7271 | 812506 | 6.8 | M | 55 | 1.9 | 1.6 | 3 | 0.10 | 93 | 0.125 | N | 5.8 | 28 | 3.0C | Y | 1 | Riccabone,G | K |
| 30.7285 | 812507 | 6.8 | M | 55 | 1.9 | 1.6 | 3 | 0.09 | 95 | 0.125 | N | 5.8 | 28 | 3.0C | Y | 1 | Riccabone,G | K |
| 30.729 | 812508 | 6.9 | M | 55 | 3.0 | | 6 | | | 0.090 | R | 14 | 46 | 5.0 | Y | 1 | Hirth,G | |
| 30.729 | 812509 | 6.6 | | | 15 | | 3 | | | 0.050 | R | 11 | 22 | 5.5 | Y | 1 | Kliche,J | |
| 30.7299 | 812510 | 6.6 | M | 55 | 1.9 | 1.6 | 3 | 0.09 | 93 | 0.125 | N | 5.8 | 28 | 3.0C | Y | 1 | Riccabone,G | K |
| 30.731 | 812511 | 6.6 | M | 55 | 1.9 | 1.6 | 3 | 0.10 | 100 | 0.125 | N | 5.8 | 28 | 3.0C | Y | 1 | Riccabone,G | K |
| 30.740 | 812512 | 5.8 | B | 55 | 35 | 20 | 5 | | | 0.105 | R | 15 | 86 | 5.7 | Y | 2 | Vincent,J | L |
| 30.741 | 812513 | 6.0 | B | 55 | 30 | 20 | 5 | | | 0.25 | SC | 13.5 | 135 | 5.7 | Y | 2 | Vincent,J | |
| 30.743 | 812514 | 5.3 | M | 55 | 26 | | 6 | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | M |
| 30.743 | 812515 | 5.8 | M | 55 | 14 | 10 | 6 | | | 0.089 | R | 5.5 | 18 | 5.5 | N | 1 | Ventura,F | N |
| 30.745 | 812516 | 5.5 | M | 55 | 35 | | | 0.33 | 135 | 0.065 | B | | 20 | 5.6 | Y | 1 | McBain,J | O |
| 30.7465 | 812517 | 5.8 | B | 55 | 9 | | 6 | | | 0.05 | B | | 10 | 6.4 | Y | 1 | Franciosi,C | P |
| 30.750 | 812518 | 6.2 | B | 55 | 4.5 | | 5 | 0.17 | 80 | 0.330 | N | 4.5 | 59 | 6.5 | Y | 1 | Castino,R | |
| 30.750 | 812519 | 5.9 | B | 54,55 | | | 4 | | | 0.050 | B | | 7 | 4.0C | N | 1 | Ruiz,J | |
| 30.75 | 812520 | 6.0 | B | E | 20 | | 3 | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 30.757 | 812521 | 5.9 | M | 55 | 18 | 13 | 6 | 1.0 | 76 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | Q |
| 30.77 | 812522 | 5.8 | B | M | | | | | | 0.03 | B | | 8 | | | | Tsygankov,D | |
| 30.77 | 812523 | 7 | B | E | 5 | | 5 | | | 0.07 | N | 8 | 15 | | | | Rudenko,S | |
| 30.771 | 812524 | | | | 10 | 6 | | 0.6 | 74 | 0.22 | N | 8 | 90 | 6.0 | Y | 1 | Fleet,R.W | R |
| 30.778 | 812525 | 5.8 | | 55 | | | 9 | | | | EY | | | 6.0 | Y | 1 | Fleet,R.W | |
| 30.785 | 812526 | 6.3 | M | 55 | 10 | 6 | 6 | | | 0.075 | R | 16 | 50 | 6.0 | Y | 1 | Fleet,R.W | S |
| 30.785 | 812527 | 5.9 | M | 55 | | | | | | 0.04 | B | | 12 | | Y | 1 | Henshaw,C | T |
| 30.785 | 812528 | 6.2 | B | 55 | | | | | | 0.050 | B | | 7 | 6.0 | Y | 2 | Lavarack,N | |
| 30.788 | 812529 | 6.6 | | | 15 | | 2 | | | 0.050 | R | 11 | 22 | 5.5 | Y | 1 | Kliche,J | |
| 30.792 | 812530 | 5.8 | B | 55 | 12.6 | | 7 | | | 0.050 | B | | 7 | 5.0M | Y | 1 | Rossi,L | |
| 30.802 | 812531 | 5.9 | S | 55 | 27.0 | | 6 | | | 0.08 | B | | 30 | 5.7 | Y | 2 | Campos,J | U |
| 30.814 | 812532 | 7.6 | M | 55 | 4.2 | | 5 | 0.07 | 15 | 0.153 | N | 8.5 | 65 | | Y | 2 | Torres,E | V |
| 30.816 | 812533 | 5.7 | | 55 | | | 9 | | | | EY | | | 5.7 | Y | 2 | Campos,J | W |
| 30.854 | 812534 | | | 55 | 8 | | 6 | | | 0.114 | N | 7.9 | 45 | 4.0CM | N | 1 | Bernardis,A | |
| 30.87 | 812535 | 6.5 | B | AAVSO | 8 | | 3 | | | 0.08 | R | | 8 | | | | Shirokov,A | |
| 30.936 | 812536 | 6.6 | M | 55 | 2 | 1.7 | | 0.05 | 130 | 0.125 | N | 5.8 | 28 | 4.0CM | Y | 1 | Riccabone,G | K |
| 30.938 | 812537 | 6.7 | M | 55 | 2 | 1.7 | | 0.05 | 135 | 0.125 | N | 5.8 | 28 | 4.0CM | Y | 1 | Riccabone,G | K |
| 30.939 | 812538 | 6.6 | M | 55 | 2 | 1.7 | | 0.05 | 125 | 0.125 | N | 5.8 | 28 | 4.0CM | Y | 1 | Riccabone,G | K |
| 30.940 | 812539 | 6.5 | M | 55 | 2 | 1.5 | | 0.05 | 130 | 0.125 | N | 5.8 | 28 | 4.0CM | Y | 1 | Riccabone,G | K |
| 30.96 | 812540 | 5.4 | B | 55 | 25 | | 4 | | | 0.050 | B | | 7 | 5.0 | Y | 2 | Merlin,J.-C | |

NOTE A (PA value appears to be measured incorrectly. Ed.)
NOTE B (Observer indicated "Y" method. Ed.)
NOTE C Instrument is Wright-Schmidt. (Observer indicated "Y" method. Ed.)
NOTE D Bright moon and cloud. (Observer gave limit as approximately 8. Ed.)
NOTE E Seeing 2/5.
NOTE F Coma diameter is approximate lower limit.
NOTE G Also visible to the naked eye. DCS 6A also used for comparison stars. Coma diameter is lower limit.
NOTE H Tail PA approximate. Visible to naked eye.
NOTE I Misty, moonrise. Broad tail.
NOTE J High clouds.
NOTE K Intense city lights.
NOTE L Nucleus and/or central condensation visible.
NOTE M Clouds.
NOTE N Oval coma.
NOTE O Tail fan-shaped, E side longer.
NOTE P 10x50 Zeiss. No moon.
NOTE Q 25'x23' coma, averted vision.
NOTE R 18'x13' coma, averted vision.
NOTE S 15'x13' coma, averted vision.
NOTE T Haze. Comet seen naked eye.
NOTE U Tail not visible.
NOTE V (Observer gave limit as 11.8. Ed.)
NOTE W Best seen with averted vision.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.720 | 830324 | 0.11 | 0.125 | N | 5.8 | 28, 40, 60 | 33 | 3.0 | 1 | Riccabone,G | A |
| 30.814 | 830325 | 0.7 | 0.153 | N | 8.5 | 65 | 35 | | 2 | Cifuentes,E | B |
| 30.896 | 830326 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | C |
| 30.925 | 830327 | 0.07 | 0.125 | N | 5.8 | 29, 40, 60 | 63 | 4.0 | 1 | Riccabone,G | D |

NOTE A Region of greater luminosity at PA 97. Diameter of the nucleus measured with an illuminated reticle is 39 arc sec. Magnification of 90 also used. Two drawings included. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE B Appearance similar to yesterday, 29/11/85. Pair (of tails) more uniform in intensity. The coma and tail have become more

DATE: 30 NOV 1985

compact. Bright nucleus. (Observer gave limit as 11.8. Translated by IHW staff. Ed.)

NOTE C Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Additional drawing submitted made with 11x80 binoculars (2.0'/mm). Ed.)

NOTE D Area of greater luminosity at PA 244 deg. and at PA 290 deg. Diameter of the false nucleus is 37 arc sec. Magnification of 90 also used. Two drawings included. Moonlight and intense city lights interfered with the observation. (Translated by IHW staff. Ed.)

DATE: 1 DEC 1985

DATE: 1 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.00 | 812541 | 6.4 | B | M | 8 | 5 | | | 0.20 | N | 5 | 35 | | | | Tsvetkov,L | |
| 1.021 | 812542 | 6.2 | B | 55 | 16 | 5 | | | 0.05 | B | | 7 | 5.0C | Y | 10 | Chmielewski,W | |
| 1.10 | 812543 | 4.9 | M | 55 | 22 | 6 | 1.0 | | 0.050 | R | | 8 | 6.0 | Y | 6 | Morris,C.S | |
| 1.104 | 812544 | 6.7 | S | | 10 | 6 | | | 0.080 | B | | 11 | | Y | 3 | Pryal,J | A |
| 1.11 | 812545 | 5.0 | S | 55, 54 | 30 | 5 | | | 0.080 | B | | 11 | 4.9 | Y | 1 | Spratt,C.E | B |
| 1.11 | 812546 | 5.3 | S | 55, 54 | 25 | 5 | 0.17 | 75 | 0.200 | SC | 10.0 | 64 | 5.0 | Y | 1 | Spratt,C.E | |
| 1.15 | 812547 | 5.2 | | 54 | 12 | 4 | | | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | C |
| 1.15 | 812548 | 5.5 | | SKY&TEL | 10.0 | 8 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | McBride,P | |
| 1.167 | 812549 | 6.7 | S | 55 | 32 | 4 | | | 0.203 | SC | 10 | 80 | 4 CM | Y | 1 | Gronek,J.D | D |
| 1.17 | 812550 | | | | 10 | 5 | 0.33 | 120 | 0.32 | N | 4 | 40 | 5.5 | Y | 1 | Keen,R | |
| 1.403 | 812551 | 6.4 | B | 55 | 15 | 5 | | | 0.12 | N | 6 | 40 | 4.5C | Y | 1 | Hayashi,H | |
| 1.403 | 812552 | 6.0 | B | 55 | 30 | | | | 0.05 | B | | 7 | | | | Hayashi,H | |
| 1.41 | 812553 | 5.5 | S | 54 | 16.7 | 6 | 0.5 | 80 | 0.05 | B | | 7 | 5.0 | Y | 1 | Kanai,K | |
| 1.41 | 812554 | 6.1 | B | 54 | 16.7 | 6 | 0.5 | 80 | 0.05 | B | | 7 | 5.0 | Y | 1 | Kanai,K | |
| 1.42 | 812555 | 6 | B | M | 7.7 | 5 | | | 0.21 | N | | 80 | | | | Knyazyuk,N | |
| 1.438 | 812556 | 6.3 | S | 55, 54 | 1.7 | 1 | | | 0.05 | R | 16 | 20 | 5.5CM | Y | 1 | Feisheng,J | |
| 1.45 | 812557 | 6.3 | S | 54 | | | | | 0.050 | B | | 7 | 3.9C | Y | 1 | Matchett,V | |
| 1.458 | 812558 | 6.3 | B | 54 | | | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hasegawa,T | |
| 1.47 | 812559 | 6.2 | S | AAVSO | 8 | 5 | | | 0.13 | N | 6.3 | 24 | 4.0M | Y | 1 | Hayashi,A | |
| 1.521 | 812560 | 5.9 | M | 54 | 15.3 | 4 | | | 0.1 | N | 10 | 40 | 5.5 | Y | 1 | Ichikawa,K | E |
| 1.53 | 812561 | 6.0 | B | M | 7.7 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 1.547 | 812562 | 6.7 | M | 55 | 4.8 | 5 | | | 0.12 | N | 6 | 36 | 3.0 | Y | 1 | Kishi,A | |
| 1.57 | 812563 | 6.0 | M | 54, 55 | 12 | 6 | 0.25 | 70 | 0.08 | B | | 11 | 5 M | N | 1 | Mitsuma,S | |
| 1.599 | 812564 | 6.0 | S | 55 | 6 | 4 | | | 0.153 | N | 8.6 | 33 | 3.5 | Y | 1 | Iwaki,Y | |
| 1.637 | 812565 | 5.4 | M | 55 | 14 | 6 | | | 0.070 | B | | 10 | 4.0M | N | 1 | Kato,T | |
| 1.65 | 812566 | 6.0 | M | E | 15 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 1.67 | 812567 | 6.2 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 1.68 | 812568 | 6.4 | B | 55 | 4 | 4 | | | 0.08 | B | | 20 | 4.5M | Y | 1 | Speil,J | F |
| 1.692 | 812569 | 6.4 | M | 54 | | 4 | | | 0.066 | R | 15.2 | 30 | 5.0T | Y | 1 | Gora,D | |
| 1.705 | 812570 | 6.2 | M | 54 | 14 10 | 5 | | | 0.08 | B | | 11 | 5.0 | Y | 1 | Gubo,H | |
| 1.708 | 812571 | 6.2 | M | 55, 54 | | | | | 0.06 | R | 4.5 | 10 | 3.6C | Y | 1 | Chodorowski,F | |
| 1.71 | 812572 | 5.9 | B | AA | 23 | 5 | | | 0.050 | B | | 7 | 5.5 | N | | Schmeer,P | |
| 1.71 | 812573 | 5.8 | B | M | | | | | 0.08 | B | | 40 | | | | Palko,Yu | |
| 1.715 | 812574 | | M | | 10 | 3 | | | 0.064 | R | 12 | 32 | | Y | 1 | Chodorowski,F | |
| 1.7187 | 812575 | 5.5 | S | | 30 23 | 6 | | 73 | 0.08 | B | | 10 | 4.8 | Y | 1 | Znasik,M | G |
| 1.722 | 812576 | 5.9 | B | 54 | 10.6 | 3 | | | 0.10 | B | | 14 | 5.0 | Y | 1 | Hasubick,W | |
| 1.726 | 812577 | 5.8 | M | 54 | 16 | 5 | | | 0.05 | B | | 12 | 4.5 | Y | 1 | Tanti,T | H |
| 1.729 | 812578 | 6.2 | | | 8 | 7 | | | 0.175 | R | 15 | 43 | 5.0C | Y | 1 | Marx,H | I |
| 1.73 | 812579 | 5.2 | S | DCS 5A | 15 | 5 | | | 0.050 | B | | 10 | 5 C | N | 1 | Aerts,L | |
| 1.73 | 812580 | 4.1 | S | DCS5A6A | 28 | 4 | | | 0.018 | B | | 3 | 6.5 | Y | 2 | Bus,E.P | |
| 1.73 | 812581 | 5.3 | S | DCS 5A | 25 | 5 | | | 0.050 | B | | 10 | 6 | Y | 3 | Comello,G | J |
| 1.73 | 812582 | 5.4 | S | DCS 5A | 12 | 6 | | | 0.050 | B | | 10 | 5 C | Y | 1 | Wils,P | |
| 1.73 | 812583 | 5.3 | B | 54 | 25 | 3 | | | 0.060 | B | | 9 | 6.5 | Y | 2 | Merlin,J.-C | |
| 1.73 | 812584 | 5.2 | V | 54 | 30 | 2 | | | | EY | | | 6.5 | Y | 2 | Merlin,J.-C | |
| 1.74 | 812585 | 5.4 | M | 54 | 15.9 | 6 | | | 0.05 | B | | 10 | 4.5 | Y | 1 | Bottger,B | |
| 1.740 | 812586 | | | | 7 | 5 | 0.25 | 100 | 0.20 | SC | 10 | 50 | 6.0 | Y | 1 | Bremseth,P.-J | K |
| 1.740 | 812587 | 6.3 | S | | | | | | 0.05 | B | | 10 | 6.0 | Y | 1 | Bremseth,P.-J | |
| 1.740 | 812588 | 6.0 | B | 55 | 11 | 5 | | | 0.050 | B | | 10 | 5.7M | Y | 1 | Kaila,K | L |
| 1.74 | 812589 | 4.3 | S | 78 | 25 | 4 | 0.50 | 60 | 0.046 | R | 4 | 8 | 6 | Y | 1 | van de Weg,R.L.W | M |
| 1.74 | 812590 | | | | 20 15 | 7 | 0.50 | 60 | 0.060 | B | | 12 | 6 | Y | 1 | van de Weg,R.L.W | |
| 1.74 | 812591 | 5.4 | S | DCS 5A | 9 7 | 6 | 0.25 | 83 | 0.050 | B | | 10 | 6 C | N | 1 | van Loo,F.R | |
| 1.74 | 812592 | 5.6 | | DCS 5A | | | | | | EY | | | 6 C | N | 1 | van Loo,F.R | |
| 1.75 | 812593 | | | | | | 12.7 | 55 | 0.15 | N | 8 | 30 | 4.5 | Y | 1 | Bottger,B | |
| 1.750 | 812594 | 6.4 | S | 55 | 3.6 | 6 | | | 0.090 | R | 14 | 46 | 5.0 | Y | 1 | Hirth,G | |
| 1.75 | 812595 | 6.2 | | VAS 161 | 5 | 5 | 0.27 | 114 | 0.205 | N | 6 | 80 | 5.5 | Y | 1 | Germann,R | |
| 1.750 | 812596 | 6.2 | | | | 3 | | | 0.080 | B | | 15 | 5 | Y | 1 | Nagele,A | N |
| 1.753 | 812597 | 5.9 | B | 55, 54 | 4.8 | 5 | 0.17 | 80 | 0.330 | N | 4.5 | 59 | 6.5 | Y | 1 | Castino,R | |
| 1.753 | 812598 | 5.4 | | 54, SAO | 20 | 6 | 1 | 80 | 0.063 | B | | 9 | 4.0 | Y | 1 | Kammerer,A | O |
| 1.753 | 812599 | 5.2 | S | 55 | 25 | 6 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Meozzi,D | |
| 1.757 | 812600 | 5.6 | M | AAVSO | 14 | 8 | 0.4 | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | P |
| 1.757 | 812601 | 6.3 | | 54 | 8 | 5 | | | 0.08 | B | | 20 | 5 M | Y | 2 | Knain,E | Q |
| 1.76 | 812602 | 6.5 | B | 54 | 14 | 4 | | | 0.080 | B | | 20 | C | Y | 1 | Jannink,D.W | R |
| 1.760 | 812603 | 5.5 | B | 55 | 30 | 3 | 3 | 70 | 0.04 | B | | 8 | | Y | 1 | Morrisby,A | S |
| 1.770 | 812604 | 6.0 | B | 54 | | | | | 0.050 | B | | 7 | 4.0C | Y | 1 | Ruiz,J | |
| 1.77 | 812605 | 7.0 | B | M | 4.5 | 4 | | | 0.07 | N | 8 | 35 | | | | Rudenko,S | |
| 1.771 | 812606 | 6.5 | B | 54 | | 5 | | | 0.080 | R | 7.5 | 17 | 4.5C | Y | 1 | Li Causi,G | T |
| 1.771 | 812607 | | | | 9 | 5 | 0.4 | 90 | 0.076 | N | 9.2 | 35 | | | | Li Causi,G | U |
| 1.775 | 812608 | | | 54 | 6 | 5 | | | 0.208 | N | 5.8 | 48 | 4.0C | Y | 1 | Ruiz,J | |
| 1.7777 | 812609 | 5.8 | B | 54 | 8 | 6 | | | 0.05 | B | | 10 | 6.2C | Y | 2 | Franciosi,C | |
| 1.778 | 812610 | 5.3 | B | 54, 55 | 21 | 5 | | | 0.050 | B | | 7 | 4.5 | N | 1 | Linder,J | V |
| 1.781 | 812611 | 5.0 | M | 55, 54 | 20 | 5 | | | 0.06 | R | 11 | 25 | | Y | 2 | Gallego,J | |
| 1.781 | 812612 | 5.5 | | 55 | | | | | | EY | | | 5.6 | Y | 1 | McBain,J | |
| 1.781 | 812613 | 6.0 | | 55 | 4 | 6 | | | 0.040 | B | | 8 | 5.0 | Y | 2 | Weissferdt,F | W |
| 1.785 | 812614 | 5.8 | B | 54 | 18.2 | 3 | | | 0.03 | B | | 8 | 5.0 | Y | 1 | Hasubick,W | |
| 1.790 | 812615 | 4.9 | S | 54 | 23 | 6 | | | 0.05 | B | | 7 | 6.2 | Y | 3 | Haver,R | |
| 1.790 | 812616 | 4.9 | S | 54 | | | | | | EY | | | 6.2 | Y | 3 | Haver,R | |
| 1.79 | 812617 | 5.5 | B | DCS 5A | 25 | 2 | | | 0.063 | B | | 8 | 4.5C | N | 1 | Geenen,J.J | J |
| 1.792 | 812618 | 5.5 | S | 55 | 10 | 5 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Vanin,G | |
| 1.800 | 812619 | 5.8 | S | 55 | 25.0 | 6 | | | 0.08 | B | | 30 | 5.2 | Y | 3 | Campos,J | X |
| 1.819 | 812620 | 6.1 | M | 54 | 7.7 | 7 | | 65 | 0.080 | B | | 11 | 5.5M | Y | 1 | Rossi,L | Y |
| 1.82 | 812621 | 6.5 | B | DCS 5A | 12 10 | 8 | | | 0.115 | N | 8 | 45 | 5 MC | Y | 1 | van Munster,T | |
| 1.826 | 812622 | 6.0 | B | 54 | 20 | | | | 0.050 | B | | 7 | 6.0 | Y | 4 | Lavarack,N | |
| 1.833 | 812623 | 6.2 | S | 55 | 25 | 6 | 1 | 60 | 0.080 | B | | 15 | 5 C | Y | 1 | Korth,S | Z |
| 1.833 | 812624 | 6.4 | M | 54 | | 3 | 0.33 | 312 | 0.050 | B | | 16 | 4.5C | Y | 1 | Lozano,L | a |
| 1.844 | 812625 | 6 | | 55 | 7 | 4 | | | 0.114 | N | 7.9 | 30 | 5.1 | | 1 | Kerber,F | b |
| 1.847 | 812626 | 6.2 | M | 55 | 8.3 | 3 | | | 0.07 | B | | 16 | 5.0C | N | 1 | Taylor,M.D | c |
| 1.896 | 812627 | 5 | | 55, 54 | 10 | 5 | | | 0.050 | B | | 10 | 3.5 | N | 1 | Marekfia,G | b |
| 1.917 | 812628 | 8.5 | B | 55 | 2.9 | 7 | | | 0.112 | N | 8 | 36 | 3.5M | N | 1 | Koschny,D | |
| 1.948 | 812629 | 6.0 | B | 54 | 7.5 | 6 | | | 0.050 | B | | 7 | 5.0M | N | 1 | Rossi,L | |
| 1.985 | 812630 | 6.0 | S | 54 | | | | | 0.08 | B | | 11 | | N | 1 | Gainsford,M.J | d |
| 1.993 | 812631 | 6.2 | M | 55 | 7.9 | 3 | | | 0.07 | B | | 16 | 5.1CM | Y | 1 | Taylor,M.D | |

NOTE A Bright nucleus. (Observer gave limit as 9. Ed.)
NOTE B DC approximate.
NOTE C Modified Sidgwick method used.
NOTE D Exc. see.
NOTE E PA = E.
NOTE F Icy wind.
NOTE G Cirrus.
NOTE H Seeing good, transparency good/fair. Haze.
NOTE I Comparison stars SAO 92230, 92183. (Observer indicated "A" method [Argelander?]. Ed.)

NOTE J Coma diameter approximate.
NOTE K Inner coma bright. (Instrument used for this note not specified. Ed.)
NOTE L Moonlight out of city.
NOTE M For naked eye elongated.
NOTE N (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are SAO 92183, SAO 92250.
NOTE O (Observer indicated "K" method. Ed.) Ground fog.
NOTE P Tail PA 93; 63 deg. Naked eye!
NOTE Q Moonlight.
NOTE R Telescopic limit is 11.
NOTE S Tail very faint with a central spine.
NOTE T Magnification approximate.
NOTE U PA computed by drawing.
NOTE V Thin fog?
NOTE W Fog. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE X Some haze. No tail visible.
NOTE Y PA approximate.
NOTE Z Coma diameter approximate. Tail very diffuse.
NOTE a Tail appear.
NOTE b (Observer indicated "A" method [Argelander?]. Ed.)
NOTE c Seeing Antoniadi III.
NOTE d Cloud.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.016 | 830328 | | 0.203 | SC | 10 | | 15 | 6.0 | | Williams,D.J | A |
| 1.016 | 830329 | | 0.105 | N | 4.2 | 16 | 15 | 6.0 | | Williams,D.J | |
| 1.275 | 830330 | | 1.5 | C | | 260 | 9 | 5.5 | 5 | Bragadin,A | B |
| 1.706 | 830331 | 0.10 | 0.125 | N | 5.8 | 28, 40, 60 | 14 | 4.0 | 1 | Riccabone,G | C |
| 1.734 | 830332 | | 0.20 | SC | 10 | 50 | 25 | 6 | 3 | Bremseth,P.-J | D |
| 1.755 | 830333 | 0.25 | 0.356 | SC | 11 | 200 | 45 | | 1 | Verdenet,M | E |
| 1.766 | 830334 | 1.2 | 0.080 | B | | 20 | 15 | 5 | 1 | Knain,E | F |
| 1.781 | 830335 | | 0.060 | R | 11 | 25 | | | 2 | Gallego,J | G |
| 1.795 | 830336 | | 0.076 | N | 9.2 | 35,140 | 10 | 4.5 | 1 | Li Causi,G | H |
| 1.811 | 830337 | 0.08 | 0.40 | N | 5 | 81,254 | 15 | 6.5 | 2 | Merlin,J.-C | I |
| 1.899 | 830338 | 2 | 0.05 | R | 7 | 15, 25, 40 | 50 | 4.5 | 1 | Kopp,M | J |
| 1.904 | 830339 | 0.08 | 0.125 | N | 5.8 | 28, 40, 60 | 45 | 4.5 | 1 | Riccabone,G | K |
| 1.908 | 830340 | 0.50 | 0.305 | N | 5.6 | 56 | 4 | 5 | 1 | Korth,S | L |

NOTE A It is very condensed at the center. The degree of condensation is 6. The comet seems to fan outward toward the east. This is more evident when seen through the 8".
NOTE B Coma diameter 5-6 arc min. DC 2.
NOTE C Nebular region of greater luminosity at PA 142. Diameter of the false nucleus (a very fine, very small zone, almost stellar in appearance) is 15 arc sec. Magnification of 80 also used. Two drawings included. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE D Tail at PA 100. Inner part of the coma was brighter than before, and the southern part was brightest. From this area, the tail began. A straight but short tail was weak about 1/4 deg. from the coma. The central condensation was very small, about 3 arc sec. (not star-like). Some diffuse was also observed at PA 80-85, about 4 arc min. from the coma. Close to the central condensation (at PA 85), there were seen a small star-like point (star? See drawing). [sic]
NOTE E (Two drawings submitted. Additional drawing submitted made using 11x80 binoculars (2.01'/mm). Ed.)
NOTE F Coma bright in center, diffuse toward the edge. Not sure of tail, very diffuse.
NOTE G Asymmetrical coma. Visible at naked eye. [sic] Front part of coma more crisp. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE H To see the tail at PA 90, it seemed easier with yellow Kodak Wratten 4 filter. The tail at PA 35+/-10 was very little contrasted and to see it was very difficult. [sic]
NOTE I Tail at PA 63, jet at PA 131, diffuse; jet at PA 174, diffuse. Large parabolic hood nearly sunward. Several "flakes" clearly detached from the central condensation.
NOTE J Only coma (diffuse) with brightness increasing towards the center visible. No tail visible.
NOTE K Diameter of the false nucleus is 61 arc sec. Magnification of 80 and 144 also used. Two drawings included. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE L Jet 8' long at PA 140; jet extremely diffuse. City lights interfered with the observation.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.058 | 850290 | 2.400 | 4 | 0.600 | 0.9 x 0.6 | 3.50 | Kodak 103a-O | | N | O | 001/T | 1 | Belli,V | |
| 1.423 | 850291 | 0.850 | 3.4 | 0.25 | 2.4 x 1.6 | 23.08 | Kodak 6415 | | Y | C | 4/P | 1 | Kojima,T | A |
| 1.717 | 850292 | 2.400 | 4 | 0.600 | 0.9 x 0.6 | 6.17 | Kodak 103a-O | | N | O | 001/T | 1 | Belli,V | |
| 1.725 | 850293 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 15.00 | Kodak 103a-O | | N | O | 4/C | 2 | Cimatti,A | |
| 1.742 | 850294 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 12.00 | Kodak 103a-O | | N | O | 5/C | 2 | Cimatti,A | B |
| 1.777 | 850295 | 0.600 | 1.6 | 0.375 | 3.4 x 2.3 | 4.05 | Kodak 103a-O | | N | O | 002/T | 1 | Belli,V | C |
| 1.778 | 850296 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 15.00 | 3M 1000 | 1000/ | N | X | 3/S | 1 | Vanin,G | |
| 1.845 | 850297 | 1.690 | 5.6 | 0.305 | 1.2 x 0.8 | 3.00 | Agfachrome | 1000/31 | N | | 4/S | 1 | Korth,S | D |
| 1.855 | 850298 | 1.690 | 5.6 | 0.305 | 1.2 x 0.8 | 3.00 | Agfachrome | 1000/31 | N | | 5/S | 1 | Korth,S | D |
| 1.870 | 850299 | 1.690 | 5.6 | 0.305 | 1.2 x 0.8 | 5.00 | Agfachrome | 1000/31 | N | | 6/S | 1 | Korth,S | D |
| 1.881 | 850300 | 1.690 | 5.6 | 0.305 | 1.2 x 0.8 | 7.00 | Agfachrome | 1000/31 | N | | 7/S | 1 | Korth,S | D |
| 1.893 | 850301 | 1.690 | 5.6 | 0.305 | 1.2 x 0.8 | 9.00 | Agfachrome | 1000/31 | N | | 8/S | 1 | Korth,S | D |

NOTE A Instrument is Wright-Schmidt. Large format (120 size) film used.
NOTE B Interrupted by clouds.
NOTE C Instrument is Celestron 14" Schmidt Camera.
NOTE D City lights interfered with the observation. (Observer indicated both type O and type X guiding. Ed.)

DATE: 2 DEC 1985

DATE: 2 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | m1 | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.003 | 812632 | 6.2 | M | 54 | 3.9 | 6 | | | 0.114 | N | 8 | 45 | 4.8 | N | 1 | Mac Kenzie,G | |
| 2.010 | 812633 | 6.1 | B | 54 | 15 | 5 | | | 0.05 | B | | 7 | 5.5C | Y | 10 | Chmielewski,W | |
| 2.066 | 812634 | 6.0 | S | 54 | 28 | 7 | | | 0.32 | N | 4.4 | 57 | 5.2 | Y | 1 | Ariail,R.B | |
| 2.14 | 812635 | 5.6 | | SKY&TEL | 10.0 | 8 | | | 0.035 | B | | 7 | 5.5 | Y | 1 | McBride,P | |
| 2.271 | 812636 | 5.2 | M | 54 | 19 | 7 | 0.42 | 290 | 0.05 | B | | 10 | 6.0 | Y | 2 | Fabre,R | A |
| 2.397 | 812637 | 7.0 | M | | 5.5 | 6 | 0.13 | 85 | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | |
| 2.410 | 812638 | 5.6 | M | 54 | 9 | 6 | 0.25 | 90 | 0.030 | B | | 8 | 4.5C | Y | 1 | Kato,T | B |
| 2.415 | 812639 | 6.0 | M | 54, 55 | 13 | 7 | 0.25 | 70 | 0.08 | B | | 11 | 5.5 | Y | 1 | Mitsuma,S | C |
| 2.42 | 812640 | 6 | B | M | 8.2 | 5 | | | 0.21 | N | | 80 | | | | Knyazyuk,N | |
| 2.44 | 812641 | 5.8 | M | | 20 | 7 | 2 | 70 | 0.05 | B | | 7 | 5.5 | Y | 2 | Hiraga,M | |
| 2.44 | 812642 | 5.5 | S | 54 | 17.9 | 6 | 0.5 | 65 | 0.05 | B | | 7 | 5.0 | Y | 1 | Kanai,K | |
| 2.44 | 812643 | 6.0 | B | 54 | 17.9 | 6 | 0.5 | 65 | 0.05 | B | | 7 | 5.0 | Y | 1 | Kanai,K | |
| 2.441 | 812644 | 6 | | 55 | 15 | 5 | 0.33 | 80 | 0.07 | B | | 10 | 3.5 | Y | 1 | Kobayashi,J | D |
| 2.45 | 812645 | 5.8 | B | | 17 | 5 | 0.6 | 70 | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 2.458 | 812646 | 6.3 | B | 54 | | | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hasegawa,T | |
| 2.458 | 812647 | 4.4 | S | 78 | 30 | 7 | | | | EY | | | 6.3C | Y | 1 | Lovejoy,T | E |
| 2.47 | 812648 | 5.8 | S | 54 | 15 | 6 | | | 0.07 | B | | 10 | 5.0M | Y | 1 | Yasuki,M | |
| 2.49 | 812649 | 5.8 | S | AAVSO | 10 | 5 | | | 0.13 | N | 6.3 | 24 | 4.0M | Y | 1 | Hayashi,A | |
| 2.51 | 812650 | 5.7 | S | AAVSO | 12 | 4 | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Hayashi,A | |
| 2.512 | 812651 | 6.0 | B | 54 | 15 | 5 | | | 0.060 | B | | 10 | 4.0 | Y | 1 | Moriya,M | F |
| 2.52 | 812652 | 5.9 | B | | 15 | 5 | | | 0.05 | B | | 10 | 5.0 | N | 1 | Uda,K | |
| 2.531 | 812653 | 6.0 | M | 54 | 15 | 5 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 2.54 | 812654 | 4.9 | S | 54 | 10 | 4 | | | 0.065 | B | | 20 | 5.3 | Y | | Pearce,A | |
| 2.54 | 812655 | 5.8 | M | 54 | | | | | 0.05 | B | | 7 | 4.5M | Y | 2 | Suzuki,K | |
| 2.542 | 812656 | 5.9 | B | | | | | | 0.035 | B | | 7 | | N | 1 | Okada,M | |
| 2.559 | 812657 | 6.3 | B | 54 | | | | | 0.07 | B | | 10 | 4.5M | Y | 1 | Date,M | |
| 2.599 | 812658 | 5.6 | M | 54 | 10 | 6 | | | 0.030 | B | | 8 | 5.0M | Y | 1 | Kato,T | |
| 2.615 | 812659 | 5.8 | M | 54 | 22 | 5 | | | 0.1 | N | 10 | 40 | 6.0 | Y | 1 | Ichikawa,K | G |
| 2.62 | 812660 | 6.0 | S | | | 6 | | | 0.08 | B | | 11 | 4.0 | N | 1 | Momose,M | |
| 2.67 | 812661 | 5.7 | B | E | 16 | | | | 0.03 | B | 7 | 7 | | | | Zagaynov,V.A | |
| 2.69 | 812662 | 6.4 | B | M | 4.5 | | | | 0.05 | R | | 20 | | | | Nesterov,Yu | |
| 2.69 | 812663 | 5.4 | B | E | 15 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 2.70 | 812664 | 5.7 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 2.705 | 812665 | 6.1 | M | 54 | 13 10 | 6 | | | 0.08 | B | | 11 | 5.5 | Y | 1 | Gubo,H | |
| 2.71 | 812666 | 5.9 | B | E | 15 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 2.71 | 812667 | 5.9 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 2.715 | 812668 | 6.0 | B | 54 | 12.6 | 5 | | | 0.10 | B | | 14 | 5.5 | Y | 1 | Hasubick,W | |
| 2.719 | 812669 | | | | 6.0 | 5 | | | 0.080 | B | | 20 | 3.9C | Y | 1 | Baroni,S | |
| 2.719 | 812670 | 5.4 | M | 54 | 24 | 6 | | | 0.05 | B | | 12 | 5.0 | Y | 1 | Tanti,T | H |
| 2.72 | 812671 | 5.6 | M | 54 | 13 | 5 | | | 0.05 | B | | 10 | 4.8 | Y | 1 | Bottger,B | |
| 2.72 | 812672 | 5.8 | B | E | 15 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 2.72 | 812673 | 5.6 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 2.7229 | 812674 | 6.1 | S | AAVSO | | 5 | | | 0.05 | B | | 7 | 5.0 | N | 1 | Sicoli,P | |
| 2.728 | 812675 | 6.5 | | 54 | 0.5 | 5 | | | 0.06 | R | 6.9 | 20 | 4.5 | Y | 1 | Guerrini,F | |
| 2.729 | 812676 | 10.0 | B | 54 | 11.3 | 4 | | | 0.203 | SC | 10 | 92 | 5.5 | Y | 1 | Hasubick,W | I |
| 2.729 | 812677 | 6.0 | B | 54 | 10.5 | 5 | | | 0.080 | B | | 20 | 6.0 | Y | 1 | Koch,V | |
| 2.73 | 812678 | 5.9 | B | AA | 15 | 5 | | | 0.050 | B | | 7 | 5.0 | N | | Schmeer,P | |
| 2.74 | 812679 | 5.5 | B | E | 17 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 2.750 | 812680 | | | 54 | 9 | | | | 0.030 | B | | 8 | 5.5C | Y | 1 | Villa,M | |
| 2.757 | 812681 | 5.3 | M | 54, SAO | 20 | 5 | | | 0.063 | B | | 9 | 5.0 | Y | 3 | Kammerer,A | J |
| 2.76 | 812682 | 5.8 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 2.762 | 812683 | 5.4 | B | 54 | 10.5 | 5 | | | 0.080 | B | | 20 | 6.0 | Y | 1 | Koch,B.O | |
| 2.763 | 812684 | 5.8 | B | 55, 54 | 4.5 | 6 | 0.17 | 80 | 0.330 | N | 4.5 | 59 | 6.1 | Y | 1 | Castino,R | |
| 2.764 | 812685 | 6.0 | M | 54 | | | | | 0.030 | B | | 8 | 5.5C | Y | 1 | Villa,M | |
| 2.767 | 812686 | 5.6 | S | 54 | 10 | 6 | | | 0.076 | R | 5.5 | 17 | 4.2C | N | 1 | Piccinini,M | |
| 2.77 | 812687 | 5.7 | B | 54 | 16 | 4 | | | 0.050 | B | | 7 | C | N | 1 | Jannink,D.W | K |
| 2.77 | 812688 | 5.4 | S | DCS 5A | | | | | 0.050 | B | | 10 | C | N | 1 | van Loo,F.R | |
| 2.77 | 812689 | 5.0 | V | 54 | 60 | 1 | 1.00 | 75 | | EY | | | 6.5 | Y | 2 | Merlin,J.-C | |
| 2.771 | 812690 | 8.1 | B | 55 | 5.0 | 6 | | | 0.112 | N | 8 | 36 | 4.0M | N | 1 | Koschny,D | |
| 2.771 | 812691 | 5.5 | | 54 | 12 | 4 | | | 0.050 | B | | 10 | 3.5 | N | 1 | Marekfia,G | L |
| 2.7777 | 812692 | 5.8 | B | 54 | 8 | 7 | | | 0.05 | B | | 10 | 6.0C | Y | 2 | Franciosi,C | |
| 2.779 | 812693 | | | 54 | 17 | | | | 0.114 | N | 8.7 | 50 | | Y | 1 | Rodriguez C.,J.A | |
| 2.78 | 812694 | 5.8 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 2.783 | 812695 | 5.2 | B | 54, 55 | 11 | 6 | | | 0.050 | B | | 7 | 4.5 | Y | 2 | Linder,J | M |
| 2.784 | 812696 | 5.8 | B | 54 | 15 | 5 | | | 0.08 | B | | 11 | 4 | N | 1 | Gainsford,M.J | N |
| 2.784 | 812697 | 5.0 | S | 54 | 26 | 6 | | | 0.050 | B | | 7 | 6.2 | Y | 1 | Meozzi,D | |
| 2.785 | 812698 | 5.9 | B | 54 | 16.8 | 4 | | | 0.03 | B | | 8 | 5.5 | Y | 1 | Hasubick,W | |
| 2.785 | 812699 | 5.8 | S | | 11 | 6 | | | 0.050 | B | | 7 | 5.0 | Y | 1 | Nolle,M | |
| 2.785 | 812700 | 5.7 | S | 54, 78 | 13.9 | 6 | 0.12 | 72 | 0.05 | B | | 10 | 4.8 | Y | 3 | Abbott,J | O |
| 2.790 | 812701 | 4.9 | S | 54 | 24 | 6 | | | 0.05 | B | | 7 | 6.3 | Y | 3 | Haver,R | |
| 2.790 | 812702 | 4.8 | S | 54 | | | | | | EY | | | 6.3 | Y | 3 | Haver,R | |
| 2.79 | 812703 | 6.2 | B | AAVSO | 15 | 3 | | | 0.08 | R | | 8 | | | | Shirokov,A | |
| 2.79 | 812704 | 5.6 | B | 54 | | 6 | | | 0.050 | B | | 10 | 4.5 | Y | 2 | Wagner,G | |
| 2.792 | 812705 | | | 54 | 9 | 6 | | | 0.114 | N | 8.7 | 25 | 6.0C | Y | 1 | Melandri,F | |
| 2.792 | 812706 | 6.3 | | | | 4 | | | 0.080 | B | | 15 | 4 | Y | 1 | Nagele,A | P |
| 2.80 | 812707 | 5.1 | S | DCS 5A | 20 | 6 | | | 0.050 | B | | 10 | 6 | Y | 3 | Comello,G | Q |
| 2.80 | 812708 | | | | | | 0.5 | 80 | 0.203 | C | 10 | 50 | 6 | Y | 3 | Comello,G | R |
| 2.80 | 812709 | 6.1 | S | DCS 5A | 50 | 5 | | | 0.050 | B | | 16 | 5 C | Y | 1 | van Asperen,H | |
| 2.80 | 812710 | 5.7 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 2.823 | 812711 | 6.3 | B | 54 | | 3 | | | 0.07 | B | | 10 | 4.8 | Y | 1 | Deconinck,M | |
| 2.826 | 812712 | 6.4 | M | 54 | 11 | 3 | 0.33 | 310 | 0.050 | B | | 10 | 4.3C | Y | 1 | Lozano,L | S |
| 2.826 | 812713 | 6 | | 54 | 5 | 5 | | | 0.114 | N | 7.9 | 30 | 5.2 | | 1 | Kerber,F | L |
| 2.830 | 812714 | 6.2 | M | 54 | 12 | 6 | | | 0.08 | B | | 11 | 5.5 | Y | 1 | Fleet,R.W | T |
| 2.833 | 812715 | 6.1 | B | | 10 | 4 | | | 0.150 | N | 4.8 | 36 | 5.5 | Y | 1 | Emrich,G | |
| 2.84 | 812716 | 6.2 | B | DCS 5A | 15 12 | 8 | | | 0.115 | N | 8 | 45 | 5.5MC | Y | 1 | van Munster,T | |
| 2.843 | 812717 | 5.5 | B | | 10 | 5 | | | 0.07 | B | | 20 | 5.5 | Y | 2 | Filimon,E | |
| 2.84375 | 812718 | 6.1: | B | 54 | 4.5 | 5 | | | 0.114 | N | 7.8 | 23 | 4.5 | Y | 1 | Gozzoli,E | |
| 2.85 | 812719 | 5.0 | S | DCS 4B | 16 | 5 | | | 0.040 | B | | 7 | 4 MC | Y | 5 | Bus,E.P | |
| 2.86 | 812720 | 6.1 | M | AA | 8 | 6 | | | 0.106 | R | 5.7 | 24 | | | | Keszthelyi,S | U |
| 2.865 | 812721 | 6.5: | | 54 | 10 | 5 | | | 0.200 | N | 7 | 47 | 4.5 | Y | 1 | Grogel,O | V |
| 2.878 | 812722 | | | | 5.5 | 5 | 0.08 | 350 | 0.153 | N | 8.5 | 65 | | Y | 2 | Torres,E | W |
| 2.92 | 812723 | 6.1 | B | AAVSO | 18 | 3 | | | 0.08 | B | | 8 | | | | Shirokov,A | |
| 2.977 | 812724 | 5.6 | M | 54 | 10.5 | 7 | | | 0.05 | B | | 7 | 4.4 | Y | 3 | DeYoung,J.A | X |
| 2.98 | 812725 | 4.8 | S | AAVSO | 15 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |

NOTE A (PA value appears to be measured incorrectly. Ed.)
NOTE B Tail length approximate.
NOTE C 10.5.
NOTE D Magnitude estimation method = F.
NOTE E 0.5 deg. tail, PA about E, visible in 15x80 binoculars. Magnitude probably slightly optimistic. (Approximately 0.2 mag.?). [sic] Delta Psc also used for comaparison.

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NOTE F Seeing 4/5.
NOTE G PA = E.
NOTE H Seeing good, transparency good.
NOTE I m2 = 10.0.
NOTE J Clouds.
NOTE K Telescopic limit is 8.
NOTE L (Observer indicated "A" method [Argelander?]. Ed.)
NOTE M Hazy. Coma diameter approximate.
NOTE N Cloud.
NOTE O Comparison stars 5.1, 5.8, 6.3, 4.3. Cloud. The "tail-lobe" structures seen in 10x50 binoculars corresponded to fountain-like features seen in larger instruments. The northern "tail-lobe" was 0.12 deg. long at PA 72. The southern "tail-lobe" was 0.1 deg. at PA 110.
NOTE P (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are SAO 92123, SAO 92080.
NOTE Q Coma diameter approximate.
NOTE R PA approximate.
NOTE S Meteor act. [sic]
NOTE T 21' coma, averted vision, between clouds.
NOTE U + 7x50 B and 10 mag. nucleus. [sic]
NOTE V Mag. method = "A".
NOTE W (Observer gave limit as 11.0. Ed.)
NOTE X Short tail at PA 100.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.005 | 830341 | 0.21 | 0.114 | N | 8 | 45 | 14 | 4.6 | 1 | Mac Kenzie,G | |
| 2.732 | 830342 | | 0.06 | R | 6.9 | 20 | 11 | 4.5 | 1 | Guerrini,F | |
| 2.750 | 830343 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | A |
| 2.771 | 830344 | | 0.40 | N | 5 | 81,254,407 | 30 | 6.5 | 2 | Merlin,J.-C | B |
| 2.826 | 830345 | 1.0 | 0.254 | N | 6.4 | 41 | 10 | 4.8 | 3 | Abbott,J | C |
| 2.838 | 830346 | 0.37 | 0.406 | N | 5 | 68 | 18 | | 2 | Farroni,G | D |
| 2.850 | 830347 | 0.98 | 0.106 | R | 5.7 | 24, 48, 60 | 27 | 5.3 | 1 | Keszthelyi,S | E |
| 2.878 | 830348 | 0.7 | 0.153 | N | 8.5 | 65 | 40 | | 2 | Cifuentes,E | F |
| 2.933 | 830349 | 0.08 | 0.125 | N | 5.8 | 28, 40, 60 | 39 | 4 | 1 | Riccabone,G | G |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Additional drawing submitted made using 11x80 binoculars (2'/mm). Ed.)
NOTE B Jet at PA 213; jet at PA 260, then curved about southward; jet at PA 357. Four very small and bright condensations seen at 407x; I can't say which one could be the "false nucleus". Diffuse extensions ill defined tailward. (Two drawings supplied, at 1820 UT with scale 0.16'/mm and at 1837 UT with scale 0.05'/mm. Ed.)
NOTE C Central condensation approximately 4 arc min. diameter. Southernmost fountain at PA 110 deg., approximately 6 arc min. length. Northernmost fountain at PA 72 deg., approximately 7 arc min. length. Vertex distance approximately 4 arc min. Semi latus rectum approximately 5 arc min. (both). Two faint tail lobes were observed with the 10x50 binoculars and these appeared as fountain-like structures with the 25.4 cm Newtonian reflector. The central condensation appeared as a reasonably well defined disk of a considerable fraction of the total coma diameter. There was however clearly an intensity peak within the central condensation.
NOTE D Apparent dimensions of the comet 9.2'x7.3'.
NOTE E Magnification of 150x also used.
NOTE F Rather diffuse. The coma was off-center to the east, as usual. The tail is less visible and less bright than on previous day. (Observer gave limit as 11.0. Translated by IHW staff. Ed.)
NOTE G Nebular regions of greater luminosity at PA 18, PA 160, and PA 91. Diameter of the false nucleus is 134 arc sec. Magnifications of 80 and 144 also used. Two drawings included. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.718 | 850302 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 30.00 | Kodak 103a-O | | N | O | 6/C | 2 | Cimatti,A | |
| 2.750 | 850303 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 30.00 | Kodak 103a-F | | N | O | 1/C | 2 | Cimatti,A | A |
| 2.760 | 850304 | 0.135 | 3.2 | | 15.2 x10.2 | 3.00 | Agfa-Pan Pro | 400/27 | N | M | 24/C | 2 | Trixler,F | B |
| 2.768 | 850305 | 0.225 | 1.7 | 0.136 | 9.1 x 6.1 | 1.50 | Kodak 2415 | | Y | O | 1/S | 1 | Valisa,P | C |
| 2.774 | 850306 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 3.00 | Kodak Tri-X | | N | | 04/P | 2 | Linder,J | D |
| 2.789 | 850307 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 30.00 | 3M CRT-4 | | Y | O | 1/C | 2 | Cimatti,A | E |
| 2.801 | 850308 | 0.180 | 2.8 | | 11.4 x 7.6 | 20.00 | Kodak 2415 | | Y | O | 1/P | 4 | Uberti,M | |
| 2.807 | 850309 | 0.135 | 3.2 | | 15.2 x10.2 | 3.50 | Agfa-Pan Pro | 400/27 | N | M | 26/C | 2 | Trixler,F | B |
| 2.811 | 850310 | 0.135 | 3.2 | | 15.2 x10.2 | 5.00 | Agfa-Pan Pro | 400/27 | N | M | 28/C | 2 | Trixler,F | B |
| 2.817 | 850311 | 0.135 | 3.2 | | 15.2 x10.2 | 2.50 | Agfa-Pan Pro | 400/27 | N | M | 32/C | 2 | Trixler,F | B |
| 2.818 | 850312 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 30.00 | Kodak 103a-O | | N | O | 7/C | 2 | Cimatti,A | F |
| 2.842 | 850313 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 20.00 | Kodak 103a-O | | N | O | 8/C | 2 | Cimatti,A | G |

NOTE A Red Wratten 25 filter used.
NOTE B City lights interfered with the observation.
NOTE C Instrument is Celestron Schmidt camera.
NOTE D Instrument is Schmidt camera.
NOTE E Large format film used.
NOTE F Guided by G. Mengoli.
NOTE G Moonlight interfered with the observation.

DATE: 3 DEC 1985

DATE: 3 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.01 | 812726 | 4.8 | S | AA | 20 | 5 | | | 0.050 | B | | 7 | | | | Green,D.W.E | A |
| 3.022 | 812727 | 6.0 | B | 54 | 20 | 3 | | 90 | 0.203 | R | 13 | 85 | 4.8 | N | 1 | Fox,J.H | B |
| 3.063 | 812728 | 5.1 | B | 54 | | 4 | | | 0.05 | B | | 20 | 5.0 | Y | 5 | da Silva,L.A.L | |
| 3.083 | 812729 | 6.5 | B | 54 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | |
| 3.090 | 812730 | 5.5 | S | 58 | 34 | 8 | 0.67 | 35 | 0.32 | N | 4.4 | 57 | 6.2 | Y | 1 | Ariail,R.B | |
| 3.10 | 812731 | 5.3 | | 54 | 20 | 5 | 0.40 | 70 | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | C |
| 3.104 | 812732 | 6.3 | B | 54 | | 4 | | | 0.08 | B | | 11 | 5 | Y | 1 | Gorski,L | |
| 3.11 | 812733 | 4.6 | B | 78 | | | | | | EY | | | 6.0 | Y | 1 | Keen,R | |
| 3.12 | 812734 | 5.8 | M | 54 | 20 | 6 | 0.67 | 70 | 0.32 | N | 4 | 40 | 6.0 | Y | 1 | Keen,R | |
| 3.125 | 812735 | 5.4 | S | 54 | 15 | 8 | 1.5 | 64 | 0.108 | N | 4 | 24 | 5.5 | Y | 2 | Franch,J | D |
| 3.15 | 812736 | 5.8 | B | 54 | 16 | 7 | | | 0.080 | B | | 20 | 5.5 | Y | | Kronk,G | E |
| 3.17 | 812737 | 6.8 | B | 54 | 11.5 | 8 | | 77 | 0.335 | N | 4.5 | 56 | 5.5 | Y | | Kronk,G | E |
| 3.21 | 812738 | 5.1: | S | 54 | | | | | 0.050 | R | | 8 | 4.0 | Y | 10 | Morris,C.S | F |
| 3.229 | 812739 | 5.2 | M | 54 | 19 | 7 | 0.46 | 290 | 0.05 | B | | 10 | 5.5 | Y | 1 | Fabre,R | G |
| 3.3271 | 812740 | 5.9 | S | SAO | 18 | 3 | | | 0.080 | B | | 20 | 5.6 | | 3 | Machholz,D | |
| 3.42 | 812741 | 6.3: | S | 54 | | 2 | | | 0.050 | B | | 7 | C | Y | 1 | Matchett,V | |
| 3.421 | 812742 | 6.4 | M | | 5.5 | 6 | | | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | |
| 3.426 | 812743 | 5.7 | M | 54 | 17 | 6 | | | 0.030 | B | | 8 | 4.5C | Y | 1 | Kato,T | |
| 3.428 | 812744 | 4.4 | S | 78 | 30 | 7 | | | | EY | | | 6.3C | Y | 1 | Lovejoy,T | H |
| 3.429 | 812745 | 5.9 | S | 54 | 22 | 5 | 0.33 | 90 | 0.07 | B | | 10 | 3.5 | Y | 1 | Kobayashi,J | |
| 3.438 | 812746 | 6.3 | S | 54 | 1.7 | 1 | | | 0.05 | R | 16 | 20 | 6 | Y | 1 | Feisheng,J | |
| 3.44 | 812747 | 5.8 | B | | 18 | 6 | 0.7 | 70 | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 3.493 | 812748 | 5.7 | B | | | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 3.500 | 812749 | 5.5: | B | 54 | 16 | | | | 0.050 | B | | 7 | 5.8C | Y | 1 | Parkinson,M | I |
| 3.51 | 812750 | 5.8 | S | 54 | 15 | 6 | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Yasuki,M | |
| 3.517 | 812751 | 6.2 | S | 54 | 11 | 5 | | | 0.153 | N | 8.6 | 33 | 4.5 | Y | 1 | Iwaki,Y | |
| 3.52 | 812752 | 5.8 | M | SAO | 15 | 5 | | 60 | 0.06 | R | 12 | 22 | 4.0 | Y | 2 | Nakamura,A | |
| 3.53 | 812753 | 5.1 | S | 54 | 12 | 5 | | | 0.065 | B | | 20 | 5.3 | Y | | Pearce,A | |
| 3.533 | 812754 | 6.0 | B | 54 | 15 | 5 | | | 0.060 | B | | 10 | 3.5 | Y | 1 | Moriya,M | J |
| 3.538 | 812755 | | | 54 | 2.2 | 5 | | | 0.08 | R | 11.4 | 33 | 2.8C | Y | 1 | Wakatsuki,M | |
| 3.54 | 812756 | | | 54 | 3.3 | 4 | | | 0.31 | N | 5.7 | 147 | 4.0M | Y | 2 | Suzuki,K | K |
| 3.54 | 812757 | 5.7 | M | 54 | | | | | 0.05 | B | | 7 | 4.0M | Y | 2 | Suzuki,K | |
| 3.54 | 812758 | 6.0 | M | 54 | 23 | | | | 0.080 | B | | 11 | 5.5 | Y | 3 | Watanabe,N | |
| 3.563 | 812759 | 6.3 | B | 54 | | | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hasegawa,T | |
| 3.573 | 812760 | 6.3 | B | 54 | | | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Date,M | |
| 3.58 | 812761 | 6.1 | B | M | 12 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 3.681 | 812762 | 5.4 | B | CZ | | 4 | | | 0.08 | B | | 10 | 5.2 | Y | 1 | Elias,P | |
| 3.69 | 812763 | 6.1 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 3.705 | 812764 | 5.5 | M | AAVSO | 15 | 8 | 0.45 | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | L |
| 3.71 | 812765 | 6.3 | B | M | 4.5 | | | | 0.05 | R | | 20 | | | | Nesterov,Yu | |
| 3.712 | 812766 | 5.9 | B | 54 | 16.8 | 4 | | | 0.10 | B | | 14 | 5.5 | Y | 1 | Hasubick,W | |
| 3.715 | 812767 | 5.8 | B | 54 | 18.9 | 4 | | | 0.03 | B | | 8 | 5.5 | Y | 1 | Hasubick,W | |
| 3.718 | 812768 | 5.1 | S | 54 | 13.2 | 5 | | | 0.140 | SN | 3.6 | 19 | 6.2 | Y | 1 | Meozzi,D | |
| 3.719 | 812769 | 6.0 | M | 54 | 16 12 | 6 | | | 0.08 | B | | 11 | 5.5 | Y | 1 | Gubo,H | |
| 3.73 | 812770 | 4.1 | S | DCS5A6A | 25 | 4 | | | 0.018 | B | | 3 | 6.5 | Y | 2 | Bus,E.P | M |
| 3.73 | 812771 | 6.3 | M | E | 25 | 5 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 3.733 | 812772 | 5.6 | B | 54 | 8 | 7 | | | 0.113 | N | 8 | 22 | 5.0 | Y | 1 | Schambeck,C.M | |
| 3.733 | 812773 | 6.3 | M | CZ | 35 | 5 | | | 0.05 | B | | 7 | 6.3 | Y | 1 | Silhan,J | |
| 3.735 | 812774 | 5.6 | B | CZ | | 3 | | | 0.08 | B | | 10 | 5.2 | N | 1 | Janecek,V | |
| 3.74 | 812775 | 5.3 | S | 54 | | | | | 0.08 | B | | 10 | 4.0 | | 1 | Shanklin,J.D | |
| 3.74 | 812776 | 4.5 | S | DCS4B6A | 20 | 5 | 2.0 | 90 | 0.040 | B | | 7 | 6.5 | Y | 2 | Bus,E.P | |
| 3.74 | 812777 | 6.2 | B | M | | | | | 0.07 | N | 8 | 33 | | | | Bezrodniy,A | |
| 3.747 | 812778 | 5.7 | B | 54 | | 6 | | | 0.060 | R | 8 | 15 | 4.5 | Y | 1 | Schambeck,C.M | |
| 3.750 | 812779 | 7.3 | S | 54 | 3.5 | 6 | | | 0.090 | R | 14 | 46 | 5.0 | Y | 1 | Hirth,G | |
| 3.75 | 812780 | 5.8 | B | M | | | | | 0.03 | B | | 8 | | | | Tsygankov,D | |
| 3.751 | 812781 | | | | 18 | 6 | | | 0.08 | B | | 20 | 3.0 | Y | 2 | Milani,G | N |
| 3.755 | 812782 | 5.6 | S | 54 | 13 | 5 | | | 0.08 | B | | 11 | 4.5 | Y | 1 | Gainsford,M.J | O |
| 3.759 | 812783 | 5.8 | S | 54 | 3.8 | 6 | | 90 | 0.25 | N | 6 | 60 | 4.5 | Y | 1 | Gainsford,M.J | P |
| 3.76 | 812784 | 6.1 | S | AAVSO | 10 | 3 | | | 0.08 | R | | 8 | | | | Shirokov,A | |
| 3.764 | 812785 | 5.5 | B | CZ | | 3 | | | 0.08 | B | | 10 | 5.1 | Y | 1 | Kral,M | |
| 3.788 | 812786 | 5.0 | S | 54 | 20 | 5 | | | 0.050 | B | | 7 | 6.2 | Y | 1 | Meozzi,D | |
| 3.79 | 812787 | 4.9 | V | 54 | 70 | 1 | 1.00 | 80 | | EY | | | 6.0 | Y | 2 | Merlin,J.-C | |
| 3.816 | 812788 | 6.5 | B | 54 | 7 | 3 | | | 0.035 | B | | 7 | 6.0C | N | 1 | Sciezor,T | Q |
| 3.826 | 812789 | 6.4 | B | CZ | 13 | 6 | | | 0.10 | O | | 25 | 6.0C | Y | 1 | Micek,I | |
| 3.833 | 812790 | 6.1 | S | 54 | | 5 | | | 0.05 | B | | 7 | 6.5 | Y | 1 | Dziura,W | |
| 3.833 | 812791 | 5.1 | S | | 20 | 3 | | | 0.050 | B | | 7 | | Y | 1 | Luthen,H | |
| 3.84 | 812792 | | | | 20 | 4 | 0.75 | | 0.080 | R | 6.3 | 2 | | Y | 1 | Luthen,H | R |
| 3.84 | 812793 | 5.3 | B | E | 18 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 3.854 | 812794 | 5.5 | B | | 12 | | | | 0.250 | N | 4.9 | 61 | 5.0 | Y | 2 | Emrich,G | |
| 3.854 | 812795 | | B | | 5 | 4 | | | 0.07 | B | | 20 | 5.0 | Y | 2 | Filimon,E | |
| 3.86 | 812796 | 6.0 | M | AA | 12 | 6 | | | 0.106 | R | 5.7 | 24 | | | | Keszthelyi,S | S |
| 3.865 | 812797 | 6.4 | B | CZ | 13 | 6 | | | 0.10 | O | | 25 | 5.8C | Y | 1 | Micek,I | |
| 3.868 | 812798 | 5.8 | S | 54 | 8.8 | 5 | | | 0.05 | B | | 10 | 4.0 | Y | 3 | Abbott,J | T |
| 3.868 | 812799 | 6.7 | S | 54 | 6 | 4 | 0.05 | 60 | 0.07 | B | | 16 | 5.5C | Y | 1 | Taylor,M.D | U |
| 3.868 | 812800 | | | 54 | 16 | 6 | | | 0.089 | R | 5.5 | 18 | 5.5 | N | 1 | Ventura,F | V |
| 3.87 | 812801 | 6.1 | S | AAVSO | 18 | 4 | | | 0.03 | B | | 8 | | | | Shirokov,A | |
| 3.87 | 812802 | 6.1 | S | AAVSO | 10 | 7 | | | 0.08 | R | | 8 | | | | Shirokov,A | |
| 3.872 | 812803 | 6.2 | M | 120 | 3.3 | 2 | | | 0.114 | N | 8 | 36 | 5.5 | Y | 1 | Pennelli,G | |
| 3.875 | 812804 | 5.4 | S | 54 | 11 8 | 5 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Vanin,G | |
| 3.88 | 812805 | 5.3 | B | E | 18 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 3.885 | 812806 | | | 54 | 8.7 | 6 | 0.04 | 90 | 0.21 | N | 5 | 43 | 5.5C | Y | 1 | Taylor,M.D | W |
| 3.89 | 812807 | 6.1 | B | 54 | 5.2 | 7 | | | 0.05 | B | | 7 | 5.5C | Y | 3 | Maraziti,A | |
| 3.89 | 812808 | 5.9 | B | AA | 18 | 5 | | | 0.050 | B | | 7 | 5.0 | N | | Schmeer,P | |
| 3.892 | 812809 | 5.4 | M | 54 | 22 | 6 | | | 0.05 | B | | 12 | 4 | Y | 1 | Tanti,T | X |
| 3.910 | 812810 | 6.4 | M | 54 | 12 | 3 | 0.38 | 300 | 0.050 | B | | 10 | 4.3C | Y | 1 | Lozano,L | |
| 3.948 | 812811 | | | 54 | 16 | | | | 0.114 | N | 8.7 | 38 | | Y | 2 | Rodriguez C.,J.A | |
| 3.95 | 812812 | 5.3 | S | 54 | 25 | 6 | 0.5 | 90 | 0.05 | B | | 7 | 5.0 | Y | 1 | Harrington,P | |
| 3.95 | 812813 | 5.0 | S | AA | 20 | 5 | | | 0.050 | B | | 7 | | | | Green,D.W.E | A |
| 3.972 | 812814 | 7.5 | B | SC2000 | 2 | | | | 0.06 | R | 12 | 28 | 5.0M | N | 1 | Rossi,L | Y |
| 3.979 | 812815 | 6.0 | M | 54 | 5 | 8 | | | 0.203 | N | 8 | 128 | 5.0 | Y | 1 | Hannon,J | |
| 3.99 | 812816 | | | | 10 | 7 | 0.3 | 90 | 0.317 | N | 6 | 55 | | | | Bortle,J.E | |
| 3.99 | 812817 | 4.8 | S | AAVSO | 25 | | | | | EY | | | | | | Bortle,J.E | A |
| 3.99 | 812818 | 4.8 | S | AAVSO | 23 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 3.99 | 812819 | | | | 18 | 6 | | | 0.120 | B | | 20 | | | | Bortle,J.E | |

NOTE A Coma diameter approximate.
NOTE B Elongated coma, dark lane. PA approximate. SAO 092080 and SAO 092183 comparison stars.
NOTE C Modified Sidgwick method used.
NOTE D Gas tail.
NOTE E Exceptionally clear.
NOTE F Very poor conditions.

NOTE G (PA value appears to be measured incorrectly. Ed.)
NOTE H Magnitude probably slightly optimistic. (Approximately 0.2 mag.?). [sic]
NOTE I Dubious mag. estimate; asymmetric coma; faint tail.
NOTE J Seeing 3/5.
NOTE K Meter: coma diameter is P1 + P2.
NOTE L 7.3 mag. nucleus. Tail PA 93; 63 deg. Naked eye!
NOTE M Coma diameter is minimum value.
NOTE N Clouds.
NOTE O Thin cloud.
NOTE P Thin cloud. Tail length = ?. PA uncertain.
NOTE Q Very good weather.
NOTE R PA 80-110. Cloudy.
NOTE S + 7x50 B and 9.5 mag. nucleus + naked eye. [sic]
NOTE T Comparison stars 5.1, 5.8. Cloud.
NOTE U Seeing Antoniadi II.
NOTE V A diffuse grayish-blue 'haze' surrounds the coma which consists of a bright, roundish condensation and an outer shell which is less bright.
NOTE W Good seeing, Antoniadi II.
NOTE X Seeing good, transparency good. Moon.
NOTE Y Data are for central cond.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.000 | 830350 | 0.67 | 0.102 | R | 15 | 47 | | 5.5 | 1 | Cuthill,L | A |
| 3.023 | 830351 | 0.6 | 0.203 | R | 13 | 85 | 7 | 4.8 | 1 | Fox,J.E | B |
| 3.027 | 830352 | 0.23 | 0.203 | R | 13 | 110 | | | | Phillips,J | C |
| 3.040 | 830353 | 0.46 | 0.22 | R | 14.9 | 50 | 14 | | 1 | Monopoli,M.O | D |
| 3.083 | 830354 | 0.99 | 0.15 | N | 6 | 30 | 10 | | 1 | Zanette,D | E |
| 3.127 | 830355 | | 0.203 | N | 6 | 135 | 17 | 6.5 | 1 | Troiani,D.M | F |
| 3.238 | 830356 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | G |
| 3.275 | 830357 | | 1.5 | C | | 260 | 9 | 4.5 | 5 | Bragadin,A | H |
| 3.705 | 830358 | 0.9 | 0.063 | R | 13.3 | 52 | | | 1 | Csukas,M | I |
| 3.705 | 830359 | 0.89 | 0.063 | R | 13.3 | 52 | | 6.2 | | Kosa-Kiss,A | J |
| 3.750 | 830360 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | K |
| 3.757 | 830361 | | 0.362 | N | 4.9 | 32 | 140 | 6.0 | 1 | Passalacqua,P | |
| 3.799 | 830362 | 0.48 | 0.15 | N | 5 | 25 | 10 | 6.0 | 2 | Merlin,J.-C | L |
| 3.862 | 830363 | 0.98 | 0.106 | R | 5.7 | 24 | 37 | 6.2 | 1 | Keszthelyi,S | |
| 3.976 | 830364 | 0.16 | 0.23 | R | 12 | 122,250,600 | | | 1 | O'Meara,S.J | G |

NOTE A A 9' across coma shows a strong intensity at the center; DC = 5. Mag. estimate using 10x50 binoculars is about 6.5 (Morris method).
NOTE B Distinct dark lane extending E, but offset to southern side of inner coma.
NOTE C City lights. Movement of comet definitely apparent. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D City lights.
NOTE E It see less brighter than NGC 2070 and less concentrate than 47 Tuc. [sic]
NOTE F Sky darkness (1-5): 4. Very transparent, dark clear skies. Halos at PA 70 deg. Streamers at PA 260 and at PA 270 deg. Rays at PA 73 deg. Gas tail at PA 270 deg. DC = 7.0. Tail was a little fan-shaped.
NOTE G (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE H Coma diameter 4.5 arc min. DC 1.
NOTE I Halo diameter: 13'; DC 7-8; tail at PA 67, 21'; tail at PA 105, 25'. (Duration not indicated. Time of observation is end time. Ed.) Schematic drawing.
NOTE J Features at PA 93 and PA 63. Schematic drawing. (Duration not indicated. Time of observation is end time. Ed.)
NOTE K (Duration not indicated. Time of observation is assumed to be start time. Additional drawing submitted made using 11x80 binoculars (2'/mm). Ed.)
NOTE L Tail at PA 102; jet at PA 206, then curved toward about PA 150. Large and bright "flake" north of the nucleus. Many diffuse jets. Parabolic hood eastward. Possible tail streamers.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.107 | 850314 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 10.00 | Kodak 2415 | | Y | O | 27/P | 1 | Crist,M | A |
| 3.130 | 850315 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 13.00 | Kodak 2415 | | Y | O | 28/P | 1 | Crist,M | A |
| 3.140 | 850316 | 0.050 | 4.0 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | | N | | 123/P | | Gianforte,J.S | B |
| 3.696 | 850317 | 1.000 | 5.6 | | 2.1 x 1.4 | 20.00 | Fomapan | 400/27 | N | O | 3/N | 1 | Zimnikoval,P | C |
| 3.751 | 850318 | 1.000 | 5.6 | | 2.1 x 1.4 | 20.00 | Fomapan | 400/27 | N | O | 4/N | 1 | Zimnikoval,P | C |
| 3.765 | 850319 | 0.135 | 3.2 | | 15.2 xl0.2 | 2.00 | Agfa-Pan Pro | 400/27 | N | M | 34/C | 1 | Trixler,F | |
| 3.768 | 850320 | 0.135 | 3.2 | | 15.2 xl0.2 | 4.00 | Agfa-Pan Pro | 400/27 | N | M | 36/C | 1 | Trixler,F | |
| 3.778 | 850321 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 1/P | | Jager,M | D |
| 3.789 | 850322 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 10.00 | Kodak 2415 | | Y | | 6/P | 1 | Conrad,R | E |
| 3.789 | 850323 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 2/P | | Jager,M | F |
| 3.796 | 850324 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 3/P | | Jager,M | D |
| 3.806 | 850325 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 4/P | | Jager,M | D |
| 3.815 | 850326 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 5/P | | Jager,M | D |
| 3.824 | 850327 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 6/P | | Jager,M | D |
| 3.846 | 850328 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 7.00 | Kodak 103a-F | | N | M | 16/P | 1 | Guarro,J | |
| 3.899 | 850329 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 10.00 | Ilford HP5 | 400/27 | N | O | 1/C | 1 | Paolinetti,R | G |
| 3.907 | 850330 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 10.00 | Ilford HP5 | 400/27 | N | O | 2/C | 1 | Paolinetti,R | G |
| 3.912 | 850331 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 2.00 | Ilford HP5 | 400/27 | N | O | 3/C | 1 | Paolinetti,R | G |
| 3.916 | 850332 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 4.00 | Ilford HP5 | 400/27 | N | O | 4/C | 1 | Paolinetti,R | G |
| 3.923 | 850333 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 8.00 | Ilford HP5 | 400/27 | N | O | 5/C | 1 | Paolinetti,R | G |

NOTE A Dew on corrector plate may have resulted in thin negatives. (Observer's image identifier is followed by suffix A. Ed.) Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE B (Observer's image identifier is 102-3. Observer listed emulsion speed as ASA 800. Ed.)
NOTE C Large format (6x6 cm) film used.
NOTE D Instrument is Schmidt camera.
NOTE E City lights interfered with the observation, Vienna, from room!
NOTE F Composite print of images 2 and 3 notes coma 40x45 arc min.; magnitude 5.0; tails three jets 4 deg. at PA 65, 160 arc min. at PA 62. [sic] Instrument is Schmidt camera.
NOTE G (Observer's image identifier is followed by suffix A. Ed.)

DATE: 4 DEC 1985

DATE: 4 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.021 | 812820 | 5.3 | M | 54 | 13.1 | 5 | | | 0.05 | B | | 7 | 5.8 | Y | 1 | DeYoung,J.A | |
| 4.052 | 812821 | 6.5 | M | 55 | | | | | 0.050 | B | | 10 | 5.5 | Y | 1 | Smith,A | |
| 4.081 | 812822 | 4.9 | S | 54 | | 3 | | 62 | 0.05 | B | | 20 | 4.0 | Y | 3 | da Silva,L.A.L | |
| 4.104 | 812823 | 6.2 | B | 54 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | |
| 4.115 | 812824 | 5.6 | M | 54 | 18.0 | 5 | | | 0.05 | B | | 12 | 6.4 | Y | 1 | Knight,S | |
| 4.139 | 812825 | 6.0 | B | 54 | 15 | 5 | | | 0.05 | B | | 7 | 6.0C | Y | 10 | Chmielewski,W | A |
| 4.151 | 812826 | 5.8 | M | 54 | 28 | 8 | 0.33 | 40 | 0.108 | N | 4.5 | 30 | 5.1 | Y | 1 | Ariail,R.B | |
| 4.1514 | 812827 | 6.4 | S | SAO | 15 | 6 | | | 0.152 | N | 8.0 | 76 | 5.4 | | 3 | Machholz,D | |
| 4.1542 | 812828 | 6.2 | S | SAO | 13 | 4 | | | 0.080 | B | | 20 | 5.4 | | 3 | Machholz,D | |
| 4.21 | 812829 | 4.7 | M | 54, 55 | 15 | 8 | | | 0.050 | R | | 8 | 6.5 | Y | 7 | Morris,C.S | |
| 4.215 | 812830 | 5.7 | B | 54 | | | | | | EY | | 1 | 6.3 | Y | 2 | Krisciunas,K | B |
| 4.23 | 812831 | 4.7 | M | 54, 55 | 15 | 7 | 0.93 | 70 | 0.080 | B | | 20 | 6.5 | Y | 7 | Morris,C.S | C |
| 4.233 | 812832 | 5.8 | M | 54 | 10 | 6 | | | 0.050 | B | | 7 | 5.3 | Y | 1 | Robertson,T | |
| 4.240 | 812833 | | | 54 | 8.6 | 6 | | | 0.15 | N | 8 | 68 | 5.3 | Y | 1 | Robertson,T | D |
| 4.25 | 812834 | | | | | | | | 0.256 | N | 4.5 | 45 | 6.5 | Y | 7 | Morris,C.S | E |
| 4.25 | 812835 | | | | | | | | 0.256 | N | 4.5 | 222 | 6.5 | Y | 7 | Morris,C.S | F |
| 4.253 | 812836 | 6.0 | B | 54 | 15 | 3 | | | 0.050 | B | | 10 | 5.5C | Y | 1 | Stapleton,J | G |
| 4.257 | 812837 | | | 54 | 15 | 6 | 0.67 | 300 | 0.254 | N | 5.6 | 157 | 5.5C | Y | 1 | Stapleton,J | H |
| 4.27 | 812838 | 5.5 | M | 54 | | | 1 | 95 | 0.05 | B | | 10 | 6 | Y | 3 | Hale,A | |
| 4.27 | 812839 | 5.4 | B | 54 | | | | | | EY | | | 6 | Y | 3 | Hale,A | |
| 4.368 | 812840 | 5.2 | M | 54 | 19 | 7 | 0.5 | 290 | 0.05 | B | | 10 | 5.5 | Y | 1 | Fabre,R | I |
| 4.43 | 812841 | 5.9 | B | M | 9 | 5 | | | 0.21 | N | | 80 | | | | Knyazyuk,N | |
| 4.480 | 812842 | | | 54 | 4.4 | 6 | 0.08 | 90 | 0.32 | N | 8 | 150 | | Y | 1 | Tregaskis,T.B | J |
| 4.484 | 812843 | | | 54 | 5.9 | 5 | | 90 | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | K |
| 4.492 | 812844 | 5.7 | S | 54 | 12 | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | L |
| 4.515 | 812845 | 5.9 | M | 78 | 12 | 7 | 0.33 | 75 | 0.08 | B | | 11 | 5 | N | 1 | Mitsuma,S | |
| 4.60 | 812846 | 6.1 | B | E | 15 | | | | 0.05 | B | | 7 | | | | Zagaynov,V.A | |
| 4.60 | 812847 | 5.8 | B | E | 14 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.60 | 812848 | 5.6 | B | E | 17 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.60 | 812849 | 6.0 | S | E | 15 | | | | 0.05 | R | 8 | 20 | | | | Zagaynov,V.A | |
| 4.60 | 812850 | 6.0 | B | E | 14 | | | | 0.05 | R | 8 | 20 | | | | Zagaynov,V.A | |
| 4.62 | 812851 | 6.0 | B | E | 14 | | | | 0.05 | R | 8 | 20 | | | | Zagaynov,V.A | |
| 4.62 | 812852 | 5.8 | B | E | 17 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.62 | 812853 | 5.8 | B | E | 14 | | | | 0.05 | R | 8 | 20 | | | | Zagaynov,V.A | |
| 4.62 | 812854 | 5.7 | B | E | 17 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.63 | 812855 | 5.7 | B | E | 16 | | | | 0.05 | R | 8 | 20 | | | | Zagaynov,V.A | |
| 4.64 | 812856 | 5.9 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.64 | 812857 | 6.2 | B | M | 19 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 4.646 | 812858 | 5.8 | M | 54 | 20 | 6 | | | 0.035 | B | | 7 | 4 | Y | 1 | Watanabe,A | |
| 4.67 | 812859 | 5.8 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.694 | 812860 | 6.2 | M | CZ | 25 | 4 | | | 0.055 | R | | 12 | 5.8 | Y | 1 | Silhan,J | |
| 4.701 | 812861 | 6.0 | B | 54 | 7 | 7 | | | 0.080 | R | 6.3 | 50 | | Y | 1 | Pfitzner,E | M |
| 4.705 | 812862 | 5.4 | M | AAVSO | 16 | 8 | 0.5 | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | N |
| 4.715 | 812863 | 6.1: | B | SAO | | | | | 0.125 | R | 6 | 35 | 3.5 | Y | 1 | Guthier,O | |
| 4.722 | 812864 | 6.5 | B | 54 | 4.9 | 6 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Bretschneider,H | |
| 4.729 | 812865 | 5.8 | B | IHW,SAO | 8.8 | 5 | | | 0.080 | B | | 20 | 3.8 | Y | 1 | Guthier,O | O |
| 4.733 | 812866 | 6.3 | B | 54 | 6 | 5 | | | 0.113 | N | 8 | 22 | 5.0 | Y | 1 | Schambeck,C.M | |
| 4.74 | 812867 | 4.8 | V | 54 | 70 | 2 | 1.50 | 73 | | EY | | | 6.5 | Y | 2 | Merlin,J.-C | |
| 4.743 | 812868 | 7.3 | S | 54 | 4.1 | 5 | | | 0.090 | R | 14 | 46 | 4.3 | Y | 1 | Hirth,G | P |
| 4.750 | 812869 | 5 : | | 54 | 20 | 7 | | | 0.050 | B | | 7 | 4.5 | Y | 1 | Linder,J | Q |
| 4.750 | 812870 | | | | 20 | 3 | 3 | 80 | 0.04 | B | | 8 | | Y | 1 | Morrisby,A | R |
| 4.751 | 812871 | 6.0 | M | 54 | | | | | 0.030 | B | | 8 | 4.5C | Y | 1 | Villa,M | |
| 4.753 | 812872 | 5.6 | B | 54 | 19.3 | 4 | | | 0.03 | B | | 8 | 6.0 | Y | 1 | Hasubick,W | |
| 4.753 | 812873 | 5.5 | B | 54 | | 4 | | | | EY | | | 6.0 | Y | 1 | Hasubick,W | |
| 4.757 | 812874 | | | 54 | 8 | 5 | | | 0.030 | B | | 8 | 4.5C | Y | 1 | Villa,M | |
| 4.759 | 812875 | 5.8 | B | 54 | 10.8 | 5 | | | 0.056 | B | | 8 | 6.0 | Y | 1 | Koch,V | |
| 4.760 | 812876 | 6.3 | B | 54 | 9 | 5 | | | 0.060 | R | 8 | 15 | 5.5 | Y | 1 | Schambeck,C.M | |
| 4.764 | 812877 | 5.4 | B | CZ | | 4 | | | 0.08 | B | | 10 | 5.7 | N | 1 | Janecek,V | |
| 4.764 | 812878 | 6.2 | M | CZ | 14 | 5 | | | 0.10 | B | | 25 | 5.3 | Y | 1 | Hajek,P | |
| 4.764 | 812879 | 5.3 | B | CZ | | 4 | | | 0.08 | B | | 10 | 5.7 | N | 1 | Kral,M | |
| 4.766 | 812880 | | | 54 | 15 | | | | 0.114 | N | 8.7 | 100 | | Y | 1 | Rodriguez C.,J.A | |
| 4.771 | 812881 | 5.8 | M | CZ | 20 | 7 | | | 0.080 | B | | 10 | 4.3 | Y | 1 | Bilek,V | S |
| 4.771 | 812882 | 6.1 | M | CZ | 30 | 4 | 1 | 80 | 0.055 | R | | 12 | 5.9 | Y | 1 | Silhan,J | |
| 4.772 | 812883 | 5.8 | M | 54 | 20 | 6 | | | 0.25 | N | 5.2 | 50 | 6.0C | Y | 1 | Gonzalez,A | T |
| 4.778 | 812884 | 5.8 | M | 54 | 20 | 6 | | | 0.25 | N | 5.2 | 100 | 6.0C | Y | 1 | Gonzalez,A | U |
| 4.781 | 812885 | 5.7 | B | 54 | 16.5 | | | | 0.050 | B | | 7 | 6.5 | Y | 1 | Bohme,D | |
| 4.785 | 812886 | 5.7 | M | 54 | 16 | 6 | | | 0.089 | R | 5.5 | 18 | 5.7 | N | 1 | Ventura,F | V |
| 4.79 | 812887 | 5.7 | B | AA | 18 | 5 | | | 0.050 | B | | 7 | 5.0 | N | | Schmeer,P | |
| 4.79 | 812888 | 5.5 | B | 54 | 10 | 5 | | | 0.056 | B | | 8 | 4.5 | Y | 1 | Kraling,W | |
| 4.790 | 812889 | 6.1 | B | | | 3 | | | 0.080 | R | 6.2 | 12 | 5.0 | Y | 1 | Lieder,F | |
| 4.792 | 812890 | 6.3 | S | CZ | 9 | 3 | | 10 | 0.05 | R | 10 | 13 | 6.0 | Y | 1 | Polak,J | |
| 4.792 | 812891 | 5.7 | B | 54 | 10.2 | 7 | 0.23 | 70 | 0.050 | B | | 10 | 5.5 | Y | 1 | Rossi,L | |
| 4.794 | 812892 | | B | 54 | 7.3 | 5 | | | 0.080 | B | | 20 | 6.0 | Y | 1 | Koch,B.O | |
| 4.794 | 812893 | 5.6 | B | 54 | 10.8 | 5 | | | 0.056 | B | | 8 | 6.0 | Y | 1 | Koch,B.O | |
| 4.799 | 812894 | | B | 54 | 13.8 | 6 | | | 0.165 | N | 8.7 | 57 | 6.5 | Y | 1 | Bohme,D | |
| 4.80 | 812895 | | | 54 | 10 | 5 | 0.33 | 110 | 0.10 | B | | 14 | 4.5 | Y | 1 | Kraling,W | W |
| 4.806 | 812896 | 5 | | 54 | 15 | 4 | | | 0.050 | B | | 10 | 3.5 | N | 1 | Marekfia,G | X |
| 4.812 | 812897 | | | | 5.5 | 4 | | | 0.130 | N | 8 | 40 | 5.0 | Y | 1 | Lieder,F | |
| 4.813 | 812898 | 4.9 | | 54 | 13.5 | 9 | | | 0.081 | B | | 11 | 4.5 | Y | 1 | Sternwarte Hof | X |
| 4.816 | 812899 | 5.8 | M | CZ | 30 | 5 | 2 | 70 | 0.05 | B | | 7 | 5.9 | Y | 1 | Silhan,J | |
| 4.82 | 812900 | | | 54 | 8 | 4 | 0.33 | | 0.200 | SC | 10 | 80 | 4.5 | Y | 1 | Kraling,W | Y |
| 4.823 | 812901 | 4.9 | M | 54 | 25 | 5 | 1.75 | | 0.08 | B | | 15 | | Y | 2 | Gallego,J | Z |
| 4.823 | 812902 | 6.2 | | | | | | | 0.080 | B | | 15 | 3 | Y | 1 | Nagele,A | a |
| 4.83 | 812903 | 5.9 | M | AA | 10 | 7 | | | 0.106 | R | 5.7 | 24 | | | | Keszthelyi,S | b |
| 4.833 | 812904 | 5.7 | | 54 | 6 | 5 | | | 0.114 | N | 7.9 | 30 | 4 | | 1 | Kerber,F | c |
| 4.840 | 812905 | 5.6 | M | 54 | 20 | 6 | 0.7 | 78 | 0.05 | B | | 12 | | Y | 1 | Tanti,T | |
| 4.854 | 812906 | 4.9 | B | 54 | 20 | | 1.2 | | 0.08 | B | | 15 | | Y | 1 | Losada,R | |
| 4.86 | 812907 | 5.7 | | | 13 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | d |
| 4.86 | 812908 | 5.0: | B | 54 | 20 | 6 | | | 0.050 | B | | 10 | 4.5 | N | 1 | Wagner,G | |
| 4.875 | 812909 | 6.0 | B | | 12 | 5 | 0.42 | 74 | 0.07 | B | | 20 | 5.5 | Y | 1 | Filimon,E | |
| 4.878 | 812910 | 5.0 | B | 54 | 10 | | 0.75 | | 0.256 | N | 5.6 | 44 | | Y | 2 | Pedraz,S | |
| 4.88 | 812911 | 5.5 | M | 54 | 14 | 5 | | | 0.05 | B | | 10 | 4.5 | N | 1 | Bottger,B | |
| 4.892 | 812912 | 6.5 | B | 54 | 9 | 3 | | | 0.035 | B | | 7 | 4.0C | N | 1 | Sciezor,T | e |
| 4.892 | 812913 | 6.3 | M | 54 | 14 | 3 | 0.40 | 300 | 0.050 | B | | 10 | 4.5C | Y | 1 | Lozano,L | |
| 4.896 | 812914 | 5.7 | B | 54 | | | | | 0.050 | B | | 10 | 5.0 | Y | 1 | Trebacz,A | |
| 4.899 | 812915 | 6.0 | M | 54 | 11 | 6 | | | 0.08 | B | | 10 | 5.5C | N | 3 | Melandri,F | |
| 4.917 | 812916 | 8.0 | B | 54 | 5.0 | 8 | | | 0.400 | N | 3.6 | 40 | 4.5 | Y | 2 | Koschny,D | f |
| 4.962 | 812917 | 6.3 | S | 54 | 3.7 | 4 | | | 0.063 | R | 13.3 | 34 | 4.6C | N | 1 | Skjaeraasen,O | g |

NOTE A Naked eye object.
NOTE B Comparison stars 55, 60.

NOTE C Coma was irregular with bulge toward the south. Tail in PA 114 only suspected.
NOTE D Filar micrometer used for coma diameter.
NOTE E m2 = 9.2.
NOTE F Central condensation was "bumpy" with activity suspected in PAs 0: and 233:.
NOTE G In Psc.
NOTE H Faint tail, bright center. (PA value may have been incorrectly determined. Ed.)
NOTE I (PA value appears to be measured incorrectly. Ed.)
NOTE J Starlike in centre. [sic] Tail length doubtful; PA approximate. (Observer gave limit as approximately 14.5. Ed.)
NOTE K Doubtful tail short and wide; PA approximate. Clear bright sky. (Observer gave limit as approximately 12.5. Ed.)
NOTE L (Observer gave limit as approximately 9.5. Ed.)
NOTE M Haze. (Observer gave limit as 10.5. Ed.)
NOTE N Tail PA 100; 70 deg. Naked eye.
NOTE O Beginnings of tail. (Translated by IHW staff. Ed.)
NOTE P Misty, humid.
NOTE Q Some hazy or fog. [sic]
NOTE R Cirrus.
NOTE S Fog.
NOTE T See drawing 1.
NOTE U Elliptical coma. See drawing 2.
NOTE V Bright condensation is slightly west of centre of the coma. A wide tail about 40' long is suspected. It appears as a very diffuse glow in the general E-SE direction.
NOTE W Type I. PA approximate.
NOTE X (Observer indicated "A" method [Argelander?]. Ed.)
NOTE Y Type I.
NOTE Z Plasma tail.
NOTE a (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are SAO 109224, 91971.
NOTE b + 7x50 B and 9 mag. nucleus + naked eye. [sic]
NOTE c Variable observing conditions. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE d (Observer gave limit as 8.5. Ed.)
NOTE e Slightly foggy.
NOTE f Nucleus elliptic, 60 arc sec. x 20 arc sec.
NOTE g Due to severe light pollution, just the brighter, inner part of the coma must have been visible.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.067 | 830365 | 0.12 | 0.200 | SC | 10 | 229,333 | 13 | 4 | 1 | Gelinas,M.A | A |
| 4.219 | 830366 | 0.10 | 0.20 | SC | 10 | 167,500 | 20 | 4.8 | 1 | Ashley,J.B | B |
| 4.245 | 830367 | 0.41 | 0.15 | N | 8 | 48 | 14 | 5.3 | 1 | Robertson,T | C |
| 4.373 | 830368 | 8 | 0.44 | N | 4.5 | 90,222 | 15 | 5.5 | 1 | Fabre,R | D |
| 4.481 | 830369 | 0.12 | 0.318 | N | 8 | 150 | 1 | | 1 | Tregaskis,T.B | E |
| 4.738 | 830370 | 0.9 | 0.063 | R | 13.3 | 52 | | | 1 | Csukas,M | F |
| 4.740 | 830371 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | G |
| 4.771 | 830372 | 0.07 | 0.40 | N | 5 | 81,254,407 | 20 | 6.5 | 2 | Merlin,J.-C | H |
| 4.772 | 830373 | | 0.250 | N | 5.2 | 50 | | | 1 | Gonzalez,A | I |
| 4.778 | 830374 | | 0.250 | N | 5.2 | 100 | | 6.0 | 1 | Gonzalez,A | J |
| 4.823 | 830375 | | 0.080 | B | | 15 | | | 2 | Gallego,J | K |
| 4.832 | 830376 | 0.93 | 0.106 | R | 5.7 | 24 | 16 | 6.0 | 1 | Keszthelyi,S | L |
| 4.854 | 830377 | | 0.080 | B | | 15 | | | 5 | Losada,R | M |
| 4.873 | 830378 | 2.6 | 0.08 | B | | 15 | 25 | 6.0 | 2 | Cardiel,N | N |
| 4.878 | 830379 | | 0.256 | N | 5.6 | 44 | | | 2 | Pedraz,S | O |
| 4.965 | 830380 | 0.6 | 0.063 | R | 13.3 | 34, 53 | 10 | 4.0 | 1 | Skjaeraasen,O | P |

NOTE A Star with visual magnitude estimated to be 9 was at PA 180 at 0137+/-2 min. Distance about 15" from the middle of central condensation. Magnitude extinction 1 to 1.5 mag. but no occultation.
NOTE B No specific structure could be seen. However, a very slight central condensation was apparent at 167x. The degree of condensation was less pronounced when observing at 500x. The field star was plotted at the start of the observation. The high humidity of 75% RH reduced the contrast considerably.
NOTE C This evening is the first that I have been able to see other than an oval shaped coma - fan-shaped measured by filar micrometer at 8.6' and central condensation at 1.2'.
NOTE D Note that the north portion of the semi latus rectum (P1) is extended compared to the southern portion (P2).
NOTE E Possible faint tail approximately PA 90, about 4' to 5' wide, about 5' long. Limit approximately mag. 14.5.
NOTE F Halo diameter: 12'; DC = 8; tail at PA 38, 20' length; tail at PA 95, 25' length. (Duration not indicated. Time of observation is end time. Ed.) Schematic drawing.
NOTE G (Duration not indicated. Time of observation is assumed to be start time. Additional drawing submitted made using 11x80 binoculars (2'/mm). Ed.)
NOTE H Jet at PA 9; tail at PA 73; tail at PA 83, straight, narrow and bright; jet at PA 95, tail streamer; jet at PA 237, then curved northward, pretty faint; jet at PA 297, then curved northward.
NOTE I The inner coma appears mostly stellar. (Observation made with a so-so seeing and some clouds.) (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE J Elliptical coma. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE K Visible at naked eye [sic] as a "diffuse" star of 5th mag. Narrow and "contrasted" plasma tail asymmetrical coma. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE L Coma "bump" at PA 170. (Translated by IHW staff. Ed.)
NOTE M The comet is clearly visible at naked eye as a faint star of about 5th magnitude. With the Newt. 25.6 cm, the plasma tail appears more diffuse and little, but inside the coma, the central condensation is definitively stellar. The incipient plasma tail is narrow and diffuse, growing from the circular coma. The south semi latus rectum (1) is brighter than its north parent. [sic] (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE N Tail long: 1 deg. 45' at PA 70. Comet visible at naked eye (not the tail). [sic] Tail very faint.
NOTE O Field: 1 deg. Visible at naked eye! [sic] (Duration not indicated. Time of observation is assumed to be end time. Ed.)
NOTE P Field: 1 deg. 9'. The head of the comet was completely circular, the decreases of the brightness outwards from the "nucleus" were gradual and smooth, and no particular details were observed. Severe light pollution affected the observation by making the background sky brighter. Much because of the bright background sky, the contrast in the field of view was low and the head appeared faint and not too easy to catch sight of.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.026 | 850334 | 0.200 | 4.5 | | 10.3 x 6.9 | 10.00 | Ektachr.400 | | N | T | 1/S | 1 | Priester,D.C | A |
| 4.045 | 850335 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | S | 1/P | 1 | Dilsizian,R | B |
| 4.080 | 850336 | 0.058 | 1.4 | | 34.5 x23.4 | 5.00 | Ektachr.400 | | N | T | 6/S | 1 | Priester,D.C | A |
| 4.083 | 850337 | 0.058 | 1.4 | | 34.5 x23.4 | 2.50 | Ektachr.400 | | N | T | 7/S | 1 | Priester,D.C | A |
| 4.090 | 850338 | 0.135 | 2.8 | | 15.2 x10.2 | 6.00 | Kodak Tri-X | 400/ | N | | 2/P | 2 | Tatum,R | |
| 4.240 | 850339 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 30.00 | Kodak Tri-X | | N | M | 9/S | 1 | Webb,R | C |
| 4.469 | 850340 | 0.135 | 3.5 | | 15.2 x10.2 | 5.00 | Fujichrome | 400/ | N | X | 2/S | 1 | Tregaskis,T.B | |
| 4.733 | 850341 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 30.00 | 3M crt 4 | | Y | O | 2/C | 2 | Cimatti,A | D |
| 4.792 | 850342 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 30.00 | Kodak 103a-F | | N | O | 2/C | 2 | Cimatti,A | E |
| 4.803 | 850343 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 25.00 | Agfa 910 P | 50/18 | N | O | 1/P | | Jager,M | F |
| 4.896 | 850344 | 0.100 | 2.9 | | 20.4 x13.7 | 20.00 | Kodak Tri-X | 400/ | N | T | 136/P | 1 | Hernschier,W | G |

NOTE A Push processed to 800 ASA.
NOTE B Exposures limited below 5 minutes to allow for stellar guiding with a minimum of "proper motion" distortion in resolution.
NOTE C Obvious ion tail on negative (first observation for this series). Inner coma and starlike central condensation visible on

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all original negatives. Film push processed slightly. (Observer indicated C-type guiding as well as M. Ed.)
NOTE D Large format film used.
NOTE E Haze. Red Wratten 25 filter used.
NOTE F Magnitude 5.0. Film is ortho. Instrument is Schmidt camera.
NOTE G Lumicon Deep Sky filter used. (Observer's image identifier is followed by suffix "/85".) City lights interfered with the observation.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.074 | 870101 | 45P-O | CL | 0.152 | 2.0 | | 8.00 | Kodak 2415 | | Y | S | 220/P | 1 | Minton,R.B | A |

NOTE A (Prints submitted are composites of two 4 min. exposures separated by 2 min. Observer's image identifiers are K2-20 and K2-21. Ed.)

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DATE: 5 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | EY | | | | | | Bortle,J.E | A |
| 5.05 | 812918 | 4.7 | S | AAVSO | 30 | 3 | | | | | | | | | | | |
| 5.05 | 812919 | 4.8 | S | AAVSO | 17 | 6 | 2.0 | 70 | 0.050 | B | | 10 | | | | Bortle,J.E | B |
| 5.05 | 812920 | | | | 7.5 | 8 | 1.0 | 70 | 0.317 | N | 6 | 55 | | | | Bortle,J.E | C |
| 5.069 | 812921 | 4.8 | B | 54 | | 3 | | | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 5.114 | 812922 | 5.4 | B | 54 | 15 | 6 | 0.17 | 95 | 0.035 | B | | 7 | 4.5 | Y | 1 | Stephan,C | D |
| 5.12 | 812923 | 4.8 | S | AA | 20 | 5 | | | 0.050 | B | | 7 | | | | Green,D.W.E | A |
| 5.15 | 812924 | | | 54 | 15 | 7 | 0.75 | 70 | 0.32 | N | 4 | 40 | 7.0 | Y | 1 | Keen,R | |
| 5.16 | 812925 | 4.7 | B | 78 | 30 | 3 | | | | EY | | | 7.0 | Y | 1 | Keen,R | |
| 5.16 | 812926 | 5.2 | | SKY&TEL | 15.0 | 1 | | | | EY | | | 6.0 | Y | 1 | McBride,P | |
| 5.17 | 812927 | 5.3 | | 54 | 15 | 5 | 1.0 | 70 | 0.040 | B | | 8 | 7.0 | Y | 1 | Keen,R | E |
| 5.18 | 812928 | | | 54 | 15 | 6 | 1.7 | 70 | 0.080 | B | | 11 | 7.0 | Y | 1 | Keen,R | |
| 5.19 | 812929 | 6.3 | S | 54 | 8.8 | 5 | | | 0.203 | SC | 10 | 51 | 6.4 | Y | 1 | Sanchez,A | F |
| 5.236 | 812930 | 5.7 | B | 54 | | | | | | EY | | 1 | 6.3 | Y | 2 | Kriaciunas,K | G |
| 5.2444 | 812931 | 5.7 | S | SAO | 19 14 | 5 | | | 0.080 | B | | 20 | 5.8 | | 3 | Machholz,D | H |
| 5.403 | 812932 | 6.0 | S | 54 | 10 | 5 | | | 0.153 | N | 8.6 | 33 | 3.0 | Y | 1 | Iwaki,Y | |
| 5.41 | 812933 | 5.9 | B | M | 9 | | | | 0.12 | N | | 40 | | | | Knyazyuk,N | |
| 5.414 | 812934 | 6.0 | M | 54 | 5.5 | 5 | | | 0.10 | N | 10 | 55 | 3.5C | Y | 1 | Kato,T | |
| 5.419 | 812935 | 5.5 | M | 54 | 14 | 5 | | | 0.030 | B | | 8 | 3.5C | Y | 1 | Kato,T | |
| 5.42 | 812936 | 6.0 | S | 54 | | 2 | | | 0.050 | B | | 7 | 5.5C | Y | 1 | Matchett,V | |
| 5.44 | 812937 | 6.3 | B | 54 | 4.8 | 6 | | | 0.20 | N | 5 | 36 | | Y | 1 | Curtis,D | I |
| 5.44 | 812938 | 4.7 | S | 54, 55 | | | | | | EY | | | 6 | Y | 1 | Seargent,D | |
| 5.44 | 812939 | | | | 18 | 7 | | | 0.08 | B | | 15 | | | | Seargent,D | |
| 5.46 | 812940 | 5.9 | B | | 15 | 6 | | | 0.05 | B | | 10 | 4.5 | N | 1 | Uda,K | |
| 5.462 | 812941 | 6.5 | B | 54 | 15 | 4 | | | 0.12 | N | 6 | 40 | 4.5C | Y | 1 | Hayashi,H | |
| 5.462 | 812942 | 5.6 | B | 54 | | | | | 0.05 | B | | 7 | | | | Hayashi,H | |
| 5.487 | 812943 | | | 54 | 12.3 | 5 | | 90 | 0.32 | N | 8 | 150 | | Y | 1 | Tregaskis,T.B | J |
| 5.491 | 812944 | 5.7 | S | 54 | 8.6 | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | K |
| 5.51 | 812945 | 5.7 | S | 54 | | | | | 0.050 | B | | 7 | | Y | | Jones,A | L |
| 5.51 | 812946 | 6.1 | S | | 20 | 5 | | | 0.08 | B | | 11 | 3.0 | N | 1 | Momose,M | |
| 5.545 | 812947 | 6.2 | B | 54 | | | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Date,M | |
| 5.575 | 812948 | 5.8 | M | 54, 78 | 13 | 6 | | | 0.08 | B | | 11 | 4.5C | N | 1 | Mitsuma,S | |
| 5.58 | 812949 | 5.8 | B | M | 13 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 5.58 | 812950 | 5.0 | V | M | | | | | | EY | | | | | | Poroshin,A | |
| 5.587 | 812951 | 5.5 | M | 54 | 25 | 5 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 5.59 | 812952 | 5.6 | M | 54 | | 4 | | | 0.05 | B | | 7 | 4.0 | Y | 2 | Suzuki,K | |
| 5.59 | 812953 | 5.7 | S | 54 | 15 | 6 | | | 0.07 | B | | 10 | 4.5 | Y | 1 | Yasuki,M | |
| 5.597 | 812954 | 5.9 | B | 54 | 15 | 5 | | | 0.060 | B | | 10 | 3.5 | Y | 1 | Moriya,M | M |
| 5.60 | 812955 | 5.8 | B | AA | 3 | 5 | | | 0.06 | B | | 20 | | Y | 1 | Campbell,R.N | N |
| 5.604 | 812956 | 5.9 | S | 54 | 22 | 5 | 0.50 | 90 | 0.07 | B | | 10 | 3.5 | Y | 1 | Kobayashi,J | |
| 5.63 | 812957 | 6.0 | B | 54 | | 6 | | | 0.15 | N | 8.6 | 41 | 4.0 | Y | 4 | Makino,J | |
| 5.63 | 812958 | 5.8 | B | E | 15 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.64 | 812959 | 5.9 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.656 | 812960 | 6.1 | M | 54 | 7 | 7 | | | 0.060 | R | 15 | 45 | 2.8C | Y | 1 | Purvinskis,R | |
| 5.66 | 812961 | 5.8 | B | E | 17 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.68 | 812962 | 5.6 | B | E | 17 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.701 | 812963 | 6.0 | B | 54 | 12 | 7 | | | 0.080 | R | 6.3 | 50 | | Y | 1 | Pfitzner,E | O |
| 5.708 | 812964 | 5.3 | B | IHW,SAO | | | | | 0.080 | B | | 20 | 3.5 | Y | 1 | Guthier,O | P |
| 5.71 | 812965 | 5.7 | B | E | 17 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.71 | 812966 | 6.2 | B | M | | 7 | 0.1 | 110 | 0.14 | R | 14 | 200 | | | | Shilov,S | Q |
| 5.712 | 812967 | 5.3 | M | AAVSO | 17 | 8 | 0.5 | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | R |
| 5.715 | 812968 | 5.9 | M | 78 | 6 | 3 | | | 0.064 | R | 12.5 | 31 | 4.5C | Y | 1 | Szymocha,M | |
| 5.719 | 812969 | 5.6 | B | 54 | 19.3 | 4 | | | 0.03 | B | | 8 | 6.0 | Y | 1 | Hasubick,W | |
| 5.719 | 812970 | 5.7 | B | 54 | 17.3 | 4 | | | 0.10 | B | | 14 | 6.0 | Y | 1 | Hasubick,W | |
| 5.723 | 812971 | 5.9 | | 54 | | | | | 0.030 | B | | 8 | | | 1 | Ratz,M | |
| 5.729 | 812972 | 5.8 | | 54 | 8 | 6 | | | 0.08 | B | | 15 | 4.2 | Y | 1 | Dietrich,M | S |
| 5.729 | 812973 | 6.3 | M | 54 | 25 | 4 | | | 0.050 | B | | 10 | 5.3C | Y | 1 | Honko,M | |
| 5.729 | 812974 | 6.3 | M | 54 | 20 | 4 | | | 0.050 | B | | 10 | 5.3C | Y | 2 | Kosinski,J | |
| 5.729 | 812975 | | | 54 | 8 | 2 | | | 0.064 | R | 6.3 | 20 | 3.0C | N | 1 | Maciejewski,W | |
| 5.729 | 812976 | 5.4 | | 54 | 3 | 5 | | | 0.114 | N | 7.9 | 30 | 3.5 | | 1 | Kerber,F | T |
| 5.729 | 812977 | 5.8 | | 54 | | | | | 0.030 | B | | 8 | | | 1 | Ratz,K | |
| 5.729 | 812978 | 5.3 | B | 54 | 5.1 | 4 | | | 0.080 | R | 15 | 39 | 5.1C | Y | 1 | Szulc,M | |
| 5.738 | 812979 | 5.6 | B | 54 | 30 | 7 | | | 0.065 | B | | 20 | 6.0 | Y | 1 | McBain,J | U |
| 5.74 | 812980 | 5.0: | B | 54 | 20 | 7 | | | 0.050 | B | | 10 | 4.5 | N | 1 | Wagner,G | |
| 5.740 | 812981 | 5.8 | | 54 | 10 | 5 | | | 0.100 | B | | 14 | 5.0 | Y | 2 | Weissferdt,F | V |
| 5.742 | 812982 | 4.9 | S | 54 | 18 | 7 | 1.5 | 80 | 0.152 | N | 5 | 44 | 4.8 | Y | 2 | Moeller,M | W |
| 5.749 | 812983 | 4.5 | S | 54 | 26 | 7 | 1 | 80 | 0.050 | B | | 7 | 4.8 | Y | 2 | Moeller,M | X |
| 5.75 | 812984 | 5.7 | B | AA | 17 | 6 | | | 0.050 | B | | 7 | 5.0 | N | | Schmeer,P | |
| 5.750 | 812985 | 5.6 | B | 54 | 17 | 4 | | | 0.050 | B | | 10 | 5.5 | Y | 1 | Kaila,K | Y |
| 5.75 | 812986 | 6.0 | | VAS 160 | 6 | 5 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Germann,R | |
| 5.750 | 812987 | | | | | 6 | | | 0.150 | N | 5 | 30 | 5.5 | | 1 | Kaila,K | Z |
| 5.75 | 812988 | 6.4 | B | DCS 5B | 12 | 8 | | | 0.050 | B | | 10 | 4.5C | N | 1 | van Munster,T | |
| 5.756 | 812989 | 4.9 | S | 55 | 21.0 | 7 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Hurst,G.M | |
| 5.760 | 812990 | 5.7 | B | 54 | 20 | 3 | 2 | 70 | 0.04 | B | | 8 | | Y | 1 | Morrisby,A | a |
| 5.77 | 812991 | 5.7 | B | M | 6 | 5 | | | 0.07 | N | 8 | 33 | | | | Shitikov,A | |
| 5.771 | 812992 | 6.3 | B | | | 4 | | | 0.050 | B | | 10 | CM | Y | 1 | Linke,H | |
| 5.790 | 812993 | 5.8 | B | | | 3 | | | 0.080 | R | 6.2 | 12 | 5.5 | Y | 1 | Lieder,F | |
| 5.792 | 812994 | 5.5 | B | 54 | 20 | 5 | 0.17 | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | b |
| 5.792 | 812995 | 5.8 | | | | | | | 0.080 | B | | 15 | 3 | Y | 1 | Nagele,A | c |
| 5.792 | 812996 | 5.7 | B | 78 | | 4 | | | 0.08 | B | | 10 | 4.5C | Y | 1 | Paradowski,M | |
| 5.792 | 812997 | 5.0 | B | 54 | 35 25 | 5 | | | 0.06 | B | | 15 | 5.5 | Y | 2 | Vincent,J | d |
| 5.793 | 812998 | 5.3 | B | 54 | 30 20 | 5 | | | 0.22 | N | 4 | 35 | 5.5 | Y | 2 | Vincent,J | e |
| 5.799 | 812999 | 6.0 | M | 54 | 9 | 4 | | | 0.07 | B | | 16 | 4.8C | N | 1 | Taylor,M.D | f |
| 5.806 | 813000 | 4.7 | | 54 | 24 20 | 8 | | | 0.081 | B | | 11 | 6 | Y | 1 | Sternwarte Hof | S |
| 5.812 | 813001 | 5.8 | B | | 14 | | | | 0.030 | B | | 8 | 5.0 | Y | 2 | Kellner,A | |
| 5.813 | 813002 | 6.2 | S | CZ | 10 | 4 | | | 0.05 | R | 10 | 13 | 6.0 | Y | 1 | Polak,J | |
| 5.819 | 813003 | 6.1 | B | | 3 | 3 | 0.1 | | 0.040 | R | 9 | 15 | 5.0C | Y | 1 | Winkler,R | |
| 5.820 | 813004 | 5.1 | B | 54 | 20 | 7 | | | 0.20 | SC | 10 | 117 | 5.5 | Y | 1 | Ward,A | g |
| 5.82 | 813005 | 6.0 | S | 54 | | | | | 0.050 | B | | 7 | 5.5 | Y | 1 | Spalding,G.H | |
| 5.823 | 813006 | 5.5 | S | | 12 | 5 | | | 0.050 | B | | 16 | 4.4 | Y | 1 | Nolle,M | |
| 5.830 | 813007 | | | | 6 | 4 | | | 0.130 | N | 8 | 40 | 5.5 | Y | 1 | Lieder,F | |
| 5.833 | 813008 | 7.1 | M | CZ | 10 | | | | 0.05 | B | | 7 | 4.5C | Y | 1 | Kourimsky,M | |
| 5.833 | 813009 | 5.7 | B | 54 | | 4 | | | 0.090 | N | 7.2 | 26 | 5.5 | Y | 1 | Vohla,F | |
| 5.839 | 813010 | 4.8 | B | 54 | 15 | 6 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Ward,A | g |
| 5.840 | 813011 | 5.8 | M | 54 | 18 15 | 6 | 1.9 | 72 | 0.08 | B | | 11 | 5.9 | Y | 1 | Fleet,R.W | h |
| 5.84 | 813012 | 5.8 | M | AA | 12 | 6 | | | 0.106 | R | 5.7 | 24 | | | | Keszthelyi,S | i |
| 5.840 | 813013 | 5.7 | M | 54 | 19 | 6 | | | 0.089 | R | 5.5 | 18 | 5.7 | N | 1 | Ventura,F | j |
| 5.843 | 813014 | 5.5 | B | | 14 | 5 | 0.33 | 74 | 0.07 | B | | 20 | 6.0 | Y | 1 | Emrich,G | |
| 5.843 | 813015 | 5.5 | B | | 19 | 5 | | | 0.03 | B | | 8 | 6.0 | Y | 1 | Filimon,E | |
| 5.844 | 813016 | 5.5 | | 54 | | 9 | | | | EY | | | 5.9 | Y | 1 | Fleet,R.W | |
| 5.854 | 813017 | 5.0 | | | 40 | 5 | | | 0.080 | B | | 15 | 5.0 | Y | 3 | Lucius,D | k |
| 5.86 | 813018 | 6.2 | M | 54 | 15 12 | 6 | | | 0.075 | R | 16 | 50 | 5.8 | Y | 1 | Fleet,R.W | |

DATE: 5 DEC 1985

DATE: 5 DEC 1985

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.865 | 813019 | 6.4 | B | | 5 | 5 | | | 0.200 | N | 7.2 | 36 | 5.0 | Y | 1 | Lipski,P | l |
| 5.868 | 813020 | 6.2 | B | 54 | 12 | 5 | | | 0.113 | N | 8 | 22 | 6.0 | Y | 1 | Schambeck,C.M | |
| 5.875 | 813021 | 6.0 | B | CZ | | 3 | | | 0.03 | B | | 6 | 5.5 | | 1 | Vaclik,F | m |
| 5.878 | 813022 | 5.6 | M | 54 | 31 | 6 | | 64 | 0.05 | B | | 12 | 4 | Y | 1 | Tanti,T | n |
| 5.88 | 813023 | 5.5 | M | 54 | 19 | 5 | | | 0.05 | B | | 10 | 5.0 | N | 1 | Bottger,B | |
| 5.882 | 813024 | 4.8 | S | 55, 54 | 21.0 | 8 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Hurst,G.M | |
| 5.889 | 813025 | 6.2 | B | 54 | 14 10 | 5 | 0.3 | 140 | 0.200 | R | 15 | 120 | 6.0 | Y | 1 | Kalauch,K.-D | |
| 5.889 | 813026 | 5.2 | S | 54, 78 | 9.2 7.8 | 7 | | | 0.05 | B | | 10 | 5.5 | Y | 3 | Abbott,J | o |
| 5.893 | 813027 | 5.5 | S | 54 | | | | | | EY | | | 5.5 | Y | 1 | Hurst,G.M | |
| 5.896 | 813028 | 7.5 | B | 54 | 4.4 | 6 | | | 0.060 | R | 15 | 45 | 5.5 | Y | 1 | Koschny,D | |
| 5.899 | 813029 | | | | 21 | | 0.7 | 77 | 0.08 | B | | 15 | 5.5 | Y | 1 | Hurst,G.M | A |
| 5.906 | 813030 | 5.9 | M | 54 | | | | | 0.06 | R | 4.5 | 10 | 4.5 | Y | 1 | Chodorowski,F | |
| 5.906 | 813031 | 5.6 | B | 54 | 12.8 | 5 | | | 0.08 | B | | 11 | 5.0 | Y | 1 | Gainsford,M.J | |
| 5.910 | 813032 | | | | 10 | 3 | | | 0.064 | R | 12 | 32 | | Y | 1 | Chodorowski,F | |
| 5.91 | 813033 | 4.8 | V | 54 | 60 | 2 | 1.30 | 71 | | EY | | | 6.0 | Y | 2 | Merlin,J.-C | |
| 5.91 | 813034 | 5.9 | B | 54 | 5 | 5 | 1.0 | | 0.050 | B | | 12 | 3.5 | Y | 1 | Mosch,J | A |
| 5.915 | 813035 | 5.7 | S | 54 | 4.5 | 7 | | 80 | 0.25 | N | 6 | 60 | 5.0 | Y | 1 | Gainsford,M.J | P |
| 5.916 | 813036 | 6.4 | | | 17 | 4 | | | 0.050 | R | 11 | 22 | 4.5 | Y | 1 | Kliche,J | |
| 5.921 | 813037 | 5.0 | B | 54 | 20 | 7 | | | 0.06 | R | | 15 | 5.5 | Y | 1 | Ward,A | g |
| 5.948 | 813038 | 5.0 | S | 50 | | 6 | | | 0.050 | B | | 7 | 5.0 | N | 1 | Lunde,R | Y |
| 5.951 | 813039 | 8.5 | B | 54 | 6 | 4 | | | 0.203 | SC | 10 | 80 | 5.5 | Y | 1 | Farrington,W.R | Z |
| 5.955 | 813040 | 5.4 | S | 54, 75 | 16 | 6 | 0.08 | 45 | 0.065 | B | | 12 | 5.5 | Y | 1 | Foulkes,M | q |
| 5.96 | 813041 | 5.3 | S | 54 | | | | | 0.08 | B | | 10 | 5.0 | | 1 | Shanklin,J.D | |
| 5.96 | 813042 | 5.7 | | | 11 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | r |
| 5.994 | 813043 | 5.0 | B | 54 | 25 | 7 | | | 0.20 | SC | 10 | 77 | 5.5 | Y | 1 | Hodonsky,K | s |
| 5.997 | 813044 | 5.4 | S | 54, 78 | 12 | 3 | 0.6 | 80 | 0.050 | B | | 10 | 5.9 | Y | 2 | Rogers,J.E | t |

NOTE A Coma diameter approximate.
NOTE B Straight, narrow type I tail.
NOTE C Very obvious tail, only 2' wide.
NOTE D Intermittent clouds - some haze.
NOTE E Modified Sidgwick method used.
NOTE F First naked eye observation. Mv central condensation = 6.1 (. .[sic]
NOTE G Comparison stars 55, 60.
NOTE H Coma diameter = 19'x14', elongated E-W.
NOTE I Faint stellar nucleus suspected.
NOTE J Suggestion of tail; PA approximate. Clear. (Observer gave limit as approximately 14.5. Ed.)
NOTE K Slight wind. (Observer gave limit as approximately 9.5. Ed.)
NOTE L Comet low altitude.
NOTE M Seeing 3/5.
NOTE N Bright sky.
NOTE O (Observer gave limit as 10.5. Ed.)
NOTE P Beginnings of tail. (Translated by IHW staff. Ed.)
NOTE Q PA approximate.
NOTE R 7.1 mag. nucleus. Tail PA 105; 65 deg. Naked eye.
NOTE S (Observer indicated "A" method [Argelander?]. Ed.)
NOTE T Haze. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE U Coma circular shaped.
NOTE V Cloudy. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE W Hazy.
NOTE X Naked eye.
NOTE Y Some haze.
NOTE Z No tail.
NOTE a Central cond. of mag. approximately 8; cirrus.
NOTE b (Observer gave limit as 12.5. Ed.)
NOTE c (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are SAO 109224, 109152, 91832, 109087.
NOTE d Comp. stars 4.8 mag. and 5.5 mag.
NOTE e Visible to naked eye.
NOTE f Seeing Antoniadi III. Noncirc. coma.
NOTE g Very clear.
NOTE h 24'x22' coma, averted vision.
NOTE i + 7x50 B and 10 mag. nucleus. [sic]
NOTE j Area immediately east of the coma to a distance of between 30'-40' is definitely more hazy than the corresponding area west of the coma. It appears to be a very wide tail.
NOTE k (Observer indicated "A" method [Argelander?]. Ed.) Coma diameter approximate.
NOTE l Oval.
NOTE m Probably well adapted, not dark adapted, of course - there is no dark sky in Czechoslovakia.
NOTE n Seeing good, transparency good. Clouds.
NOTE o Comparison stars 4.0, 5.1, 5.5. Adequate defocusing of comparison stars was only achieved by using one eyepiece of the 10x50 binoculars.
NOTE p Tail length = ?, PA uncertain.
NOTE q Comet so large that had [sic] difficulty in completely defocusing the stars with the binoculars to make the magnitude estimates.
NOTE r (Observer gave limit as 8.8. Ed.)
NOTE s No tail seen.
NOTE t Coma pear-shaped; very faint narrow tail. Chart 101 also used.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.059 | 830381 | 0.38 | 0.254 | N | 5.6 | 60,120,160 | 21 | 6.8 | 2 | Knisely,D | A |
| 5.198 | 830382 | 0.15 | 0.23 | R | 12 | 122,250,600 | | | 1 | O'Meara,S.J | B |
| 5.201 | 830383 | 0.33 | 0.20 | N | 6 | 96,135 | 10 | 5.2 | 1 | Wilson,A.M | C |
| 5.712 | 830384 | 0.88 | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | D |
| 5.742 | 830385 | 0.9 | 0.063 | R | 13.3 | 52 | | | 1 | Csukas,M | E |
| 5.830 | 830386 | 1.9 | 0.05 | B | | 10, 15 | 210 | 5.5 | 1 | Hurst,G.M | F |
| 5.842 | 830387 | 0.93 | 0.106 | R | 5.7 | 24 | 9 | 5.7 | 1 | Keszthelyi,S | |
| 5.844 | 830388 | 1.25 | 0.080 | B | | 15 | 30 | 5.0 | 3 | Lucius,D | |
| 5.896 | 830389 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | G |
| 5.908 | 830390 | 0.25 | 0.298 | N | 5 | 40, 65,179 | 15 | 6.2 | 1 | Stott,D | H |
| 5.939 | 830391 | 0.43 | 0.090 | M | 11 | 40,120 | 17 | 5.1 | 1 | Foulkes,M | I |
| 5.958 | 830392 | 2 | 0.065 | B | | 12 | 10 | 5.1 | 1 | Foulkes,M | J |
| 5.960 | 830393 | 0.5 | 0.203 | SC | 10 | 80 | 25 | 5.5 | 1 | Farrington,W.R | K |
| 5.993 | 830394 | | 0.203 | SC | 10 | 70 | | 6.0 | | Williams,D.J | L |

NOTE A Visible to naked eye. Central condensation stellar magn. 7.8 surrounded by halo 50" arc wide. Outer edge of coma very diffuse with hints of brightenings at PA 20 and PA 95. Faint narrow central spine noted in tail at PA 80 extending from nucleus down tail to 10' arc from nucleus. Possible faint narrow spikes in coma on both sides of tail. Faint broad outer tail has width of 5 to 7 min. arc tapering slightly with slight brightening 1/2 degree from nucleus. Magnification of 240x also used.
NOTE B (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Double nucleus observed. 3 faint stars included in coma.
NOTE D Features at PA 105, PA 65, PA 155, and PA 45. Schematic drawing. (Duration not indicated. Time of observation is end time. Ed.)

NOTE E Halo diameter = 14'; DC = 8; tail at PA 141, 33' length. A 31' tail had PA 141 12' to nucleus, PA 162 22' to nucleus, PA 173 40' to nucleus. [sic] (Duration not indicated. Time of observation is end time. Ed.) Schematic drawing.
NOTE F ZLM 5.5 improving to 6.0. Very well condensed circular coma. Tail, broad and diffuse PA 77 deg. for 42'. Star involved in edge of coma PA 288 deg. from nuclear region. Composite drawing. Bright details with 10x50 binoculars and tail added from observation with 15x80 binoculars.
NOTE G (Duration not indicated. Time of observation is assumed to be start time. Additional drawing submitted made using 11x80 binoculars (1.96'/mm). Ed.)
NOTE H Tail at PA 83 deg. Seeing too poor for useful high power work but tail shows well now. Still seems very thin.
NOTE I Diameter 10', DC = 6. Star seen at approximately PA 270 deg. Coma had 3 distinct areas of brightness. The central 'spot' was the brightest. This was elliptical in approximately PA 90-270. Outer coma circular. Beyond the fairly distinct outer boundary, the coma faded and became indistinct.
NOTE J Central condensation slightly elliptical at PA 45-225. Outer edge nebulous. A faint extension was glimpsed towards PA 45. The comet has now become so large that the binoculars will not completely defocus the stars for the magnitude estimates. Diameter 16'. DC = 6. Tail 5' at PA 45.
NOTE K DC 4, mag. 8.5 on this date. I saw no evidence of a tail. Several times I saw the coma brightness fluctuate by approx. 0.3 mag. This was not due to seeing. When the coma passed from in front of star I saw no change in brightness.
NOTE L Clear, but the neighbor's chimney smoke is bad. Rough on the eyes. Halley is becoming very easy to find. Nucleus is very compact and star-like. A simple object to spot with the 10x50 binoculars. (Duration not indicated. Time of observation is start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.140 | 850345 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | S | 2/P | 1 | Dilsizian,R | A |
| 5.179 | 850346 | 0.205 | 3.8 | | 10.0 x 6.7 | 15.00 | Kodak VR 200 | | N | T | 3/P | 1 | Cunningham,J | B |
| 5.200 | 850347 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 5.00 | Kodak VR 200 | | N | T | 4/P | 1 | Cunningham,J | B |
| 5.218 | 850348 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 5.00 | Kodak VR 200 | | N | T | 5/P | 1 | Cunningham,J | B |
| 5.741 | 850349 | 0.050 | 1.8 | | 39.6 x27.0 | 5.42 | Kodak Tri-X | 400/27 | N | O | 2/P | 1 | Grogel,O | C |
| 5.928 | 850350 | 0.210 | 4 | | 9.8 x 6.5 | 3.97 | Kodak Tri-X | 400/ | N | O | 3/P | 1 | Ward,A | |
| 5.961 | 850351 | 0.500 | 5.6 | | 4.1 x 2.7 | 5.33 | Kodak Tri-X | 400/ | N | O | 8/P | 1 | Ward,A | |

NOTE A Exposures limited below 5 minutes to allow for stellar guiding with a minimum of "proper motion" distortion in resolution.
NOTE B Film "push" processed from ISO 200 to 800.
NOTE C (Observer's image identifier is followed by suffix A. Ed.)

DATE: 6 DEC 1985

DATE: 6 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.042 | 813045 | 6.0 | B | 54 | 16 12 | 5 | | 50 | 0.05 | B | | 7 | 6.0C | Y | 10 | Chmielewski,W | |
| 6.063 | 813046 | 6.2 | B | 54 | 25 | 3 | | | 0.152 | R | 5 | 24 | 4.4 | N | 1 | Fox,J.H | A |
| 6.076 | 813047 | 6.2 | M | 54 | 3.9 | 6 | | | 0.114 | N | 8 | 45 | 4.0 | N | 1 | Mac Kenzie,G | B |
| 6.085 | 813048 | 5.4 | M | 78 | 28 | 7 | 0.75 | 45 | 0.32 | N | 4.4 | 57 | 6.1 | Y | 1 | Ariail,R.B | |
| 6.10 | 813049 | 5.6 | B | 54 | 14 | 6 | | | 0.080 | B | | 20 | 5.0 | Y | | Kronk,G | |
| 6.1132 | 813050 | 5.7 | S | SAO | 21 | 8 | 0.38 | 76 | 0.254 | N | 3.8 | 32 | 6.2 | | 1 | Machholz,D | |
| 6.1160 | 813051 | 5.4 | | SAO | 10 | 5 | | | | EY | | | 6.2 | | 1 | Machholz,D | |
| 6.1174 | 813052 | 5.7 | S | SAO | 20 | 6 | | | 0.080 | B | | 20 | 6.2 | | 1 | Machholz,D | |
| 6.13 | 813053 | 6.2 | B | 54 | 9.7 | 8 | | 71 | 0.335 | N | 4.5 | 56 | 5.0 | Y | | Kronk,G | |
| 6.14 | 813054 | 4.0 | | 54, 78 | 90 | 2 | | | | EY | | | 6.5 | Y | 7 | Morris,C.S | |
| 6.145 | 813055 | 5.5 | B | 54 | 15.0 | 9 | 0.75 | 45 | 0.15 | N | 8 | 30 | 6.0 | Y | 1 | McBride,P | C |
| 6.145 | 813056 | 5.5 | | 54 | 15.0 | 1 | | | | EY | | | 6.0 | Y | 1 | McBride,P | |
| 6.16 | 813057 | 4.5 | M | 54, 78 | 20 | 7 | 2.5 | 70 | 0.050 | R | | 8 | 6.5 | Y | 7 | Morris,C.S | |
| 6.17 | 813058 | 4.5 | M | 54, 78 | 16 | 7 | 2.5 | 70 | 0.080 | B | | 20 | 6.5 | Y | 7 | Morris,C.S | D |
| 6.171 | 813059 | 5.7 | M | 54 | 10.3 | 6 | 0.5 | 250 | 0.050 | B | 5 | 7 | | Y | 1 | Jeffrey,J | E |
| 6.229 | 813060 | 4.9 | B | 54 | 15 | 6 | | | 0.05 | B | | 10 | 5 | Y | 1 | Ward,A | |
| 6.244 | 813061 | 5.6 | S | 78 | 12 | 6 | | | 0.05 | B | | 10 | 4.4 | N | 2 | Saxon,V.P | |
| 6.28 | 813062 | 5.2 | B | 54 | | | | | | EY | | | 6 | Y | 3 | Hale,A | |
| 6.28 | 813063 | 5.2 | M | 54 | | | 1.5 | 75 | 0.05 | B | | 10 | 6 | Y | 3 | Hale,A | |
| 6.281 | 813064 | 6.2 | S | 54, 78 | | 6 | | | 0.05 | B | | 7 | 5.0 | Y | 1 | Bracken,R | F |
| 6.39 | 813065 | 5.6 | S | 78, 54 | 11 | 6 | | | 0.049 | B | | 3 | 5.5 | Y | | Jones,A | G |
| 6.42 | 813066 | 8.8 | S | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | H |
| 6.535 | 813067 | 5.4 | S | 101 | 20 | 5 | 0.33 | 80 | 0.07 | B | | 10 | 3.0 | Y | 1 | Kobayashi,J | |
| 6.563 | 813068 | 5.9 | M | 54 | | | | | 0.060 | R | 15 | 45 | 5.8 | Y | 1 | Purvinskis,R | |
| 6.58 | 813069 | 6.0 | B | M | 12 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 6.63 | 813070 | 5.2 | B | E | 20 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.65 | 813071 | 5.5 | S | 54 | 20 | 6 | | | 0.15 | N | 5.3 | 32 | 5.5 | Y | 1 | Oka,A | |
| 6.670 | 813072 | 5.9 | M | 78 | | | | | 0.06 | R | 4.5 | 10 | 6.1 | Y | 1 | Chodorowski,F | |
| 6.67 | 813073 | 5.3 | B | E | 20 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.674 | 813074 | | | | 10 | 3 | | | 0.064 | R | 12 | 32 | 6.1 | Y | 1 | Chodorowski,F | |
| 6.68 | 813075 | 6.3 | B | M | 20 | | | | 0.04 | R | 6 | 18 | | | | Drapun,A | |
| 6.69 | 813076 | 5.7 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 6.694 | 813077 | 5.2 | M | AAVSO | 15 | 8 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | I |
| 6.70 | 813078 | 6.3 | B | M | 20 | 4 | | | 0.04 | R | 3 | 18 | | | | Drapun,A | |
| 6.71 | 813079 | 6.2 | B | M | 6.5 | 3 | 0.1 | 110 | 0.10 | N | 10 | 169 | | | | Shilov,S | J |
| 6.71 | 813080 | 5.4 | B | E | 20 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.718 | 813081 | 5.0 | S | 54 | 18 | 6 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Meozzi,D | |
| 6.719 | 813082 | 5.7 | M | CZ | 20 | 7 | | | 0.080 | B | | 10 | 4.5 | Y | 1 | Bilek,V | |
| 6.719 | 813083 | 5.9 | B | | 4 | 2 | 0.3 | | 0.030 | B | | 8 | 5.0C | Y | 1 | Winkler,R | |
| 6.72 | 813084 | 5.3 | B | E | 20 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.722 | 813085 | 6.2 | B | 54 | 8 | 6 | 0.08 | | 0.08 | B | | 20 | 6 | Y | 2 | Knain,E | |
| 6.726 | 813086 | 5.9 | M | CZ | 12 | 6 | | | 0.05 | B | | 7 | 4.8 | N | 1 | Silhan,J | |
| 6.73 | 813087 | 6.5 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 6.73 | 813088 | 5.2 | B | AAVSO | | 6 | | | 0.05 | B | | 7 | | | | Chernis,K | |
| 6.740 | 813089 | 5.9 | B | 54 | | | | | 0.050 | B | | 7 | 4.0C | N | 1 | Ruiz,J | |
| 6.740 | 813090 | 5.3 | B | CZ | | 4 | | | 0.08 | B | | 10 | 5.7 | Y | 1 | Janecek,V | |
| 6.74 | 813091 | 5.0 | S | DCS5B6A | 20 | 6 | | | 0.050 | B | | 10 | 5.5 | N | 3 | Comello,G | K |
| 6.750 | 813092 | | | 54 | 5 | 4 | | | 0.208 | N | 5.8 | 48 | 4.0C | N | 1 | Ruiz,J | |
| 6.750 | 813093 | 6.0 | S | | 8 | 5 | 0.50 | 95 | 0.05 | B | | 10 | 5.5 | Y | 1 | Bremseth,P.-J | |
| 6.75 | 813094 | 5.2 | B | E | 20 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.753 | 813095 | 5.4 | M | CZ | 5 | 6 | | | 0.05 | B | | 7 | 5.6 | | 1 | Pravec,P | |
| 6.76 | 813096 | 4.3: | S | 101 | | 6 | 1.0 | 75 | 0.05 | B | | 10 | 5.5 | Y | 2 | Bouma,R.J | |
| 6.760 | 813097 | 6.1 | M | 78 | 15 | 3 | 0.45 | 298 | 0.050 | B | | 10 | 4.5 | Y | 1 | Lozano,L | |
| 6.76 | 813098 | 5.8 | B | 54 | | 6 | | | 0.050 | B | | 12 | 4.0 | Y | 1 | Mosch,J | |
| 6.767 | 813099 | 6.2 | B | 54 | | 4 | | | 0.030 | B | | 8 | 4.0C | N | 1 | Richert,M | |
| 6.77 | 813100 | 4.5: | S | DCS 6A | 20 | 5 | 1.5 | 90 | 0.040 | B | | 7 | 6 | N | 2 | Bus,E.P | K |
| 6.771 | 813101 | 4.9 | B | 54 | 35 25 | 5 | | | 0.105 | R | 15 | 86 | 5.5 | Y | 2 | Vincent,J | L |
| 6.774 | 813102 | | | 54 | 8 | 6 | | | 0.150 | R | 15 | 56 | 4.0C | N | 1 | Richert,M | |
| 6.781 | 813103 | 5.7 | M | CZ | | | | | 0.10 | B | | 25 | 5.5C | Y | 1 | Valasek,V | M |
| 6.781 | 813104 | 5.5 | | 54 | 10 | 4 | | | 0.040 | B | | 8 | 6.0 | Y | 2 | Weissferdt,F | N |
| 6.785 | 813105 | 5.8 | M | CZ | 20 | 6 | 1 | 70 | 0.055 | R | | 12 | 6.0 | Y | 1 | Silhan,J | |
| 6.788 | 813106 | 5.5 | | | 12 | | | | 0.035 | B | | 7 | 5.0C | N | 1 | Marx,H | O |
| 6.79 | 813107 | 5.4 | B | E | 20 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.792 | 813108 | 6.3 | B | 78 | 8 | 4 | | | 0.035 | B | | 7 | 5.5C | N | 1 | Sciezor,T | P |
| 6.792 | 813109 | 6.3 | B | | | 4 | | | 0.050 | B | | 10 | C | Y | 1 | Linke,H | |
| 6.799 | 813110 | 5.9 | B | | 5.0 | 5 | | | 0.063 | R | 13.3 | 44 | 6.0 | Y | 1 | Bartnik,M | |
| 6.799 | 813111 | 5.5 | S | | 14 | 5 | | | 0.050 | B | | 7 | 5.2 | Y | 1 | Nolle,M | |
| 6.802 | 813112 | 6.1 | S | 78 | | 5 | | | 0.05 | B | | 7 | | Y | 1 | Dziura,W | |
| 6.804 | 813113 | 6.5 | M | | 4.4 | 5 | 0.08 | 85 | 0.153 | N | 8.5 | 65 | | Y | 2 | Torres,E | Q |
| 6.806 | 813114 | | | | 11 8 | | 0.8 | 75 | 0.22 | N | 8 | 90 | 5.9 | Y | 1 | Fleet,R.W | |
| 6.809 | 813115 | 5.6 | B | 54 | 11.6 | 6 | | 75 | 0.050 | B | | 10 | 6.0 | Y | 1 | Rossi,L | |
| 6.813 | 813116 | 6.2 | S | CZ | 13 | 3 | | | 0.05 | R | 10 | 13 | 6.2 | Y | 1 | Polak,J | |
| 6.830 | 813117 | 5.6 | | 54 | | 9 | | | | EY | | | 6.1 | Y | 1 | Fleet,R.W | |
| 6.83 | 813118 | 5.4 | B | E | 20 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.833 | 813119 | 5.8 | M | 54 | 20 14 | 6 | 1.9 | 74 | 0.08 | B | | 11 | 6.1 | Y | 1 | Fleet,R.W | R |
| 6.84 | 813120 | 5.5 | B | AA | 20 | 6 | | | 0.050 | B | | 7 | 6.0 | N | | Schmeer,P | S |
| 6.844 | 813121 | 6.2 | M | 54 | | 4 | | | 0.08 | B | | 10 | 4.0C | N | 1 | Rapavy,P | |
| 6.847 | 813122 | 5.9 | M | 54 | 14 | 6 | 3 | 60 | 0.04 | B | | 12 | 5.8 | Y | 1 | Henshaw,C | T |
| 6.847 | 813123 | 5.9 | B | 54, 78 | 7.5 | 7 | | 50 | 0.080 | R | 6.3 | 50 | | Y | 1 | Pfitzner,E | U |
| 6.854 | 813124 | 5.8 | B | 54 | 4.5 | 6 | | | 0.090 | N | 7.2 | 26 | 6.0 | Y | 1 | Vohla,F | |
| 6.86 | 813125 | 5.8 | | | | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | V |
| 6.865 | 813126 | 6.7 | M | CZ | 11 | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Kourimsky,M | |
| 6.875 | 813127 | 6.2 | | | | 4 | | | 0.080 | B | | 15 | 3 | Y | 1 | Nagele,A | W |
| 6.875 | 813128 | 6.3 | B | CZ | 13 | 6 | | | 0.10 | O | | 25 | 6.0C | Y | 1 | Micek,I | |
| 6.878 | 813129 | 6.0 | M | CZ | 20 | 5 | | | 0.10 | B | | 25 | 5.8 | Y | 1 | Hajek,P | |
| 6.878 | 813130 | 5.6 | B | 54 | 21.7 | 4 | | | 0.03 | B | | 8 | 6.0 | Y | 1 | Hasubick,W | |
| 6.878 | 813131 | 5.5 | B | 54 | | 4 | | | | EY | | | 6.0 | Y | 1 | Hasubick,W | |
| 6.88 | 813132 | 4.7 | V | 54 | 60 | 2 | 1.60 | 68 | | EY | | | 6.0 | Y | 2 | Merlin,J.-C | |
| 6.889 | 813133 | 5.7 | B | 54 | 10.2 7.7 | 4 | 0.43 | 75 | 0.10 | B | | 14 | 6.0 | Y | 1 | Hasubick,W | |
| 6.896 | 813134 | 5.8 | | 54 | 5.2 | 6 | | | 0.203 | SC | 10 | 50 | 4.5 | Y | 1 | Dietrich,M | N |
| 6.899 | 813135 | 5.5 | M | CZ | 20 | 7 | | | 0.080 | B | | 10 | 6.0 | Y | 1 | Bilek,V | |
| 6.906 | 813136 | 6.4 | | | 16 | 4 | | | 0.050 | R | 11 | 22 | 3.5 | Y | 1 | Kliche,J | |
| 6.910 | 813137 | | | 54 | 5 | 5 | | | 0.114 | N | 7.9 | 30 | 4.7 | | 1 | Kerber,F | X |
| 6.924 | 813138 | 6.2 | M | 54 | 12 9 | 4 | 0.1 | 88 | 0.07 | B | | 16 | 5.1C | Y | 1 | Taylor,M.D | |
| 6.97 | 813139 | 4.7 | S | AAVSO | | | | | | EY | | | | | | Bortle,J.E | Y |
| 6.97 | 813140 | 4.8 | S | AAVSO | 14.5 | 5 | | 70 | 0.050 | B | | 10 | | | | Bortle,J.E | |

NOTE A SAO 092182 comparison star.
NOTE B Comet seemed fainter in binoculars than Dec. 2.003 (due to haze). Star-like coma was more difficult to observe.
NOTE C 8.5 mag. nucleus.
NOTE D Possible second tail in PA 110:.

NOTE E First sighting of the comet with the naked eye for me. A faint tail was seen about 1/2 degree long with a PA of 250. The tail was straight and seemed to have a brighter narrow central area surrounded by a fainter glow. No details seen in the central coma area. Limit 14.7.
NOTE F Good seeing.
NOTE G Wisp of tail?
NOTE H Condensation.
NOTE I Naked eye!
NOTE J PA approximate.
NOTE K Coma diameter approximate.
NOTE L Comp. stars 4.8 and 5.5: comet pear shape.
NOTE M Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE N (Observer indicated "A" method [Argelander?]. Ed.)
NOTE O Comparison stars 35 Psc, 38 Psc. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE P Very clear skies.
NOTE Q (Observer gave limit as 11.0. Ed.)
NOTE R 25'x20' coma, averted vision.
NOTE S Also seen with naked eye.
NOTE T Tail length and PA from sketch.
NOTE U First beginnings of a tail at approximately PA 50 deg. (Observer gave limit as 10.5. Ed.)
NOTE V (Observer gave limit as 8.5. Ed.)
NOTE W (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are SAO 109100, 109087, 109152, 109111, 109102.
NOTE X Haze. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE Y Too vague for dia. and DC.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.073 | 830395 | 0.24 | 0.114 | N | 8 | 45,150 | 29 | 4.0 | 1 | Mac Kenzie,G | |
| 6.087 | 830396 | 0.6 | 0.203 | R | 13 | | 10 | 4.4 | 1 | Fox,J.H | A |
| 6.140 | 830397 | | 0.203 | SC | 10 | 81 | | | 2 | Lohvinenko,T.W | B |
| 6.256 | 830398 | | 0.254 | N | 5.6 | 60,120,160 | 17 | 6.5 | 2 | Knisely,D | C |
| 6.712 | 830399 | 1.2 | 0.080 | B | | 20 | 20 | 6 | 1 | Knain,E | D |
| 6.806 | 830400 | 0.7 | 0.153 | N | 8.5 | 65 | 40 | | 2 | Cifuentes,E | E |
| 6.826 | 830401 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | F |

NOTE A N-S bar definite with averted vision, but difficult to see directly. Coma has sharp boundary to W, fading gradually to E.
NOTE B On this date the comet is observed to have a diameter of 175.61" and an integrated magnitude of 6.2 (check stars: HR 69 and HR 72). The comet is much dimmer than November 29, 1985.
NOTE C Central core of coma very bright. "Fish head" type form seen vaguely. Coma shows hints of faint radial streamers. Central condensation 7th or 8th magnitude and poorly defined. Coma brightness fairly uniform out to 1/3 coma radius except for central condensation. Tail is narrow with north edge slightly better defined than south edge. Tail is fainter than on 05/12/85. Magnification of 240x also used.
NOTE D Bright point in coma. Dark patches seen in coma, but unclearly.
NOTE E I observed for the first time a beginning of a typical comet tail, estimated 4.5 arc min. length, in an easterly direction. (Observer gave limit as 11.0. Translated by IHW staff. Ed.)
NOTE F (Duration not indicated. Time of observation is assumed to be start time. Additional drawing submitted made using 11x80 binoculars. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.193 | 850352 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | 3M 1000 | 1000/ | N | O | 2/N | 17 | Edberg,S.J | |
| 6.193 | 850353 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | Ilford HP 5 | 500/ | N | O | 36/C | 17 | Edberg,S.J | |
| 6.199 | 850354 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/ | N | O | 3/N | 17 | Edberg,S.J | |
| 6.199 | 850355 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | Ilford HP 5 | 500/ | N | O | 37/C | 17 | Edberg,S.J | |
| 6.204 | 850356 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/ | N | O | 4/N | 17 | Edberg,S.J | |
| 6.204 | 850357 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | Ilford HP 5 | 500/ | N | O | 39/C | 17 | Edberg,S.J | |
| 6.207 | 850358 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | 3M 1000 | 1000/ | N | O | 5/N | 17 | Edberg,S.J | |
| 6.207 | 850359 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | Ilford HP 5 | 500/ | N | O | 40/C | 17 | Edberg,S.J | |
| 6.208 | 850360 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | 3M 1000 | 1000/ | N | O | 6/N | 17 | Edberg,S.J | |
| 6.208 | 850361 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | Ilford HP 5 | 500/ | N | O | 41/C | 17 | Edberg,S.J | |
| 6.210 | 850362 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | S | 1/P | 1 | Yen,B | A |
| 6.214 | 850363 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/ | N | O | 7/N | 17 | Edberg,S.J | |
| 6.214 | 850364 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | Ilford HP 5 | 500/ | N | O | 42/C | 17 | Edberg,S.J | |
| 6.219 | 850365 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | 3M 1000 | 1000/ | N | O | 8/N | 17 | Edberg,S.J | |
| 6.222 | 850366 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | 3M 1000 | 1000/ | N | O | 9/N | 17 | Edberg,S.J | |
| 6.228 | 850367 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/ | N | O | 10/N | 17 | Edberg,S.J | |
| 6.234 | 850368 | 0.050 | 2 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 11/N | 17 | Edberg,S.J | |
| 6.239 | 850369 | 0.200 | 4 | | 10.3 x 6.9 | 5.00 | 3M 1000 | 1000/ | N | O | 12/N | 17 | Edberg,S.J | |
| 6.243 | 850370 | 0.200 | 5.6 | | 10.3 x 6.9 | 5.00 | 3M 1000 | 1000/ | N | O | 13/N | 17 | Edberg,S.J | |
| 6.903 | 850371 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 0.50 | Kodak 103a-F | | N | M | 17/P | 1 | Guarro,J | |
| 6.907 | 850372 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 1.00 | Kodak 103a-F | | N | M | 18/P | 1 | Guarro,J | |
| 6.913 | 850373 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 7.00 | Kodak 103a-F | | N | M | 19/P | 1 | Guarro,J | |
| 6.944 | 850374 | 0.400 | 5.5 | | 5.2 x 3.4 | 12.00 | ORWO NP 27 | 400/27 | N | O | 10/N | 1 | Kamenickj',M | B |
| 6.992 | 850375 | 0.135 | 2.8 | | 15.2 x10.2 | 20.00 | Kodak 2415 | | Y | X | 1/P | 2 | Portela,A | |

NOTE A Start time approximate. (Observer's image identifier is 6. Ed.) Instrument is Schmidt camera.
NOTE B 6x6 cm format film used.

DATE: 7 DEC 1985

DATE: 7 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.021 | 813141 | 6.1 | M | 78 | 3.9 | 5 | | | 0.114 | N | 8 | 45 | 4.9 | N | 1 | Mac Kenzie,G | A |
| 7.023 | 813142 | 5.2 | S | 78, 101 | 19 | | | | 0.035 | B | | 7 | 5.7 | Y | 3 | Morrison,W | B |
| 7.031 | 813143 | 5.1 | B | 54 | 20 | 7 | | | 0.06 | R | | 25 | 5 | Y | 1 | Ward,A | |
| 7.035 | 813144 | 5.3 | | 54 | | | | | | EY | | | | | 2 | de Assis Neto,V.F | |
| 7.035 | 813145 | | | 54 | 19.6 | 7 | 1.4 | 75 | 0.07 | B | | 10 | 6.5 | Y | 2 | de Assis Neto,V.F | |
| 7.04 | 813146 | 5.6 | B | 54 | 16 | 6 | | | 0.080 | B | | 20 | 5.5 | Y | | Kronk,G | C |
| 7.042 | 813147 | 5.5 | B | 78 | | | | | 0.080 | B | | 20 | 5.7 | Y | | Smith,D | |
| 7.05 | 813148 | 6.2 | B | 54 | 9.0 | 8 | | 75 | 0.335 | N | 4.5 | 56 | 5.5 | Y | | Kronk,G | C |
| 7.08 | 813149 | 5.9 | B | 78 | 20 | 2 | | | 0.030 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | D |
| 7.083 | 813150 | 5.1 | | 34 | 30 | 3 | | | 0.030 | B | | 9 | 5.7 | Y | 1 | Luthen,H | |
| 7.083 | 813151 | 5.4 | B | 54 | 15.0 | 9 | 1 | 45 | 0.15 | N | 8 | 30 | 5.9 | N | 1 | McBride,P | E |
| 7.087 | 813152 | 5.5 | M | 54 | 5.5 | 8 | 0.5 | 90 | 0.203 | N | 8 | 128 | 5.5 | Y | 1 | Hannon,J | |
| 7.10 | 813153 | 4.5 | M | 54, 78 | 20 | 7 | | | 0.050 | R | | 8 | 5.5 | Y | 14 | Morris,C.S | |
| 7.10 | 813154 | 4.5 | M | 54, 78 | 16 | 7 | 1.5 | 70 | 0.080 | R | | 20 | 5.5 | Y | 14 | Morris,C.S | |
| 7.104 | 813155 | 7.0 | M | 55 | | | | | 0.035 | B | | 7 | 3.5C | N | 2 | Smith,A | |
| 7.117 | 813156 | 5.9 | M | 54 | 20.0 | 6 | | | 0.05 | B | | 12 | 6.3 | Y | 1 | Knight,S | |
| 7.117 | 813157 | | | | 20.0 | 6 | 0.5 | 77 | 0.254 | N | 5.6 | 38 | 6.3 | Y | 1 | Knight,S | F |
| 7.117 | 813158 | | | | 22.0 | | | | 0.254 | N | 5.6 | 38 | 6.3 | Y | 1 | Knight,S | G |
| 7.122 | 813159 | 5.4 | M | 78 | 9 | 5 | | | 0.050 | B | | 7 | 4.6 | Y | 1 | Robertson,T | |
| 7.125 | 813160 | 6.1 | B | 54 | 30 | 3 | | | 0.050 | B | | 10 | 6.0 | Y | 1 | Stapleton,J | H |
| 7.132 | 813161 | | | 54 | 30 | 7 | | | 0.108 | N | 8.5 | 36 | 6.0 | Y | 1 | Stapleton,J | I |
| 7.221 | 813162 | 5.8 | M | 78 | 9.5 | 5 | | | 0.06 | B | | 20 | 4.4C | N | 1 | de la Rosa Jr,A | J |
| 7.2361 | 813163 | 4.8 | M | 78 | 10 | 6 | 0.62 | 69 | 0.05 | B | | 7 | 5.8 | Y | 5 | Cook,A.J | |
| 7.25 | 813164 | 4.8 | B | 78 | | | | | | EY | | | 6.5 | Y | 1 | Keen,R | |
| 7.25 | 813165 | 5.2 | | 78 | 20 | 5 | 1.2 | 70 | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | K |
| 7.410 | 813166 | 5.8 | M | 78 | 7 | 5 | | | 0.254 | N | 5.6 | 158 | 6.0 | Y | 1 | Glassett,W | L |
| 7.44 | 813167 | 5.9 | B | M | 9.4 | 5 | | | 0.21 | N | | 80 | | | | Knyazyuk,N | |
| 7.464 | 813168 | 5.3 | M | 78 | 14 | 6 | | | 0.070 | B | | 10 | 5.0C | Y | 1 | Kato,T | |
| 7.480 | 813169 | 6.1 | M | 78 | 5 | 6 | 0.2 | 70 | 0.15 | N | 8.5 | 50 | 5.0C | Y | 1 | Kato,T | |
| 7.482 | 813170 | 5.8 | S | 78 | | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | M |
| 7.490 | 813171 | 6.3 | B | 54, 78 | | | | | 0.07 | B | | 10 | 4.0C | Y | 2 | Date,M | |
| 7.493 | 813172 | | | 78 | 11 | 6 | | 90 | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | N |
| 7.50 | 813173 | 5.8 | B | | 17 | 5 | 0.33 | | 0.05 | B | | 10 | 4.5 | N | 1 | Uda,K | |
| 7.51 | 813174 | 5.3 | M | 78 | 15 | 7 | 0 | 45 | 0.080 | B | | 11 | 6 | Y | 2 | Watanabe,N | |
| 7.522 | 813175 | 5.6 | M | 78 | 14 | 6 | 0.3 | 70 | 0.070 | B | | 10 | 5.0C | Y | 1 | Kato,T | |
| 7.55 | 813176 | 5.5 | | | 25 | 7 | | | 0.12 | B | | 20 | 6.0 | Y | 1 | Washi,S | O |
| 7.56 | 813177 | 5.0 | | | 15 | 7 | | | 0.23 | | 4.4 | 40 | 4.0 | Y | 1 | Washi,I | P |
| 7.583 | 813178 | 5.5 | S | 101 | 17 | 5 | 0.50 | 90 | 0.07 | B | | 10 | 2.5 | Y | 1 | Kobayashi,J | |
| 7.603 | 813179 | 5.5 | B | 78 | 30 | | | | 0.05 | B | | 7 | 6.0 | Y | 2 | Hayashi,H | |
| 7.62 | 813180 | 5.6 | S | 78 | 15 | 6 | | | 0.07 | B | | 10 | 5.5 | Y | 1 | Yasuki,M | |
| 7.69 | 813181 | 6.3 | B | M | 5.7 | 2 | | | 0.07 | N | 8 | 33 | | | | Yurchenko,Yu | |
| 7.705 | 813182 | 5.8 | M | 54 | 16 10 | 3 | | | 0.08 | B | | 11 | 4.5 | Y | 1 | Gubo,H | |
| 7.710 | 813183 | | | | 30 | 5 | | 75 | 0.080 | R | 6.3 | 20 | 5.7 | Y | 1 | Luthen,H | Q |
| 7.71 | 813184 | 6.3 | M | E | 27 | 6 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 7.713 | 813185 | 4.8 | S | 78 | 15 | 6 | | | 0.050 | B | | 7 | 6.2 | Y | 1 | Meozzi,D | |
| 7.719 | 813186 | 5.4 | S | 78 | 6 | 7 | | | 0.050 | B | | 7 | 4.0C | N | 1 | Piccinini,M | R |
| 7.72 | 813187 | 6.6 | B | 78 | 10.9 7.3 | 8 | | | 0.20 | N | 6 | 31 | 5.5 | N | 1 | Jahn,J | S |
| 7.72 | 813188 | 6.1 | B | 78 | 8 | 6 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Speil,J | |
| 7.729 | 813189 | 4.9 | S | 78 | 10.0 | 6 | | | 0.140 | SN | 3.6 | 19 | 6.2 | Y | 1 | Meozzi,D | |
| 7.733 | 813190 | 5.7 | | 78 | | 9 | | | | EY | | | 6.0 | Y | 1 | Fleet,R.W | |
| 7.733 | 813191 | 5.7 | S | 78 | 16 | 7 | | | 0.065 | B | | 12 | 5.0 | Y | 1 | Foulkes,M | T |
| 7.736 | 813192 | 5.9 | M | 78 | 20 15 | 6 | 1.2 | 73 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | U |
| 7.736 | 813193 | 5.2 | B | 54 | 20 | 7 | | | 0.06 | R | | 25 | 4.5 | Y | 1 | Ward,A | |
| 7.74 | 813194 | 5.9 | S | 54 | | | | | 0.08 | B | | 10 | 5.7 | | 1 | Shanklin,J.D | |
| 7.74 | 813195 | 5.9 | S | 54 | | | | | 0.05 | B | | 7 | 5.7 | | 1 | Shanklin,J.D | |
| 7.74 | 813196 | 5.7 | S | 54 | | | | | | EY | | | 5.7 | | 1 | Shanklin,J.D | |
| 7.743 | 813197 | 6.1 | M | 78 | 14 8 | 6 | 0.3 | 74 | 0.075 | R | 16 | 50 | 6.0 | Y | 1 | Fleet,R.W | |
| 7.748 | 813198 | 5.5 | S | 54 | 14 | 5 | | | 0.05 | B | | 7 | 5 | Y | 2 | Gainsford,M.J | |
| 7.75 | 813199 | 5.5 | S | DCS5B6A | 20 | 6 | | | 0.080 | B | | 15 | 4.5C | N | 1 | Zanstra,W.T | |
| 7.753 | 813200 | 4.8 | S | 54 | 19.2 | 7 | | | 0.05 | B | | 10 | 5.5 | Y | 2 | Hurst,G.M | |
| 7.76 | 813201 | 6.0 | S | DCS 5B | 15 | 5 | | | 0.050 | B | | 7 | 5.5C | N | 1 | Kuipers,G | |
| 7.76 | 813202 | 4.3 | S | 101 | 12 | 6 | 1.5 | 65 | 0.05 | B | | 10 | 6 | Y | 2 | Bouma,R.J | |
| 7.760 | 813203 | 6.3 | M | 78, 101 | 20 | 4 | | | 0.030 | B | | 8 | 5.2C | Y | 2 | Kosinski,J | |
| 7.76 | 813204 | 4.3: | | DCS 6A | 25 | 4 | | | | EY | | | 6 | Y | 2 | Bus,E.P | V |
| 7.76 | 813205 | 5.2 | S | DCS 7 | | 6 | | | 0.080 | B | | 15 | 5.5C | Y | 1 | Feijth,H | |
| 7.76 | 813206 | 6.0 | S | DCS 5B | 15 | 5 | | | 0.050 | B | | 7 | 5.5C | N | 1 | Kroon,B | |
| 7.764 | 813207 | 5.3 | B | 78 | 5.1 | 4 | | | 0.080 | R | 15 | 39 | 5.4C | Y | 1 | Szulc,M | |
| 7.766 | 813208 | 5.7 | S | 54 | 14 | 5 | | 100 | 0.08 | B | | 11 | 5.7 | Y | 3 | Gainsford,M.J | W |
| 7.766 | 813209 | | | 54 | | | | | | EY | | | 5.7 | Y | 3 | Gainsford,M.J | X |
| 7.771 | 813210 | 5.1 | B | 54 | 20 | 7 | | | 0.06 | R | | 25 | 5 | Y | 1 | Ward,A | |
| 7.78 | 813211 | 4.3 | S | DCS 6A | 20 | 5 | | | 0.018 | B | | 3 | 6 | Y | 2 | Bus,E.P | |
| 7.785 | 813212 | 5.5 | B | 54,78 | 20 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | Y |
| 7.785 | 813213 | 6.1 | M | 78 | 15.4 | 7 | | | 0.089 | R | 13.7 | 32 | C | Y | 1 | Linger,S | Z |
| 7.785 | 813214 | 6.5 | B | 78 | | 3 | | | 0.080 | B | | 20 | 5.0C | Y | 2 | Dionisi,M | |
| 7.79 | 813215 | 5.5 | B | M | 10 | 3 | | | 0.07 | N | 8 | 33 | | | | Shitikov,A | |
| 7.79 | 813216 | 5.6 | B | M | | | | | 0.03 | B | | 8 | | | | Tsygankov,D | |
| 7.792 | 813217 | 6.2 | B | 78,101 | 13 | 4 | | | 0.035 | B | | 7 | 6.0C | Y | 1 | Sciezor,T | a |
| 7.794 | 813218 | 5.2 | B | 54 | 25 | 8 | | | 0.20 | SC | 10 | 117 | 5.5 | Y | 1 | Ward,A | b |
| 7.795 | 813219 | 5.6 | S | 77, 78 | 12.1 | 8 | 0.15 | 77 | 0.05 | B | | 10 | 5.8 | Y | 4 | Abbott,J | c |
| 7.795 | 813220 | 6.3 | B | 78 | 12.1 | 8 | 0.15 | 77 | 0.05 | B | | 10 | 5.8 | Y | 4 | Abbott,J | d |
| 7.80 | 813221 | 4.5: | S | DCS 6A | 17 | 6 | | | 0.040 | B | | 7 | 6 | Y | 2 | Bus,E.P | V |
| 7.806 | 813222 | 6.5 | M | 78 | 8 | 4 | | | 0.09 | M | 11 | 56 | 4.5 | Y | 2 | Westlund,M | e |
| 7.810 | 813223 | 5.0 | B | 101 | 20 | 7 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Ward,A | b |
| 7.837 | 813224 | 5.9 | S | 78 | 22 | 4 | | | 0.050 | B | | 10 | 5.6C | Y | 1 | Kaila,K | |
| 7.854 | 813225 | 6.3 | B | | 9.5 | 5 | | | 0.150 | N | 4.8 | 36 | 5.5 | Y | 1 | Emrich,G | |
| 7.854 | 813226 | 5.6 | B | | 14 | 5 | 0.12 | 75 | 0.07 | B | | 20 | 5.5 | Y | 1 | Filimon,E | |
| 7.865 | 813227 | 6.0 | | 54 | | | | | 0.030 | B | | 8 | C | N | 2 | Kieltyka,G | |
| 7.87 | 813228 | 4.3 | S | DCS 6A | 23 | 5 | | | 0.046 | R | 4 | 8 | 5.5 | Y | 3 | van de Weg,R.L.W | |
| 7.87 | 813229 | 5.3 | B | DCS 6A | 23 | 5 | | | 0.046 | R | 4 | 8 | 5.5 | Y | 3 | van de Weg,R.L.W | |
| 7.87 | 813230 | 4.4 | S | DCS 6A | 21 | 7 | 1.5 | 60 | 0.060 | B | | 12 | 5.5 | Y | 3 | van de Weg,R.L.W | f |
| 7.87 | 813231 | 5.5 | B | DCS 6A | 21 | 7 | 1.5 | 60 | 0.060 | B | | 12 | 5.5 | Y | 3 | van de Weg,R.L.W | f |
| 7.88 | 813232 | 5.5 | M | 54 | 20 | 6 | | | 0.06 | R | 4 | 10 | 6.0 | Y | 1 | Granslo,B.H | |
| 7.88 | 813233 | 6.2 | | | 12 | | | | 0.034 | B | | 9 | | | 3 | Pereira,A | g |
| 7.892 | 813234 | 5.7 | S | 54 | | 5 | | | 0.063 | R | 13.3 | 34 | 5.0C | Y | 2 | Skjaeraasen,O | |
| 7.896 | 813235 | 5.4 | S | 54, 78 | 9 | 4 | 0.4 | 80 | 0.050 | B | | 10 | 6.0 | Y | 1 | Rogers,J.H | h |
| 7.896 | 813236 | | | | 2 | 4 | 0.17 | 80 | 0.320 | R | 18 | 140 | 6.0 | Y | 1 | Rogers,J.H | i |
| 7.91 | 813237 | 6.6 | B | M | 3 | 6 | 0.1 | | 0.07 | N | 8 | 33 | | | | Rudenko,S | |
| 7.912 | 813238 | 6.0 | S | 78 | | 5 | | | 0.05 | B | | 7 | | Y | 1 | Dziura,W | |
| 7.927 | 813239 | 8.3 | B | 78 | 8 | 3 | 0.25 | 25 | 0.203 | SC | 10 | 80 | 5.3 | Y | 1 | Farrington,W.R | |
| 7.96 | 813240 | 4.8 | S | DCS5B6A | 20 | 6 | 0.83 | 90 | 0.050 | B | | 10 | 6 | Y | 3 | Comello,G | j |
| 7.994 | 813241 | 6.2 | B | 6 | 5 | 4 | | | 0.114 | N | 8 | 30 | | Y | | Leitao Jr,C | |

DATE: 7 DEC 1985

NOTE A At lower powers, star-like coma was almost invisible, at 90x it became barely visible.
NOTE B Slight haziness in sky.
NOTE C Exceptionally clear.
NOTE D Very condensed.
NOTE E 8.5 mag. nucleus.
NOTE F Gas tail 0.025 deg. wide.
NOTE G Elliptical coma. (On original report form observer drew arrow from coma diameter value to tail PA box holding values of 77 deg. and 257 deg. Ed.)
NOTE H Bright skies.
NOTE I In Psc.
NOTE J Clear skies, street lights.
NOTE K Modified Sidgwick method used.
NOTE L Coma shows envelopes.
NOTE M (Observer gave limit as 9.1. Ed.)
NOTE N Doubtful tail.
NOTE O (Observer indicated "Y" method. Ed.)
NOTE P Instrument is Wright-Schmidt. Type I. (Observer indicated "Y" method. Ed.)
NOTE Q Tail length 1-1.5 deg.
NOTE R Moist.
NOTE S Central mag. 8.7.
NOTE T Clear.
NOTE U 27'x21' coma, averted vision.
NOTE V Coma diameter approximate.
NOTE W Tail length = ?, PA uncertain.
NOTE X Very clear. Comet not seen.
NOTE Y (Observer gave limit as 12.5. Ed.)
NOTE Z Clear, windy. (Observer gave limit as 10.0. Ed.)
NOTE a Very clear skies.
NOTE b Very clear.
NOTE c Comparison stars 6.3, 5.7, 4.0, 5.1, 6.0. Adequate defocusing of comparison stars was only achieved by using one eyepiece of the 10x50 binoculars. The "tail-lobe" structures seen in 10x50 binoculars corresponded to fountain-like features in larger instruments. The northern "tail-lobe" was 0.15 deg. long at PA 77. The southern "tail-lobe" was 0.04 deg. at PA 112.
NOTE d Comparison star 6.3. The "tail-lobe" structures seen in 10x50 binoculars corresponded to fountain-like features seen in larger instruments. The northern "tail-lobe" was 0.15 deg. long at PA 77. The southern "tail-lobe" was 0.04 deg. at PA 112.
NOTE e Misty sky.
NOTE f Sunward directed fan: top angle 60 deg.
NOTE g (Observer gave limit as 8.5. Ed.)
NOTE h Coma elongated; tail only suspected, broad. Chart 101 also used.
NOTE i See drawing.
NOTE j Coma diameter and PA approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.010 | 830402 | | 0.203 | SC | 10 | 70 | | 6.0 | | Williams,D.J | A |
| 7.017 | 830403 | 0.20 | 0.114 | N | 8 | 45, 90 | 20 | 4.9 | 1 | Mac Kenzie,G | |
| 7.075 | 830404 | 0.20 | 0.114 | N | 8 | 45, 90 | 16 | 4.9 | 1 | Mac Kenzie,G | |
| 7.137 | 830405 | 0.67 | 0.090 | M | 10 | 111 | 5 | | 1 | Arpin,P | B |
| 7.238 | 830406 | 3 | 0.050 | B | | 7 | 5 | 5.8 | 5 | Cook,A.J | |
| 7.724 | 830407 | 0.21 | 0.203 | SC | 10 | 80,160,330 | 6 | 5.0 | 1 | Foulkes,M | C |
| 7.753 | 830408 | 0.34 | 0.114 | N | 8 | 28 | 10 | 5.5 | 1 | Donatiello,G | |
| 7.771 | 830409 | 1 | 0.076 | N | 9.2 | 35,140 | | 4.8 | 1 | Li Causi,G | D |
| 7.777 | 830410 | 0.16 | 0.298 | N | 5 | 40, 65,179 | 17 | 6.1 | 1 | Stott,D | E |
| 7.800 | 830411 | 1.6 | 0.090 | M | 11 | 56 | 15 | 4.5 | 2 | Westlund,M | F |
| 7.875 | 830412 | 0.16 | 0.320 | R | 18 | 140 | | 6.0 | 1 | Rogers,J.E | G |
| 7.878 | 830413 | 0.22 | 0.254 | N | 6.4 | 41, 65,130 | 19 | 5.7 | 3 | Abbott,J | H |
| 7.906 | 830414 | 0.40 | 0.063 | R | 13.3 | 34, 53 | 10 | 4.5 | 2 | Skjaerasen,O | I |
| 7.960 | 830415 | 1 | 0.203 | SC | 10 | 80 | 5 | 5.3 | 1 | Farrington,W.R | J |

NOTE A I do believe a tail can be seen toward the northeast of the comet's nucleus. It is very faint and short. (Duration not indicated. Time of observation is start time. Ed.)
NOTE B Jet (very faint) at 0. The comet is definitely visible to the naked eye. Magnitude: 4.9. Coma circular. Field diameter 0.84 deg. (Instrument and power ambiguous. Ed.)
NOTE C Coma diameter 5', DC = 7. Short tail visible. Central condensation star-like at 330x. The surrounding small bright area was elongated in PA about 135-315 deg. Outer envelope faint. Tail 6' at PA 50.
NOTE D The tail was perfectly straight. The central condensation (c.c.) was extended in direction north-south (140x).
NOTE E Fan at PA 227 deg. Jet at PA 318 deg. Tail at PA 87 deg. Fine detail in coma at high power, fan shaped feature is the best defined. Coma is pear shaped with the tail a little fainter than on the 5th. Magnification of 269 also used.
NOTE F Misty sky.
NOTE G Nucleus (stellar) very faint; coma DC 4, diameter 2', symmetrical; main tail at PA 80 deg., faint, 10' long; diffuse spur (suspected) at PA 11 deg., very faint, about 6' long; outer envelope (suspected), very faint. (Duration not indicated. Time of observation is start time. Ed.)
NOTE H Central condensation approximately 33 arc sec. Southernmost fountain at PA 95 deg., approximately 1.1x3.6 arc min. Northernmost fountain at PA 70 deg., approximately 1.6x8.3 arc min. Central tail structures at PA 80 deg., approximately 2.0x2.5 arc min. Semi latus rectum approximately 2.3 arc min. (both). Vertex distance approximately 2.1 arc min. Central condensation nearly stellar in appearence at lower powers. Central condensation thus only a small object relative to the whole coma and of high contrast against the coma. Three separate structures visible within the forming tail with a hint of more complex faint filamentary features (streamers) seen at times. The northernmost fountain-like structure appeared to be longer than the southernmost counterpart; distance being measured from the apparent root with the coma.
NOTE I The site this time was on a 530 meter mountain northwest of the city (Oslo), where the seeing is in most directions far better than at site no. 1, which is down in the city. However, the comet was in the direction of the city, and, though tens of degrees above the horizon, Halley was observed through the twilight-like "airglow" (caused by light pollution) so it did not appear very much more clearly than it does from site no. 1. Halley's head was circular; the brightness changes outwards from the coma were smooth and gradual and no peculiarities were seen at all. Lumicon Deep Sky filter used.
NOTE J Mag. 8.3, N mag. 12.2. On this night I first noticed a short faint tail in PA 25, length 15'. During times of very steady seeing the nucleus became very bright and starlike and centered in the coma.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.022 | 850376 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 15.00 | Kodak 2415 | | Y | O | 35/P | 1 | Crist,M | A |
| 7.056 | 850377 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 20.00 | Kodak 2415 | | Y | O | 36/P | 1 | Crist,M | A |
| 7.132 | 850378 | 1.524 | 6 | 0.254 | 1.4 x 0.9 | 30.00 | Kodak 2415 | | Y | X | 90/P | 1 | Snyder,L.F | |
| 7.552 | 850379 | 0.268 | 2.6 | 0.102 | 7.7 x 5.1 | 10.00 | Fuji 400 | | Y | X | 3/S | 1 | Richardson,C | B |
| 7.761 | 850380 | 1.750 | 5 | 0.350 | 1.2 x 0.8 | 17.92 | 3M 1000 | 1000/ | N | M | 1/P | 1 | Mobberley,M | C |
| 7.793 | 850381 | 0.058 | 2 | | 34.5 x23.4 | 5.00 | Fujichrome | 400/27 | N | O | 1/S | 2 | Townsend,R | |
| 7.855 | 850382 | 1.750 | 5 | 0.350 | 1.2 x 0.8 | 18.00 | 3M 1000 | 1000/ | N | M | 2/P | 1 | Mobberley,M | C |

NOTE A (Observer's image identifier is followed by suffix A. Ed.) Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE B Instrument is Meade Schmidt camera.
NOTE C This color slide film was processed as a negative.

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SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.179 | 870102 | 600G-O | CL | 0.135 | 1.9 | | 10.00 | Kodak Tri-X | 400/27 | N | T | 226/S | 2 | Buchanan,W.T | A |

NOTE A Halley not visible to my naked eye, two people claimed visibility at the site. (Observer's image identifier is E-112-26. Ed.)

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.012 | 813242 | | | | 4.0 | 7 | | | 0.203 | R | 13 | 110 | 4.5C | Y | 1 | Phillips,J | |
| 8.040 | 813243 | 4.8 | B | 101 | | 2 | | | 0.05 | B | | 20 | 6.2 | Y | 7 | da Silva,L.A.L | |
| 8.044 | 813244 | 5.8 | B | 54 | | 7 | | | 0.07 | B | | 10 | 6.5 | Y | 2 | de Assis Neto,V.F | A |
| 8.045 | 813245 | 6.0 | B | 78, 101 | 15 12 | 5 | | 70 | 0.05 | B | | 7 | 6.0C | Y | 10 | Chmielewski,W | B |
| 8.060 | 813246 | | | 101 | 30 | 7 | | | 0.20 | SC | 10 | 77 | 5.0 | Y | 1 | Hodonsky,K | C |
| 8.063 | 813247 | 5.9 | B | 78, 101 | 19.8 | 5 | | | 0.050 | B | | 7 | 5.7 | Y | 5 | Will,M | |
| 8.076 | 813248 | 7.3 | B | 101 | 15 | 3 | | | 0.203 | R | 13 | 85 | 4.0 | N | 1 | Fox,J.H | D |
| 8.09 | 813249 | 5.9 | B | 78 | 28 19 | 2 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | E |
| 8.0965 | 813250 | 5.5 | M | 101 | 25 | 6 | 1 | 55 | 0.279 | SC | 10 | 166 | 4.5 | Y | 1 | Kemble,L.J | F |
| 8.11 | 813251 | | | | 90 | 2 | | | | EY | | | 6.0 | Y | 15 | Morris,C.S | |
| 8.119 | 813252 | 6.2 | B | 78 | 4.2 | 5 | | | 0.05 | B | | 20 | 4.7 | Y | 2 | Diaz P.,E | |
| 8.123 | 813253 | 5.3 | M | 101 | 29 | 7 | 0.60 | 50 | 0.41 | N | 4.5 | 58 | 6.7 | Y | 2 | Ariail,R.B | |
| 8.15 | 813254 | 5.8 | B | 54 | 14 | 6 | | | 0.080 | B | | 20 | 4.0 | Y | | Kronk,G | G |
| 8.15 | 813255 | 4.6 | M | 54, 78 | 15 | 6 | | | 0.050 | R | | 8 | 6.0 | Y | 15 | Morris,C.S | |
| 8.15 | 813256 | 4.6 | M | 54, 78 | 12 | 7 | 2.5 | 70 | 0.080 | B | | 20 | 6.0 | Y | 15 | Morris,C.S | |
| 8.194 | 813257 | 6.5 | S | 101 | 33 | 5 | | | 0.203 | SC | 10 | 80 | 4.5C | Y | 1 | Gronek,J.D | H |
| 8.205 | 813258 | | | 54, 87 | 30 | 7 | | | 0.108 | N | 8.5 | 36 | 6.0 | Y | 1 | Stapleton,J | I |
| 8.2104 | 813259 | 6.1 | S | SAO | 10 | 6 | | | 0.254 | N | 3.8 | 32 | 5.4 | | 3 | Machholz,D | |
| 8.23 | 813260 | 6.6 | B | 78 | 12.0 | 8 | | | 0.15 | N | 8 | 30 | 5.5 | N | 1 | McBride,P | |
| 8.23 | 813261 | 6.3 | S | 78 | 13.8 | 5 | | | 0.203 | SC | 10 | 51 | 6.4 | Y | 1 | Sanchez,A | J |
| 8.257 | 813262 | 6.1 | B | 54, 87 | 30 | 3 | | | 0.050 | B | | 10 | 6.0 | Y | 1 | Stapleton,J | I |
| 8.2875 | 813263 | 4.4 | S | 101 | 10 | 6 | 0.97 | 75 | 0.05 | B | | 7 | 6.0 | Y | 5 | Cook,A.J | |
| 8.306 | 813264 | 5.1 | M | 101 | 19 | 7 | 0.5 | 290 | 0.05 | B | | 10 | 6.0 | Y | 2 | Fabre,R | K |
| 8.44 | 813265 | 5.9 | B | M | 10 | 5 | | | 0.21 | N | | 80 | | | | Knyazyuk,N | |
| 8.44 | 813266 | 4.5 | S | 78 | | | | | | EY | | | 6.1 | Y | 1 | Seargent,D | |
| 8.44 | 813267 | 4.5 | | 78 | | | | | 0.025 | B | | 3 | | Y | 1 | Seargent,D | |
| 8.470 | 813268 | 6.0 | S | 101 | | 6 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 8.475 | 813269 | | | | 6 | 9 | | | 0.15 | N | 8 | 50 | 5.0 | Y | 1 | Williams,P.F | |
| 8.475 | 813270 | 5.9 | M | 101 | 11 | 7 | 0.33 | 60 | 0.08 | B | | 11 | 5.5 | N | 1 | Mitsuma,S | |
| 8.52 | 813271 | 6.0 | B | M | | | | | 0.05 | R | | 7 | | | | Konstantinov,S | |
| 8.52 | 813272 | 5.5 | S | 78 | 13 | 7 | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Yasuki,M | |
| 8.545 | 813273 | 6.2 | S | 101 | 2 | 3 | | | 0.08 | R | 12.5 | 40 | 5.0C | Y | 1 | Feisheng,J | |
| 8.549 | 813274 | 6.2 | B | 54, 78 | | | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Date,M | |
| 8.574 | 813275 | 5.4 | S | 101 | 20 | 5 | 0.50 | 75 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |
| 8.576 | 813276 | 6.0 | B | 101 | 15 | 5 | | | 0.060 | B | | 10 | 4.5 | Y | 1 | Moriya,M | L |
| 8.594 | 813277 > | 6.3 | M | 78 | 5.5 | 6 | | | 0.060 | R | 15 | 45 | 4.0C | Y | 1 | Purvinskis,R | |
| 8.611 | 813278 | 6.2 | M | 54, 78 | 3.5 | 5 | | | 0.1 | N | 10 | 56 | 4.0 | Y | 1 | Ichikawa,K | M |
| 8.65 | 813279 | 5.5 | B | E | 15 | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 8.670 | 813280 | 6.0 | M | 78 | | | | | 0.06 | R | 4.5 | 10 | 5.7 | Y | 1 | Chodorowski,F | |
| 8.67 | 813281 | 5.2 | B | AAVSO | 20 | 6 | | | 0.05 | R | 4 | 7 | | | | Chernis,K | |
| 8.674 | 813282 | | | | 10 | 3 | | | 0.064 | R | 12 | 32 | 5.7 | Y | 1 | Chodorowski,F | |
| 8.708 | 813283 | | | 101 | 8 | 5 | | | 0.150 | R | 15 | 56 | 3.5C | N | 1 | Richert,M | |
| 8.71 | 813284 | 6.2 | M | E | 28 | 6 | | | 0.04 | R | | 12 | | | | Maydik,A | |
| 8.712 | 813285 | 5.3 | B | 101 | 10.4 | | | | 0.056 | B | | 8 | 5.5 | Y | 1 | Koch,B.O | |
| 8.72 | 813286 | 6.0 | S | 78 | | | | | 0.08 | B | | 10 | 4.0 | | 1 | Shanklin,J.D | N |
| 8.729 | 813287 | 4.7 | | 78 | 6 | 4 | | | 0.114 | N | 7.9 | 30 | 4.3 | | 1 | Kerber,F | O |
| 8.73 | 813288 | 6.3 | B | AAVSO | | | | | 0.15 | N | | | | | | Korneev,V | |
| 8.747 | 813289 | 6.7 | B | 101 | | 3 | | | 0.080 | B | | 20 | 5.0C | Y | 2 | Dionisi,M | |
| 8.750 | 813290 | | | | 4.5 | 7 | | | 0.112 | N | 8 | 36 | 3.0 | N | 1 | Koschny,D | |
| 8.75 | 813291 | 5.4 | S | DCS 5A | 12 | | 0.33 | | 0.050 | B | | 10 | 4.5C | N | 1 | van Loo,F.R | |
| 8.753 | 813292 | 7.1 | S | 101 | | 5 | | | 0.090 | R | 14 | 46 | 4.0 | Y | 1 | Birth,G | P |
| 8.771 | 813293 | 6.2 | B | 78 | 30 | 5 | | | 0.04 | B | | 8 | 6.3 | Y | 1 | Morrisby,A | Q |
| 8.813 | 813294 | 6.3 | | | | | | | 0.080 | B | | 15 | 3 | Y | 1 | Nagele,A | R |
| 8.813 | 813295 | 6.5 | M | 101 | 8 | 4 | | | 0.09 | M | 11 | 56 | 5.0C | Y | 1 | Westlund,M | S |
| 8.82 | 813296 | 6.3 | B | M | 20 | 4 | | | 0.04 | R | 6 | 18 | | | | Drapun,I | |
| 8.82 | 813297 | 6.3 | B | M | 20 | | | | 0.04 | R | 6 | 18 | | | | Drapun,A | |
| 8.875 | 813298 | 5.7: | S | 101 | | 5 | | | 0.063 | R | 13.3 | 34 | 5.0C | Y | 2 | Skjaeraasen,O | T |
| 8.896 | 813299 | 5.6 | M | 54 | 20 16 | 7 | | 60 | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | U |
| 8.96 | 813300 | 6.2 | | | 9 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | V |
| 8.97 | 813301 | 4.8 | S | AAVSO | 16 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 8.972 | 813302 | 7.0 | S | 101 | 4.3 | 7 | | | 0.203 | N | 6 | 101 | 5.5 | Y | 1 | Hudak,D.M | |
| 8.99 | 813303 | 4.7 | S | AA | 20 | 4 | | | 0.050 | B | | 7 | | | | Green,D.W.E | W |

NOTE A The tail is fainter than yesterday.
NOTE B On Dec. 8.097 UT, Halley passes before 32 Psc. The star has dimmed for 0.2 mag. to (IHW staff interpretation of observer's symbol. Ed.) 0.3 mag.
NOTE C Could not get est. of mag. due to haze.
NOTE D Haze, ice fog. SAO 108988 and SAO 108989 comparison stars.
NOTE E Elliptical coma. Possible gas tail visible.
NOTE F Seeing rather poor due to ice fog, but comet still seen well in binocs. and then, in clearer skies, with various powers in scope. Tail very diffuse but seen well, especially by sweeping. Comet moving very noticeably over 5-10 min. Comets Thiele and Hartly-Good seen well in same observing session.
NOTE G Mostly cloudy.
NOTE H Exc. see.
NOTE I In Psc.
NOTE J Mv central condensation = 6.1.
NOTE K (PA value appears to be measured incorrectly. Ed.)
NOTE L Seeing 3/5.
NOTE M Chart 101 also used for comparison stars.
NOTE N Cloud.
NOTE O (Observer indicated "A" method [Argelander?]. Ed.)
NOTE P Misty, clouds.
NOTE Q Good seeing. No tail seen.
NOTE R (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are SAO 128544, 128547, 128466, 128422, 128421.
NOTE S Cirrus.
NOTE T Estimated mag. uncertain.
NOTE U Seeing good, transparency excellent. Clouds.
NOTE V (Observer gave limit as 9.0. Ed.)
NOTE W Coma diameter approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.012 | 830416 | 0.22 | 0.203 | R | 13 | 110 | | | 1 | Phillips,J | A |
| 8.053 | 830417 | 1.32 | 0.050 | B | | 7 | 30 | 5.7 | 5 | Will,M | B |
| 8.073 | 830418 | 0.6 | 0.203 | R | 13 | 85 | 10 | 4.0 | 1 | Fox,J.H | C |
| 8.290 | 830419 | 3 | 0.050 | B | | 7 | 6 | 6.0 | 5 | Cook,A.J | |
| 8.807 | 830420 | 1.6 | 0.090 | M | 11 | 56 | 15 | 5.0 | 1 | Westlund,M | D |

NOTE A City lights. The comet is still a nebulous patch of light with the central condensation easily noted. There were times

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tonight when the comet appeared elongated with a tail developing to the east, or at least the coma appeared elongated slightly to the east. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

NOTE B Circular coma, with some suggestion of oblateness, although this could not be determined for sure. Three concentric zones of gradation of brightness found in the coma. Coma diameter 19' 46". Zone 1 = 3' 57"; zone 2 = 9' 13"; zone 3 = 19' 46". Note that a star is seen at the edge of the coma at PA 100. It was later occulted by the outer coma and could not be seen. Dark adapted.

NOTE C Nucleus and jet to NW easily seen, remainder of coma less so. Coma elongated E with deep notch, not quite reaching nucleus. S branch of coma brighter than N branch.

NOTE D City lights and thin cirrus.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.066 | 850383 | 0.135 | 3.8 | | 15.2 xl0.2 | 10.00 | Kodak Tri-X | 400/ | N | O | 1/C | 2 | Moore,A.J | |
| 8.082 | 850384 | 0.135 | 3.8 | | 15.2 xl0.2 | 20.00 | Kodak Tri-X | 400/ | N | O | 2/C | 2 | Moore,A.J | |
| 8.102 | 850385 | 0.200 | 4.5 | | 10.3 x 6.9 | 10.00 | Ektachr.400 | | N | T | 11/S | 1 | Priester,D.C | A |
| 8.113 | 850386 | 0.135 | 3.8 | | 15.2 xl0.2 | 20.00 | Kodak Tri-X | 400/ | N | O | 3/C | 2 | Moore,A.J | |
| 8.116 | 850387 | 0.200 | 4.5 | | 10.3 x 6.9 | 10.00 | Ektachr.400 | | N | T | 12/S | 1 | Priester,D.C | B |
| 8.142 | 850388 | 0.135 | 3.8 | | 15.2 xl0.2 | 20.00 | Kodak Tri-X | 400/ | N | O | 4/C | 2 | Moore,A.J | |
| 8.149 | 850389 | 0.200 | 2.8 | | 10.3 x 6.9 | 4.00 | Kodak Tri-X | 400/ | N | X | 635/N | 1 | Lazerson,H | C |
| 8.200 | 850390 | 0.180 | 2.8 | | 11.4 x 7.6 | 1.00 | Ektachrome | 400/ | N | S | 1/P | 2 | Sanford,J | D |
| 8.275 | 850391 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.08 | 3M 1000 | 1000/ | N | S | 3/P | 5 | Cook,A.J | |
| 8.281 | 850392 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | 3M 1000 | 1000/ | N | S | 4/P | 5 | Cook,A.J | |
| 8.293 | 850393 | 0.180 | 2.8 | | 11.4 x 7.6 | 3.00 | 3M 1000 | 1000/ | N | S | 5/P | 5 | Cook,A.J | |
| 8.296 | 850394 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | 3M 1000 | 1000/ | N | S | 6/P | 5 | Cook,A.J | |
| 8.984 | 850395 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 4.00 | Kodak 2415 | | Y | S | 3/P | 1 | Dilsizian,R | E |

NOTE A Occultation. Push processed to 800 ASA.

NOTE B Occultation. Exposure duration uncertain. Push processed to 800 ASA.

NOTE C (Observer's image identifier is 16-35. Ed.) "Push" processed to 800 ASA.

NOTE D This color slide film was processed as a negative.

NOTE E Exposures limited below 5 minutes to allow for stellar guiding with a minimum of "proper motion" distortion in resolution.

DATE: 9 DEC 1985 DATE: 9 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.000 | 813304 | 5.9 | B | 101 | | | | | 0.036 | B | | 3 | 6.5 | Y | 2 | de Assis Neto,V.F | |
| 9.000 | 813305 | | | 101 | | 6 | 0.25 | 68 | 0.07 | B | | 10 | 6.5 | Y | 2 | de Assis Neto,V.F | |
| 9.011 | 813306 | 4.8 | B | 101 | | 1 | | | 0.05 | B | | 20 | 4.0 | Y | 1 | da Silva,L.A.L | |
| 9.015 | 813307 | 4.7 | B | 101 | | 3 | | | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 9.04 | 813308 | 6.2 | B | 101 | 16 | 6 | | | 0.080 | B | | 20 | 4.5 | Y | | Kronk,G | |
| 9.052 | 813309 | 5.9 | B | 101 | 15 | 6 | | | 0.035 | B | | 7 | 4.0 | Y | 1 | Stephan,C | A |
| 9.056 | 813310 | 4.7 | M | 101 | 19.8 | 7 | 0.8 | 45 | 0.05 | B | | 7 | 5.1 | Y | 5 | DeYoung,J.A | B |
| 9.06 | 813311 | 6.6 | B | 101 | 9.9 | 8 | 0.17 | 86 | 0.335 | N | 4.5 | 56 | 4.5 | Y | | Kronk,G | |
| 9.08 | 813312 | 4.8 | M | 54, 78 | 19 | 6 | | | 0.050 | R | | 8 | 5.0 | Y | 14 | Morris,C.S | |
| 9.083 | 813313 | | | 101 | | 3 | | | 0.08 | R | 11 | 21 | 4.5C | N | 1 | Graves,D | C |
| 9.10 | 813314 | 4.4 | S | 101 | 25 | 5 | 0.50 | 70 | 0.080 | B | | 11 | 5.9 | Y | 3 | Spratt,C.E | D |
| 9.104 | 813315 | 6.0 | B | 101 | 10 | 6 | | | 0.15 | N | 8 | 60 | 5.4 | Y | 1 | Gilchrist,D.K | E |
| 9.11 | 813316 | 4.7 | S | 101 | 20 | 6 | 0.33 | 70 | 0.080 | R | 3.7 | 19 | 6.0 | Y | 3 | Spratt,C.E | |
| 9.12 | 813317 | 4.8 | S | 101 | 45 | 2 | | | | EY | | 1 | 6.0 | Y | 3 | Spratt,C.E | |
| 9.15 | 813318 | 6.2 | S | 101 | 9.4 | 6 | | | 0.203 | SC | 10 | 51 | 6.4 | Y | 1 | Sanchez,A | F |
| 9.153 | 813319 | 6.2 | M | 101 | | | | | 0.050 | B | | 10 | 5.5 | Y | 1 | Smith,A | |
| 9.156 | 813320 | 5.5 | M | 101 | 30 | 6 | 1.25 | 55 | 0.279 | SC | 10 | 166 | 5.0 | Y | 1 | Kemble,L.J | G |
| 9.167 | 813321 | 6.5 | S | 101 | 34 | 5 | | | 0.203 | SC | 10 | 80 | 4.5C | Y | 1 | Gronek,J.D | H |
| 9.174 | 813322 | 6.2 | B | 101 | | 2 | | | 0.08 | R | 6.3 | 16 | 4.3 | Y | 3 | Burch,J.Q | I |
| 9.1743 | 813323 | 5.9 | S | IHW | 11 | 7 | | | 0.152 | N | 8.0 | 76 | 5.2 | | 3 | Machholz,D | |
| 9.1743 | 813324 | 6.3 | B | IHW | 7 | 8 | | | 0.152 | N | 8.0 | 76 | 5.2 | | 3 | Machholz,D | |
| 9.177 | 813325 | 6.2 | B | 101 | | 2 | | | 0.08 | R | 6.3 | 25 | 4.3 | Y | 3 | Burch,J.Q | I |
| 9.188 | 813326 | 6.0 | S | 101 | 40 | 7 | | | 0.08 | R | 6 | 20 | 6.2 | Y | 1 | Bracken,R | J |
| 9.201 | 813327 | 5.9 | M | 101 | 20.0 | 7 | | | 0.05 | B | | 12 | 6.5 | Y | 1 | Knight,S | |
| 9.208 | 813328 | 6.1 | B | 101 | 14 11 | 4 | | 80 | 0.05 | B | | 7 | 5.5C | Y | 10 | Chmielewski,W | |
| 9.24 | 813329 | 4.9 | B | 101 | | | | | | EY | | | 6.5 | Y | 27 | Hale,A | |
| 9.24 | 813330 | | | | | | 0.5 | 80 | 0.20 | N | 6 | 61 | 6.5 | Y | 27 | Hale,A | |
| 9.260 | 813331 | 6.6 | S | | 10 | 5 | 0.03 | | 0.080 | B | | 11 | | Y | 3 | Pryal,J | K |
| 9.271 | 813332 | 5.1 | M | 101 | 19 | 7 | 0.5 | 290 | 0.05 | B | | 10 | 5.5 | Y | 1 | Fabre,R | L |
| 9.285 | 813333 | 5.8 | B | 101 | 12 | 6 | | | 0.05 | B | | 10 | 4.3 | N | 2 | Saxon,V.P | M |
| 9.426 | 813334 | | | | 9.5 | 6 | 0.7 | 80 | 0.10 | N | 10 | 55 | 5.5C | Y | 1 | Kato,T | |
| 9.43 | 813335 | 5.6 | S | 101 | 9 | | | | 0.049 | B | | 3 | | Y | | Jones,A | |
| 9.44 | 813336 | 5.8 | S | 101 | | | | | 0.049 | B | | 3 | | Y | | Jones,A | |
| 9.44 | 813337 | | | | 5 | 6 | | 60 | 0.317 | N | 5 | 86 | 6.0 | Y | | Jones,A | |
| 9.444 | 813338 | 5.2 | M | 101 | 11 | 6 | 0.8 | 75 | 0.030 | B | | 8 | 5.5C | Y | 1 | Kato,T | |
| 9.450 | 813339 | 5.9 | S | 101 | | 8 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 9.45 | 813340 | 8.7 | S | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | N |
| 9.45 | 813341 | 5.9 | M | SAO | 13 | 6 | 0.33 | 65 | 0.06 | R | 12 | 22 | 4.0 | Y | 4 | Nakamura,A | |
| 9.46 | 813342 | 5.7 | B | | 19 | 5 | | | 0.05 | B | | 10 | 4.5 | N | 1 | Uda,K | |
| 9.476 | 813343 | 6.2 | B | 101 | | | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Date,M | |
| 9.48 | 813344 | 7.1 | B | SAO | 12 | 6 | | | 0.15 | N | 5.7 | 34 | 4 | Y | 2 | Tanikawa,M | O |
| 9.48 | 813345 | 6.5 | B | SAO | 12 | 5 | | | 0.15 | N | 6 | 23 | 4 | Y | 2 | Tanikawa,M | O |
| 9.48 | 813346 | 5.9 | B | SAO | | | | | 0.05 | B | | 7 | 4 | Y | 2 | Tanikawa,M | |
| 9.49 | 813347 | 5.5 | S | 78 | 10 | 7 | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Yasuki,M | |
| 9.493 | 813348 | 5.9 | B | | | | | | 0.035 | B | | 7 | | N | 1 | Okada,M | |
| 9.494 | 813349 | 5.4 | | 101 | | | | | | EY | | | 5.5C | Y | 1 | Kato,T | |
| 9.529 | 813350 | 6.3 | B | 101 | 10 | 5 | | | 0.12 | N | 6 | 40 | 4.5C | Y | 1 | Hayashi,H | |
| 9.529 | 813351 | 5.6 | B | 101 | 20 | | | | 0.05 | B | | 7 | | | | Hayashi,H | |
| 9.53 | 813352 | 6.6 | B | 101 | | 7 | | | 0.15 | N | 8.6 | 41 | 6.0 | Y | 4 | Makino,J | |
| 9.53 | 813353 | 5.6 | M | 101 | | | 0.5 | | 0.05 | B | | 7 | 5.0 | Y | 2 | Suzuki,K | |
| 9.53 | 813354 | | | 101 | 3.9 | 4 | | | 0.31 | N | 5.7 | 147 | 5.0 | Y | 2 | Suzuki,K | P |
| 9.540 | 813355 | 5.4 | B | 101 | 11 | 6 | 2 | | 0.070 | B | | 10 | 5.5 | Y | 1 | Nakamura,Y | |
| 9.559 | 813356 | 5.9 | B | 101 | 20 | 5 | | | 0.060 | B | | 10 | 4.5 | Y | 1 | Moriya,M | Q |
| 9.58 | 813357 | 6.0 | B | AAVSO | 4 | 6 | 4.5 | 62 | 0.05 | B | | 7 | | | | Guryanov,S | |
| 9.63 | 813358 | 5.0 | B | AAVSO | 17 | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 9.64 | 813359 | 5.9 | B | AAVSO | | | | | 0.15 | N | | | | | | Korneev,V | R |
| 9.64 | 813360 | 5.5 | B | AAVSO | | | | | 0.11 | R | 7 | | | | | Churyumov,K | |
| 9.65 | 813361 | 6.0 | B | M | | | | | 0.07 | N | 8 | 33 | | | | Martis,A | S |
| 9.66 | 813362 | 5.7 | B | M | | | | | 0.10 | R | | 30 | | | | Lyubavin,A | |
| 9.69 | 813363 | 6.1 | B | M | 4 | | 0.3 | | 0.08 | R | | 29 | | | | Nesterov,Yu | |
| 9.705 | 813364 | | | | 3.7 | 8 | | | 0.060 | R | 15 | 45 | 3.0 | N | 1 | Koschny,D | |
| 9.708 | 813365 | 4.9 | S | 101 | | 6 | | | 0.050 | B | | 7 | 4.5 | N | 1 | Lunde,R | |
| 9.708 | 813366 | 4.5 | | 101 | 5 | 5 | | | 0.114 | N | 7.9 | 30 | 4.5 | | 1 | Kerber,F | T |
| 9.714 | 813367 | 5.5 | M | AAVSO | 14 | 8 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | U |
| 9.72 | 813368 | 5.7 | S | AAVSO | | 5 | | | 0.08 | R | 10 | 29 | | | | Goldfarb,M | |
| 9.726 | 813369 | 7.1 | S | 101 | 4.5 | 5 | | | 0.090 | R | 14 | 46 | 4.3 | Y | 1 | Hirth,G | V |
| 9.729 | 813370 | | | | 2.1 | 6 | | | 0.076 | R | 16 | 100 | 5.0C | Y | 1 | Kukkonen,I.T | W |
| 9.729 | 813371 | 5.4 | S | 101 | 6 | 7 | | | 0.050 | B | | 7 | 3.9C | N | 1 | Piccinini,M | |
| 9.73 | 813372 | 5.8 | S | M | 9 | 2 | | | 0.06 | R | 10 | 28 | | | | Muravyeva,Yu | |
| 9.73 | 813373 | 5.6 | V | E | 14 | 5 | | | | EY | | | | | | Dzhultaev,K | |
| 9.73 | 813374 | 5.6 | V | E | 14 | 5 | | | | EY | | | | | | Kolchanov,V | |
| 9.73 | 813375 | 5.6 | V | E | 14 | 5 | | | | EY | | | | | | Sladkov,Ya | |
| 9.73 | 813376 | 5.6 | B | E | 12 | | | | 0.08 | R | 10 | 29 | | | | Danilov,M | |
| 9.73 | 813377 | 5.7 | B | E | | | | | 0.06 | R | 10 | 28 | | | | Kamnev,Y | |
| 9.73 | 813378 | 5.7 | B | E | | | | | 0.06 | R | 10 | 28 | | | | Pleshkunov,D | |
| 9.73 | 813379 | 5.4 | B | E | 12 | | | | 0.08 | B | | 8 | | | | Navalihin,M | |
| 9.73 | 813380 | 5.4 | B | M | 12 | | | | 0.08 | B | | 8 | | | | Chuprakov,S | |
| 9.73 | 813381 | 5.6 | B | E | 10 | | | | 0.08 | R | 10 | 29 | | | | Dyachuk,A | |
| 9.735 | 813382 | 6.1 | B | 101 | | | | | 0.050 | B | | 7 | 4.5C | Y | 1 | Ruiz,J | |
| 9.745 | 813383 | | | 101 | 6 | 6 | | | 0.208 | N | 5.8 | 48 | 4.5C | Y | 1 | Ruiz,J | |
| 9.750 | 813384 | 6.5 | B | 101 | | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Kukkonen,I.T | |
| 9.75 | 813385 | 5.4 | S | DCS 6A | 15 | 5 | | | 0.050 | B | | 10 | 5 C | N | 1 | van Loo,F.R | |
| 9.75 | 813386 | 5.8 | S | AAVSO | 15 | 5 | | | 0.08 | B | | 8 | | | | Shirokov,A | |
| 9.763 | 813387 | 4.7 | S | 101 | 15 | 7 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Meozzi,D | |
| 9.771 | 813388 | | B | 101 | 6 | 6 | | | 0.210 | N | 5.7 | 66 | | Y | 1 | Temprano,J | |
| 9.773 | 813389 | 5.2 | B | 101 | 25 | 7 | | | 0.20 | SC | 10 | 117 | 4.5 | Y | 1 | Ward,A | X |
| 9.785 | 813390 | 6 | B | 101 | 11 | 5 | 0.1 | 60 | 0.05 | B | | 10 | 5 C | Y | 1 | Menichetti,R | |
| 9.785 | 813391 | 5.1 | B | 101 | 20 | 6 | | | 0.050 | B | | 10 | 4 | Y | 1 | Ward,A | Y |
| 9.79 | 813392 | 5.7 | B | AAVSO | 18 | 4 | | | 0.03 | B | | 8 | | | | Shirokov,A | |
| 9.792 | 813393 | 5.8 | B | 101 | 11 | | | | 0.114 | N | 8.7 | 100 | | Y | 1 | Rodriguez C.,J.A | |
| 9.806 | 813394 | 6.5 | M | 101 | 8 | 4 | | | 0.09 | M | 11 | 56 | 5.0 | Y | 2 | Westlund,M | |
| 9.829 | 813395 | 5.1 | M | 101 | 22 | 6 | | | 0.25 | N | 5.2 | 68 | 6.2 | Y | 1 | Gonzalez,A | Z |
| 9.840 | 813396 | 6.0 | M | 101 | 16 | 4 | | | 0.050 | B | | 10 | 4.5C | Y | 1 | Lozano,L | |
| 9.841 | 813397 | 5.5 | B | 101 | 20 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | a |
| 9.854 | 813398 | 5.6 | B | | | | | | 0.03 | B | | 8 | 5.5 | Y | 1 | Filimon,E | |
| 9.854 | 813399 | | B | | 11 | 5 | 0.17 | 75 | 0.07 | B | | 20 | 5.5 | Y | 1 | Filimon,E | |
| 9.882 | 813400 | | | | 12.0 | 8 | 0.7 | 53 | 0.08 | B | | 15 | 4.5 | Y | 1 | Hurst,G.M | |
| 9.89 | 813401 | 4.7 | B | 101 | 45 | 4 | 1.50 | 70 | 0.050 | B | | 7 | 5.5 | Y | 2 | Merlin,J.-C | |
| 9.892 | 813402 | 5.8 | M | 101 | 5.3 | 4 | 0.07 | 70 | 0.07 | B | | 16 | 4.5C | Y | 1 | Taylor,M.D | b |
| 9.895 | 813403 | 4.6 | S | 101 | 14.4 | 8 | 0.67 | 53 | 0.05 | B | | 10 | 4.5 | Y | 1 | Hurst,G.M | |
| 9.899 | 813404 | 5.9 | S | 101 | 7.4 | 3 | | | 0.04 | B | | 8 | 4.5C | Y | 1 | Taylor,M.D | c |

DATE: 9 DEC 1985



| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.93 | 813405 | 4.4 | B | DCS6A6B | | 6 | | | 0.040 | B | | 8 | 5.5C | N | 1 | Scholten,A | |
| 9.938 | 813406 | 8 | B | 101 | 8 | 3 | 0.25 | 30 | 0.203 | SC | 10 | 80 | 5.8 | Y | 1 | Farrington,W.R | |
| 9.94 | 813407 | 6.0 | S | 101 | | | | | 0.050 | B | | 7 | 5.0 | Y | 1 | Spalding,G.H | d |
| 9.969 | 813408 | 4.6 | M | 101 | 17.0 | 6 | | | 0.05 | B | | 7 | 4.3 | Y | 3 | DeYoung,J.A | |
| 9.969 | 813409 | 4.8 | S | 101 | 10.0 | 6 | | | 0.050 | B | | 7 | 5.5 | N | 1 | Lunde,R | |

NOTE A Heavy dew - haze in sky.
NOTE B Jets seen.
NOTE C Urban city lights.
NOTE D DC approximate.
NOTE E Coma diameter is rough estimate.
NOTE F Mv central condensation = 6.1.
NOTE G Comet very bright, tail very diffuse but long and easily seen by sweeping in RA.
NOTE H Exc. see.
NOTE I Dark location 20 miles to west of city lights.
NOTE J Unaided eye view!
NOTE K Elongated coma. (Observer gave limit as 10. Ed.)
NOTE L (PA value appears to be measured incorrectly. Ed.)
NOTE M City lights.
NOTE N Condensation.
NOTE O m2 (observer's symbol believed to mean "approximately equal to", Ed.) 11.
NOTE P Meter: coma diameter is P1 + P2.
NOTE Q Seeing 4/5.
NOTE R Envelope in head.
NOTE S Envelope in the head.
NOTE T (Observer indicated "A" method [Argelander?]. Ed.)
NOTE U 7.0 mag. nucleus. Naked eye.
NOTE V Humid.
NOTE W Coma diameter determined as an average of five transit time observations.
NOTE X Slight ground mist, thick fog by 7:30.
NOTE Y Misty, thick fog by 7:30.
NOTE Z See drawing 3.
NOTE a Thin mist prevailed. (Observer gave limit as 11.5. Ed.)
NOTE b Haze. Seeing Antoniadi III.
NOTE c Hurried!
NOTE d Fog.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.007 | 830421 | | 0.105 | N | 4.2 | | 20 | 6.0 | | Williams,D.J | A |
| 9.073 | 830422 | 0.99 | 0.15 | N | 5 | 30 | 10 | | 1 | Zanette,D | B |
| 9.099 | 830423 | 0.19 | 0.203 | N | 6 | 61,116 | 14 | 6.5 | 1 | Williams,J | C |
| 9.49 | 830424 | 1.03 | 0.15 | N | 5.7 | 34 | 14 | 4 | 2 | Tanikawa,M | D |
| 9.741 | 830425 | 0.88 | 0.063 | R | 13.3 | 52 | | 6.1 | | Kosa-Kiss,A | E |
| 9.766 | 830426 | | 0.356 | SC | 11 | 200 | 15 | | 1 | Verdenet,M | F |
| 9.771 | 830427 | 0.16 | 0.210 | N | 5.7 | 66 | | | 1 | Temprano,J | G |
| 9.813 | 830428 | 1.2 | 0.06 | R | 5.7 | 20, 40 | 30 | 5.0 | 3 | Cardiel,N | |
| 9.821 | 830429 | | 0.090 | M | 11 | 56,111 | 65 | 5.0 | 2 | Westlund,M | H |
| 9.829 | 830430 | | 0.250 | N | 5.2 | 69 | | 6.2 | 1 | Gonzalez,A | I |
| 9.861 | 830431 | 0.09 | 0.298 | N | 5 | 40, 65,179 | 20 | 6.0 | 1 | Stott,D | J |
| 9.865 | 830432 | 0.04 | 0.83 | R | 19.7 | 900 | 10 | 5.0 | 3 | Soc. Astro. de France | K |
| 9.878 | 830433 | 0.13 | 0.83 | R | 19.7 | 320 | 10 | 5.0 | 3 | Soc. Astro. de France | L |
| 9.883 | 830434 | 0.07 | 0.406 | N | 5 | 254 | 8 | | 2 | Farroni,G | M |
| 9.898 | 830435 | 2.4 | 0.08 | B | | 15 | 45 | 4.5 | 1 | Hurst,G.M | N |
| 9.957 | 830436 | 1 | 0.203 | SC | 10 | 80 | 5 | 5.8 | 1 | Farrington,W.R | O |
| 9.960 | 830437 | 0.02 | 0.610 | C | 13.5 | 823 | 5 | 4.3 | 3 | DeYoung,J.A | P |

NOTE A I can just see the comet with my eye. It is very easy to spot in the finderscope on the 8". The 8" still gives the best view at 70x. The nucleus is bright and compact and appears to be enveloped in a "misty fog" slightly elongated on the eastern side. (Duration not indicated. Time of observation is start time. Ed.)
NOTE B Cirrus.
NOTE C Fuzzy starlike center. Coma gradually brightened toward center. I had great difficulty deciding if there was more detail. I might have seen a broad short tail and some sort of detail around the nucleus, but I'm not at all very certain. This drawing is more accurate than the last one (28/11/85). I am having trouble keeping my north and east orientation correct and the accuracy of my scale. I'd welcome suggestions.
NOTE D Dia. (observer's symbol believed to mean "approximately equal to", Ed.) 12'. DC = 6/10.
NOTE E Unspecified features at PA 38 deg. and PA 330 deg. Schematic drawing. (Duration not indicated. Time of observation is end time. Ed.)
NOTE F Additional drawing submitted made using 11x80 binoculars (1.97'/mm). Ed.)
NOTE G Without tail. (Duration not indicated. Time of observation is assumed to be roughtly mid time. Ed.)
NOTE H (Two drawings supplied labelled 1920 UT (56x, 1.6'/mm) and 2015 (111x), respectively, Ed.)
NOTE I In less (than) an hour, the densest part of the coma occulted the star. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE J Fan at PA 180 deg. Tail at PA 76 deg. Detail in central condensation more elusive now, tail much easier to see though. Magnification of 269x also used.
NOTE K Jet at PA 103, 19" long; jet at PA 140, 24" long; streamer at PA 162, 43" long; tail at PA 203, 51" long; streamer at PA 238, 32" long. Drawing made by Alain Perez.
NOTE L Jet at PA 167, 22" long; jet at PA 180, 32" long; streamer at PA 216, 40" long; jet at PA 258, 30" long. Drawing made by Phillipe Venant.
NOTE M Apparent dimensions of the comet 2.17'x2.89'. Jet at PA 200, length 26".
NOTE N Extremely well condensed with very bright area of 5' diameter surrounded in overall 12' halo. Possible faint very diffuse material glimpsed between two tails as drawn. 42' long tail at PA 53 brighter than 48' long tail at PA 18. Star involved in coma PA 47 deg. from nuclear region.
NOTE O Mag. 8.0; N mag. about 13. Tail slightly brighter than on Dec. 7, length 15', PA 30. The nucleus was very dim tonight and more diffuse. At 2320 coma moved in front of star which was around mag. 10.5. It took 42 mins. for the coma to transit the star. I noticed no dimming of the star.
NOTE P Jets at PA 194 and PA 278. A dark spine at PA 50.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.736 | 850396 | 0.600 | 5.6 | | 3.4 x 2.3 | 30.00 | Kodak 103a-O | | N | S | 6/P | 1 | Dragesco,J |
| 9.832 | 850397 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | 3M | 1000/ | N | O | 16/T | 1 | Martin,D |
| 9.838 | 850398 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | 3M | 1000/ | N | O | 17/T | 1 | Martin,D |
| 9.839 | 850399 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 1.00 | Kodak 103a-F | | N | M | 15/P | 1 | Guarro,J |
| 9.847 | 850400 | 0.200 | 4.5 | | 10.3 x 6.9 | 3.00 | 3M | 1000/ | N | O | 18/T | 1 | Martin,D |
| 9.850 | 850401 | 0.200 | 4.5 | | 10.3 x 6.9 | 3.00 | 3M | 1000/ | N | O | 19/T | 1 | Martin,D |
| 9.854 | 850402 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M | 1000/ | N | O | 20/T | 1 | Martin,D |
| 9.863 | 850403 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M | 1000/ | N | O | 21/T | 1 | Martin,D |
| 9.868 | 850404 | 0.200 | 4.5 | | 10.3 x 6.9 | 5.00 | 3M | 1000/ | N | O | 22/T | 1 | Martin,D |

DATE: 10 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.000 | 813410 | | | 101 | | 3 | | | 0.08 | R | 11 | 21 | 4.0C | N | 1 | Graves,D | A |
| 10.000 | 813411 | 6.1 | M | 101 | 3.9 | 5 | | | 0.114 | N | 8 | 45 | 4.5 | Y | 1 | Mac Kenzie,G | B |
| 10.000 | 813412 | 5.5 | B | 101 | | | | | 0.050 | B | | 10 | 4.5C | Y | 1 | Robinson,R.L | |
| 10.003 | 813413 | 5.2 | | 101 | | 6 | | | 0.20 | SC | 10 | 70 | 6.0 | Y | 1 | Williams,D.J | C |
| 10.021 | 813414 | 5.7 | B | 101 | | | | | 0.080 | B | | 20 | 5.8 | Y | | Smith,D | |
| 10.035 | 813415 | 5.9 | B | 101 | | 5 | | | 0.10 | R | 15 | 15 | 6.0 | Y | 1 | Ferrin,I | |
| 10.04 | 813416 | 5.8 | | 101 | | | | | | EY | | | 6.0 | Y | 1 | Ferrin,I | |
| 10.063 | 813417 | 5.8 | B | 101 | | 1 | | | 0.05 | B | | 7 | 4.5 | N | 2 | Benavides,A | |
| 10.072 | 813418 | 5.4 | B | 101 | | | | | 0.036 | B | | 3 | 6.5 | Y | 2 | de Assis Neto,V.F | |
| 10.072 | 813419 | | | 101 | | 6 | | | 0.07 | B | | 10 | 6.5 | Y | 2 | de Assis Neto,V.F | |
| 10.083 | 813420 | 6.0 | B | 101 | 15 12 | 5 | | 70 | 0.05 | B | | 7 | 6.0C | Y | 10 | Chmielewski,W | D |
| 10.10 | 813421 | 4.4 | S | 101 | 25 | 5 | 0.75 | 70 | 0.080 | B | | 11 | 5.5 | Y | 1 | Spratt,C.E | E |
| 10.11 | 813422 | 4.7 | S | 101 | 20 | 6 | 1 | 70 | 0.140 | SN | 3.6 | 28 | 5.5 | Y | 1 | Spratt,C.E | |
| 10.13 | 813423 | 4.3 | S | AA | 22 | 6 | | | 0.050 | B | | 7 | | | | Green,D.W.E | F |
| 10.135 | 813424 | 5.8 | M | AAVSO | | | | | | EY | | | | | | O'Meara,S.J | |
| 10.15 | 813425 | 4.6 | B | 101 | 30 | 3 | | | | EY | | | 5.5 | Y | 1 | Keen,R | G |
| 10.16 | 813426 | 5.2 | | 101 | 16 | 5 | 1.3 | 70 | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | H |
| 10.17 | 813427 | | | 101 | 20 | 6 | 1.7 | 70 | 0.080 | B | | 11 | 5.5 | Y | 1 | Keen,R | |
| 10.18 | 813428 | 4.0: | | 54, 101 | 80 | 3 | | | | EY | | | 7.0 | Y | 16 | Morris,C.S | I |
| 10.19 | 813429 | | | | 10 | 8 | | | 0.015 | B | | 6 | 7.0 | Y | 16 | Morris,C.S | J |
| 10.191 | 813430 | 5.7 | M | 101 | 19.0 | 7 | | | 0.05 | B | | 12 | 6.5 | Y | 1 | Knight,S | |
| 10.198 | 813431 | 6.0 | S | 101 | 40 | 7 | | | 0.08 | R | 6 | 20 | 6.2 | Y | 1 | Bracken,R | K |
| 10.22 | 813432 | 5.0 | M | 54, 100 | 14 | 8 | 1.33 | 70 | 0.050 | R | | 8 | 7.0 | Y | 16 | Morris,C.S | L |
| 10.222 | 813433 | 5.6 | | 101 | 20 | 4 | 0.50 | 45 | 0.050 | R | 4 | | 6.0 | Y | | Underhay,E | M |
| 10.2236 | 813434 | 5.7 | S | DCS | 13 | 6 | 0.28 | 77 | 0.254 | N | 3.8 | 32 | 5.3 | | 3 | Machholz,D | |
| 10.2236 | 813435 | 6.2 | B | DCS | 13 | 6 | 0.28 | 77 | 0.254 | N | 3.8 | 32 | 5.3 | | 3 | Machholz,D | |
| 10.2236 | 813436 | 6.6 | S | DCS | 4 | 4 | 0.28 | 77 | 0.254 | N | 3.8 | 32 | 5.3 | | 3 | Machholz,D | N |
| 10.2236 | 813437 | 6.8 | B | DCS | 4 | 4 | 0.28 | 77 | 0.254 | N | 3.8 | 32 | 5.3 | | 3 | Machholz,D | N |
| 10.24 | 813438 | 5.0 | M | 54, 100 | 14 | 7 | 2.67 | 70 | 0.080 | B | | 20 | 7.0 | Y | 16 | Morris,C.S | O |
| 10.240 | 813439 | 5.1 | M | 101 | 10 | 5 | | | 0.050 | B | | 7 | 4.6 | Y | 1 | Robertson,T | |
| 10.2500 | 813440 | 4.8 | M | 101 | 10 | 6 | 1.92 | 60 | 0.05 | B | | 7 | 6.0 | Y | 5 | Cook,A.J | |
| 10.299 | 813441 | 6.5 | S | | 10 | 5 | | | 0.080 | B | | 11 | | Y | 3 | Pryal,J | P |
| 10.378 | 813442 | 5.5 | M | 101 | 25 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,H | |
| 10.385 | 813443 | 5.5 | M | 101 | 30 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 10.395 | 813444 | 5.7 | M | 101 | 11 | 7 | 0.33 | 65 | 0.08 | B | | 11 | 6 | Y | 1 | Mitsuma,S | Q |
| 10.41 | 813445 | 5.7 | S | 101 | 8 | | | | 0.049 | B | | 3 | 5.9 | Y | | Jones,A | |
| 10.41 | 813446 | | | 101 | 11 | | | | 0.050 | B | | 7 | | | | Jones,A | |
| 10.41 | 813447 | 4.5 | S | 101 | | 7 | | | 0.03 | R | 7 | 8 | 6.2C | Y | | Lovejoy,T | R |
| 10.42 | 813448 | 5.8 | M | | 20 | 7 | | | 0.07 | B | | 10 | 5 | Y | 3 | Hiraga,M | |
| 10.42 | 813449 | | | | 5 | 6 | | 60 | 0.317 | N | 5 | 86 | 6.0 | Y | | Jones,A | |
| 10.42 | 813450 | 8.9 | S | SAO | | 1 | | | 0.317 | N | 5 | 86 | | | | Jones,A | S |
| 10.448 | 813451 | 6.0 | B | 101 | | 3 | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hasegawa,T | |
| 10.46 | 813452 | 4.9 | S | 101 | 14.0 | 6 | 0.2 | 65 | 0.05 | B | | 7 | 5.0 | Y | 1 | Kanai,K | |
| 10.46 | 813453 | 5.6 | B | 101 | 14.0 | 6 | 0.2 | 65 | 0.05 | B | | 7 | 5.0 | Y | 1 | Kanai,K | |
| 10.460 | 813454 | 6.2 | S | 101 | 3.0 | 6 | | | 0.08 | R | 11.4 | 33 | C | Y | 1 | Wakatsuki,M | |
| 10.48 | 813455 | 5.6 | S | 101 | | 6 | | | 0.08 | B | | 11 | 4.0 | N | 2 | Momose,M | |
| 10.482 | 813456 | 5.1 | M | 101 | 11 | 6 | | | 0.030 | B | | 8 | 5.0C | Y | 1 | Kato,T | |
| 10.490 | 813457 | | | | 8.5 | 6 | 0.3 | 70 | 0.10 | N | 10 | 55 | 5.0C | Y | 1 | Kato,T | |
| 10.49 | 813458 | 5.5 | S | 101 | | 2 | | | 0.050 | B | | 7 | C | N | 1 | Matchett,V | |
| 10.500 | 813459 | 5.7 | B | 101 | | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 10.54 | 813460 | 5.4 | | 101 | | | | | | EY | | | 6.2 | Y | | Clark,M.L | |
| 10.55 | 813461 | 5.0 | S | 101 | 14 | 4 | | | 0.03 | R | | 6 | 6.2 | Y | | Clark,M.L | |
| 10.55 | 813462 | 5.4 | S | 101 | 10 | 7 | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Yasuki,M | |
| 10.56 | 813463 | 5.4 | S | 101 | 10 | 6 | 0.47 | 114 | 0.41 | N | 4.2 | 86 | 6.2 | Y | | Clark,M.L | |
| 10.569 | 813464 | 5.4 | M | 101 | 5.0 | 5 | 0.67 | 85 | 0.1 | N | 10 | 25 | 6.0 | Y | 1 | Ichikawa,K | |
| 10.576 | 813465 | 5.8 | M | 101 | | 6 | | | 0.060 | R | 15 | 45 | 5.1C | Y | 1 | Purvinskis,R | |
| 10.65 | 813466 | 5.7 | S | AAVSO | | | | | 0.08 | R | 10 | 29 | | | | Goldfarb,M | |
| 10.68 | 813467 | 6.2 | B | M | | | | | 0.07 | R | 8 | 33 | | | | Martis,A | |
| 10.70 | 813468 | 5.1 | B | AAVSO | 17 | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 10.70 | 813469 | 6.0 | B | 101 | 7 | 6 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Speil,J | T |
| 10.719 | 813470 | 6.0 | M | 101 | 8 | 4 | | | 0.09 | M | 11 | 56 | 4.5 | Y | 2 | Westlund,M | U |
| 10.73 | 813471 | 5.7 | B | M | 12 | | | | 0.08 | B | | 8 | | | | Rogozin,V | |
| 10.73 | 813472 | 5.7 | B | E | 12 | | | | 0.08 | B | | 8 | | | | Zhigalev,A | |
| 10.73 | 813473 | 5.7 | B | E | | | | | 0.06 | R | 10 | 28 | | | | Kamnev,Y | |
| 10.73 | 813474 | 5.7 | B | E | | | | | 0.06 | R | 10 | 28 | | | | Pleshkunov,D | |
| 10.733 | 813475 | 4.8 | M | 101 | 15 | 5 | | | 0.063 | B | | 9 | 4.0C | Y | 1 | Kammerer,A | V |
| 10.75 | 813476 | 5.9 | S | SAO 67 | 5 | | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Germann,R | |
| 10.75 | 813477 | 5.8 | B | DCS 6A | 12 | 5 | | | 0.063 | B | | 8 | 3 C | N | 1 | Geenen,J.J | |
| 10.75 | 813478 | 5.1 | S | DCS 6A | | 5 | | | 0.115 | N | 8 | 45 | C | Y | 1 | Maat,W.J | |
| 10.754 | 813479 | 5.4 | B | IHW | 14.2 | 6 | | | 0.080 | B | | 20 | 4.5 | Y | 1 | Guthier,O | |
| 10.760 | 813480 | 5.5 | M | 101 | 14 | 6 | | | 0.089 | R | 5.5 | 18 | 5.5M | N | 1 | Ventura,F | |
| 10.77 | 813481 | 5.9 | B | DCS 6A | | 6 | | | 0.050 | B | | 10 | 4.5C | N | 1 | Roos,M.C | |
| 10.77 | 813482 | 4.5 | S | DCS 6A | 18 | 7 | 1.75 | 78 | 0.060 | B | | 12 | 6.0 | Y | 3 | van de Weg,R.L.W | W |
| 10.77 | 813483 | 5.1 | B | DCS 6A | 18 | 7 | 1.75 | 78 | 0.060 | B | | 12 | 6.0 | Y | 3 | van de Weg,R.L.W | |
| 10.77 | 813484 | 4.3 | S | DCS 6A | 23 | 4 | 2.0 | 78 | 0.046 | R | 4 | 8 | 6.0 | Y | 3 | van de Weg,R.L.W | |
| 10.77 | 813485 | 4.9 | B | DCS 6A | 23 | 4 | 2.0 | 78 | 0.046 | R | 4 | 8 | 6.0 | Y | 3 | van de Weg,R.L.W | |
| 10.771 | 813486 | 6.1 | B | 101 | | 3 | | | 0.07 | B | | 10 | 5.0 | N | 1 | Deconinck,M | |
| 10.771 | 813487 | | | | | | 0.9 | 71 | 0.250 | N | 6 | 150 | 4.7 | Y | 1 | Guthier,O | X |
| 10.774 | 813488 | 5.7 | S | 101 | 10 | 6 | | | 0.114 | N | 7.9 | 26 | 5.0C | N | 1 | Bernardis,A | |
| 10.78 | 813489 | 5.2 | M | 101 | 14 | 5 | | | 0.05 | B | | 10 | 4.5 | Y | 1 | Bottger,B | |
| 10.78 | 813490 | 5.4 | S | DCS 6A | 12 | 5 | | | 0.080 | B | | 15 | 4 C | N | 1 | Zanstra,W.T | |
| 10.786 | 813491 | 5.9 | B | 101 | 10 | 3 | | | 0.05 | B | | 10 | 5.5C | Y | 1 | Menichetti,R | |
| 10.788 | 813492 | 5.9 | B | 101 | 10 | 3 | | | 0.13 | N | 5.5 | 36 | 5.5C | Y | 1 | Menichetti,R | |
| 10.79 | 813493 | 5.4 | B | 101 | 8 | 4 | | | 0.056 | B | | 8 | 4.5 | Y | 1 | Kraling,W | Y |
| 10.79 | 813494 | 4.7 | S | DCS 6A | 15 | | | | 0.050 | B | | 10 | C | N | 1 | Aerts,L | |
| 10.79 | 813495 | 4.4 | B | DCS6A6B | | 6 | | | 0.040 | B | | 8 | 5.5 | Y | 2 | Scholten,A | |
| 10.799 | 813496 | 4.8 | | 101 | 15 | 4 | | | 0.050 | B | | 10 | 4.0 | N | 1 | Marekfia,G | Z |
| 10.799 | 813497 | 5.1 | M | 101 | 20 | 6 | 0.6 | 73 | 0.05 | B | | 12 | 4.5 | Y | 1 | Tanti,T | a |
| 10.800 | 813498 | 5.1 | B | 101 | 20 | 6 | | 80 | 0.030 | B | | 8 | 4.3 | Y | 1 | Linder,J | b |
| 10.8125 | 813499 | 5.8 | B | 101 | 12 | 7 | | | 0.05 | B | | 10 | 6.0C | Y | 2 | Franciosi,C | |
| 10.82 | 813500 | 4.7 | V | 101 | 60 | 2 | 1.17 | 76 | | EY | | | 6.5 | Y | 2 | Merlin,J.-C | |
| 10.826 | 813501 | 4.9 | S | | 15 | 5 | | | 0.114 | N | 8.7 | 38 | 5.2 | Y | 1 | Nolle,M | c |
| 10.851 | 813502 | 6.0 | M | 101 | 16 | 4 | 0.47 | 302 | 0.050 | B | | 10 | 4.1C | Y | 1 | Lozano,L | |
| 10.86 | 813503 | 5.2 | B | AA | 17 | 6 | | | 0.050 | B | | 7 | 4.5 | N | | Schmeer,P | |
| 10.865 | 813504 | 5.9: | | | | | | | 0.080 | B | | 15 | 3 | Y | 1 | Nagele,A | d |
| 10.875 | 813505 | 7.0 | B | | 7.0 | 8 | | | 0.060 | R | 15 | 45 | 4.0 | Y | 1 | Koschny,D | |
| 10.875 | 813506 | 7.0 | B | | 20.0 | 6 | | | 0.050 | B | | 7 | 4.0 | Y | 1 | Koschny,D | |
| 10.878 | 813507 | 5.5 | B | 101 | 21.8 | 4 | | | 0.03 | B | | 8 | 5.5 | Y | 1 | Hasubick,W | |
| 10.878 | 813508 | 5.8 | B | 101 | 14.0 | 4 | | | 0.10 | B | | 14 | 5.5 | Y | 1 | Hasubick,W | |
| 10.88 | 813509 | 4.7 | S | DCS 6A | | 6 | | | 0.045 | B | | 9 | 6 | Y | 1 | Comello,G | |
| 10.88 | 813510 | 6.1 | B | DCS 6A | 12 10 | 7 | | | 0.115 | N | 8 | 45 | 4.5C | Y | 1 | van Munster,T | |

DATE: 10 DEC 1985

DATE: 10 DEC 1985

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.913 | 813511 | 5.3 | B | 101 | 12.8 | 7 | | | 0.050 | B | | 10 | 5.0 | Y | 1 | Rossi,L | V |

NOTE A Deteriorating seeing (weather).
NOTE B Temp. = -2 deg. C; star-like coma increasingly difficult to see. Movement detected in about 25 min. of time.
NOTE C Clear, dark.
NOTE D Naked eye object.
NOTE E DC approximate.
NOTE F Coma diameter approximate.
NOTE G -4 deg. Fahrenheit.
NOTE H Modified Sidgwick method used.
NOTE I Comet appeared as a star (m2 = 5.5) with an extremely faint coma surrounding it. Hint of a tail towards the east.
NOTE J Only inner condensation was visible.
NOTE K Good seeing.
NOTE L Chart 101 also used.
NOTE M Magnification of 8+12 [sic] used.
NOTE N Magnitude estimates of inner coma only.
NOTE O Chart 101 also used. Coma nearly parabolic in shape.
NOTE P Weather hazy at 2000 PST. (Observer gave limit as 9. Ed.)
NOTE Q 10.
NOTE R Comet brighter.
NOTE S Condensation.
NOTE T Faint aurora.
NOTE U Cirrus.
NOTE V Slight haze.
NOTE W Tail rays in plasma tail: 0.25 deg. long at PA 35 and 0.17 deg. long at PA 60.
NOTE X Envelope.
NOTE Y Cloud gap. (Translated by IHW staff. Ed.)
NOTE Z (Observer indicated "A" method [Argelander?]. Ed.)
NOTE a Seeing good, transparency fair. Haze.
NOTE b Some fog, some clouds. Coma elliptical? Tail? PA approximate.
NOTE c Drawing.
NOTE d (Observer indicated "A" method [Argelander?]. Ed.) Comparison star is approximately SAO 128335. [sic]

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.003 | 830438 | | 0.203 | SC | 10 | 70 | | 6.0 | | Williams,D.J | A |
| 10.040 | 830439 | 0.25 | 1.0 | C | 21 | 210 | 85 | 6.0 | 1 | Ferrin,I | B |
| 10.092 | 830440 | 0.67 | 0.114 | N | 8 | 45 | 14 | 4.5 | 1 | Mac Kenzie,G | C |
| 10.135 | 830441 | 0.46 | 0.050 | B | | 10 | | | 5 | O'Meara,S.J | D |
| 10.250 | 830442 | 3 | 0.050 | B | | 7 | 20 | 6.0 | 5 | Cook,A.J | |
| 10.458 | 830443 | | 0.08 | R | 11.4 | 33 | 6 | 2.1 | 1 | Wakatsuki,M | E |
| 10.462 | 830444 | | 0.08 | R | 11.4 | 33 | 5 | 2.1 | 1 | Wakatsuki,M | |
| 10.715 | 830445 | 1.6 | 0.090 | M | 11 | 56 | 10 | 4.5 | 2 | Westlund,M | F |
| 10.755 | 830446 | 0.50 | 0.114 | N | 8 | 56 | 6 | 5.0 | 2 | Donatiello,G | G |
| 10.762 | 830447 | 1 | 0.114 | N | 8.7 | 70 | 5 | 5.2 | 1 | Nolle,M | H |
| 10.771 | 830448 | | 0.250 | N | 6 | 75 | | | 1 | Guthier,O | I |
| 10.793 | 830449 | 0.67 | 0.12 | R | 15 | 53, 74,153 | 15 | 6.0 | 2 | Franciosi,C | J |
| 10.813 | 830450 | 0.1 | 0.40 | N | 5 | 81,254 | 20 | 6.5 | 2 | Merlin,J.-C | K |
| 10.833 | 830451 | | 0.356 | SC | 11 | 200 | 180 | | 1 | Verdenet,M | L |

NOTE A (Duration not indicated. Time of observation is start time. Ed.)
NOTE B Coma maximum diameter about 21'; degree of condensation 5 (Morris scale, 2.5 Ferrin scale). Central condensation diameter approximately 10". Comet did show a sharp central condensation on a faint and wide rotationally symmetric coma, with no irregularities of any kind. (Three drawings supplied at 0020, 0105, and 0140 UT. Ed.)
NOTE C Because of comet's low altitude (fainter stars were more difficult to see than 2 hrs. earlier). [sic]
NOTE D (Duration not indicated. Time of observation is assumed to be start time.
NOTE E Someone saw a jet. Saw it again 10 min. afterwards. Then didn't see it. Saw one narrow line (wide and bright). (Illusion). (Roughly translated by IHW staff. Ed.)
NOTE F Thin cirrus.
NOTE G Total magnitude estimate 5.9. Barlow lens used to double magnification.
NOTE H Inner coma was somewhat eccentric as compared to the outer coma. It was somewhat flattened towards the south. The outer coma is round. No tail. (Translated by IHW staff. Ed.)
NOTE I A kernel-like condensation visible in the center of the coma. Coma with two distinct envelopes. Tail at PA 71, 52'; and PA 49, 12'. (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed. )
NOTE J Pseudo nucleus diameter 15", VM: 9.0, ellipsoidal 15" x about 10"; coma diameter 13', VM: 5.9; 9' 12" tail at PA 50. [sic] (Two drawings included in this listing. Ed.)
NOTE K Tail at PA 44, straight, narrow and bright; jet at PA 180, dense, slightly curved eastward; jet at PA 221, about sunward, then curved in a large and diffuse fountain; jet at PA 303, then curved toward PA 12, becoming diffuse; tail at PA 76, PA of the axis.
NOTE L (Additional drawing submitted made using 11x80 binoculars (1.97'/mm). Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.012 | 850405 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 13.00 | Kodak 2415 | | Y | | 1/P | 1 | Crist,M | A |
| 10.026 | 850406 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 25.00 | Kodak 2415 | | Y | | 2/P | 1 | Crist,M | A |
| 10.188 | 850407 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | 3M 1000 | 1000/ | N | O | 14/N | 7 | Edberg,S.J | |
| 10.188 | 850408 | 0.050 | 2 | | 39.6 x27.0 | 10.00 | Ilford HP 5 | 500/ | N | O | 43/C | 7 | Edberg,S.J | |
| 10.196 | 850409 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/ | N | O | 15/N | 7 | Edberg,S.J | B |
| 10.199 | 850410 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | 3M 1000 | 1000/ | N | O | 16/N | 7 | Edberg,S.J | |
| 10.210 | 850411 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | S | 2/P | 1 | Yen,B | C |
| 10.211 | 850412 | 0.050 | 2 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 17/N | 7 | Edberg,S.J | |
| 10.221 | 850413 | 0.200 | 2.8 | | 10.3 x 6.9 | 4.00 | Kodak Tri-X | 400/ | N | X | 702/N | 1 | Lazerson,H | D |
| 10.231 | 850414 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/ | N | O | 19/N | 7 | Edberg,S.J | |
| 10.237 | 850415 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | 3M 1000 | 1000/ | N | O | 20/N | 7 | Edberg,S.J | |
| 10.240 | 850416 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | 3M 1000 | 1000/ | N | O | 21/N | 7 | Edberg,S.J | |
| 10.444 | 850417 | 0.850 | 3.4 | 0.25 | 2.4 x 1.6 | 18.75 | Kodak 6415 | | Y | C | 5/P | 1 | Kojima,T | E |
| 10.817 | 850418 | 0.100 | 2.9 | | 20.4 x13.7 | 20.00 | Kodak Tri-X | 400/ | N | T | 139/P | 1 | Hernschier,W | F |
| 10.840 | 850419 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 1.50 | Kodak 2415 | | Y | M | 20/P | 1 | Guarro,J | |
| 10.847 | 850420 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 10.00 | Kodak 2415 | | Y | M | 21/P | 1 | Guarro,J | |
| 10.861 | 850421 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 7.00 | Kodak 2415 | | Y | O | 1/T | 2 | Genebriera,J | |

NOTE A High developer temperature may account for somewhat "fogged" and dense negative. Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE B Start time approximate.
NOTE C Start time approximate. (Observer's image identifier is 12. Ed.) Instrument is Schmidt camera.
NOTE D (Observer's image identifier is 17-2. Ed.) "Push" processed to 800 ASA.
NOTE E Instrument is Wright-Schmidt. Large format (120 size) film used.
NOTE F Lumicon Deep Sky filter used. (Observer's image identifier is followed by suffix "/85".) City lights interfered with the observation.

DATE: 10 DEC 1985 DATE: 10 DEC 1985

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.083 | 870103 | 600G-O | CL | 0.135 | 1.9 | | 20.00 | Kodak Tri-X | 400/27 | N | C | 503/S | 2 | Buchanan,W.T | A |

NOTE A (Observer's image identifier is E-115-03. Ed.) Halley visible.

DATE: 11 DEC 1985

DATE: 11 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.021 | 813512 | 5.9 | B | 101 | | | | | | R | 15 | 15 | 6.1 | Y | 1 | Ferrin,I | |
| 11.021 | 813513 | | | | 5.9 | 7 | | | 0.203 | R | 13 | 110 | | Y | 1 | Phillips,J | |
| 11.029 | 813514 | 5.4 | B | 101 | | | | | 0.036 | B | | 3 | 6.5 | Y | 2 | de Assis Neto,V.F | |
| 11.029 | 813515 | | | 101 | 13.0 | 6 | | | 0.07 | B | | 10 | 6.5 | Y | 2 | de Assis Neto,V.F | A |
| 11.054 | 813516 | 6.0 | B | 101 | | 7 | | | 0.12 | B | | 20 | 6.1 | Y | 1 | Ferrin,I | |
| 11.056 | 813517 | 4.6 | M | 101 | | 6 | | | 0.05 | B | | 7 | 4.5 | Y | 1 | DeYoung,J.A | |
| 11.083 | 813518 | 6.5 | S | | 11 | 5 | 0.02 | | 0.080 | B | | 11 | 8 | Y | 3 | Pryal,J | B |
| 11.12 | 813519 | 4.4 | S | 101 | 25 | 6 | 0.50 | 68 | 0.080 | B | | 11 | 5.5 | Y | 1 | Spratt,C.E | |
| 11.142 | 813520 | 6.0 | B | 101 | 15 12 | 5 | | 70 | 0.05 | B | | 7 | 5.5C | Y | 10 | Chmielewski,W | |
| 11.2062 | 813521 | 5.8 | S | DCS | 9 | 6 | 0.20 | 77 | 0.254 | N | 3.8 | 32 | 5.0 | | 3 | Machholz,D | |
| 11.208 | 813522 | 6.4 | S | 101 | 34 | 5 | | | 0.203 | SC | 10 | 125 | 4.5C | Y | 1 | Gronek,J.D | C |
| 11.333 | 813523 | 5.0 | M | 101 | 20 | 7 | 0.5 | 290 | 0.05 | B | | 10 | 5.5 | Y | 1 | Fabre,R | D |
| 11.354 | 813524 | | | | 6.5 | 7 | 0.4 | 60 | 0.10 | N | 10 | 55 | 5.0C | Y | 1 | Kato,T | |
| 11.378 | 813525 | 5.3 | M | 101 | 14 | 6 | | | 0.030 | B | | 8 | 5.0C | Y | 1 | Kato,T | |
| 11.41 | 813526 | 5.7 | S | 101 | | | | | 0.049 | B | | 3 | | | | Jones,A | |
| 11.41 | 813527 | | | 101 | 9 | | | | 0.050 | B | | 7 | | | | Jones,A | |
| 11.417 | 813528 | 6.3 | B | 101 | 12 | 4 | | | 0.050 | B | | 7 | 5.8C | Y | 1 | Parkinson,M | E |
| 11.42 | 813529 | | | | | 6 | | 50 | 0.317 | N | 5 | 86 | 5.0 | | | Jones,A | |
| 11.42 | 813530 | 8.7 | S | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | F |
| 11.42 | 813531 | 4.7 | S | 101 | | 7 | | | 0.03 | R | 7 | 8 | 6.2C | Y | | Lovejoy,T | |
| 11.42 | 813532 | 5.9 | S | 101 | | 2 | | | 0.050 | B | | 7 | 5.0C | Y | 1 | Matchett,V | |
| 11.434 | 813533 | 5.7 | S | 101 | 7.5 | 6 | | | 0.1 | N | 10 | 40 | 4.0 | Y | 6 | Ichikawa,K | |
| 11.44 | 813534 | 5.9 | B | E | 11 | 4 | | | 0.21 | N | | 80 | | | | Knyazyuk,N | |
| 11.445 | 813535 | 5.8 | M | 101 | 12 | 7 | | | 0.08 | B | | 11 | 4.5 | N | 1 | Mitsuma,S | |
| 11.458 | 813536 | 6.0 | B | 101 | | 3 | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hasegawa,T | |
| 11.47 | 813537 | 5.6 | M | 101 | | 4 | 0.7 | | 0.05 | B | | 7 | 5.0 | Y | 2 | Suzuki,K | |
| 11.47 | 813538 | 5.8 | B | | 18 | 6 | | | 0.05 | B | | 10 | 5.0 | N | 1 | Uda,K | |
| 11.476 | 813539 | 6.1 | B | 101 | | | | | 0.07 | B | | 10 | 4.5 | Y | 1 | Date,M | |
| 11.50 | 813540 | 7.0 | B | SAO | 12 | 5 | | | 0.15 | N | 5.7 | 34 | 3 | Y | 2 | Tanikawa,M | G |
| 11.51 | 813541 | 7.1 | B | SAO | 12 | 5 | | | 0.15 | N | 6 | 23 | 3 | Y | 2 | Tanikawa,M | G |
| 11.51 | 813542 | 6.0 | B | SAO | | | | | 0.05 | B | | 7 | 3 | Y | 2 | Tanikawa,M | |
| 11.521 | 813543 | 6.2 | S | 101 | 3.0 | 6 | | | 0.15 | N | 6 | 32 | C | Y | 1 | Wakatsuki,M | |
| 11.548 | 813544 | 5.7 | S | 101 | 15 | 5 | 0.50 | 80 | 0.07 | B | | 10 | 3.5 | Y | 1 | Kobayashi,J | |
| 11.549 | 813545 | 6.2 | S | 101 | 2 | 3 | | | 0.08 | R | 12.5 | 40 | 5.5 | Y | 1 | Feisheng,J | |
| 11.563 | 813546 | 5.3 | M | 101 | 10 | 5 | 0.67 | 75 | 0.1 | N | 10 | 40 | 5.5 | Y | 1 | Ichikawa,K | |
| 11.563 | 813547 | 5.6 | M | 101 | 9.7 | 6 | | | 0.060 | R | 15 | 45 | 5.4C | Y | 1 | Purvinskis,R | |
| 11.57 | 813548 | 5.1 | S | 101 | 12 | 5 | | | 0.065 | B | | 20 | 5.4 | Y | | Pearce,A | |
| 11.63 | 813549 | 5.1 | B | AAVSO | | | | | 0.11 | R | 7 | | | | | Churyumov,K | |
| 11.70 | 813550 | 5.7 | B | AAVSO | | | | | 0.20 | R | 15 | | | | | Churyumov,K | |
| 11.709 | 813551 | 6.1 | B | 101 | 2 | 2 | | | 0.114 | N | 7.9 | 45 | 5.4C | Y | 1 | Raffaello,D | H |
| 11.71 | 813552 | 6.2 | B | 101 | 7 | 6 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Speil,J | I |
| 11.73 | 813553 | 6.0 | B | M | | | | | 0.08 | B | | 40 | | | | Palko,Yu | |
| 11.736 | 813554 | | | | | | | | 0.305 | N | 5 | 60 | 6.2 | | 2 | Zanotta,M.V | J |
| 11.75 | 813555 | 5.6 | S | AAVSO | | | | | 0.08 | R | 10 | 29 | | | | Golubev,V | |
| 11.776 | 813556 | 5.6 | B | 101 | 30 | 7 | | | 0.065 | B | | 20 | 4.1 | Y | 1 | McBain,J | |
| 11.785 | 813557 | 6.0 | B | 101 | | | | | 0.05 | B | | 7 | 5 | | 1 | Dal Santo,M | K |
| 11.785 | 813558 | 6.1 | M | 101 | 12 9 | 4 | 0.1 | 55 | 0.07 | B | | 16 | 4.5C | Y | 1 | Taylor,M.D | L |
| 11.79167 | 813559 | 5.8 | B | 101 | 10 | 7 | | | 0.05 | B | | 10 | 6.0C | Y | 2 | Franciosi,C | M |
| 11.792 | 813560 | 6.3 | B | 101 | 13 | | | | 0.114 | N | 8.7 | 100 | | Y | 1 | Rodriguez C.,J.A | |
| 11.80 | 813561 | 4.6 | B | 101 | 30 | 4 | 1.00 | 72 | 0.050 | B | | 7 | 5.5 | Y | 2 | Merlin,J.-C | |
| 11.80 | 813562 | 5.1 | B | AAVSO | 20 | 6 | 0.3 | 70 | 0.11 | R | 7 | | | | | Churyumov,K | |
| 11.803 | 813563 | 7.0 | S | SAO | | | | | 0.31 | N | 5 | 62 | | | | Giampaolo,G | |
| 11.833 | 813564 | 6.0 | | AAVSO | 8 | 5 | 0.67 | 80 | 0.080 | B | | 11 | | Y | | Stomeo,E | |
| 11.854 | 813565 | 5.8 | B | 4A | | | | | 0.050 | B | | 7 | 5.5 | Y | 1 | van der Mey,L | |
| 11.858 | 813566 | 6.7 | B | 101 | 2.3 | 3 | | | 0.080 | B | | 20 | 5.0C | Y | 2 | Dionisi,M | N |
| 11.87 | 813567 | 5.7 | S | DCS 6A | 60 | 6 | | | 0.050 | B | | 16 | 5 C | Y | 1 | van Asperen,H | |
| 11.872 | 813568 | 6.2 | M | 122 | 5.3 | 7 | | | 0.114 | N | 8 | 36 | 5.0 | N | 1 | Pennelli,G | |
| 11.875 | 813569 | | | 101 | 8.2 | 6 | | | 0.15 | N | 6.6 | 50 | 5.5 | Y | | Dal Santo,M | |
| 11.878 | 813570 | | | | 3 | 8 | | | 0.508 | C | 20 | 240 | 5.0 | Y | 4 | Foulkes,M | O |
| 11.889 | 813571 | 5.6 | S | 101 | 24 | 7 | | | 0.065 | B | | 12 | 5.0 | Y | 4 | Foulkes,M | O |
| 11.903 | 813572 | 6.0 | M | 101 | 11 | 7 | | | 0.05 | B | | 10 | 6.0C | Y | 3 | Melandri,F | |
| 11.908 | 813573 | | | 101 | 15 | 6 | | | 0.030 | B | | 8 | 5.0C | N | 1 | Villa,M | |
| 11.913 | 813574 | 4.7: | S | 101 | 11 | 7 | | | 0.05 | B | | 10 | 3.0 | N | 1 | Hurst,G.M | P |
| 11.913 | 813575 | 5.9 | M | 101 | | | | | 0.030 | B | | 8 | 5.0C | Y | 1 | Villa,M | |
| 11.922 | 813576 | | | 101 | 12 | 7 | | | 0.114 | N | 8.7 | 25 | 4.5C | Y | 1 | Villa,M | |
| 11.94 | 813577 | 6.2 | | | 7 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | Q |
| 11.958 | 813578 | 4.9: | S | 101 | | | | | 0.03 | B | | 6 | 5.0C | Y | 1 | Milani,G | |

NOTE A Tail invisible.
NOTE B Hazy weather. VVL hazy coma. [sic]
NOTE C Exc. see.
NOTE D (PA value appears to be measured incorrectly. Ed.)
NOTE E Star-like central condensation.
NOTE F Condensation.
NOTE G m2 (observer's symbol believed to mean "approximately equal to", Ed.) 11.
NOTE H No tail.
NOTE I Faint aurora.
NOTE J In yellow-green filter, tail broken in two parts divided by a darker area where it joins the coma; afterward the two parts gathered (giving an egg-shape to the coma-tail system), then the tail went on straight and narrow. Tail PA 65.
NOTE K Cloudy - limited visibility. (Observer indicated Y/N for dark adaptation).
NOTE L Haze. Seeing Antoniadi III.
NOTE M Veled ski. [sic] Coma diameter approximate.
NOTE N Coma diameter accuracy +/-0.1. Clouds.
NOTE O Unsteady.
NOTE P Coma diameter approximate. Passing cloud.
NOTE Q (Observer gave limit as 8.0. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.000 | 830452 | 0.66 | 0.114 | N | 8 | 45, 90 | 41 | 4.5 | 1 | Mac Kenzie,G | |
| 11.026 | 830453 | 0.22 | 0.203 | R | 13 | 110 | | | | Phillips,J | A |
| 11.51 | 830454 | 1.03 | 0.15 | N | 5.7 | 34 | 14 | 3 | 2 | Tanikawa,M | B |
| 11.51 | 830455 | 1.37 | 0.15 | N | 5.7 | 23 | 14 | 3 | 2 | Tanikawa,M | C |
| 11.845 | 830456 | 0.1 | 0.080 | B | | 20 | 65 | 5.0 | 2 | Dionisi,M | D |
| 11.885 | 830457 | 0.58 | 0.150 | N | 6.6 | 100 | 4 | 4.5 | 1 | Dal Santo,M | |
| 11.905 | 830458 | 1.2 | 0.150 | N | 6.6 | 33 | 4 | 4.5 | 1 | Dal Santo,M | |

NOTE A City lights. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Dia. and m2 (observer's symbol believed to mean "approximately equal to", Ed.) 12' and 11, respectively. DC = 5/10. ml =

7.0.
NOTE C Dia. and m2 (observer's symbol believed to mean "approximately equal to", Ed.) 12' and 11, respectively. DC = 5/10. ml = 7.1.
NOTE D City lights interfered with the observation. A very bright jet internal to coma has the same luminosity of the nucleus [sic]; PA 0 at 0.0', PA 27 at 0.5', PA 36.5 at 1.0'. Another jet has the same luminosity of the coma; PA 150 at 0.0', PA 158 at 1.0'.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.112 | 850422 | 3.00 | | 1.00 | 0.7 x 0.5 | 30.00 | IIa-O | | N | | 9/P | 1 | Ferrin,I | A |
| 11.813 | 850423 | 0.225 | 1.7 | 0.136 | 9.1 x 6.1 | 1.50 | Kodak 103a-O | | N | | 001/P | 1 | Bordignon,F | B |
| 11.822 | 850424 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 0.50 | Kodak 103a-F | | N | M | 22/P | 1 | Guarro,J | |
| 11.825 | 850425 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 1.00 | Kodak 103a-F | | N | M | 23/P | 1 | Guarro,J | |
| 11.831 | 850426 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 10.00 | Kodak 103a-F | | N | M | 24/P | 1 | Guarro,J | |
| 11.835 | 850427 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 15.00 | Ilford HP5 | 400/27 | N | O | 6/C | 1 | Paolinetti,R | C |
| 11.845 | 850428 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 10.00 | Ilford HP5 | 400/27 | N | O | 8/C | 1 | Paolinetti,R | C |
| 11.845 | 850429 | 0.600 | 6 | | 3.4 x 2.3 | 44.00 | Ilford HP4 | 400/27 | N | O | 00/C | 1 | Paolinetti,R | D |
| 11.852 | 850430 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 15.00 | Ilford HP5 | 400/27 | N | O | 9/C | 1 | Paolinetti,R | C |
| 11.861 | 850431 | 0.180 | 2.8 | | 11.4 x 7.6 | 20.00 | Kodak 2415 | | Y | O | 2/P | 4 | Uberti,M | |

NOTE A Instrument is Schmidt camera.
NOTE B Instrument used is Celestron 5" [sic] Schmidt camera. The seeing wasn't too good because of several passages of clouds.
NOTE C (Observer's image identifier is followed by suffix A. Ed.)
NOTE D Large format film (4x5 inch) used. Instrument is astrograph.

DATE: 12 DEC 1985

DATE: 12 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.063 | 813579 | 5.8 | B | 101 | 15 | 6 | 0.17 | 50 | 0.035 | B | | 7 | 4.0 | Y | 1 | Stephan,C | A |
| 12.066 | 813580 | 6.8 | B | 101 | 25 | 5 | | | 0.203 | R | 13 | 85 | 4.9 | N | 1 | Fox,J.H | B |
| 12.07 | 813581 | 4.5 | B | 101 | 35 | 3 | | | | EY | | | 7.0 | Y | 1 | Keen,R | |
| 12.08 | 813582 | 5.5 | M | 101 | 15 | 7 | 1.2 | 70 | 0.32 | N | 4 | 33 | 7.0 | Y | 1 | Keen,R | |
| 12.09 | 813583 | 5.1 | | 101 | 18 | 6 | 0.7 | 70 | 0.040 | B | | 8 | 7.0 | Y | 1 | Keen,R | |
| 12.09 | 813584 | 5.1 | M | 54, 100 | 16 | 6 | | | 0.050 | R | | 8 | 5.5 | Y | 14 | Morris,C.S | C |
| 12.10 | 813585 | 5.2 | | 101 | 18 | 6 | 1.0 | 70 | 0.080 | B | | 11 | 7.0 | Y | 1 | Keen,R | D |
| 12.11 | 813586 | 4.5 | S | 101 | 25 | 6 | 0.75 | 65 | 0.080 | B | | 11 | 5.5 | Y | 1 | Spratt,C.E | C |
| 12.128 | 813587 | 5.8 | B | 101 | | 1 | | | 0.05 | B | | 7 | 4.1 | N | 2 | Benavides,A | |
| 12.146 | 813588 | 6.3 | S | | 11 | 6 | | | 0.080 | B | | 11 | 8 | Y | 3 | Pryal,J | |
| 12.167 | 813589 | 4.9 | S | 101 | 8 | 6 | | | 0.203 | SC | 11 | 67 | 4.0 | Y | 1 | Jacobs,T | E |
| 12.174 | 813590 | 6.1 | B | 101 | 15 12 | 5 | | 65 | 0.05 | B | | 7 | 5.5C | Y | 10 | Chmielewski,W | F |
| 12.184 | 813591 | 6.0 | M | 101 | 3.5 | 8 | | | 0.076 | R | 15 | 48 | 4.5 | Y | 4 | Poulos,D | |
| 12.2090 | 813592 | 5.8 | S | DCS | 6 | 9 | 0.12 | 77 | 0.254 | N | 3.8 | 32 | 5.0 | | 3 | Machholz,D | |
| 12.222 | 813593 | 5.9 | B | 101 | | 5 | | | 0.050 | B | | 10 | 5.0C | Y | 1 | Stapleton,J | G |
| 12.226 | 813594 | | | 101 | 10 | 7 | 0.33 | 305 | 0.254 | N | 5.6 | 157 | 5.0C | Y | 1 | Stapleton,J | H |
| 12.319 | 813595 | 4.9 | M | 101 | 20 | 7 | 0.55 | 290 | 0.05 | B | | 10 | 5.5 | Y | 1 | Fabre,R | I |
| 12.386 | 813596 | 5.5 | B | 101 | 25 | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Hayashi,H | |
| 12.43 | 813597 | 4.5 | S | 101 | | | | | 0.03 | R | 7 | 8 | 6.2C | Y | | Lovejoy,T | |
| 12.431 | 813598 | 6.1 | B | 101 | 12 | 5 | | | 0.050 | B | | 7 | 5.8C | Y | 1 | Parkinson,M | |
| 12.44 | 813599 | 5.0 | S | 101 | | 3 | | | 0.050 | B | | 7 | 5.0C | Y | 1 | Matchett,V | |
| 12.447 | 813600 | 5.5 | S | 101 | 15 | 3 | | | 0.050 | B | | 12 | 5.8 | Y | 1 | Batza,H | |
| 12.45 | 813601 | 5.8 | M | 101 | 10 | 7 | 0.42 | | 0.08 | B | | 11 | 5.5 | Y | 1 | Mitsuma,S | J |
| 12.45 | 813602 | | | | | | 0.33 | 70 | 0.08 | B | | 15 | | | | Seargent,D | |
| 12.45 | 813603 | 4.7 | S | 101 | | 7 | | | | EY | | | 6 | Y | 1 | Seargent,D | |
| 12.458 | 813604 | 6.2 | S | 101 | 2.0 | 3 | | | 0.08 | R | 12.5 | 40 | 5.5 | Y | 1 | Feisheng,J | |
| 12.458 | 813605 | 4.5 | S | 101 | | | | | 0.05 | B | | 10 | 6.0 | Y | 13 | Garradd,G | |
| 12.46 | 813606 | 5.4 | S | AAVSO | 10 | 5 | | | 0.13 | N | 6.3 | 24 | 4.5 | Y | 1 | Hayashi,A | |
| 12.470 | 813607 | 5.6 | S | 101 | | 7 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 12.471 | 813608 | | | | 6.5 | 6 | 0.13 | 60 | 0.10 | N | 10 | 55 | 5.0C | Y | 1 | Kato,T | |
| 12.472 | 813609 | 6.1 | S | 101 | 3.1 | 6 | | | 0.15 | N | 6 | 32 | C | Y | 1 | Wakatsuki,M | |
| 12.475 | 813610 | | | | 5 | 9 | | | 0.15 | N | 8 | 50 | 5.0 | Y | 1 | Williams,P.F | |
| 12.477 | 813611 | 5.0 | M | 101 | 17 | 6 | | | 0.030 | B | | 8 | 5.0C | Y | 1 | Kato,T | |
| 12.500 | 813612 | 5.5 | B | 101 | 10 | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 12.51 | 813613 | 5.5 | M | 101 | | | 0.7 | | 0.05 | B | | 7 | 5.5 | Y | 2 | Suzuki,K | |
| 12.51 | 813614 | | | 101 | 3.9 | 5 | | | 0.31 | N | 5.7 | 147 | 5.5 | Y | 2 | Suzuki,K | K |
| 12.528 | 813615 | 5.7 | S | 101 | 8 | 5 | | | 0.153 | N | 8.6 | 33 | 3.5 | Y | 1 | Iwaki,Y | |
| 12.556 | 813616 | 5.9 | B | 101 | 15 | 5 | | | 0.060 | B | | 10 | 4.0 | Y | 1 | Moriya,M | L |
| 12.573 | 813617 | 6.0 | B | 101 | | | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Date,M | |
| 12.576 | 813618 | 5.6 | M | 101 | 7.8 | | | | 0.060 | R | 15 | 45 | 5.1C | N | 1 | Purvinskis,R | M |
| 12.60 | 813619 | 5.3 | B | AAVSO | 25 | 6 | 1 | 70 | 0.11 | R | 7 | | | | | Churyumov,K | N |
| 12.635 | 813620 | | | | 6.2 | 5 | | | 0.254 | N | 6 | 61 | 4 C | Y | 1 | Bhadriah,L.H.E | |
| 12.65 | 813621 | 5.4 | B | AAVSO | | | | | 0.11 | R | 7 | | | | | Churyumov,K | |
| 12.65 | 813622 | 5 | B | M | 10 | | | | 0.03 | B | | 8 | | | | Zinvyev,V.A | |
| 12.691 | 813623 | 4.7 | S | 101 | 20 | 6 | 2.0 | | 0.152 | N | 5 | 44 | 5.4 | Y | 2 | Moeller,M | O |
| 12.694 | 813624 | 4.7 | S | 101 | | 6 | | | 0.050 | B | | 7 | 4.5 | N | 1 | Lunde,R | P |
| 12.698 | 813625 | 5.7 | M | 101 | 8 | 4 | | | 0.08 | B | | 10 | 5.0C | N | 1 | Rapavy,P | Q |
| 12.708 | 813626 | 4.7 | S | 101 | 12.0 | 6 | | | 0.080 | B | | 20 | 4.3C | Y | 1 | Baroni,S | |
| 12.708 | 813627 | 4.4 | S | 101 | 17 | 7 | 1.06 | 64 | 0.050 | B | | 7 | 6.5 | Y | 1 | Meozzi,D | |
| 12.71 | 813628 | | | 101 | 8 | 6 | 0.33 | 80 | 0.100 | B | | 14 | 5.0 | Y | 1 | Kraling,W | R |
| 12.71 | 813629 | 5.2 | B | 101 | 8 | 6 | | | 0.056 | B | | 8 | | Y | 1 | Kraling,W | |
| 12.71 | 813630 | 5.8 | B | M | | | | | 0.08 | B | | 40 | | | | Palko,Yu | |
| 12.712 | 813631 | 5.6 | M | 101 | 9 | 4 | | | 0.10 | B | | 25 | 5.0C | Y | 1 | Rapavy,P | Q |
| 12.716 | 813632 | 4.5 | S | 101 | 11.6 | 6 | 0.57 | 70 | 0.140 | SN | 3.6 | 19 | 6.5 | Y | 1 | Meozzi,D | |
| 12.72 | 813633 | 4.8 | B | 4A | 5 | 6 | | | 0.056 | B | | 8 | 4.7 | Y | 1 | Kraling,W | |
| 12.72 | 813634 | 4.8 | B | 4A | 5 | 6 | 0.33 | 70 | 0.100 | B | | 14 | 4.7 | Y | 1 | Kraling,W | S |
| 12.726 | 813635 | 5.2 | M | 101 | 18 12 | 6 | 0.67 | 75 | 0.08 | B | | 11 | 4.0 | Y | 1 | Gubo,H | |
| 12.726 | 813636 | 5.4 | B | 101 | 13.4 | 4 | | | 0.03 | B | | 8 | 5.5 | Y | 1 | Hasubick,W | |
| 12.729 | 813637 | 6.2 | B | | | 5 | | | 0.050 | B | | 10 | C | Y | 1 | Linke,H | |
| 12.730 | 813638 | 5.8 | B | 101 | | | | | 0.050 | B | | 7 | 5.0C | Y | 1 | Ruiz,J | |
| 12.73 | 813639 | 5.5 | B | DCS 6A | 12 | 4 | | | 0.063 | B | | 8 | 4.5C | N | 1 | Geenen,J.J | |
| 12.73 | 813640 | 5.6 | S | AAVSO | | | | | 0.08 | R | 10 | 29 | | | | Goldfarb,M | |
| 12.735 | 813641 | | | 101 | 6 | 6 | | | 0.208 | N | 5.8 | 48 | 5.0C | Y | 1 | Ruiz,J | |
| 12.736 | 813642 | 5.3 | S | 101 | 7 | 6 | | | 0.050 | B | | 7 | 4.5C | Y | 1 | Piccinini,M | |
| 12.740 | 813643 | 5.2 | B | 101 | 8.4 | | | | 0.080 | B | | 20 | 5.5 | Y | 1 | Koch,B.O | |
| 12.740 | 813644 | 5.0 | | 101 | 10 | 4 | 0.5 | 80 | 0.040 | B | | 8 | 6.0 | Y | 2 | Weissferdt,F | T |
| 12.75 | 813645 | 5.1 | M | 101 | 10 | 7 | | | 0.05 | B | | 10 | 4.3 | Y | 1 | Bottger,B | |
| 12.75 | 813646 | 5.4: | S | 101 | 6 | 7 | | | 0.08 | B | | 15 | 4.5 | Y | 1 | Glowinski,C | |
| 12.75 | 813647 | 4.3 | S | DCS 6A | 15 | 7 | | | 0.050 | B | | 10 | 5.5C | Y | 1 | Aerts,L | |
| 12.75 | 813648 | 5.3 | B | DCS6A6B | 12 | 8 | 0.42 | 60 | 0.115 | N | 8 | 45 | 5.5C | Y | 1 | van Munster,T | |
| 12.75 | 813649 | 4.5 | V | 101 | 45 | 3 | 1.25 | 68 | | EY | | | 6.0 | Y | 2 | Merlin,J.-C | |
| 12.756 | 813650 | 6.1 | B | 101 | 2 | 2 | | | 0.050 | B | | 12 | 4.3C | N | 1 | Raffaello,D | U |
| 12.7562 | 813651 | 5.5 | S | AAVSO | | 5 | | | 0.05 | B | | 7 | 5.0 | N | 1 | Sicoli,P | |
| 12.76 | 813652 | 5.7 | M | 101 | | 4 | | | 0.15 | N | 8 | 56 | 5.0 | Y | 1 | Sardini,D | |
| 12.760 | 813653 | 6.0 | B | 101 | | 3 | | | 0.07 | B | | 10 | 5.2 | N | 1 | Deconinck,M | |
| 12.763 | 813654 | 5.7 | B | 101 | 5.6 | 6 | 0.17 | 90 | 0.330 | N | 4.5 | 59 | 6.3 | Y | 1 | Castino,R | |
| 12.764 | 813655 | 4.7 | B | 101 | 10.7 | 6 | 0.77 | 68 | 0.030 | B | | 8 | 5.0 | Y | 2 | Linder,J | |
| 12.764 | 813656 | | B | | | | 0.8 | 61 | 0.250 | N | 6 | 150 | | Y | 1 | Guthier,O | V |
| 12.765 | 813657 | 4.9 | B | 101 | 11.5 | 7 | 0.7 | 70 | 0.063 | B | | 9 | 5.5 | Y | 3 | Kammerer,A | |
| 12.765 | 813658 | 4.8 | S | 101 | 13.0 | 7 | 1.27 | 60 | 0.08 | B | | 15 | 6.3 | Y | 5 | Haver,R | |
| 12.775 | 813659 | 4.6 | S | 101 | 13.5 | 6 | 1.53 | 60 | 0.05 | B | | 7 | 6.3 | Y | 5 | Haver,R | |
| 12.7775 | 813660 | 6.0: | B | 101 | 5 | 4 | | | 0.08 | B | | 20 | 4 | Y | 1 | Gozzoli,E | W |
| 12.778 | 813661 | 6.0 | M | 101 | 16 | 4 | 0.50 | 300 | 0.050 | B | | 10 | 4.5C | Y | 1 | Lozano,L | X |
| 12.780 | 813662 | 4.4 | S | 101 | | | | | | EY | | | 6.3 | Y | 5 | Haver,R | |
| 12.78 | 813663 | 5.5 | B | DCS 6A | | 5 | | | 0.063 | B | | 9 | 5.5C | N | 1 | Swart,E.T | |
| 12.78 | 813664 | 4.9 | S | DCS 6A | 6 | 7 | | | 0.050 | B | | 10 | 5.5C | Y | 1 | van Loo,F.R | |
| 12.78 | 813665 | 5.4 | B | E | | 3 | | | 0.08 | B | | 88 | | | | Dzhultaev,K | |
| 12.78 | 813666 | 5.4 | B | E | | 3 | | | 0.08 | B | | 8 | | | | Kolchanov,V | |
| 12.78 | 813667 | 5.4 | B | E | | 3 | | | 0.08 | B | | 8 | | | | Sladkov,Ya | |
| 12.78 | 813668 | | | | 20 | | 0.1 | | 0.05 | B | | 7 | | | | Sedelkin,D | |
| 12.78 | 813669 | 5.6 | B | M | | | | | 0.08 | R | 10 | 29 | | | | Goldfarb,M | |
| 12.78 | 813670 | 5.4 | B | E | | | | | 0.08 | B | | 8 | | | | Navalihin,M | |
| 12.78 | 813671 | 5.4 | B | E | | | | | 0.08 | B | | | | | | Chuprakov,S | |
| 12.781 | 813672 | | | 101 | 6.7 | 3 | | | 0.150 | N | 6 | 45 | 5.2 | Y | 1 | Deconinck,M | |
| 12.781 | 813673 | | | 101 | 8 | 5 | 0.7 | 70 | 0.20 | N | 6 | 40 | 5.0C | Y | 1 | Li Causi,G | Y |
| 12.781 | 813674 | 4.8 | S | 101 | 5 | 5 | | | 0.05 | B | | 10 | 6.0 | Y | 1 | Vanin,G | |
| 12.784 | 813675 | 5.4 | B | 101 | 5.8 | 6 | 0.14 | 90 | 0.035 | B | | 7 | 6.3 | Y | 1 | Castino,R | |
| 12.784 | 813676 | 5.2 | B | SAO,IHW | 9.6 | 6 | 0.6 | 76 | 0.080 | B | | 20 | 5.5 | Y | 1 | Guthier,O | Z |
| 12.784 | 813677 | 4.3 | | 101 | | | | | | EY | | | 6.0 | Y | 2 | Milani,G | |
| 12.784 | 813678 | | | | 12 | 5 | 0.20 | 60 | 0.08 | B | | 20 | 6.0 | Y | 2 | Milani,G | |
| 12.785 | 813679 | 4.6 | S | 101 | 15 | | | | 0.03 | B | | 6 | 6.0 | Y | 2 | Milani,G | |

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.785 | 813680 | 4.8 | B | 101 | 15 | | | | 0.03 | B | | 6 | 6.0 | Y | 2 | Milani,G | |
| 12.785 | 813681 | 5.8 | B | 101 | 5 | 5 | | | 0.210 | N | 5.7 | 66 | 4.3C | Y | 1 | Temprano,J | |
| 12.79 | 813682 | 5.0 | S | DCS 6A | | 3 | | | 0.080 | B | | 15 | 5 | Y | 2 | Bril,H.J | |
| 12.79 | 813683 | 5.2 | B | M | 7 | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 12.79167 | 813684 | 5.7 | B | 101 | 9 | 7 | | | 0.05 | B | | 10 | 6.2C | Y | 2 | Franciosi,C | |
| 12.792 | 813685 | 5.6 | M | 101 | | | | | 0.06 | R | 4.5 | 10 | 4.3 | Y | 1 | Chodorowski,F | |
| 12.792 | 813686 | | | | 6 | 5 | | | 0.15 | N | 6.6 | 50 | 5.0C | | 1 | Dal Santo,M | a |
| 12.792 | 813687 | 5.0 | B | | | | | | | EY | | | | | | Guthier,O | |
| 12.792 | 813688 | 4.5 | S | 101 | 15 | 7 | | 70 | 0.08 | B | | 20 | 5.7 | Y | 3 | Parisio,R | |
| 12.799 | 813689 | | | | 10 | 3 | | | 0.064 | R | 12 | 32 | 4.3 | Y | 1 | Chodorowski,F | |
| 12.799 | 813690 | 6.0 | B | 101 | | | | | 0.05 | B | | 7 | 5 | Y | 1 | Dal Santo,M | b |
| 12.80 | 813691 | 5.4 | B | DCS 6A | | | | | 0.080 | B | | 15 | 5 | Y | 2 | Bril,H.J | |
| 12.809 | 813692 | 6.2 | M | 122 | 6.0 | 6 | | | 0.114 | N | 8 | 36 | 5.0 | N | 1 | Pennelli,G | |
| 12.819 | 813693 | 4.2 | | | 45 | 6 | 1.0 | 70 | 0.080 | B | | 15 | 5.0 | Y | 3 | Lucius,D | c |
| 12.83 | 813694 | 4.2 | S | DCS 6A | 21 | 4 | 1.5 | | 0.046 | R | 4 | 8 | 6 | Y | 3 | van de Weg,R.L.W | |
| 12.83 | 813695 | 5.0 | B | DCS 6A | 21 | 4 | 1.5 | | 0.046 | R | 4 | 8 | 6 | Y | 3 | van de Weg,R.L.W | |
| 12.83 | 813696 | 4.4 | S | DCS 6A | 17 | 7 | 2.0 | 70 | 0.060 | B | | 12 | 6 | Y | 3 | van de Weg,R.L.W | d |
| 12.83 | 813697 | 5.0 | B | DCS 6A | 17 | 7 | 2.0 | 70 | 0.060 | B | | 12 | 6 | Y | 3 | van de Weg,R.L.W | d |
| 12.833 | 813698 | 6.7 | B | 58 | 15 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | e |
| 12.835 | 813699 | 6.0 | B | 101 | 10.5 | 2 | | | 0.08 | B | | 20 | 5.2 | Y | 1 | Gigli,P | f |
| 12.840 | 813700 | 5.8 | B | 101 | 0.4 | 6 | 0.06 | 297 | 0.28 | SC | 5 | 70 | 4.1 | Y | 1 | Amoretti,M | |
| 12.85 | 813701 | 6.0 | S | 101 | 8 | 7 | | | 0.203 | SC | 10 | 44 | 5.6C | Y | 2 | Maraziti,A | |
| 12.851 | 813702 | 6.0 | B | 101 | 2.5 | 3 | 0.03 | 60 | 0.080 | B | | 20 | 5.0C | Y | 2 | Dionisi,M | g |
| 12.865 | 813703 | 5.0 | | 101 | 4.5 | 4 | 0.15 | 85 | 0.203 | SC | 10 | 50 | 5.0 | Y | 1 | Dietrich,M | T |
| 12.903 | 813704 | 4.7 | B | 101 | 8 | 6 | 0.27 | 68 | 0.100 | B | | 14 | 5 | Y | 1 | Linder,J | h |
| 12.95 | 813705 | 4.1 | S | AA | 25 | 6 | | | 0.050 | B | | 7 | | | | Green,D.W.E | i |
| 12.951 | 813706 | | | | 5 | | | | 0.040 | B | | 8 | | | 1 | Levai,R | |
| 12.97 | 813707 | 4.7 | S | AAVSO | | | | | 0.050 | B | | 10 | | | | Bortle,J.E | j |

NOTE A Tail approx 10' ring in 7x35's. Only narrow portion seen.
NOTE B Streamers in coma. SAO 128260 comparison star.
NOTE C Modified Sidgwick method used.
NOTE D Chart 101 also used.
NOTE E Clouds at 20:00 PST.
NOTE F Tail just barely visible in 7x35 binocular not in 8 inch Schmidt-Cass.
NOTE G Near horizon. In Psc.
NOTE H Some light pollution. (PA value may have been incorrectly determined. Ed.)
NOTE I (PA value appears to be measured incorrectly. Ed.)
NOTE J 9.5. PA 65 to 70.
NOTE K Meter: coma diameter is P1 + P2.
NOTE L Seeing 3/5.
NOTE M Cloud impeding observation.
NOTE N A round disk-like orange nucleus; a distinctly seen cone of matter emanation to S and to sun, exactly what V. Struve and F. Bessel saw in comet Halley in 1835.
NOTE O PA 80, 130. Twilight.
NOTE P Deep twilight.
NOTE Q High clouds. Cirrus?
NOTE R Type I.
NOTE S Tail PA approximate.
NOTE T (Observer indicated "A" method [Argelander?]. Ed.)
NOTE U No tail.
NOTE V Core structure. (Translated by IHW staff. Ed.)
NOTE W Haze.
NOTE X Fog.
NOTE Y Magnification approximate.
NOTE Z Core magnitude 10. (Translated by IHW staff. Ed.)
NOTE a Lighted sky - haze. Coma diameter approximate. (Observer indicated Y/N for dark adaptation. Ed.)
NOTE b Very cloudy after this estimate.
NOTE c (Observer indicated "A" method [Argelander?]. Ed.) Coma diameter approximate.
NOTE d Tail length is lower limit.
NOTE e (Observer gave limit as 13.0. Ed.)
NOTE f Clear, slight wind. (Translated by IHW staff. Ed.)
NOTE g Coma diameter accuracy +/-0.6. Tail length accuracy +/-0.01.
NOTE h Poor weather. Tail length approximate.
NOTE i Coma diameter approximate.
NOTE j Cirrus clouds.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.041 | 830459 | 0.25 | 1.00 | | 21 | 210 | 87 | 6.2 | 1 | Ferrin,I | A |
| 12.043 | 830460 | 0.38 | 0.254 | N | 5.6 | 60,120,180 | 17 | 6.5 | 2 | Knisely,D | B |
| 12.066 | 830461 | 0.6 | 0.203 | R | 13 | 85,225 | 10 | 4.9 | 1 | Fox,J.H | C |
| 12.075 | 830462 | 0.99 | 0.15 | N | 6 | 30 | 5 | | 1 | Zanette,D | |
| 12.080 | 830463 | 0.43 | 0.203 | N | 6 | 61,116 | 10 | 5.5 | 1 | Williams,J | D |
| 12.51 | 830464 | 1.03 | 0.15 | N | 5.7 | 34 | 14 | 3 | 2 | Tanikawa,M | E |
| 12.747 | 830465 | 0.58 | 0.100 | M | 10.5 | 35 | 10 | 4.5 | 1 | Piccinini,M | |
| 12.764 | 830466 | | 0.250 | N | 6 | 75 | | | 1 | Guthier,O | F |
| 12.766 | 830467 | 0.06 | 0.40 | N | 5 | 81,254 | 15 | 6.0 | 2 | Merlin,J.-C | G |
| 12.778 | 830468 | | 0.250 | N | 6 | 150 | | | 1 | Guthier,O | H |
| 12.785 | 830469 | 0.2 | 0.210 | N | 5.7 | 66 | | | 1 | Temprano,J | I |
| 12.785 | 830470 | 0.6 | 0.200 | N | 6 | 35,200 | 10 | 5 | 1 | Li Causi,G | J |
| 12.786 | 830471 | 0.58 | 0.150 | N | 6.6 | 100 | 3 | 4.5 | 1 | Dal Santo,M | |
| 12.814 | 830472 | 2 | 0.05 | R | 7 | 40 | 25 | 5.0 | 1 | Kopp,M | K |
| 12.816 | 830473 | 1.92 | 0.080 | B | | 15 | 30 | 5.0 | 3 | Lucius,D | L |
| 12.839 | 830474 | | 0.356 | SC | 11 | 200 | 165 | | 1 | Verdenet,M | M |
| 12.861 | 830475 | 0.22 | 0.203 | SC | 10 | 77,167 | 20 | 5.6 | 2 | Maraziti,A | N |

NOTE A Comet looked featureless, all symmetric around, with strong central condensation of diameter about 14 arc sec. (Three drawings supplied made at 0020, 0105, and 0140 UT. Ed.)
NOTE B Stellar central condensation surrounded by bright irregular disk about 10" arc diameter. Hint of possible outer envelope at southwest edge of coma. Dark patch PA 20 from 1/2 coma radius to coma edge. Bright spine from nucleus down tail to about 15' arc from nucleus. Faint radial streamer or jet noted at PA 120 approximately 7' arc long. Tail faint and uniform except for vague patch just outside coma with tail 1/2 to 1/3 coma diameter at its widest. Magnification of 240x also used.
NOTE C "Fountain effect" W of nucleus more apparent at 225x. At 85x, W side of coma just seems brighter and more sharply defined than E which simply diffuses to invisibility. Nuclear condensation more easily seen than in previous nights.
NOTE D Fuzzy starlike center with coma brightening toward center. Outer coma very faint, no detail. Lights from city (pop. 1,000,000) 30 miles to the west starting to interfere by brightening sky.
NOTE E Dia. and m2 (observer's symbol believed to mean "approximately equal to", Ed.) 12' and 11, respectively. DC = 5/10. ml = 6.5.
NOTE F Coma distinctly condensed, condensation in center approximately 10th magnitude. Tail: PA 61, 48'; PA 69, 60'; PA 76, 36'. (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE G Jet at PA 3, diffuse, tail at PA 31, straight, tail at PA 68; jet at PA 167, bright jet finishing in curved and diffuse fountain to PA 113; jet at PA 229, narrow, curved jet about sunward; jet at PA 276, diffuse.

DATE: 12 DEC 1985

NOTE H Using 150x, a "kidney-shaped" structure became visible. Naked eye observation of Halley approximately 5.1 mag. (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE I (Duration not indicated. Time of observation is assumed to be roughly mid time. Ed.)
NOTE J Coma was very bright and little shaded. DC was 5. Tail at PA 70 was brighter from condensation to the indicated star. The rest of the tail was very little contrasted, and difficult to see. [sic] To see the second tail was easier at 200x. I'm not sure at all about the presence of the third feature/tail. City lights interfered with the observation.
NOTE K Temp.: 2 deg. C. Diffuse coma very faint but increasing brightness toward the center; tail faint, too. Vertex distance: V = 10.5. Semi latus rectum: P1 = 9.0', P2 = 9.0'. Tail PA = 30 deg.
NOTE L Tail at PA 70.
NOTE M (Additional drawing submitted made using 11x80 binoculars (2.05'/mm). Ed.)
NOTE N Bright "nucleus", not pointlike (Word translated by IHW staff. Ed.); bright condensation surrounding the nucleus which is placed in the northern side of it at PA 355. Very large and diffuse coma (DC = 7); no tail seen. Vertex distance = 3.1'. Semi latus rectum P1 = P2 = 4.0'.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.015 | 850432 | 3.00 | | 1.00 | 0.7 x 0.5 | 14.00 | IIa-O | | N | | 2/P | 1 | Ferrin,I | A |
| 12.131 | 850433 | 0.500 | 5 | | 4.1 x 2.7 | 10.00 | Ilford XP1 | 400/ | N | S | 1/P | 3 | Sanford,J | B |
| 12.153 | 850434 | 0.180 | 2.8 | | 11.4 x 7.6 | 7.00 | Ilford XP1 | 400/ | N | S | 2/P | 3 | Sanford,J | B |
| 12.163 | 850435 | 0.200 | 2.8 | | 10.3 x 6.9 | 4.00 | Kodak Tri-X | 400/ | N | X | 709/N | 1 | Lazerson,E | C |
| 12.174 | 850436 | 0.205 | 3.8 | | 10.0 x 6.7 | 10.00 | Kodak VR 200 | | N | T | 8/P | 1 | Cunningham,J | D |
| 12.194 | 850437 | 0.205 | 3.8 | | 10.0 x 6.7 | 10.00 | Kodak VR 200 | | N | T | 9/P | 1 | Cunningham,J | D |
| 12.210 | 850438 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | S | 3/P | 1 | Yen,B | E |
| 12.747 | 850439 | 0.100 | 2.9 | | 20.4 x13.7 | 20.00 | Kodak Tri-X | 400/ | N | T | 140/P | 1 | Hernschier,W | F |
| 12.759 | 850440 | 0.500 | 3.5 | | 4.1 x 2.7 | 5.00 | 103a-O | | N | | 701/P | | Soc. Astro. de France | G |
| 12.792 | 850441 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 20.00 | Ilford HP5 | 400/27 | N | O | 21/C | 1 | Paolinetti,R | |
| 12.803 | 850442 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 10.00 | Ilford HP5 | 400/27 | N | O | 22/C | 1 | Paolinetti,R | |
| 12.813 | 850443 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 15.00 | Ilford HP5 | 400/27 | N | O | 23/C | 1 | Paolinetti,R | |
| 12.816 | 850444 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Fujichrome | 400/ | N | O | 2/T | 2 | Genebriera,J | H |
| 12.841 | 850445 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 0.50 | Kodak 103a-F | | N | M | 25/P | 1 | Guarro,J | |
| 12.848 | 850446 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 8.00 | Kodak 103a-F | | N | M | 26/P | 1 | Guarro,J | |
| 12.864 | 850447 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 9.00 | Kodak 2415 | | Y | O | 4/T | 2 | Genebriera,J | |
| 12.921 | 850448 | 1.905 | 5.4 | 0.350 | 1.1 x 0.7 | 30.00 | Kodak 2415 | | Y | O | 5/T | 2 | Genebriera,J | |
| 12.947 | 850449 | 0.600 | 1.7 | 0.350 | 3.4 x 2.3 | 13.00 | Ilford HP4 | | N | | 001/T | 1 | Belli,V | A |
| 12.957 | 850450 | 0.600 | 1.7 | 0.350 | 3.4 x 2.3 | 2.05 | Kodak 103a-O | | N | | 002/T | 1 | Belli,V | A |

NOTE A Instrument is Schmidt camera.
NOTE B Skylight filter used.
NOTE C (Observer's image identifier is 17-9. Ed.) "Push" processed to 800 ASA.
NOTE D Film "push" processed from ISO 200 to 800.
NOTE E Start time approximate. (Observer's image identifier is 21. Ed.) Instrument is Schmidt camera.
NOTE F Lumicon Deep Sky filter used. (Observer's image identifier is followed by suffix "/85".) City lights interfered with the observation.
NOTE G Photograph made by P. Morel.
NOTE H (Observer's report form is ambiguous. The film may have been hyper-sensitized in forming gas (10% H2, 90% N2) at 48 C for 22 hours. Ed.)

DATE: 13 DEC 1985

DATE: 13 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.021 | 813708 | 6.8 | B | 101 | 20 | 5 | | | 0.203 | R | 13 | 85 | 4.3 | N | 1 | Fox,J.H | A |
| 13.045 | 813709 | 5.0 | B | 101 | 23.2 | 6 | | | 0.07 | B | | 10 | 6.5 | Y | 2 | de Assis Neto,V.F | B |
| 13.066 | 813710 | 5.5 | B | 101 | | 2 | | | 0.05 | B | | 7 | 4.1 | Y | 2 | Benavides,A | |
| 13.09 | 813711 | 4.8 | M | 100,101 | 14 | 7 | | | 0.050 | R | | 8 | 5.5 | Y | 14 | Morris,C.S | |
| 13.094 | 813712 | 5.8 | B | 101 | 15 | 5 | | | 0.050 | B | | 10 | 5.0C | Y | 1 | Stapleton,J | C |
| 13.10 | 813713 | 4.8 | M | 100,101 | 12 | 7 | 2.5 | 68 | 0.080 | B | | 20 | 5.5 | Y | 14 | Morris,C.S | D |
| 13.11 | 813714 | 4.3 | S | 101 | 25 | 6 | 1 | 65 | 0.080 | B | | 11 | 6.0 | Y | 1 | Spratt,C.E | |
| 13.11 | 813715 | 4.4 | S | 101 | 20 | 7 | 1 | 65 | 0.140 | SN | 3.6 | 28 | 5.7 | Y | 1 | Spratt,C.E | E |
| 13.146 | 813716 | 5.3 | M | 101 | 17.0 | 7 | | | 0.05 | B | | 12 | 7.0 | Y | 1 | Knight,S | |
| 13.1736 | 813717 | 5.1 | | DCS | 10 | | | | | EY | | | 5.4 | | 3 | Machholz,D | |
| 13.1736 | 813718 | 5.6 | S | DCS | 12 | 6 | 0.23 | 79 | 0.080 | B | | 20 | 5.4 | | 3 | Machholz,D | |
| 13.1736 | 813719 | 5.1 | | DCS | 10 | | | | | EY | | | 5.4 | | 3 | Machholz,D | |
| 13.177 | 813720 | 4.9 | M | 101 | 17.0 | 7 | 2.0 | 70 | 0.05 | B | | 12 | 7.0 | Y | 1 | Knight,S | F |
| 13.184 | 813721 | 6.1 | B | 101 | 16 14 | 5 | | 65 | 0.05 | B | | 7 | 5.5C | Y | 10 | Chmielewski,W | |
| 13.215 | 813722 | 5.0 | M | 101 | 11 | 6 | | | 0.050 | B | | 7 | 4.7 | Y | 1 | Robertson,T | |
| 13.222 | 813723 | | | 101 | 8.7 | 6 | 2 | | 0.15 | N | 8 | 68 | 4.7 | Y | 1 | Robertson,T | G |
| 13.229 | 813724 | 4.9 | M | 101 | 20 | 7 | 0.58 | 290 | 0.05 | B | | 10 | 5.5 | Y | 1 | Fabre,R | H |
| 13.385 | 813725 | 5.4 | M | 101 | 25 | 6 | | | 0.035 | B | | 7 | 3 | Y | 1 | Watanabe,H | |
| 13.395 | 813726 | 5.6 | M | 101 | 14 | 7 | 0.67 | 65 | 0.08 | B | | 11 | 6.5 | Y | 2 | Mitsuma,S | I |
| 13.399 | 813727 | 5.4 | M | 101 | 25 | 6 | | | 0.035 | B | | 7 | 3 | Y | 1 | Watanabe,A | |
| 13.417 | 813728 | 4.9 | M | 101 | 13.5 | 6 | | | 0.030 | B | | 8 | 4.5C | Y | 1 | Kato,T | J |
| 13.42 | 813729 | 4.5 | S | 101 | | | | | 0.05 | B | | 10 | 5 T | Y | 1 | Seargent,D | |
| 13.438 | 813730 | | | | 5 | 6 | | | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | J |
| 13.44 | 813731 | 4.4 | S | 101 | 20 | 7 | | | | EY | | | 7.3Z | Y | 2 | Lovejoy,T | K |
| 13.453 | 813732 | 5.7 | B | 101 | 25 | | | | 0.05 | B | | 7 | 4.5C | Y | 1 | Hayashi,H | |
| 13.458 | 813733 | 6.2 | S | 101 | 2.0 | 3 | | | 0.08 | R | 12.5 | 40 | 5.5 | Y | 1 | Feisheng,J | |
| 13.458 | 813734 | 4.5 | S | 101 | | | | | 0.05 | B | | 10 | 6.0 | Y | 13 | Garradd,G | |
| 13.458 | 813735 | 6.0 | S | 101 | 3.2 | 7 | | | 0.15 | N | 6 | 45 | C | Y | 1 | Wakatsuki,M | |
| 13.46 | 813736 | 5.4 | S | AAVSO | 9 | 5 | 0 | 60 | 0.13 | N | 6.3 | 24 | 4.5 | Y | 1 | Hayashi,A | |
| 13.47 | 813737 | 5.0 | B | 101 | | 6 | | | 0.15 | N | 8.6 | 41 | 6.0 | Y | 4 | Makino,J | |
| 13.47 | 813738 | 5.5 | M | 101 | | | | | 0.05 | B | | 7 | 4.5 | Y | 2 | Suzuki,K | |
| 13.47 | 813739 | | | 101 | 3.5 | 5 | 0.5 | | 0.31 | N | 5.7 | 147 | 4.5 | Y | 2 | Suzuki,K | L |
| 13.48 | 813740 | 4.9 | S | 101 | 12.7 | 6 | 0.6 | 60 | 0.05 | B | | 7 | 5.0 | Y | 1 | Kanai,K | |
| 13.48 | 813741 | 5.1 | B | 101 | 12.7 | 6 | 0.6 | 60 | 0.05 | B | | 7 | 5.0 | Y | 1 | Kanai,K | |
| 13.486 | 813742 | 5.7 | B | 101 | | | | | 0.050 | B | | 7 | 5.8C | Y | 1 | Parkinson,M | |
| 13.49 | 813743 | 5.5 | M | SAO | 14 | 5 | 0.33 | 70 | 0.06 | R | 12 | 22 | 4.0 | Y | 4 | Nakamura,A | |
| 13.492 | 813744 | 5.3 | S | 101 | 12 | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | M |
| 13.52 | 813745 | 5.6 | B | M | 7 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 13.52 | 813746 | 5.6 | B | M | 5 | 6 | 3 | 61 | 0.05 | B | | 7 | | | | Guryanov,S | |
| 13.528 | 813747 | 5.5 | M | 101 | 5.9 | 7 | 0.33 | | 0.2 | R | 12 | 25 | 4.0 | Y | 1 | Ichikawa,K | N |
| 13.542 | 813748 | 6.0 | B | 101 | | 3 | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hasegawa,T | |
| 13.56 | 813749 | 6 | B | M | | | | | 0.05 | B | | 7 | | | | Ponomaryov,E | |
| 13.566 | 813750 | 5.9 | B | 101 | | | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Date,M | |
| 13.573 | 813751 | 5.7 | M | 101 | | | | | 0.050 | B | | 7 | 4.9C | N | 1 | Purvinskis,R | O |
| 13.65 | 813752 | 5 | B | M | 10 | | | | 0.03 | B | | 8 | | | | Zinvyev,V.A | |
| 13.656 | 813753 | | | | 7.2 | 5 | | | 0.254 | N | 6 | 61 | 4 C | Y | 1 | Bhadriah,L.H.E | |
| 13.66 | 813754 | 6.1 | M | M | 28 | 6 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 13.67 | 813755 | 5.2 | B | AAVSO | 12 | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 13.68 | 813756 | 5.0 | B | E | 20 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 13.68 | 813757 | 5.9 | B | M | 6 | 3 | | | 0.07 | N | 8 | 33 | | | | Yurchenko,Yu | |
| 13.68 | 813758 | 5.0 | B | E | 20 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 13.69 | 813759 | 6.2 | B | M | 7.5 5 | 2 | 0.1 | 130 | 0.10 | R | 10 | 169 | | | | Shilov,S | P |
| 13.70 | 813760 | 5.4 | B | M | 38 | 3 | 1.2 | | 0.05 | B | | 7 | | | | Budilka,P | |
| 13.712 | 813761 | 6.1 | | 101 | 0.5 | 5 | | | 0.06 | R | 6.9 | 20 | 4.6 | Y | 1 | Guerrini,F | |
| 13.715 | 813762 | 5.5 | M | 101 | | 5 | | | 0.050 | B | | 20 | 4 C | Y | 1 | Bhadriah,L.H.E | |
| 13.719 | 813763 | 4.4 | S | 101 | 16.0 | 6 | | | 0.080 | B | | 20 | 5.0C | Y | 1 | Baroni,S | |
| 13.72 | 813764 | 6.0 | S | 101 | 12 | 5 | | | 0.05 | B | | 10 | 4.5 | Y | 1 | Zanut,S | |
| 13.73 | 813765 | 5.2 | S | 101 | | | | | 0.08 | B | | 10 | 4.0 | | 1 | Shanklin,J.D | Q |
| 13.73 | 813766 | 5.3 | S | VAS 231 | 5 | 5 | | | 0.205 | N | 6 | 80 | 5.5 | Y | 1 | Germann,R | |
| 13.73 | 813767 | 5.2 | B | AAVSO | | | | | 0.11 | R | 7 | | | | | Churyumov,K | |
| 13.7395 | 813768 | 5.7 | B | 101 | 9 | 7 | | | 0.05 | B | | 10 | 6.0C | Y | 2 | Franciosi,C | R |
| 13.743 | 813769 | 5.6 | M | 101 | 16 13 | 6 | 1.5 | 65 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | S |
| 13.747 | 813770 | 5.5 | S | 101 | 10 | 6 | | | 0.114 | N | 7.9 | 26 | 5.0C | N | 1 | Bernardis,A | T |
| 13.747 | 813771 | 5.2 | B | 101 | 13 | 5 | | | 0.05 | B | | 7 | 4.5 | Y | 1 | Gainsford,M.J | Q |
| 13.75 | 813772 | 5.3 | B | 101 | 2.9 | 4 | | | 0.20 | N | 4.7 | 104 | 5 | Y | 1 | Cappellari,M | |
| 13.750 | 813773 | 5.0 | B | 101 | 35 | 7 | | | 0.065 | B | | 20 | 5.0 | Y | 1 | McBain,J | U |
| 13.751 | 813774 | | | 101 | 5 | 4 | | | 0.15 | N | 8 | 56 | 5.0 | Y | 1 | Sardini,D | |
| 13.751 | 813775 | 6.1 | | 101 | 0.5 | 5 | | | 0.06 | R | 6.9 | 20 | 4.4 | Y | 1 | Guerrini,F | |
| 13.753 | 813776 | 4.5 | S | 101 | 10 | 4 | 0.20 | 80 | 0.050 | B | | 7 | 4.8C | N | 5 | Meozzi,D | |
| 13.75634 | 813777 | 6.0: | B | 101 | 5.4 | 4 | | | 0.08 | B | | 20 | 3.5 | Y | 1 | Gozzoli,E | V |
| 13.760 | 813778 | 5.2 | B | 101 | 30 | 5 | 2 | 70 | 0.04 | B | | 8 | | Y | 1 | Morrisby,A | W |
| 13.76 | 813779 | 5.4 | B | E | 18 | 3 | | | 0.08 | B | | | | | | Dzhultaev,K | |
| 13.76 | 813780 | 5.5 | B | E | 18 | 3 | | | 0.08 | B | | | | | | Kolchanov,V | |
| 13.76 | 813781 | 5.5 | B | E | 18 | 3 | | | 0.08 | B | | | | | | Sladkov,Ya | |
| 13.76 | 813782 | 5.4 | B | E | 13 | | | | 0.08 | B | | 8 | | | | Danilov,M | |
| 13.76 | 813783 | 5.5 | B | E | | | | | 0.06 | R | 10 | 28 | | | | Kamnev,Y | |
| 13.76 | 813784 | 5.5 | B | E | | | | | 0.06 | R | 10 | 28 | | | | Pleshkunov,D | |
| 13.76 | 813785 | 5.6 | B | AAVSO | | | | | 0.08 | R | 10 | 29 | | | | Goldfarb,M | |
| 13.76 | 813786 | 5.4 | B | M | 15 | 4 | 0.2 | | 0.08 | B | | 8 | | | | Muravyeva,Yu | |
| 13.76 | 813787 | 5.4 | B | E | 12 | | | | 0.08 | B | | 8 | | | | Dyachuk,A | |
| 13.760 | 813788 | 5.9 | B | 101 | 4 | 5 | | | 0.210 | N | 5.7 | 66 | 4.4C | Y | 1 | Temprano,J | |
| 13.764 | 813789 | 5.5 | | 101 | | 9 | | | | EY | | | 6.0 | Y | 1 | Fleet,R.W | |
| 13.771 | 813790 | 5.8 | M | 101 | 17 | 7 | | | 0.05 | B | | 10 | 6.0 | Y | 1 | Melandri,F | X |
| 13.771 | 813791 | 5.8 | S | 101 | 13.5 | 4 | | | 0.07 | B | | 16 | 4.5C | N | 1 | Taylor,M.D | Y |
| 13.771 | 813792 | 5.3 | B | 101 | 35 25 | 6 | 1.1 | 66 | 0.22 | R | 4 | 35 | 5.4 | Y | 2 | Vincent,J | Z |
| 13.774 | 813793 | 5.1 | B | 101 | 12 | | | | 0.114 | N | 8.7 | 100 | | Y | 1 | Rodriguez C.,J.A | |
| 13.7743 | 813794 | | | 101 | 8.5 | 7 | 0.11 | 80 | 0.12 | R | 15 | 53 | 6.0C | Y | 2 | Franciosi,C | a |
| 13.781 | 813795 | 5.7 | B | 101 | 4 | 2 | | | 0.03 | B | | 8 | | Y | 1 | Dominici,A | b |
| 13.785 | 813796 | 5.7 | B | 101 | 12 | 4 | | | 0.05 | B | | 10 | 5.5C | N | 1 | Menichetti,R | |
| 13.785 | 813797 | 5.7 | M | CZ | 6 | 4 | | | 0.05 | B | | 7 | 4.4 | | 2 | Pravec,P | |
| 13.791 | 813798 | 5.4 | B | 101 | 5.3 | 6 | 0.16 | 90 | 0.050 | B | | 16 | 5.8 | Y | 1 | Castino,R | |
| 13.795 | 813799 | 6.1 | M | 122 | 6.5 | 5 | | | 0.114 | N | 8 | 36 | 5.0 | Y | 1 | Pennelli,G | |
| 13.80 | 813800 | 5.8 | B | M | 3 | | | | 0.05 | R | | 20 | | | | Nesterov,Yu | |
| 13.806 | 813801 | 6.8 | B | 58 | 15 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | c |
| 13.809 | 813802 | 5.5 | B | 101 | | | | | 0.050 | B | | 10 | 6.5 | Y | 1 | Trebacz,A | |
| 13.813 | 813803 | | | | 5 | 4 | | | 0.15 | N | 6.6 | 50 | 4.0C | Y | | Dal Santo,M | d |
| 13.813 | 813804 | 5.8 | B | 101 | | | | | 0.05 | B | | 7 | 4.3C | Y | 1 | Dal Santo,M | e |
| 13.830 | 813805 | 6.1 | | 101 | 0.5 | 5 | | | 0.06 | R | 6.9 | 20 | 4.0 | Y | 1 | Guerrini,F | |
| 13.833 | 813806 | 4.9 | S | 101 | | | | | 0.08 | B | | 20 | 5.5C | Y | 1 | Milani,G | |
| 13.833 | 813807 | 4.4 | S | 101 | 15 | 7 | | 70 | 0.08 | B | | 11 | 5.7 | Y | 3 | Parisio,R | |
| 13.8368 | 813808 | 5.9 | B | 101 | 15 | 5 | | | 0.080 | B | | 11 | 4.0C | N | 1 | Brogioni,A | f |

DATE: 13 DEC 1985

DATE: 13 DEC 1985

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.840 | 813809 | 5.9 | | AAVSO | 8 | 5 | 0.83 | | 0.080 | B | | 11 | | Y | | Stomeo,E | |
| 13.844 | 813810 | 6.0 | B | 101 | 10.5 | 3 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Gigli,P | g |
| 13.860 | 813811 | 4.7 | S | 101 | 13.0 | 7 | 1.63 | 65 | 0.080 | B | | 15 | 6.2 | Y | 5 | Haver,R | |
| 13.864 | 813812 | 5.1 | S | 101 | 12 | 6 | | | 0.05 | B | | 10 | 4 C | Y | 1 | Giuntoli,M | |
| 13.865 | 813813 | 6.0 | B | 101 | 3.0 | 3 | 0.04 | 62 | 0.080 | B | | 20 | 5.0C | Y | 2 | Dionisi,M | h |
| 13.87 | 813814 | 6.1 | S | 101 | 8.1 | 7 | | | 0.203 | SC | 10 | 44 | 5.4C | Y | 2 | Maraziti,A | |
| 13.88 | 813815 | 6.0 | B | 101 | | | | | 0.05 | B | | 7 | 5.4C | Y | 2 | Maraziti,A | |
| 13.880 | 813816 | 4.6 | S | 101 | 13.5 | 6 | 1.63 | 65 | 0.05 | B | | 7 | 6.2 | Y | 5 | Haver,R | |
| 13.880 | 813817 | 4.4 | S | 101 | | | | | | EY | | | 6.2 | Y | 5 | Haver,R | |
| 13.885 | 813818 | 5.8 | M | 101 | | | | | 0.030 | B | | 8 | 6.0 | Y | 1 | Villa,M | |
| 13.893 | 813819 | | | 101 | 16 | | | | 0.030 | B | | 8 | 5.5 | Y | 1 | Villa,M | |
| 13.90 | 813820 | 5.0 | M | 101 | 20 | 6 | | | 0.06 | R | 4 | 15 | 5.0 | Y | 1 | Granslo,B.H | i |
| 13.906 | 813821 | 8.4 | S | SAO | | | | | 0.31 | N | 5 | 62 | | | | Giampaolo,G | |

NOTE A Streamers in coma. SAO 128260 comparison star.
NOTE B Tail invisible.
NOTE C Slight haze. In Psc.
NOTE D Gas tail was narrow.
NOTE E Hint of dust tail at PA 90.
NOTE F Gas tail.
NOTE G Filar micrometer used for coma diameter. Central condensation dia. using filar micrometer was 1.08'.
NOTE H (PA value appears to be measured incorrectly. Ed.)
NOTE I m2 = 9.5.
NOTE J Poor transparency.
NOTE K Hint of tail with naked eye. 2.0 deg., PA about 70 tail seen through 15x80.
NOTE L Meter: coma diameter is P1 + P2.
NOTE M Thin cloud. (Observer gave limit as 9.0. Ed.)
NOTE N PA = E.
NOTE O Cloud impeding observing.
NOTE P Tail length and PA approximate.
NOTE Q Cloud.
NOTE R Coma diameter approximate.
NOTE S 19'x16' coma, averted vision.
NOTE T Evident asymmetry.
NOTE U Seen with naked eye.
NOTE V Haze.
NOTE W Tail faint.
NOTE X See with naked eye.
NOTE Y Antoniadi III.
NOTE Z Comp. stars 5.4 and 5.0.
NOTE a Nucleus = 8".
NOTE b (Observer gave limit as 8.5. Ed.)
NOTE c (Observer gave limit as 12.0. Ed.)
NOTE d Very lighted sky. Coma diameter approximate.
NOTE e Lighted sky.
NOTE f I perceive detail. (Roughly translated by IHW staff. Ed.)
NOTE g Clear, no wind. (Translated by IHW staff. Ed.)
NOTE h Coma diameter accuracy +/-1.1. Tail length accuracy +/-0.02.
NOTE i Coma diameter uncertain.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.014 | 830476 | 0.67 | 0.090 | M | 11 | 50 | 10 | 5 | 2 | Arpin,P | A |
| 13.024 | 830477 | 0.6 | 0.203 | R | 13 | 85,150 | 10 | 4.3 | 1 | Fox,J.H | B |
| 13.715 | 830478 | | 0.06 | R | 6.9 | 20 | 10 | 4.6 | 1 | Guerrini,F | |
| 13.758 | 830479 | . | 0.06 | R | 6.9 | 20 | 18 | 4.4 | 1 | Guerrini,F | |
| 13.760 | 830480 | 0.26 | 0.210 | N | 5.7 | 66 | | 5.0 | 1 | Temprano,J | C |
| 13.837 | 830481 | | 0.06 | R | 6.9 | 20 | 20 | 4.0 | 1 | Guerrini,F | |
| 13.854 | 830482 | 1.5 | 0.080 | B | | 15 | 10 | 6.2 | 5 | Haver,R | D |
| 13.867 | 830483 | 0.12 | 0.125 | N | 5.8 | 28, 40, 60 | 46 | 4.5 | 1 | Riccabone,G | E |
| 13.881 | 830484 | 0.03 | 0.400 | N | 5 | 40,166 | 16 | 5.6 | 2 | Sarocchi,D | |

NOTE A The central condensation is almost stellar and slightly off center of a circular coma. Total magnitude 4.80.
NOTE B W side of coma definitely brighter and more sharply defined than E side. NE bright edge does not extend into nucleus.
NOTE C Without tail. (Duration not indicated. Time of observation is assumed to be roughly mid time. Ed.)
NOTE D Tail at PA 65. S-shaped feature at PA 70 to 75.
NOTE E Area of greater luminosity at PA 76, PA 118, and at PA 175. The edge of another feature is very distinct and sharp. Diameter of the false nucleus measured with an illuminated reticle is 41 arc sec. Magnifications of 80 and 144 also used. Two drawings included. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.087 | 850451 | 1.524 | 6 | 0.254 | 1.4 x 0.9 | 49.00 | Kodak 2415 | | Y | X | 94/P | 1 | Snyder,L.F | |
| 13.125 | 850452 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 30.00 | Kodak Tri-X | | N | M | 10/S | 1 | Webb,R | A |
| 13.163 | 850453 | 0.200 | 2.8 | | 10.3 x 6.9 | 4.00 | Kodak Tri-X | 400/ | N | X | 714/N | 1 | Lazerson,H | B |
| 13.210 | 850454 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | S | 4/P | 1 | Yen,B | C |
| 13.520 | 850455 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 20.00 | Kodak 2415 | | Y | | 4/P | 1 | Niijima,T | D |
| 13.582 | 850456 | 0.268 | 2.6 | 2 | 7.7 x 5.1 | 12.00 | Ilford HP5 | | N | X | 4/P | 1 | Richardson,C | E |
| 13.764 | 850457 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 20.33 | Ilford HP5 | 400/27 | N | O | 1/C | 1 | Paolinetti,R | F |
| 13.784 | 850458 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 15.00 | Ilford HP5 | 400/27 | N | O | 2/C | 1 | Paolinetti,R | F |
| 13.784 | 850459 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.50 | Kodak 2415 | | Y | | 101/P | | Jager,M | G |
| 13.795 | 850460 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 15.00 | Ilford HP5 | 400/27 | N | O | 3/C | 1 | Paolinetti,R | F |
| 13.801 | 850461 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 2.00 | Ilford HP5 | 400/27 | N | O | 4/C | 1 | Paolinetti,R | F |
| 13.804 | 850462 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 4.00 | Ilford HP5 | 400/27 | N | O | 5/C | 1 | Paolinetti,R | F |
| 13.955 | 850463 | 0.135 | 2.8 | | 15.2 x10.2 | 24.00 | Kodak 2415 | | Y | O | 13/P | 4 | Portela,A | H |

NOTE A Film light-damaged in processing. Included to show large extent of coma. Inner coma and starlike central condensation visible on all original negatives. Film push processed slightly. (Observer indicated C-type guiding as well as M. Ed.)
NOTE B (Observer's image identifier is 17-14. Ed.) "Push" processed to 800 ASA.
NOTE C Start time approximate. (Observer's image identifier is 30. Ed.) Instrument is Schmidt camera.
NOTE D (Observer's image identifier is 851213-1. Ed.) Large format (70 mm) film used. City lights interfered with the observation.
NOTE E Instrument is Meade Schmidt camera.
NOTE F (Observer's image identifier is followed by suffix A. Ed.)
NOTE G Coma 30 to 35 arc min.; magnitude 4.5; tails 5 deg. at PA 62, 70 arc min. at PA 69. Instrument is Schmidt camera.
NOTE H (Time supplied by observer may have been start time or mid-exposure time. Ed.)

DATE: 14 DEC 1985 DATE: 14 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | m1 | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.014 | 813822 | 5.7 | B | 101 | 30 | 4 | | | 0.05 | B | | 7 | 4.5 | N | 1 | Fox,J.H | A |
| 14.015 | 813823 | 5.0 | B | 101 | 23.2 | 6 | 0.9 | 52 | 0.07 | B | | 10 | 6.5 | Y | 2 | de Assis Neto,V.F | |
| 14.042 | 813824 | 6.0 | B | 101 | | | | | 0.050 | B | | 7 | | N | 1 | Kaufmann,R | B |
| 14.06 | 813825 | 5.8 | B | 101 | 16 | 6 | | | 0.080 | B | | 20 | 5.5 | Y | | Kronk,G | C |
| 14.073 | 813826 | 6.0 | S | 101 | 8 | 4 | | | 0.080 | B | | 11 | 4.3C | Y | 1 | Bailey,G | D |
| 14.080 | 813827 | 6.0 | B | 101 | 18 | 1 | 0.47 | 65 | 0.05 | B | | 7 | 5.0 | Y | 1 | Lairet,R | |
| 14.08 | 813828 | 4.8 | M | 101 | | | | | 0.050 | R | | 8 | 5.0 | Y | 10 | Morris,C.S | |
| 14.08 | 813829 | 4.8 | M | 101 | 15 | 7 | 1.75 | 68 | 0.080 | B | | 20 | 5.0 | Y | 10 | Morris,C.S | |
| 14.094 | 813830 | 5.5 | M | 101 | | | | | 0.050 | B | | 10 | | Y | 1 | Ariail,R.B | |
| 14.108 | 813831 | 6.0 | B | 101 | 14 | 5 | | | 0.05 | B | | 7 | 6.0C | Y | 10 | Chmielewski,W | |
| 14.125 | 813832 | 5.4 | S | 101 | 17.1 | 7 | 1.5 | 69 | 0.108 | N | 4 | 24 | 5.5 | Y | 2 | Franch,J | E |
| 14.187 | 813833 | 5.0 | M | 101 | 35 | 6 | 1.5 | 50 | 0.279 | SC | 10 | 100 | 5.0 | Y | 1 | Kemble,L.J | F |
| 14.1875 | 813834 | 5.0 | M | 101 | 12 | 6 | 2.00 | 72 | 0.05 | B | | 7 | 6.0 | Y | 5 | Cook,A.J | |
| 14.379 | 813835 | 5.0 | M | 101 | 15 | 6 | 0.50 | 60 | 0.030 | B | | 8 | 5.5C | Y | 1 | Kato,T | |
| 14.38 | 813836 | 5.7 | M | 101 | | | | | 0.08 | B | | 11 | 5.5 | N | 1 | Mitsuma,S | |
| 14.396 | 813837 | 5.3 | | 101 | | | | | | EY | | | 5.5C | Y | 1 | Kato,T | |
| 14.403 | 813838 | | | | 6 | 6 | 0.33 | 60 | 0.10 | N | 10 | 55 | 5.5C | Y | 1 | Kato,T | |
| 14.42 | 813839 | 5.5 | M | 101 | | | | | 0.05 | B | | 7 | 5.0 | Y | 2 | Suzuki,K | |
| 14.43 | 813840 | 6.0 | B | 101 | 5.2 | 7 | | | 0.20 | N | 5 | 36 | | Y | 1 | Curtis,D | G |
| 14.44 | 813841 | 6.9 | B | SAO | 13 | 7 | 0.33 | 85 | 0.15 | N | 6 | 23 | 5 | Y | 3 | Tanikawa,M | H |
| 14.45 | 813842 | 4.5 | S | 101 | 20 | 7 | 3.0 | 68 | | EY | | | 7.3Z | Y | 2 | Lovejoy,T | I |
| 14.458 | 813843 | 6.2 | S | 101 | 2.0 | 3 | | | 0.08 | R | 12.5 | 40 | 5.5 | Y | 1 | Feisheng,J | |
| 14.458 | 813844 | 4.5 | S | 101 | | | | | 0.05 | B | | 10 | 6.0 | Y | 13 | Garradd,G | |
| 14.46 | 813845 | 5.0 | S | 101 | 13.5 | 6 | 0.3 | 55 | 0.05 | B | | 7 | 5.0 | N | 1 | Kanai,K | |
| 14.46 | 813846 | 5.4 | B | 101 | 13.5 | 6 | 0.3 | 55 | 0.05 | B | | 7 | 5.0 | N | 1 | Kanai,K | |
| 14.46 | 813847 | 5.4 | S | AAVSO | 9 | 5 | 0.33 | 65 | 0.13 | N | 6.3 | 24 | 5.0 | Y | 1 | Hayashi,A | |
| 14.465 | 813848 | | | | | 3 | | | 0.08 | B | | 15 | 6.0 | Y | 13 | Garradd,G | |
| 14.47 | 813849 | 4.8 | S | 101 | 10 | 7 | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Yasuki,M | |
| 14.471 | 813850 | | | 101 | 7.4 | 5 | | | 0.32 | N | 8 | 150 | 5 | Y | 1 | Tregaskis,T.B | J |
| 14.478 | 813851 | 5.3 | S | 101 | | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | K |
| 14.479 | 813852 | 5.8 | B | 101 | 8 | 4 | 0.33 | 55 | 0.108 | N | 4 | 16 | 7 | Y | 2 | Turner,N | |
| 14.49 | 813853 | 5.5 | | | 25 | 7 | | | 0.12 | B | | 20 | 6.0 | Y | 1 | Washi,S | L |
| 14.526 | 813854 | 5.4 | M | 101 | 5.8 | | | | 0.1 | N | 10 | 56 | 6.5 | Y | 1 | Ichikawa,K | M |
| 14.53 | 813855 | 4.8 | S | 101 | 11 | 4 | | | 0.03 | R | | 6 | 5.6 | Y | | Clark,M.L | |
| 14.53 | 813856 | 5.7 | B | | 15 | 6 | 0.8 | | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 14.54 | 813857 | 5.2 | S | 101 | 9 | 6 | 0.35 | 110 | 0.41 | N | 4.2 | 86 | 5.6 | Y | | Clark,M.L | |
| 14.590 | 813858 | 4.6 | S | 101 | 18 | 5 | 0.58 | 60 | 0.07 | B | | 10 | 2.5 | Y | 1 | Kobayashi,J | |
| 14.65 | 813859 | 5 | B | M | 10 | | | | 0.03 | B | | 8 | | | | Zinvyev,V.A | |
| 14.707 | 813860 | 6.0 | | 101 | 0.5 | 5 | | | 0.06 | R | 6.9 | 20 | 4.2M | Y | 1 | Guerrini,F | |
| 14.708 | 813861 | 6.0 | M | 101 | 9 | 4 | | | 0.09 | M | 11 | 56 | 5.0 | Y | 2 | Westlund,M | |
| 14.7083 | 813862 | 5.2 | B | 101 | 9 | 7 | | | 0.05 | B | | 10 | 6.5MT | Y | 1 | Franciosi,C | N |
| 14.722 | 813863 | 6.0 | S | 101 | 20 | 5 | | | 0.07 | B | | 20 | 5.5 | Y | 2 | Camurri,L | |
| 14.73 | 813864 | 6.1 | S | 101 | 9.3 | 7 | | | 0.203 | SC | 10 | 44 | 5.1C | Y | 2 | Maraziti,A | |
| 14.730 | 813865 | 6.0 | B | 101 | | | | | 0.050 | B | | 7 | 4.0CT | N | 1 | Ruiz,J | |
| 14.73 | 813866 | 5.4 | S | AAVSO | | | | | 0.08 | R | 10 | 29 | | | | Goldfarb,M | |
| 14.735 | 813867 | | | 101 | 5 | 6 | | | 0.208 | N | 5.8 | 48 | 4.0CT | N | 1 | Ruiz,J | |
| 14.74 | 813868 | 6.1 | B | 101 | | | | | 0.05 | B | | 7 | 5.1C | Y | 2 | Maraziti,A | |
| 14.743 | 813869 | 4.4 | S | 101 | 15 | 6 | 1.35 | 72 | 0.050 | B | | 7 | 6.4 | Y | 1 | Meozzi,D | |
| 14.75 | 813870 | 5.7: | B | 101 | 9 | 5 | | | 0.08 | B | | 20 | 4.5 | Y | 1 | Gozzoli,E | |
| 14.75 | 813871 | 6.2 | S | 101,100 | 8 | 6 | | | 0.05 | B | | 10 | 4.3 | Y | 1 | Zanut,S | |
| 14.756 | 813872 | 4.5 | S | 101 | 10.8 | 7 | 0.70 | 80 | 0.140 | SN | 3.6 | 19 | 6.4 | Y | 1 | Meozzi,D | |
| 14.76 | 813873 | 6.0 | M | 101 | 10 5 | 4 | | | 0.15 | N | 8 | 56 | 5.0 | Y | 1 | Sardini,D | |
| 14.764 | 813874 | 5.9 | M | 101 | 17 | 5 | 0.55 | 305 | 0.050 | B | | 10 | 4.5C | Y | 1 | Lozano,L | O |
| 14.77 | 813875 | 5.4 | S | M | 4 | 3 | 0.1 | | 0.06 | R | 10 | 28 | | | | Muravyeva,Yu | |
| 14.77 | 813876 | 5.2 | B | AAVSO | 15 | | | | 0.08 | R | | 8 | | | | Golubev,V | |
| 14.771 | 813877 | 5.8 | B | 101 | | | | | 0.05 | B | | 7 | 4 | Y | 1 | Dal Santo,M | P |
| 14.78 | 813878 | 5.3 | B | E | | 4 | | | 0.08 | B | | | | | | Dzhultaev,K | |
| 14.78 | 813879 | 5.3 | B | E | 15 | 4 | | | 0.08 | B | | | | | | Kolchanov,V | |
| 14.78 | 813880 | 5.3 | B | E | 15 | 4 | | | 0.08 | B | | | | | | Sladkov,Ya | |
| 14.78 | 813881 | 5.5 | B | E | 13 | | | | 0.08 | R | 10 | 29 | | | | Danilov,M | |
| 14.78 | 813882 | | | | 14 | | 0.2 | | 0.08 | B | | 8 | | | | Sedelkin,D | |
| 14.781 | 813883 | 6.1 | M | 122 | 5.0 | 4 | | | 0.114 | N | 8 | 36 | 4.5 | N | 1 | Pennelli,G | |
| 14.783 | 813884 | 4.6 | S | 101 | 12 | | | | 0.03 | B | | 6 | 5.5C | Y | 1 | Milani,G | |
| 14.79 | 813885 | 4.8 | S | 101 | | | | | 0.08 | B | | 10 | 5.5 | | 1 | Shanklin,J.D | |
| 14.792 | 813886 | | M | 101 | 21 | | | | 0.05 | B | | 10 | 6.0 | Y | 2 | Melandri,F | Q |
| 14.792 | 813887 | 5.8 | | | | | | | 0.03 | B | | 8 | | | | Melandri,F | |
| 14.80 | 813888 | | | 101 | | | | | 0.20 | R | 12 | 40 | 5.5 | | 1 | Shanklin,J.D | R |
| 14.833 | 813889 | 5.4 | B | 101 | 5.5 | 6 | 0.16 | 90 | 0.050 | B | | 16 | 5.8 | Y | 1 | Castino,R | |
| 14.834 | 813890 | 5.1 | S | 101 | 12 | 3 | | | 0.05 | B | | 10 | 4 C | N | 1 | Giuntoli,M | |
| 14.840 | 813891 | 6.4 | B | 101 | | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Kukkonen,I.T | |
| 14.848 | 813892 | 6.0 | B | 101 | 10.5 | 3 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Gigli,P | S |
| 14.850 | 813893 | 4.4 | S | 101 | 15 | 7 | | 70 | 0.41 | N | 4.5 | 75 | 6.5 | Y | 2 | Parisio,R | |
| 14.85 | 813894 | 4.8: | B | M | | | | | 0.11 | B | | | | | | Churyumov,K | |
| 14.858 | 813895 | 5.7 | B | 101 | 15.2 | 7 | 0.8 | 70 | 0.050 | B | | 10 | 6.0 | Y | 1 | Rossi,L | T |
| 14.858 | 813896 | 5.6 | | AAVSO | 5 | 4 | | | 0.080 | B | | 11 | | Y | | Stomeo,E | |
| 14.86 | 813897 | 5.2 | | | 9 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | U |
| 14.861 | 813898 | 5.6 | B | 101 | 13 | 4 | | | 0.05 | B | | 10 | 5.5C | Y | 1 | Menichetti,R | |
| 14.868 | 813899 | | | | 2.0 | 5 | | | 0.076 | R | 16 | 139 | 5.0C | Y | 1 | Kukkonen,I.T | V |
| 14.881 | 813900 | 6.0 | S | 101 | 8 | 3 | | | 0.080 | B | | 20 | 4 C | Y | 1 | Boetto,M | W |
| 14.889 | 813901 | 6.0 | M | 101 | 12 | 5 | 0.6 | 40 | 0.07 | B | | 16 | 5.0C | Y | 1 | Taylor,M.D | X |
| 14.892 | 813902 | 5.8 | S | 101 | 12 | 5 | 0.6 | 40 | 0.07 | B | | 16 | 5.0C | Y | 1 | Taylor,M.D | |
| 14.910 | 813903 | | | 101 | 2.3 | 7 | 0.05 | 40 | 0.21 | N | 5 | 43 | 5.0C | Y | 1 | Taylor,M.D | |
| 14.910 | 813904 | | | 101 | 14 | | | | 0.050 | B | | 10 | 6.0 | Y | 2 | Villa,M | |
| 14.924 | 813905 | 5.9 | M | 101 | | | | | 0.030 | B | | 8 | 6.0 | Y | 2 | Villa,M | |
| 14.951 | 813906 | 5.5 | M | 101 | 5 | 7 | 0.25 | 90 | 0.203 | N | 8 | 128 | 5.0 | Y | 1 | Hannon,J | |
| 14.96 | 813907 | 4.3 | S | AA | 28 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | Y |
| 14.969 | 813908 | 6.7 | S | 101 | 3.7 | 5 | | | 0.203 | N | 6 | 101 | 4.5 | Y | 1 | Hudak,D.M | |
| 14.99 | 813909 | 4.8 | S | AA | 27 | 7 | 1 | | 0.080 | B | | 20 | | | | Green,D.W.E | Z |

NOTE A SAO 128281 comparison star.
NOTE B Barely visible, fuzzy coma. Tail length small. [sic]
NOTE C Exceptionally clear.
NOTE D Much easier to see.
NOTE E Gas tail.
NOTE F Tail very diffuse.
NOTE G Faint stellar nucleus suspected.
NOTE H m2 (observer's symbol believed to mean "approximately equal to", Ed.) 10.5.
NOTE I Tail longer and more prominent. 3.0 deg., PA 68 tail seen through 15x80.
NOTE J Coma brighter on f. side. Crescent moon and windy. No stellar-like nucleus.
NOTE K Cresent moon, drifting cloud.
NOTE L (Observer indicated "Y" method. Ed.)

DATE: 14 DEC 1985

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NOTE M PA = E.
NOTE N Central condensation about 20".
NOTE O Mist.
NOTE P Haze.
NOTE Q Very clear sky.
NOTE R Central condensation magnitude 5.6. Thin central brighter spine.
NOTE S Clear, no wind. (Translated by IHW staff. Ed.)
NOTE T Tail length approximate. Halley visible with naked eye.
NOTE U (Observer gave limit as 9.0. Ed.)
NOTE V Coma diameter determined as an average of five transit time observations.
NOTE W Slight haze.
NOTE X Tail fanned to 78 deg. (?). Seeing Antoniadi III.
NOTE Y Coma diameter approximate.
NOTE Z Coma diameter and tail length approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.010 | 830485 | 0.6 | 0.203 | R | 13 | 85 | 10 | 4.5 | 1 | Fox,J.H | A |
| 14.053 | 830486 | | 0.203 | SC | 10 | 81 | | | 2 | Lohvinenko,T.W | B |
| 14.061 | 830487 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | C |
| 14.139 | 830488 | | 0.108 | N | 4 | 24 | 20 | 5.5 | 2 | Franch,J | D |
| 14.166 | 830489 | | 0.254 | N | 4.8 | 32 | 24 | 6.0 | 1 | Troiani,D.M | E |
| 14.189 | 830490 | 3.2 | 0.050 | B | | 7 | 5 | 6.0 | 5 | Cook,A.J | |
| 14.44 | 830491 | 1.40 | 0.15 | N | 5.7 | 23 | 14 | 5 | 3 | Tanikawa,M | F |
| 14.527 | 830492 | 0.2 | 0.318 | N | 8 | 150 | 3 | | | Tregaskis,T.B | G |
| 14.7 | 830493 | 0.29 | 0.254 | N | 4.5 | 125, 45 | 72 | 6 | 1 | Pesci,S | H |
| 14.705 | 830494 | 1.6 | 0.090 | M | 11 | 56 | 10 | 5.0 | 2 | Westlund,M | |
| 14.711 | 830495 | | 0.06 | R | 6.9 | 20 | 12 | 4.2 | 1 | Guerrini,F | |
| 14.877 | 830496 | 0.08 | 0.125 | N | 5.8 | 28, 40, 60 | 33 | 4.0 | 1 | Riccabone,G | I |

NOTE A Star embedded in W coma looks almost like 2nd nucleus. Its surrounding condensation is probably an artifact.
NOTE B Comet Halley is seen here with a nuclear magnitude of 7.9 (check star: AGK 3+0 deg. 0181) and an integrated magnitude of 5.8 (check stars: HR 69, 61 Cyg A, B). The comet on this date was seen through 16x50 binoculars and through the Celestron 6x30 finderscope and then I saw it with the naked eye. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C The comet is seen here with a size of 233.47" and is seen with some forms of a tail with spikes forming at PA 240 and PA 16. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Gas tail at PA 69. The comet, now of 5.4 magnitude, possessed a somewhat parabolic coma which was some 17' in total extent. The nucleus was reported as being ill-defined and inconspicuous, being hard to extract from the strong central condensation of the coma. The gas tail was well seen, extending to the northeast for almost 1.5 deg. Scale = 10.0'/mm.
NOTE E Sky darkness (1-5): 5. Ray at PA 90 deg. Envelope in coma at PA 20 deg. Streamer at PA 180 deg. DC = 4.5.
NOTE F Feature at PA 85, length 20'. Dia. and m2 (observer's symbol believed to mean "approximately equal to", Ed.) 13' and 10.5, respectively. DC 7/10. m1 = 6.9.
NOTE G No stellar-like nucleus. DC 5.
NOTE H No special feature visible in coma DC 6/7; central condensation appears not exactly in coma's center. "Water-drop" feature towards north: very faint.
NOTE I Areas of greater luminosity at PA 65 and at PA 103. Diameter of the nucleus is 44 arc sec. Magnifications of 80 and 144 also used. Two drawings included. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.049 | 850464 | 1.583 | 8 | 0.203 | 1.3 x 0.9 | 20.00 | Kodak 2415 | | Y | C | 2/P | 1 | Minton,R.B | A |
| 14.151 | 850465 | 0.135 | 2.8 | | 15.2 x10.2 | 7.00 | Ektachrome | 400/ | N | | 5/S | | Pryal,J | |
| 14.210 | 850466 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | S | 5/P | 1 | Yen,B | B |
| 14.552 | 850467 | 0.268 | 2.6 | 2 | 7.7 x 5.1 | 12.00 | Ilford HP5 | | N | X | 5/P | 1 | Richardson,C | C |
| 14.720 | 850468 | 0.500 | 5.6 | | 4.1 x 2.7 | 30.00 | Kodak 103a-O | | N | O | 1/C | 3 | Cimatti,A | |
| 14.787 | 850469 | 0.200 | 3.5 | | 10.3 x 6.9 | 14.00 | Kodak 103a-O | | N | O | 3/C | 3 | Cimatti,A | |
| 14.795 | 850470 | 0.500 | 5.6 | | 4.1 x 2.7 | 30.00 | Kodak 103a-O | | N | O | 2/C | 3 | Cimatti,A | |
| 14.798 | 850471 | 0.200 | 3.5 | | 10.3 x 6.9 | 13.00 | Kodak 103a-O | | N | O | 4/C | 3 | Cimatti,A | |
| 14.810 | 850472 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 5.00 | Kodak 2415 | | Y | | 102/P | | Jager,M | D |
| 14.842 | 850473 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 1.00 | Kodak 103a-F | | N | M | 28/P | 1 | Guarro,J | |
| 14.848 | 850474 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 8.00 | Kodak 103a-F | | N | M | 27/P | 1 | Guarro,J | |
| 14.994 | 850475 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 3.50 | Kodak 2415 | | Y | S | 4/P | 1 | Dilsizian,R | E |

NOTE A Measured coma diameter = 5.7 arc min. Measured tail length = 18 arc min. (Print submitted by observer is a composite of two contiguous 10 min. Ed.)
NOTE B Start time approximate. (Observer's image identifier is 32. Ed.) Instrument is Schmidt camera.
NOTE C Instrument is Meade Schmidt camera.
NOTE D Coma 30 arc min.; magnitude 4.5; tails 3 deg. at PA 66, 4 deg. at PA 69, 90 arc min. at PA 73. Instrument is Schmidt camera.
NOTE E Exposures limited below 5 minutes to allow for stellar guiding with a minimum of "proper motion" distortion in resolution.

DATE: 15 DEC 1985

DATE: 15 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | EY | | | | | | Green,D.W.E | |
| 15.00 | 813910 | 4.9 | B | AA | | | | | | EY | | | | | | Green,D.W.E | |
| 15.00 | 813911 | 4.4 | M | AA | | | | | | EY | | | | | | Green,D.W.E | |
| 15.001 | 813912 | | | | 5.5 | 7 | | | 0.203 | R | 13 | 110 | | Y | 1 | Phillips,J | |
| 15.003 | 813913 | 6.0 | B | 101 | 3.2 | 6 | | | 0.05 | B | | 20 | 3.7 | Y | 3 | Diaz P.,E | |
| 15.014 | 813914 | 5.5 | B | 101 | | | | | 0.050 | B | | 10 | 5 C | Y | 1 | Robinson,R.L | |
| 15.024 | 813915 | 5.6 | S | 101 | 13 | 4 | | | 0.035 | B | | 7 | 6.3 | Y | 3 | Morrison,W | |
| 15.03 | 813916 | 4.8 | S | AAVSO | 11.5 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 15.031 | 813917 | 4.7 | M | 101 | 10.1 | 6 | 1.0 | 63 | 0.05 | B | | 7 | 6.3 | Y | 4 | DeYoung,J.A | |
| 15.042 | 813918 | 5.7 | B | 101 | | | | | 0.080 | B | | 20 | 6.0 | Y | | Smith,D | |
| 15.05 | 813919 | 5.0 | S | 101 | 18 | 6 | 0.5 | 110 | 0.203 | N | 7 | 54 | 4.0 | N | 1 | Harrington,P | |
| 15.059 | 813920 | 4.8 | B | 78 | | 2 | | | 0.05 | B | | 20 | 5.5 | Y | 7 | da Silva,L.A.L | |
| 15.06 | 813921 | 5.7 | B | 101 | 16 | 6 | | | 0.080 | B | | 20 | 5.5 | Y | | Kronk,G | A |
| 15.06 | 813922 | 6.6 | B | 101 | 10.3 | 7 | 0.22 | 65 | 0.154 | N | 8.0 | 68 | 5.5 | Y | | Kronk,G | A |
| 15.076 | 813923 | 5.8 | S | 101 | 4.3 | 3 | | | 0.08 | R | 11 | 39 | 4.1C | N | 1 | Graves,D | B |
| 15.076 | 813924 | 5.8 | B | 101 | 16 | 1 | 0.33 | 68 | 0.05 | B | | 7 | 5.0 | | | Lairet,R | |
| 15.097 | 813925 | 5.7 | B | 101 | 15 | 6 | 0.17 | 50 | 0.035 | B | | 7 | 5.0 | Y | 1 | Stephan,C | C |
| 15.10 | 813926 | 4.3: | | 101 | 45 | 3 | | | | EY | | | 6.5 | Y | 7 | Morris,C.S | |
| 15.11 | 813927 | 4.9 | M | 101, 54 | 16.5 | 7 | | | 0.050 | R | | 8 | 6.5 | Y | 7 | Morris,C.S | |
| 15.135 | 813928 | 6.3 | S | 101 | 34 | 5 | | | 0.203 | SC | 10 | 80 | 4.5C | Y | 1 | Gronek,J.D | D |
| 15.14 | 813929 | 4.9 | M | 101, 54 | 13 | 7 | 1.75 | 65 | 0.080 | B | | 20 | 6.5 | Y | 7 | Morris,C.S | E |
| 15.15 | 813930 | | | | | | | | 0.256 | N | 4.5 | 45 | 6.5 | Y | 7 | Morris,C.S | F |
| 15.167 | 813931 | 6.0 | S | 101 | 4 | 2 | | | 0.152 | N | 8 | 135 | 5 | Y | 1 | Lewis,D.E | |
| 15.198 | 813932 | 4.8 | M | 101 | 20 | 7 | 0.58 | 290 | 0.05 | B | | 10 | 6.5 | Y | 4 | Fabre,R | G |
| 15.21 | 813933 | 5.1 | | 101 | 20 | 5 | 1.0 | 70 | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | H |
| 15.2222 | 813934 | 5.0 | M | 101 | 12 | 6 | 1.68 | 66 | 0.05 | B | | 7 | 6.0 | Y | 2 | Cook,A.J | |
| 15.229 | 813935 | 5.9 | B | 101 | 15 | 4 | | | 0.050 | B | | 10 | 5.0C | Y | 1 | Stapleton,J | I |
| 15.250 | 813936 | 5.9 | S | 101 | | 7 | | | 0.05 | B | | 7 | 5.0 | Y | 1 | Bracken,R | |
| 15.28 | 813937 | 4.9 | M | 101 | | | 1.5 | 50 | 0.05 | B | | 10 | 6.5 | Y | 5 | Hale,A | |
| 15.37 | 813938 | 4.8 | S | 101 | 9.5 | 7 | | | 0.07 | B | | 10 | 5.5M | Y | 1 | Yasuki,M | |
| 15.375 | 813939 | 5.9 | S | 101 | 10 | 4 | | | 0.153 | N | 8.6 | 33 | 5.5 | Y | 1 | Iwaki,Y | |
| 15.378 | 813940 | 4.8 | M | 101 | 15 | 6 | 0.8 | 60 | 0.030 | B | | 8 | 5.5M | Y | 1 | Kato,T | |
| 15.379 | 813941 | 4.9 | | 101 | 10 | | | | | EY | | | 5.5M | Y | 1 | Kato,T | |
| 15.389 | 813942 | | | | 7 | 6 | 0.5 | 60 | 0.10 | N | 10 | 55 | 5.5M | Y | 1 | Kato,T | |
| 15.421 | 813943 | 5.8 | M | 101 | 7 | 5 | | | 0.442 | N | 4.4 | 221 | 5.8 | Y | 1 | Glassett,W | |
| 15.439 | 813944 | 4.6 | S | 101 | 20 | 5 | 0.58 | 80 | 0.07 | B | | 10 | 3.5 | Y | 1 | Kobayashi,J | |
| 15.444 | 813945 | 5.9 | B | 101,100 | | | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Date,M | |
| 15.447 | 813946 | 5.5 | S | 101 | 15 | 3 | | | 0.050 | B | | 12 | 5.0 | Y | 1 | Batza,H | J |
| 15.45 | 813947 | 6.0 | | 101 | | 2 | | | 0.050 | B | | 7 | 4.9C | Y | 1 | Matchett,V | K |
| 15.458 | 813948 | 6.2 | S | 101 | 2.0 | 3 | | | 0.08 | R | 12.5 | 40 | 5.5 | Y | 1 | Feisheng,J | |
| 15.465 | 813949 | 5.7 | M | 101 | 11 | 7 | 0.50 | 60 | 0.08 | B | | 11 | 5.5 | Y | 1 | Mitsuma,S | L |
| 15.469 | 813950 | 6.0 | S | 101 | 5.1 | 7 | | | 0.15 | N | 6 | 45 | 6.2 | Y | 2 | Nakatsuki,M | |
| 15.47 | 813951 | 5.5 | S | AAVSO | 10 | 5 | 0.50 | 65 | 0.13 | N | 6.3 | 24 | 5.5 | Y | 1 | Hayashi,A | |
| 15.47 | 813952 | 5.6 | M | SAO | 11 | 4 | 0.42 | 70 | 0.06 | R | 12 | 22 | 4.0 | Y | 3 | Nakamura,A | |
| 15.485 | 813953 | 5.8 | M | 101 | | 7 | | | 0.05 | B | | 7 | 5.5 | Y | 1 | Mitsuma,S | |
| 15.49 | 813954 | 5.6 | S | AAVSO | 10 | 5 | 0.33 | 65 | 0.07 | B | | 10 | 6.0 | Y | 1 | Hayashi,A | |
| 15.496 | 813955 | 4.8 | M | 101 | 9 | 5 | 0.33 | | 0.1 | N | 10 | 25 | 6.5 | Y | 1 | Ichikawa,K | M |
| 15.521 | 813956 | 4.4 | M | 101 | 12.1 | 4 | | | 0.13 | N | 6.1 | 32 | 5.5C | Y | 1 | Ino,Y | N |
| 15.53 | 813957 | | | | | 4 | | | 0.21 | N | 9 | 31 | | | | Konstantinov,S | |
| 15.56 | 813958 | 5.0 | S | 101 | 10 | 5 | | | 0.065 | B | | 20 | 5.2 | Y | | Pearce,A | |
| 15.563 | 813959 | 6.2 | M | 101 | 3.2 | 5 | | | 0.060 | R | 15 | 45 | 5.0M | Y | 1 | Purvinskis,R | |
| 15.62 | 813960 | 5.6 | B | M | | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 15.636 | 813961 | 5.9 | B | 101 | | | | | 0.05 | B | | 7 | 5.0CM | Y | 1 | Kukkonen,I.T | |
| 15.660 | 813962 | | | | 2.1 | 5 | | | 0.076 | R | 16 | 139 | 5.0CM | Y | 1 | Kukkonen,I.T | O |
| 15.66 | 813963 | 5.3 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 15.705 | 813964 | 5.9 | B | 101 | 10 | | 1.4 | 30 | 0.030 | B | | 8 | 5 CM | N | 2 | Adamoli,G | |
| 15.71 | 813965 | 6.2 | S | 101 | 10.3 | 7 | | | 0.203 | SC | 10 | 44 | 6.0 | Y | 4 | Maraziti,A | |
| 15.71 | 813966 | 5.8 | B | 101 | 7 | | | | 0.045 | B | | 7 | 5.5 | Y | 1 | Speil,J | P |
| 15.715 | 813967 | 4.5 | S | 101 | 13 | 6 | 1.02 | 64 | 0.050 | B | | 7 | 6.1 | Y | 1 | Meozzi,D | |
| 15.72 | 813968 | 6.0 | B | 101 | | | | | 0.05 | B | | 7 | 6.0 | Y | 4 | Maraziti,A | |
| 15.720 | 813969 | 4.5 | S | 101 | 9.5 | 7 | 0.49 | 62 | 0.140 | SN | 3.6 | 19 | 6.1 | Y | 1 | Meozzi,D | |
| 15.730 | 813970 | 6.1 | B | 101 | | | | | 0.050 | B | | 7 | 4.0C | N | 1 | Ruiz,J | |
| 15.735 | 813971 | | | 101 | 5 | 6 | | | 0.208 | N | 5.8 | 48 | 4.0C | N | 1 | Ruiz,J | |
| 15.740 | 813972 | 8.0 | S | SAO | | | | | 0.31 | N | 5 | 62 | | | | Giampaolo,G | |
| 15.742 | 813973 | | | 101 | 14 | | | | 0.030 | B | | 8 | 5.0CM | Y | 1 | Villa,M | |
| 15.743 | 813974 | | | | | 6 | | | 0.15 | N | 6.6 | 50 | 4.3C | Y | | Dal Santo,M | |
| 15.743 | 813975 | 5.9 | B | 101 | | | | | 0.05 | B | | 7 | 4.3C | Y | 1 | Dal Santo,M | J |
| 15.743 | 813976 | 6.1 | S | SAO | | | | | 0.05 | B | | 10 | | | | Giampaolo,G | |
| 15.750 | 813977 | 5.8 | B | 101 | 0.4 | 6 | 0.06 | 297 | 0.28 | SC | 5 | 70 | 4.1 | Y | 1 | Amoretti,M | |
| 15.750 | 813978 | 5.6 | B | 101 | 9.2 | 7 | 0.4 | 63 | 0.050 | B | | 10 | 6.0M | Y | 1 | Rossi,L | |
| 15.752 | 813979 | 6.1 | M | 101 | 8 5 | 3 | | | 0.15 | N | 8 | 56 | 5.0 | Y | 1 | Sardini,D | |
| 15.752 | 813980 | | | | | | | | 0.080 | B | | 20 | 6.0 | | 4 | Zanotta,M.V | Q |
| 15.763 | 813981 | 5.7 | B | 101 | 5 | 6 | 0.15 | 90 | 0.050 | B | | 16 | 5.5 | Y | 1 | Castino,R | R |
| 15.768 | 813982 | 6.0 | B | 101 | 18 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | | Medway,K | S |
| 15.771 | 813983 | | | | 9 | 4 | | | 0.20 | SC | 10 | 111 | 6.0 | Y | 1 | Bremseth,P.-J | T |
| 15.771 | 813984 | 6.5 | S | | | | | | 0.050 | B | | 10 | 6.0 | Y | 1 | Bremseth,P.-J | |
| 15.774 | 813985 | 5.5 | B | 101 | 10 | 4 | | | 0.05 | B | | 10 | 5.5C | Y | 1 | Menichetti,R | |
| 15.78 | 813986 | 6.4 | B | DCS 6B | | 3 | | | 0.080 | B | | 15 CM | | N | 1 | Keijmel,P.C | |
| 15.781 | 813987 | 6.0 | M | 122 | 5.3 | 3 | | | 0.114 | N | 8 | 36 | 4.5 | N | 1 | Pennelli,G | |
| 15.79 | 813988 | 5.6 | | | 9 | | 0.20 | 80 | 0.034 | B | | 9 | | | 1 | Pereira,A | U |
| 15.792 | 813989 | 6.8 | B | 57 | 15 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | V |
| 15.792 | 813990 | 5.3 | S | 101 | 12 8 | 4 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Vanin,G | |
| 15.793 | 813991 | 5.0 | B | 101 | 10 | | | | 0.114 | N | 8.7 | 100 | | Y | 1 | Rodriguez C.,J.A | |
| 15.809 | 813992 | 5.9 | M | 101 | 17 | 5 | 0.55 | 305 | 0.050 | B | | 10 | 4.5C | Y | 1 | Lozano,L | |
| 15.830 | 813993 | 5.8 | M | 101 | | | | | 0.030 | B | | 8 | 4.5C | Y | 1 | Villa,M | |
| 15.832 | 813994 | 6.1 | B | 101 | 10.0 | 2 | | | 0.08 | B | | 20 | 5.5 | Y | 1 | Gigli,P | W |
| 15.833 | 813995 | 5.2 | M | 101 | 9 6 | 8 | 0.5 | 64 | 0.080 | B | | 10 | 7.0 | Y | 1 | Mikuz,H | |
| 15.836 | 813996 | 4.1: | S | 101 | | | | | | EY | | | 6.3 | Y | 2 | Milani,G | |
| 15.837 | 813997 | | | | 15 | 4 | 0.33 | 70 | 0.08 | B | | 20 | 6.3 | Y | 2 | Milani,G | |
| 15.840 | 813998 | 5.3 | M | 101 | 10 | 7 | 0.2 | 64 | 0.050 | B | | 7 | 7.0 | Y | 1 | Mikuz,H | |
| 15.851 | 813999 | 5.8 | B | 101 | | 4 | | | 0.080 | B | | 20 | 3.5C | Y | 1 | Dionisi,M | |
| 15.860 | 814000 | 4.3 | S | 101 | | | | | | EY | | | 6.2 | Y | 5 | Haver,R | |
| 15.865 | 814001 | 5.8 | M | 101 | 15 | | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Melandri,F | X |
| 15.865 | 814002 | 4.5 | S | 101 | 14.0 | 6 | 1.6 | 65 | 0.08 | B | | 15 | 6.2 | Y | 5 | Haver,R | |
| 15.8777 | 814003 | 5.8 | B | 101 | 8 | 7 | | | 0.05 | B | | 10 | 5.8CTM | Y | 2 | Franciosi,C | |
| 15.880 | 814004 | 4.4 | S | 101 | 15.0 | 5 | 1.6 | 65 | 0.05 | B | | 7 | 6.2 | Y | 5 | Haver,R | |
| 15.965 | 814005 | | | 101 | | 3 | | | 0.05 | B | | 7 | 5.0 | N | 3 | Benavides,A | |
| 15.976 | 814006 | 4.9 | M | 101 | 10.1 | 5 | 0.5 | 60 | 0.05 | B | | 7 | 4.3 | Y | 1 | DeYoung,J.A | |
| 15.98 | 814007 | 4.9 | S | 101 | 20 | 6 | 0.5 | 120 | 0.108 | N | 4 | 17 | 5.0 | Y | 1 | Harrington,P | |
| 15.993 | 814008 | 5.8 | S | 101 | | 3 | | | 0.08 | R | 11 | 21 | 4.9C | N | 1 | Graves,D | B |
| 15.996 | 814009 | 5.5 | S | 101 | 11.5 | 5 | 0.2 | 70 | 0.035 | B | | 7 | 5.7M | Y | 3 | Morrison,W | |
| 15.997 | 814010 | 5.5 | M | 101 | 17.0 | 6 | 1.25 | 66 | 0.05 | B | | 12 | 5.7M | Y | 1 | Knight,S | Y |

DATE: 15 DEC 1985

NOTE A Exceptionally clear.
NOTE B Urban city lights.
NOTE C Tail averted vision.
NOTE D Exc. see.
NOTE E Tail very faint.
NOTE F Bulge in comet's coma toward the north.
NOTE G (PA value appears to be measured incorrectly. Ed.)
NOTE H Modified Sidgwick method used.
NOTE I Near horizon, some high clouds.
NOTE J Haze.
NOTE K Cloud.
NOTE L 9.5.
NOTE M PA = E.
NOTE N Difficult to observe. Lines are too bright. [sic] Every day is a hazy day. (Translated by IHW staff. Ed.)
NOTE O Coma diameter determined as an average of five transit time observations.
NOTE P Faint aurora.
NOTE Q Narrow and straight tail with central spine at PA 65 deg. Faint broad tail, probably bent toward PA greater than 15 deg.
NOTE R Moon.
NOTE S Some drifting thin clouds interfered. (Observer gave limit as 11.5. Ed.)
NOTE T Inner coma fainter. (Instrument used for this note not specified. Ed.)
NOTE U (Observer gave limit as 9.4. Ed.)
NOTE V (Observer gave limit as 12.5. Ed.)
NOTE W Looks less luminous and slightly smaller. The shape is hardly oval, and is instead more round than previously. (Translated by IHW staff. Ed.)
NOTE X Veiled sky.
NOTE Y Gas tail.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.001 | 830497 | 0.22 | 0.203 | R | 13 | 110 | | | | Phillips,J | A |
| 15.017 | 830498 | 0.67 | 0.090 | M | 11 | 50 | 20 | 4.5 | 1 | Arpin,P | |
| 15.018 | 830499 | 0.3 | 0.200 | N | 8 | 81,130 | 10 | 5 | 1 | Robinson,R.L | B |
| 15.215 | 830500 | | 0.33 | N | 4.5 | 50,150 | 20 | 6.5 | 3 | Fabre,R | C |
| 15.224 | 830501 | 3.1 | 0.050 | B | | 7 | 15 | 6.0 | 2 | Cook,A.J | |
| 15.740 | 830502 | 0.58 | 0.150 | N | 6.6 | 100 | 4 | 4.5 | 1 | Dal Santo,M | |
| 15.762 | 830503 | 0.21 | 0.114 | SN | 8.7 | 25,100 | 15 | 5.0 | 1 | Abbadessa,M | D |
| 15.788 | 830504 | 0.23 | 0.20 | SC | 10 | 111 | 30 | 6 | 3 | Bremseth,P.-J | E |
| 15.806 | 830505 | 0.08 | 0.125 | N | 5.8 | 28, 40, 60 | 42 | 4.0 | 1 | Riccabone,G | F |
| 15.878 | 830506 | 0.04 | 0.83 | R | 19.7 | 900 | 10 | 5.0 | 3 | Soc. Astro. de France | G |
| 15.974 | 830507 | 0.75 | 0.318 | N | 8 | 40, 75,160 | 65 | 5.5 | 1 | Hathaway,W | |

NOTE A Comet found quickly by scanning with 7x50 binoculars. Getting larger and brighter. Central condensation of comet passed just south of star in drawing at 0010 UT. City lights. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B A star was traversed by the comet head. Unfortunately, I did not observe it while it passed the central condensation. During a moment of very stable seeing a thin, faint line appeared in the tail just behind the coma. It was not seen again.
NOTE C Note that the semi latus rectums are compressed (in) this observation as compared to 4 Dec. The tail has a brighter area (spike) down its center. Scale = 10'/mm.
NOTE D City lights interfered with the observation.
NOTE E Brightest structure at PA 225, line structure at PA 170, diffuse structures at PA 45 and at PA 90. Different structures in the coma was visible, B (brightest). The small central condensation and the inner coma was weaker than before. The whole coma had a smooth surface brightness. Diameter (central condensation) 7 arc sec. At 1927 UT, the central condensation occulted "nearly exactly" star A. Star A mag. about 10. I could not see the centr. con. at 1927 UT when the star was at the center! No drop in brightness was observed. The star only turned half a magnitude weaker (perhaps little more). [sic]
NOTE F Nucleus diameter, average of three measurements, is 39 arc sec. Magnifications of 80 and 144 also used. Two drawings included. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE G Jet at PA 32, 21" long; jet at PA 155, 30" long; jet at PA 195, 25" long; jet at PA 255, 18" long; jet at PA 312, 23" long; jet at PA 341, 24" long. Drawing made by Alain Perez.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.037 | 850476 | 0.135 | 2.8 | | 15.2 x10.2 | 7.00 | Kodak Tri-X | 400/ | N | | 3/P | 2 | Tatum,R | |
| 15.069 | 850477 | 0.200 | 4.5 | | 10.3 x 6.9 | 10.00 | Ektachr.400 | | N | T | 17/S | 1 | Priester,D.C | A |
| 15.111 | 850478 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 240/P | 1 | Sabia,J.D | |
| 15.117 | 850479 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 2.00 | Kodak 2415 | | Y | X | 241/P | 1 | Sabia,J.D | |
| 15.131 | 850480 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 28.00 | Kodak Tri-X | | N | M | 11/S | 1 | Webb,R | B |
| 15.147 | 850481 | 0.200 | 3.5 | | 10.3 x 6.9 | 30.00 | Kodak 2415 | | N | T | 1/P | | Levy,A | C |
| 15.195 | 850482 | 0.200 | 3.5 | | 10.3 x 6.9 | 30.00 | Kodak 2415 | | N | T | 2/P | 1 | Levy,A | C |
| 15.210 | 850483 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | S | 6/P | 1 | Yen,B | D |
| 15.226 | 850484 | 0.200 | 3.5 | | 10.3 x 6.9 | 20.00 | Ektachr. Pro | 200/ | N | T | 000/P | 1 | Levy,A | |
| 15.701 | 850485 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 5.00 | Kodak 2415 | | Y | | 7/P | 1 | Conrad,R | E |
| 15.716 | 850486 | 0.200 | 4 | | 10.3 x 6.9 | 11.00 | Kodak 103a-O | | N | O | 1/C | 3 | Cimatti,A | F |
| 15.725 | 850487 | 0.500 | 5.6 | | 4.1 x 2.7 | 30.00 | Kodak 103a-O | | N | O | 1/C | 3 | Cimatti,A | F |
| 15.725 | 850488 | 0.200 | 4 | | 10.3 x 6.9 | 15.00 | Kodak 103a-O | | N | O | 2/C | 3 | Cimatti,A | F |
| 15.745 | 850489 | 0.135 | 3.5 | | 15.2 x10.2 | 15.00 | Kodak 103a-O | | N | O | 3/C | 3 | Cimatti,A | F |
| 15.753 | 850490 | 0.500 | 5.6 | | 4.1 x 2.7 | 30.00 | Kodak 103a-O | | N | O | 2/C | 3 | Cimatti,A | F |
| 15.764 | 850491 | 0.200 | 4 | | 10.3 x 6.9 | 20.00 | Kodak 103a-O | | N | O | 4/C | 3 | Cimatti,A | |
| 15.772 | 850492 | 1.905 | 5.4 | 0.350 | 1.1 x 0.7 | 40.00 | Fujichrome | 400/ | N | O | 6/T | 2 | Genebriera,J | G |
| 15.785 | 850493 | 0.500 | 5.6 | | 4.1 x 2.7 | 40.00 | Kodak 103a-O | | N | O | 3/C | 3 | Cimatti,A | |
| 15.791 | 850494 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 25.00 | Ilford HP5 | 400/27 | N | O | 6/C | 1 | Paolinetti,R | H |
| 15.798 | 850495 | 0.200 | 5.6 | | 10.3 x 6.9 | 30.00 | Kodak 103a-O | | N | O | 5/C | 3 | Cimatti,A | |
| 15.806 | 850496 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 15.00 | Ilford HP5 | 400/27 | N | O | 7/C | 1 | Paolinetti,R | H |
| 15.808 | 850497 | 1.905 | 5.4 | 0.350 | 1.1 x 0.7 | 40.00 | Kodak 2415 | | Y | O | 7/T | 2 | Genebriera,J | |
| 15.815 | 850498 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 10.00 | Ilford HP5 | 400/27 | N | O | 8/C | 1 | Paolinetti,R | H |
| 15.818 | 850499 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 15.00 | 3M 1000 | 1000/ | N | X | 4/S | 1 | Vanin,G | |
| 15.819 | 850500 | 0.600 | 1.7 | 0.350 | 3.4 x 2.3 | 15.00 | Ilford FP4 | | N | O | 1/T | 1 | Battaini,P | I |
| 15.820 | 850501 | 0.500 | 5.6 | | 4.1 x 2.7 | 40.00 | Kodak 103a-O | | N | O | 4/C | 3 | Cimatti,A | |
| 15.822 | 850502 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 6.00 | Ilford HP5 | 400/27 | N | O | 9/C | 1 | Paolinetti,R | J |
| 15.823 | 850503 | 0.135 | 3.5 | | 15.2 x10.2 | 20.00 | Kodak 103a-O | | N | O | 6/C | 3 | Cimatti,A | |
| 15.825 | 850504 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 3.00 | Ilford HP5 | 400/27 | N | O | 10/C | 1 | Paolinetti,R | K |
| 15.826 | 850505 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 0.50 | Ilford HP5 | 400/27 | N | O | 11/C | 1 | Paolinetti,R | K |
| 15.833 | 850506 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Fujichrome | 400/ | N | O | 8/T | 2 | Genebriera,J | G |
| 15.838 | 850507 | 0.135 | 3.5 | | 15.2 x10.2 | 15.00 | Kodak 103a-O | | N | O | 7/C | 3 | Cimatti,A | |
| 15.843 | 850508 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | O | 9/T | 2 | Genebriera,J | |
| 15.874 | 850509 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 8.00 | Ilford HP5 | 400/27 | N | S | 1/T | 1 | Mikuz,H | |
| 15.884 | 850510 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 9.00 | Ilford HP5 | 400/27 | N | S | 2/T | 1 | Mikuz,H | |
| 15.894 | 850511 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 5.00 | Ilford HP5 | 400/27 | N | S | 3/T | 1 | Mikuz,H | |

NOTE A Push processed to 800 ASA.
NOTE B Intermittent high cirrus interference. Inner coma and starlike central condensation visible on all original negatives. Film push processed slightly. (Observer indicated C-type guiding as well as M. Ed.)
NOTE C (Print submitted by observer is a composite of 1 and 2 showing two comet images. Observer's image identifier is the equivalent Roman numeral. Ed.)

DATE: 15 DEC 1985

NOTE D Start time approximate. (Observer's image identifier is 5. Ed.) Instrument is Schmidt camera.
NOTE E City lights interfered with the observation; Vienna, from room!
NOTE F Moonlight interfered with the observation.
NOTE G (Observer's report form is ambiguous. The film may have been hyper-sensitized in forming gas (10% H2, 90% N2) at 48 C for 22 hours. Ed.)
NOTE H (Observer's image identifier is followed by suffix A. Ed.)
NOTE I Instrument is Schmidt camera.
NOTE J Image shows star occultation; see images 10 and 11 on this date. (Observer's image identifier is followed by suffix A. Ed.)
NOTE K With star occultation; see that negative number 9 dated 15 December 1985. [sic] (Observer's image identifier is followed by suffix A. Ed.)

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.109 | 870104 | 600G-O | CL | 0.135 | 1.9 | | 18.00 | Kodak Tri-X | 400/27 | N | C | 521/S | 1 | Buchanan,W.T | A |

NOTE A (Observer's image identifier is E-115-21A. Ed.) Halley visible.

DATE: 16 DEC 1985

DATE: 16 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.000 | 814011 | | | | 7 | | 0.20 | 75 | 0.15 | R | 5 | 31 | 5.7M | Y | 3 | Morrison,W | |
| 16.026 | 814012 | 4.7 | B | 101 | | 1 | | | 0.05 | B | | 20 | 4.0 | Y | 1 | da Silva,L.A.L | |
| 16.067 | 814013 | 4.5 | B | 101 | 4 | 3 | | | 0.06 | R | 12 | 56 | 5.3 | Y | 1 | Onofre D.,D | |
| 16.083 | 814014 | 5.6 | B | 101 | | | | | 0.080 | B | | 20 | 5.8 | Y | | Smith,D | |
| 16.09 | 814015 | 4.5 | S | AA | 25 | 5 | | | 0.050 | B | | 7 | | | | Green,D.W.E | A |
| 16.09 | 814016 | 4.6 | S | AA | 25 | 5 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |
| 16.104 | 814017 | 5.5 | M | 101 | | 7 | 0.40 | 55 | 0.050 | B | | 10 | 6.2 | Y | 1 | Ariail,R.B | |
| 16.104 | 814018 | 6.0 | B | 101 | | 5 | | | 0.08 | B | | 11 | 4.5 | Y | 1 | Gorski,L | |
| 16.104 | 814019 | 5.9 | B | 101 | 20 | 5 | | | 0.050 | B | | 10 | 5.0C | Y | 1 | Stapleton,J | B |
| 16.12 | 814020 | 4.8 | S | 101,100 | 20 | 6 | 0.50 | 65 | 0.080 | B | | 11 | 5.0 | Y | 1 | Spratt,C.E | |
| 16.125 | 814021 | 6.3 | S | | 9 | 5 | | | 0.080 | B | | 11 | 8 | N | 3 | Pryal,J | C |
| 16.153 | 814022 | 5.8 | M | 101 | | | 0.50 | 90 | 0.050 | B | | 10 | 5.4 | Y | 1 | Smith,A | D |
| 16.2104 | 814023 | 5.3 | S | DCS | 18 | 5 | 0.22 | 75 | 0.080 | B | | 20 | 5.2 | | 3 | Machholz,D | E |
| 16.351 | 814024 | 5.2 | M | 101 | 20 | 6 | | | 0.035 | B | | 7 | 4 | Y | 1 | Watanabe,H | |
| 16.354 | 814025 | 5.2 | M | 101 | 25 | 6 | | | 0.035 | B | | 7 | 4 | Y | 1 | Watanabe,A | |
| 16.380 | 814026 | 5.1 | M | 101 | 12 | 6 | | | 0.030 | B | | 8 | 4.5M | Y | 1 | Kato,T | |
| 16.389 | 814027 | | | | 3.5 | 6 | 0.08 | 60 | 0.10 | N | 10 | 55 | 4.5M | Y | 1 | Kato,T | |
| 16.39 | 814028 | 5.8 | B | E | 11 | 4 | | | 0.21 | N | | 80 | | | | Knyazyuk,N | |
| 16.458 | 814029 | 6.1 | S | 101 | 2.3 | 3 | | | 0.05 | R | 16 | 20 | 4.5M | Y | 1 | Feisheng,J | |
| 16.479 | 814030 | 5.8 | B | 101,100 | | | | | 0.07 | B | | 10 | 4.5 | Y | 1 | Date,M | |
| 16.48 | 814031 | 5.4 | M | 101 | | 5 | | | 0.05 | B | | 7 | 4.5M | Y | 2 | Suzuki,K | |
| 16.493 | 814032 | 5.6 | B | 101 | 30 | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Hayashi,H | |
| 16.542 | 814033 | 5.8 | B | 101 | | 5 | | | 0.05 | B | | 7 | 4.5C | Y | 1 | Hasegawa,T | |
| 16.545 | 814034 | 5.3 | M | 101 | 6.8 | | | 80 | 0.1 | N | 10 | 25 | 5.0 | Y | 1 | Ichikawa,K | |
| 16.55 | 814035 | 5.8 | B | M | | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 16.563 | 814036 | 6.1 | M | 101 | | | | | 0.060 | R | 15 | 45 | 5.0M | Y | 1 | Purvinskis,R | |
| 16.59 | 814037 | 6 | B | M | | | | | 0.05 | B | | 7 | | | | Ponomaryov,E | |
| 16.61 | 814038 | 5.9 | B | AAVSO | | | | | 0.20 | R | 15 | | | | | Churyumov,K | |
| 16.64 | 814039 | 5.9 | B | M | 5 | | | | 0.05 | R | | 20 | | | | Nesterov,Yu | |
| 16.68 | 814040 | 5.7 | B | 101 | 8 | 6 | | | 0.045 | B | | 7 | 5.5 | Y | 1 | Speil,J | |
| 16.688 | 814041 | 5.8 | M | AAVSO | 7 | 7 | 0.8 | 110 | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | F |
| 16.715 | 814042 | 5.6 | M | 101 | | 4 | | | 0.08 | B | | 10 | 4.5M | N | 1 | Rapavy,P | G |
| 16.726 | 814043 | 7.4 | S | 101 | 3.5 | 5 | | | 0.090 | R | 14 | 46 | 4.6 | Y | 1 | Hirth,G | H |
| 16.730 | 814044 | 6.0 | B | 101 | | | | | 0.050 | B | | 7 | 4.0C | N | 1 | Ruiz,J | |
| 16.735 | 814045 | | | 101 | 6 | | | | 0.208 | N | 5.8 | 48 | 4.0C | N | 1 | Ruiz,J | |
| 16.736 | 814046 | 5.7 | S | 101 | | 6 | | | 0.114 | N | 7.9 | 45 | 5.0C | N | 1 | Bernardis,A | |
| 16.742 | 814047 | 5.9 | M | 101 | 10 | 3 | | | 0.15 | N | 8 | 56 | 5.0M | Y | 1 | Sardini,D | |
| 16.743 | 814048 | 5.5 | M | 101 | 15 | 6 | 0.3 | 67 | 0.05 | B | | 12 | 4 | Y | 1 | Tanti,T | I |
| 16.750 | 814049 | 5.4 | M | 101 | 12 | 6 | | | 0.089 | R | 5.5 | 18 | 5.4M | N | 1 | Ventura,F | J |
| 16.7527 | 814050 | 5.6 | B | 101 | 6 | 7 | | | 0.05 | B | | 10 | 5.0CM | Y | 2 | Franciosi,C | K |
| 16.767 | 814051 | 5.5 | S | 101 | 3.6 | 3 | 0.2 | 28 | 0.07 | B | | 16 | 4.5CM | Y | 1 | Taylor,M.D | L |
| 16.770 | 814052 | 5.7 | B | 101 | 5 | 6 | 0.15 | 90 | 0.050 | B | | 16 | 5.0 | Y | 1 | Castino,R | M |
| 16.774 | 814053 | 5.5 | B | 101 | 10 | 3 | | | 0.05 | B | | 10 | 5 CM | N | 1 | Menichetti,R | |
| 16.781 | 814054 | 5.9 | B | 101 | | 4 | | | 0.05 | B | | 10 | M | Y | 2 | Frosina,A | N |
| 16.79 | 814055 | 5.5 | | | 9 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | O |
| 16.79 | 814056 | 5.3 | B | AAVSO | | | | | 0.20 | R | 15 | | | | | Churyumov,K | |
| 16.79 | 814057 | 4.8 | B | AAVSO | 15 | 5 | 0.7 | 66 | 0.11 | R | 7 | | | | | Churyumov,K | |
| 16.792 | 814058 | 5.5 | M | 101 | 11 | 3 | | | 0.06 | R | 5.7 | 20 | 5.0CM | Y | 3 | Cardiel,N | P |
| 16.799 | 814059 | 5.9 | M | 101 | 17 | 5 | | | 0.050 | B | | 10 | 4.0M | N | 1 | Lozano,L | Q |
| 16.802 | 814060 | 6.0 | M | 122 | 5.4 | 3 | | | 0.114 | N | 8 | 36 | 4.5 | N | 1 | Pennelli,G | |
| 16.806 | 814061 | 5.4: | S | 101 | | | | 30 | 0.08 | B | | 11 | 4 | N | 1 | Gainsford,M.J | R |
| 16.816 | 814062 | 5.7 | B | 101 | 0.4 | 6 | 0.06 | 297 | 0.28 | SC | 5 | 70 | 4.1 | Y | 1 | Amoretti,M | |
| 16.833 | 814063 | 5.5 | B | 4A | | | | | 0.050 | B | | 7 | 5.5 | Y | 1 | van der Mey,L | |
| 16.844 | 814064 | 5.7 | S | 101 | 12 | | | | 0.05 | B | | 10 | 4.0C | Y | 6 | Melandri,F | S |
| 16.861 | 814065 | 5.7 | B | 101 | | 4 | | | 0.080 | B | | 20 | 3.5C | Y | 1 | Dionisi,M | |
| 16.910 | 814066 | 5.2 | M | 100,101 | 10 | 8 | 0.25 | 64 | 0.080 | B | | 10 | 7.0 | Y | 1 | Mikuz,H | |
| 16.95 | 814067 | 4.4 | S | AA | 25 | 6 | | | 0.050 | B | | 7 | | | | Green,D.W.E | A |
| 16.990 | 814068 | 5.6 | S | 101 | 7 | 6 | 0.35 | 50 | 0.080 | R | 4.4 | 19 | 3.0 | N | 1 | Jacobs,T | |
| 16.990 | 814069 | 5.8 | B | 101 | | 6 | | | 0.08 | B | | 11 | 4.3 | Y | 2 | Gorski,L | |

NOTE A Coma diameter approximate.
NOTE B Moon out, clear.
NOTE C Smog poor. [sic]
NOTE D Faint tail barely seen.
NOTE E Comet barely visible to the naked eye.
NOTE F Naked eye!
NOTE G Coma ellipt.
NOTE H Moon, clouds.
NOTE I Seeing good, transparency excellent. Moon.
NOTE J Coma decidedly oval. The central condensation has a pear-like shape with the wide end in the west and the narrow part at the eastern end. Coma diameter uncertain.
NOTE K Veled ski. [sic]
NOTE L Haze. Antoniadi IV. Moon.
NOTE M Moon.
NOTE N Limit = 9.5. h0 approximately 60 deg.
NOTE O (Observer gave limit as 9.0. Ed.)
NOTE P Moon 4 days.
NOTE Q Crescent moon.
NOTE R Patchy cloud. Coma dia. = ?. DC = ?. Tail length = ?. PA uncertain.
NOTE S Veiled sky.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.021 | 830508 | | 0.203 | SC | 10 | 70 | | 6.5 | | Williams,D.J | A |
| 16.032 | 830509 | 0.4 | 0.203 | N | 6 | 61,116 | 10 | 5.5 | 1 | Williams,J | B |
| 16.052 | 830510 | | 0.203 | SC | 10 | 81 | | | 2 | Lobvinenko,T.W | C |
| 16.688 | 830511 | 0.89 | 0.063 | R | 13.3 | 52 | | 6.3 | | Kosa-Kiss,A | D |
| 16.768 | 830512 | 0.08 | 0.125 | N | 5.8 | 28, 40, 60 | 39 | 4.5 | 1 | Riccabone,G | E |
| 16.773 | 830513 | 0.23 | 0.114 | SN | 8.7 | 25,100 | 15 | 5.0 | 1 | Abbadessa,M | F |
| 16.792 | 830514 | 1.2 | 0.06 | R | 5.7 | 20 | 30 | 5.0 | 3 | Cardiel,N | |
| 16.950 | 830515 | 0.31 | 0.114 | N | 8 | 45 | 55 | 4.9 | 1 | Mac Kenzie,G | |
| 16.981 | 830516 | 0.67 | 0.156 | N | 8 | 52 | 116 | 5.7 | 2 | Cuthill,D.D | G |

NOTE A Very clear. Halley was easily spotted in the finderscope of the 8". The center of Halley is still very compact and bright. Halley must have swept between us and a star, because just east of the nucleus was a bright point. After checking the AAVSO chart, the plotted path for Halley does indicate that a star would be very near Halley. If you move the scope just enough so that the comet nucleus is out of the field and if you use averted vision, a faint tail is visible. (Duration not indicated. Time of observation is start time. Ed.)
NOTE B Coma brightens toward central condensation. No detail. There was a star embedded in the coma. It was brighter than the

DATE: 16 DEC 1985

central condensation. Moonlight, city lights interfered with the observation.
NOTE C Today we can see that the nuclear magnitude is 7.7 (check star: AGK 3+0 deg. 0181) and an integrated magnitude of 5.8 (check star: HR 69). The diameter of the comet is 243.62". The comet is very noticeable even with the unaided eye out here away from the city lights. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Feature at PA 110 deg. Schematic drawing. (Duration not indicated. Time of observation is end time. Ed.)
NOTE E One area of distinctly greater luminosity at PA 265. Nucleus diameter 59 arc sec. Magnification of 80 and 144 also used. Two drawings included. Moonlight and intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE F City lights and moonlight interfered with the observation.
NOTE G The bands of the inner tail were visible by sweeping the scope perpendicular to the lengths of the bands with a blue filter. (N & S movement). Coma now appears distinctly asymmetrical. Also a very distinct blue-green color is evident. Medium blue, red, and violet filters used. Synchronic bands [sic] at PA 40, 68, and 80.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.736 | 850512 | 1.820 | 5.2 | 0.350 | 1.1 x 0.8 | 20.00 | Kodak 103a-O | | N | O | 1/C | 2 | Cimatti,A | A |
| 16.828 | 850513 | 0.420 | 1.7 | 0.250 | 4.9 x 3.3 | 15.00 | Kodak 2415 | | Y | S | 3/P | 1 | Bruhin,W | B |
| 16.867 | 850514 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 20.00 | Ilford HP5 | 400/27 | N | O | 1/T | 1 | Mikuz,H | |
| 16.885 | 850515 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 15.00 | Ilford HP5 | 400/27 | N | O | 2/T | 1 | Mikuz,H | |
| 16.895 | 850516 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 10.00 | Ilford HP5 | 400/27 | N | O | 3/T | 1 | Mikuz,H | |

NOTE A Moonlight interfered with the observation.
NOTE B (Observer's image identifier is III. Ed.)

DATE: 17 DEC 1985

DATE: 17 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.000 | 814070 | 5.4 | B | 101 | 25 | 4 | | | 0.06 | R | 8.3 | 30 | 4.5 | N | 1 | Fox,J.H | A |
| 17.00 | 814071 | | | | | 4 | | | 0.20 | N | 5 | 35 | | | | Tsvetkov,L | |
| 17.025 | 814072 | 5.4 | S | 101 | 17 | 1 | | | 0.05 | B | | 10 | 4.5C | N | 3 | House,R.R | B |
| 17.063 | 814073 | 5.7 | B | 101 | | | | | 0.080 | B | | 20 | 5.5M | Y | | Smith,D | |
| 17.09 | 814074 | 4.9 | M | 100,101 | | 6 | 1.58 | 58 | 0.080 | B | | 20 | 4.5M | Y | 10 | Morris,C.S | |
| 17.1160 | 814075 | 4.9 | S | DCS | 14 | 4 | 0.30 | 76 | 0.050 | R | 12.0 | 13 | 5.2 | | 3 | Machholz,D | C |
| 17.12 | 814076 | 5.8 | B | 101 | 11 | 6 | | | 0.080 | B | | 20 | 4.0 | Y | | Kronk,G | D |
| 17.1208 | 814077 | 5.2 | S | DCS | 16 | 5 | 0.33 | 76 | 0.080 | B | | 20 | 5.2 | | 3 | Machholz,D | C |
| 17.132 | 814078 | 5.8 | B | 101 | 15 | 4 | | | 0.050 | B | | 10 | 4.5C | Y | 1 | Stapleton,J | E |
| 17.167 | 814079 | 5.5 | B | 101 | 15 | 7 | | | 0.20 | SC | 6 | 30 | 4.5 | Y | 2 | Saxon,V.P | F |
| 17.208 | 814080 | 6.1 | S | | 10 | 5 | 0.02 | | 0.080 | B | | 11 | | Y | 3 | Pryal,J | G |
| 17.2639 | 814081 | 5.3 | M | 101 | 10 | 6 | 1.83 | 65 | 0.05 | B | | 7 | 6.0 | Y | 2 | Cook,A.J | |
| 17.41 | 814082 | 5.1 | S | SAO | 15 | 4 | | | 0.05 | B | | 7 | 5.5 | Y | 1 | Asbdown,M | H |
| 17.42 | 814083 | 5.6 | S | 101 | 9.7 | 7 | 0.4 | 65 | 0.05 | B | | 7 | 5.0M | N | 1 | Kanai,K | |
| 17.42 | 814084 | 5.6 | B | 101 | 9.7 | 7 | 0.4 | 65 | 0.05 | B | | 7 | 5.0M | N | 1 | Kanai,K | |
| 17.42 | 814085 | 5.5 | M | 100,101 | 9 | 7 | 0.50 | 60 | 0.08 | B | | 11 | 5 M | Y | 1 | Mitsuma,S | I |
| 17.424 | 814086 | 5.4 | S | 101 | 19 | 5 | 0.33 | 90 | 0.07 | B | | 10 | 3.5 | Y | 1 | Kobayashi,J | |
| 17.43 | 814087 | 5.4 | M | 101 | | | | | 0.05 | B | | 7 | 5.5M | Y | 2 | Suzuki,K | |
| 17.43 | 814088 | | | 101 | 3.5 | 5 | 1.0 | | 0.31 | N | 5.7 | 147 | 5.5M | Y | 2 | Suzuki,K | J |
| 17.44 | 814089 | 4.4 | S | 101 | | | | | 0.05 | B | | 10 | 5 M | Y | 1 | Seargent,D | |
| 17.445 | 814090 | 5.6 | M | 100,101 | | 8 | | | 0.05 | B | | 7 | 5 M | Y | 1 | Mitsuma,S | |
| 17.458 | 814091 | 6.1 | S | 101 | 2.3 | 3 | | | 0.05 | R | 16 | 20 | 4.5M | Y | 1 | Feisheng,J | |
| 17.465 | 814092 | 5.4 | S | 101 | | 7 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 17.470 | 814093 | | | | 5 | 9 | | | 0.15 | N | 8 | 100 | 5.0 | Y | 1 | Williams,P.F | |
| 17.475 | 814094 | 5.6 | B | 101 | | 6 | | | 0.050 | B | | 7 | | Y | 3 | Bembrick,C | |
| 17.48 | 814095 | 5.5 | S | AAVSO | 8 | 5 | 0 | 65 | 0.13 | N | 6.3 | 24 | 5.5M | Y | 1 | Hayashi,A | |
| 17.48 | 814096 | 5.5 | B | M | 5 | 6 | 3 | 62 | 0.05 | B | | 7 | | | | Guryanov,S | K |
| 17.482 | 814097 | 5.7 | M | 101 | 4.7 | 6 | | | 0.12 | N | 6 | 36 | 3.0C | Y | 1 | Kishi,A | |
| 17.49 | 814098 | 5.6 | S | AAVSO | 8 | 4 | | | 0.07 | B | | 10 | 5.0M | Y | 1 | Hayashi,A | |
| 17.49 | 814099 | 6.2 | B | M | | | | | 0.05 | B | | 7 | | | | Sikoruk,L | |
| 17.500 | 814100 | 5.0 | S | 101 | 12 | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | L |
| 17.51 | 814101 | 4.9 | S | 101 | 8 | 7 | | | 0.08 | B | | 11 | 3.5 | N | 1 | Momose,M | |
| 17.556 | 814102 | 4.6 | M | 101 | 20 | 4 | 1 | 80 | 0.05 | B | | 20 | 5.0 | Y | 7 | Ichikawa,K | |
| 17.56 | 814103 | 5.4 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 17.57 | 814104 | 5.0 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | M |
| 17.59 | 814105 | 5.6 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 17.60 | 814106 | 6.8 | B | E | 7 | 4 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 17.60 | 814107 | 5.0 | S | E | 18 | | | | 0.05 | R | 8 | 20 | | | | Zagaynov,V.A | |
| 17.60 | 814108 | 5.6 | B | E | 17 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 17.62 | 814109 | 5.8 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 17.62 | 814110 | 4.8 | B | AAVSO | 25 | 6 | 1.5 | 66 | 0.11 | R | | | | | | Churyumov,K | |
| 17.64 | 814111 | 5.2 | B | E | 17 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 17.71 | 814112 | 5.7 | B | M | 4 | | | | 0.05 | B | | 7 | | | | Nesterov,Yu | N |
| 17.715 | 814113 | 5.3 | S | 101 | 3.5 | 4 | | | 0.063 | R | 13.3 | 34 | 3.0C | N | 1 | Skjaeraasen,O | O |
| 17.733 | 814114 | 5.1 | M | 101 | | 6 | | | 0.05 | B | | 12 | 4 | Y | 1 | Tanti,T | P |
| 17.743 | 814115 | 7.2 | S | 101 | 3.6 | 5 | | | 0.090 | R | 14 | 46 | 4.3 | Y | 1 | Hirth,G | Q |
| 17.750 | 814116 | 5.2 | M | 101 | | 6 | | | 0.089 | R | 5.5 | 18 | 5.0M | N | 1 | Ventura,F | |
| 17.802 | 814117 | 5.2 | B | 101 | 5.3 | 5 | | | 0.080 | R | 15 | 39 | 4.3MC | Y | 1 | Szulc,M | |
| 17.833 | 814118 | 6.5 | B | 57 | 16 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | R |
| 17.837 | 814119 | 5.6 | B | 101 | | 5 | | | 0.063 | R | 13.3 | 21 | 4.5M | N | 1 | Pilski,A | |
| 17.910 | 814120 | 5.9 | M | 101,100 | 17 | 5 | | | 0.200 | N | 6 | 40 | 5.0M | Y | 2 | Lozano,L | |
| 17.97 | 814121 | 4.4 | S | AA | 16 | 4 | | | 0.080 | B | | 20 | | | | Green,D.W.E | S |
| 17.98 | 814122 | 4.3 | S | AA | 18 | 5 | | | 0.050 | B | | 7 | | | | Green,D.W.E | S |

NOTE A SAO 127993 comparison star.
NOTE B Hazy sky.
NOTE C 32% moon 21 degrees away.
NOTE D Mostly cloudy.
NOTE E Bright moon.
NOTE F City lights and moon.
NOTE G Elongated coma. (Observer gave limit as 10. Ed.)
NOTE H Some moonlight.
NOTE I 9.1.
NOTE J Meter: coma diameter is P1 + P2.
NOTE K Four fragments in the head. (0.15 m Newtonian, 96x.)
NOTE L Scattered cloud, crescent moon. (Observer gave limit as approximately 8.5. Ed.)
NOTE M The cone emanating the matter to the south, resembling that of Dec. 12.60.
NOTE N Granulation in the central condensation.
NOTE O Severe light pollution made the background sky awfully bright, and in addition, thin clouds made it difficult/impossible to see the outer parts of the coma.
NOTE P Seeing good, transparency excellent. Moon.
NOTE Q Moon.
NOTE R (Observer gave limit as 12.0. Ed.)
NOTE S Coma diameter approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.003 | 830517 | 0.6 | 0.203 | R | 13 | 85 | 10 | 4.5 | 1 | Fox,J.H | A |
| 17.010 | 830518 | | 0.203 | SC | 10 | 70 | | 6.0 | | Williams,D.J | B |
| 17.139 | 830519 | 0.15 | 0.23 | R | 12 | 122,250,600 | | | 1 | O'Meara,S.J | C |
| 17.143 | 830520 | 0.41 | 0.20 | N | 6 | 30, 48 | 10 | 5 | 1 | Wilson,A.M | D |
| 17.264 | 830521 | 3 | 0.050 | B | | 7 | 15 | 6.0 | 2 | Cook,A.J | |
| 17.735 | 830522 | 0.46 | 0.063 | R | 13.3 | 34, 53 | 17 | 3.5 | 1 | Skjaeraasen,O | E |

NOTE A A bright knot in coma at PA 290. Seeing is so bad that a sharp focus is impossible. Separation and PA about the same as "star" noted 12/14/85.
NOTE B The moonlight has started interfering with observing Halley. The comet is still easily visible through the 8" finderscope, but the tail is washed out in the moonlight. (Duration not indicated. Time of observation is start time. Ed.)
NOTE C (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Y and V filters used.
NOTE E Lumicon Deep Sky filter used. Thin clouds made the comet's coma (no tail was seen) invisible every now and then, but it reappeared after a few minutes, until 17.741 UT when it disappeared completely. Due to those clouds, the visibility of the comet varied and I had to take several pauses. Difficult to distinguish between the rather bright background sky and the outer parts of the coma. Very much light pollution, almost no wind, bad seeing. Moonlight interfered (though not as much as the light pollution). Circular smooth coma, with brightness gradually decreasing outwards from the innermost tiny central condensation. Total field: 48'.

DATE: 17 DEC 1985

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.122 | 850517 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 30.00 | Kodak Tri-X | | N | M | 12/S | 1 | Webb,R | A |
| 17.249 | 850518 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | 3M 1000 | 1000/ | N | S | 7/P | 2 | Cook,A.J | |
| 17.252 | 850519 | 0.180 | 2.8 | | 11.4 x 7.6 | 2.00 | 3M 1000 | 1000/ | N | S | 8/P | 2 | Cook,A.J | |
| 17.257 | 850520 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | 3M 1000 | 1000/ | N | S | 9/P | 2 | Cook,A.J | |
| 17.319 | 850521 | 0.500 | 5 | | 4.1 x 2.7 | 10.00 | Ilford XP1 | 400/ | N | S | 1/P | 1 | Sanford,J | B |

NOTE A Moonlight a problem; slight interference by 5-day old moon. Inner coma and starlike central condensation visible on all original negatives. Film pushed processed slightly. (Observer indicated C-type guiding as well as M. Ed.)
NOTE B Very windy, S = 3-5 sec.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.162 | 870105 | -O | CL | 0.135 | 1.9 | | 25.00 | Kodak 103a-F | | N | | 602/S | 2 | Buchanan,W.T | A |

NOTE A Error in RA guiding. Halley invisible. (Note probably refers to observing conditions. Observer's image identifier is E-116-02. Ed.)

DATE: 18 DEC 1985

DATE: 18 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.000 | 814123 | 4.4 | B | 78 | | | 0 | | | 0.05 | B | | 20 | 3.5 | Y | 1 | da Silva,L.A.L | A |
| 18.00 | 814124 | 4.7 | S | AAVSO | 10.5 | | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 18.00 | 814125 | 5.3 | B | AAVSO | 12 | | 5 | | | 0.20 | N | 5 | 35 | | | | Tsvetkov,L | |
| 18.028 | 814126 | 6.1 | M | 101 | 4.1 | | 4 | | | 0.114 | N | 8 | 45 | 4.1 | Y | 1 | Mac Kenzie,G | B |
| 18.031 | 814127 | 5.4 | B | 101 | 20 | | 4 | | | 0.06 | R | 8.3 | 30 | 3.7M | N | 1 | Fox,J.H | C |
| 18.042 | 814128 | 5.5 | B | 101 | | | | | | 0.080 | B | | 20 | 5.8M | Y | | Smith,D | |
| 18.08 | 814129 | 4.9 | M | 101 | | | 6 | 1.25 | 60 | 0.080 | B | | 20 | 5.0M | Y | 10 | Morris,C.S | |
| 18.104 | 814130 | 5.6 | B | 101 | | | 4 | | | 0.08 | B | | 11 | 4.0 | Y | 1 | Gorski,L | |
| 18.12 | 814131 | 4.5 | S | 101,100 | 20 | | 5 | 0.25 | 65 | 0.080 | B | | 11 | 4.5 | Y | 1 | Spratt,C.E | D |
| 18.125 | 814132 | 6.3 | S | | 7 | | 3 | | | 0.080 | B | | 11 | | Y | 3 | Pryal,J | E |
| 18.13 | 814133 | 5.5 | B | 101 | 11 | | 8 | | | 0.080 | B | | 20 | 4.0 | Y | | Kronk,G | F |
| 18.22 | 814134 | 5.0 | M | 100 | | | | 1.2 | 50 | 0.05 | B | | 10 | 6 M | Y | 2 | Hale,A | G |
| 18.367 | 814135 | 5.0 | M | 101 | 12 | | 6 | | | 0.030 | B | | 8 | 4.5MT | Y | 1 | Kato,T | |
| 18.385 | 814136 | 5 | M | 101 | 20 | | 6 | | | 0.035 | B | | 7 | 4 | Y | 1 | Watanabe,H | |
| 18.389 | 814137 | | | | 4.5 | | 6 | 0.10 | 60 | 0.10 | N | 10 | 55 | 4.5M | Y | 1 | Kato,T | |
| 18.389 | 814138 | 5.0 | M | 101 | 20 | | 6 | | | 0.035 | B | | 7 | 4 | Y | 1 | Watanabe,A | |
| 18.41 | 814139 | 5.1 | S | SAO | 15 | | 4 | | | 0.05 | B | | 7 | 5.5 | Y | 1 | Ashdown,M | H |
| 18.415 | 814140 | 5.5 | B | 101 | 25 | | | | | 0.05 | B | | 7 | 4.5M | Y | 1 | Hayashi,H | |
| 18.43 | 814141 | 5.5 | M | 100 | 10 | | 8 | | | 0.05 | B | | 7 | 4.5M | Y | 1 | Mitsuma,S | |
| 18.440 | 814142 | 5.7 | M | 101 | 5.5 | | 6 | | | 0.12 | N | 6 | 36 | 3.0MC | Y | 1 | Xishi,A | |
| 18.44 | 814143 | 5.4 | M | 100 | 9.5 | | 8 | 0.42 | 65 | 0.08 | B | | 11 | 4.5M | Y | 1 | Mitsuma,S | I |
| 18.47 | 814144 | 4.8 | S | 101 | 9 | | 7 | | | 0.07 | B | | 10 | 4.5M | Y | 1 | Yasuki,M | |
| 18.472 | 814145 | 5.2 | S | 101 | 12 | | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | J |
| 18.483 | 814146 | 5.8 | B | 101,100 | | | | | | 0.07 | B | | 10 | 3.7M | Y | 1 | Date,M | |
| 18.49 | 814147 | 5.6 | S | AAVSO | 8 | | 4 | | | 0.07 | B | | 10 | 5.0M | Y | 1 | Hayashi,A | |
| 18.49 | 814148 | 5.4 | | 101 | | | | 2.5 | 260 | 0.050 | B | | 7 | CM | Y | 1 | Matchett,V | K |
| 18.50 | 814149 | 5.7 | B | M | | | 5 | 2 | 60 | 0.05 | B | | 7 | | | | Guryanov,S | |
| 18.51 | 814150 | 5.4 | S | AAVSO | 8 | | 5 | | | 0.13 | N | 6.3 | 24 | 5.0M | Y | 1 | Hayashi,A | |
| 18.57 | 814151 | 5.7 | B | M | | | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 18.65 | 814152 | 5.7 | B | M | 12 | | 2 | | | 0.07 | N | 8 | 33 | | | | Shitikov,A | |
| 18.65 | 814153 | 5.7 | B | M | 4 | | | | | 0.05 | B | | 7 | | | | Nesterov,Yu | L |
| 18.691 | 814154 | 5.5 | B | 100 | 10 | | 5 | | | 0.063 | R | 13.3 | 21 | 4.5M | Y | 1 | Pilski,A | |
| 18.698 | 814155 | 5.5 | M | 101 | | | | | | 0.060 | R | 4.5 | 10 | 5.0M | Y | 1 | Chodorowski,F | |
| 18.70 | 814156 | 5.0 | B | AAVSO | 15 | | 6 | | | 0.11 | R | 7 | | | | | Churyumov,K | |
| 18.706 | 814157 | 5.7 | B | 101 | | | | | | 0.050 | B | | 10 | 5.5 | Y | 1 | Trebacz,A | |
| 18.708 | 814158 | 6.4 | M | 100 | 15 | | 5 | | | 0.150 | N | 5.3 | 45 | 5.5 | Y | 1 | Wikholm,L | |
| 18.73 | 814159 | 5.0 | S | 101 | | | | | | 0.08 | B | | 20 | 3.0 | | 1 | Shanklin,J.D | |
| 18.750 | 814160 | 6.0 | M | 100,101 | 25 | | 4 | | | 0.030 | B | | 8 | 5.5C | Y | 1 | Honko,M | |
| 18.750 | 814161 | 6.1 | M | 100,101 | 25 | | 4 | | | 0.030 | B | | 8 | 5.5C | Y | 2 | Kosinski,J | M |
| 18.760 | 814162 | 5.2 | S | 100 | 11 | | 5 | | | 0.08 | B | | 11 | 4.8 | Y | 1 | Gainsford,M.J | N |
| 18.764 | 814163 | 5.9 | M | AAVSO | 6 | | 7 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | O |
| 18.767 | 814164 | 5.9 | S | 100 | 4.6 | | 6 | 0.04 | 65 | 0.076 | R | 12 | 37 | 5.5CM | Y | 1 | Taylor,M.D | P |
| 18.771 | 814165 | 4.8 | S | 101 | 8.4 | 6.9 | 8 | 0.04 | 98 | 0.05 | B | | 10 | 4.7M | Y | 3 | Abbott,J | Q |
| 18.771 | 814166 | 5.5 | B | 101 | 8.4 | 6.9 | 8 | 0.03 | 98 | 0.05 | B | | 10 | 4.7M | Y | 3 | Abbott,J | R |
| 18.779 | 814167 | 5.1 | S | 100 | 4 | | 6 | | 80 | 0.25 | N | 6 | 60 | 4.8 | Y | 1 | Gainsford,M.J | S |
| 18.785 | 814168 | | | | 12 | | 4 | 0.4 | 80 | 0.200 | R | 14 | 40 | 5.4 | | 1 | Rogers,J.H | T |
| 18.785 | 814169 | 5.6 | S | 100 | 8 | | 5 | | | 0.080 | B | | 10 | 5.4 | | 1 | Rogers,J.H | N |
| 18.785 | 814170 | 5.4 | S | 100 | 10 | | 4 | | | 0.050 | B | | 10 | 5.4 | | 1 | Rogers,J.H | N |
| 18.79 | 814171 | 5.3 | B | M | | | | | | 0.03 | B | | 8 | | | | Tsygankov,D | |
| 18.792 | 814172 | 4.6 | S | 101 | 18 | | 6 | 0.67 | 67 | 0.05 | B | | 10 | 3.0M | N | 1 | Hurst,G.M | U |
| 18.792 | 814173 | 5.2 | B | 101 | 15 | | 8 | 0.67 | 90 | 0.06 | R | | 25 | 5.5 | Y | 1 | Ward,A | |
| 18.794 | 814174 | 5.5 | B | 100 | | | 4 | | | 0.05 | B | | 10 | M | Y | 2 | Frosina,A | V |
| 18.798 | 814175 | | | | 18 | | 7 | 0.67 | 67 | 0.08 | B | | 15 | 3.0M | N | 1 | Hurst,G.M | U |
| 18.7981 | 814176 | 5.7 | B | 101 | 5 | | 6 | | | 0.05 | B | | 10 | 5.0CM | N | 2 | Franciosi,C | |
| 18.799 | 814177 | 5.0 | B | 101 | 25 | | 5 | 0.33 | | 0.102 | R | 14.7 | 60 | | Y | | Medway,K | W |
| 18.80 | 814178 | 6.0 | S | 101 | 9.6 | | 6 | | | 0.203 | SC | 10 | 44 | 5.5C | Y | 2 | Maraziti,A | |
| 18.81 | 814179 | 5.8 | B | 101 | | | | | | 0.203 | SC | 10 | 44 | 5.5C | Y | 2 | Maraziti,A | |
| 18.81 | 814180 | 4.7 | S | DCS 6B | 10 | | 6 | | | 0.050 | B | | 10 | 3.5MC | N | 1 | van Loo,F.R | |
| 18.819 | 814181 | 4.9 | S | 101 | 10 | 9 | 7 | 0.33 | 55 | 0.065 | B | | 12 | 4.5 | N | 1 | Foulkes,M | X |
| 18.833 | 814182 | 4.7 | S | 101 | 9 | | 3 | | | 0.08 | B | | 20 | 5.5 | Y | 4 | Milani,G | Y |
| 18.837 | 814183 | 5.8 | M | 100 | 6.4 | | 4 | 0.05 | 72 | 0.07 | B | | 16 | 5.0CM | Y | 1 | Taylor,M.D | Z |
| 18.86 | 814184 | 5.0 | B | AAVSO | | | 6 | | | 0.05 | R | 4 | 7 | | | | Chernis,K | |
| 18.86 | 814185 | 5.7 | S | 100 | | | | | | 0.050 | B | | 7 | 5.0 | Y | 1 | Spalding,G.H | N |
| 18.87 | 814186 | 5.5 | B | 100 | 10 | | 5 | | | 0.080 | B | | 20 | CM | N | 1 | Jannink,D.W | a |
| 18.88 | 814187 | 4.5 | S | DCS 6B | 12 | | 5 | | | 0.040 | B | | 7 | 4 MC | Y | 5 | Bus,E.P | |
| 18.96 | 814188 | 4.3 | S | AA | 22 | | 5 | | | 0.050 | B | | 7 | | | | Green,D.W.E | b |
| 18.97 | 814189 | 4.4 | S | AA | 22 | | 4 | | | 0.080 | B | | 20 | | | | Green,D.W.E | b |
| 18.978 | 814190 | 4.7 | M | 101 | 11.4 | | 6 | | | 0.05 | B | | 7 | 5.0M | Y | 1 | DeYoung,J.A | |
| 18.98 | 814191 | | | | 3.5 | | 7 | 0.8 | 67 | 0.317 | N | 6 | 68 | | | | Bortle,J.E | c |
| 18.98 | 814192 | 4.7 | S | AAVSO | 11.5 | | 6 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 18.985 | 814193 | 5.3 | S | 101 | 9 | | 1 | | | 0.05 | B | | 10 | 3.5CM | N | 3 | House,R.R | d |

NOTE A Moonlight.
NOTE B Size increased a large amount since last observation. (5 day old moon nearby.)
NOTE C SAO 127993 comparison star.
NOTE D Sea fog in area.
NOTE E Near first quarter moon. Fog at 20:00 PST. (Observer gave limit as 9. Ed.)
NOTE F Mostly cloudy, moon.
NOTE G Comet 10 deg. from crescent moon, which may have slightly affected brightness and tail length estimates. The comet could be seen with the naked eye without much difficulty.
NOTE H Some moonlight.
NOTE I 9.0.
NOTE J Crescent moon and drifting clouds. (Observer gave limit as 8.3. Ed.)
NOTE K Magnitude is upper limit.
NOTE L Granulation in the central condensation.
NOTE M Coma diameter uncertain.
NOTE N Moon.
NOTE O Naked eye!
NOTE P Antoniadi II.
NOTE Q Comparison stars 4.9, 5.4, 4.5. First quarter moon 12 deg. The "tail-lobe" structures seen in 10x50 binoculars corresponded to fountain-like features seen in larger instruments. The northern "tail-lobe" was 0.04 deg. long at PA 98. The southern "tail-lobe" was 0.04 deg. at PA 117.
NOTE R Comparison stars 5.4, 5.8. The "tail-lobe" structures seen in 10x50 binoculars corresponded to fountain-like features seen in larger instruments. The northern "tail-lobe" was 0.03 deg. long at PA 98. The southern "tail-lobe" was 0.03 deg. at PA 117.
NOTE S Moon. Tail PAs uncertain.
NOTE T See drawing. Moon.
NOTE U Strong moonlight.
NOTE V Limit = 9.3. b0 approximately 50 deg.
NOTE W 1st quarter moon 10 deg. SE. (Observer gave limit as 11.0. Ed.)
NOTE X Moon up.

DATE: 18 DEC 1985

NOTE Y Moon cirri.
NOTE Z Antoniadi III.
NOTE a Telescopic limit is 8.
NOTE b Coma diameter approximate.
NOTE c Narrow, straight type I tail.
NOTE d Hazy sky.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.026 | 830523 | 0.26 | 0.114 | N | 8 | 45 | 14 | 3.9 | 1 | Mac Kenzie,G | |
| 18.031 | 830524 | 0.6 | 0.203 | R | 13 | 85,225 | 10 | 3.7 | 1 | Fox,J.H | A |
| 18.107 | 830525 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | B |
| 18.135 | 830526 | 0.75 | 0.318 | N | 8 | 40 | 31 | 5.5 | 1 | Hathaway,W | |
| 18.748 | 830527 | 0.21 | 0.298 | N | 5 | 40, 65,269 | 27 | 5.8 | 1 | Stott,D | C |
| 18.781 | 830528 | 0.5 | 0.200 | R | 14 | 40,170 | 10 | 5.4 | 1 | Rogers,J.H | D |
| 18.802 | 830529 | 2.0 | 0.05 | B | | 10 | 30 | 3.0 | 1 | Hurst,G.M | E |
| 18.830 | 830530 | 0.21 | 0.203 | SC | 10 | 80,165 | 10 | 4.5 | 1 | Foulkes,M | F |

NOTE A Wing-like extensions from nucleus more easily seen at higher magnification. W edge of coma not so much brighter than E, but it is more sharply defined. Very mottled surface appearance.
NOTE B (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Hood at PA 155 deg. Tail at PA 85 deg. Hood is rather a vague structure. The PA refers to its centre.
NOTE D Coma DC 4, asymmetric, inner part bright with no stellar nucleus. "Horns" (probable), north and south edges of parabola. "Spine" (probable), centre of tail about 24' long at PA 80 deg. (These features were seen with both eyepieces, with nucleus out of field at 170x, so were almost certainly real.)
NOTE E Difficult as moon near comet's field, but tail still seen, straight, broad, in PA 67 deg.
NOTE F Central bright area offset from coma centre. Surrounded by a circular disk which in turn was surrounded by a fainter elliptical disk. Faint tail visible, 8' at PA 50. Coma diameter 5'x4', DC = 6.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.812 | 850522 | 0.500 | 5.6 | | 4.1 x 2.7 | 3.92 | Kodak Tri-X | 400/ | N | X | 1/P | 1 | Ward,A | A |
| 18.816 | 850523 | 0.500 | 8 | | 4.1 x 2.7 | 10.00 | Fujichrome | 400/27 | N | O | 2/S | 2 | Townsend,R | |
| 18.817 | 850524 | 0.500 | 5.6 | | 4.1 x 2.7 | 3.83 | Kodak Tri-X | 400/ | N | X | 2/P | 1 | Ward,A | A |
| 18.980 | 850525 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 3.00 | Kodak 2415 | | Y | S | 5/P | 1 | Dilsizian,R | B |

NOTE A UV filter used. Moon in sky.
NOTE B Exposures limited below 5 minutes to allow for stellar guiding with a minimum of "proper motion" distortion in resolution.

DATE: 19 DEC 1985

DATE: 19 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.024 | 814194 | 5.8 | B | 100 | 15 | 3 | | | 0.06 | R | 8.3 | 30 | 3.7 | N | 1 | Fox,J.H | A |
| 19.028 | 814195 | 6.5 | S | 100 | 3.4 | 8 | | | 0.152 | N | 5.5 | 69 | 4.5M | Y | 1 | Hudak,D.M | |
| 19.096 | 814196 | 5.9 | B | 101,100 | 16 | 1 | | | 0.05 | B | | 7 | 4.5 | Y | 1 | Lairet,R | |
| 19.11 | 814197 | 4.9 | M | 101 | | 6 | 1.17 | 63 | 0.080 | B | | 20 | 4.5M | Y | 10 | Morris,C.S | |
| 19.117 | 814198 | 5.9 | B | 101 | | 2 | | | 0.05 | B | | 7 | | | 1 | Benavides,A | |
| 19.12 | 814199 | 5.6 | B | 100 | 12 | 7 | | | 0.080 | B | | 20 | 3.5 | Y | | Kronk,G | B |
| 19.13 | 814200 | 6.0 | B | 100 | 9 | 7 | | | 0.154 | N | 8.0 | 68 | 3.5 | Y | | Kronk,G | B |
| 19.1424 | 814201 | 5.2 | S | IHW | 13 | 6 | 0.18 | 74 | 0.080 | B | | 20 | 4.8 | | 3 | Machholz,D | C |
| 19.1451 | 814202 | 5.5 | S | IHW | 17 | 7 | 0.27 | 74 | 0.152 | N | 8.0 | 76 | 4.8 | | 3 | Machholz,D | C |
| 19.40 | 814203 | 5.8 | B | | 12 | 6 | | | 0.05 | B | | 10 | 3.5 | N | 1 | Uda,K | |
| 19.41 | 814204 | 5.7 | S | 100 | | | | | 0.045 | R | 6 | 13 | 2.5 | | | Jones,A | D |
| 19.42 | 814205 | | | 100 | 2 | 6 | | | 0.317 | N | 5 | 86 | | | | Jones,A | E |
| 19.42 | 814206 | 8.8 | S | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | F |
| 19.420 | 814207 | 5.5 | M | 101 | 10 | 6 | 0.25 | 60 | 0.070 | B | | 10 | 4.5M | Y | 1 | Kato,T | |
| 19.431 | 814208 | | | | 4.0 | 6 | 0.10 | 60 | 0.15 | N | 8.5 | 100 | 4.5M | Y | 1 | Kato,T | |
| 19.434 | 814209 | | | | 6 | 6 | 0.15 | 60 | 0.15 | N | 8.5 | 50 | 4.5M | Y | 1 | Kato,T | |
| 19.435 | 814210 | 5.6 | M | 100 | 8.5 | 8 | | | 0.05 | B | | 7 | 4.5M | Y | 1 | Mitsuma,S | |
| 19.445 | 814211 | 5.6 | M | 100 | 6.9 | 8 | 0.42 | 65 | 0.08 | B | | 11 | 4.5M | Y | 1 | Mitsuma,S | G |
| 19.469 | 814212 | 6.1 | S | 100 | 6 | 2 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | H |
| 19.48 | 814213 | 5.5 | B | M | | 5 | 2 | 60 | 0.05 | B | | 7 | | | | Guryanov,S | |
| 19.483 | 814214 | 6.1 | B | 101,100 | | | | | 0.07 | B | | 10 | 3.0M | Y | 1 | Date,M | |
| 19.54 | 814215 | 6.3 | B | M | | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 19.55 | 814216 | 4.9 | B | AAVSO | | | | | 0.11 | R | 7 | | | | | Churyumov,K | |
| 19.60 | 814217 | 5.9 | B | M | | | | | 0.05 | B | | 7 | | | | Ponomaryov,E | |
| 19.64 | 814218 | 5.0 | B | E | 12 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 19.66 | 814219 | | | | 12 | 5 | 1 | 60 | 0.050 | B | | 7 | 4 | N | 1 | Luthen,H | I |
| 19.67 | 814220 | 5.0 | B | E | 12 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 19.67 | 814221 | 5.6 | B | M | 7 | 3 | | | 0.07 | N | 8 | 33 | | | | Yurchenko,Yu | |
| 19.69 | 814222 | 5.3 | B | AAVSO | | | | | 0.20 | R | 15 | | | | | Churyumov,K | |
| 19.70 | 814223 | 5.0 | B | E | 12 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 19.7083 | 814224 | 5.8 | B | 100 | 6 | 7 | | | 0.05 | B | | 10 | 5.0MC | N | 2 | Franciosi,C | |
| 19.729 | 814225 | 5.3 | S | 100 | 15 | 5 | | | 0.080 | B | | 15 | 5 CM | Y | 1 | Korth,S | J |
| 19.729 | 814226 | 6.1 | B | | | 6 | | | 0.050 | B | | 10 | M | Y | 1 | Linke,H | |
| 19.730 | 814227 | 5.9 | B | 101 | | | | | 0.050 | B | | 7 | 3.5C | N | 1 | Ruiz,J | |
| 19.73 | 814228 | 5.8 | B | 100 | 10 | 5 | | | 0.050 | B | | 7 | CM | Y | 1 | Jannink,D.W | K |
| 19.74 | 814229 | 4.9 | S | DCS 6B | 12 | 4 | 0.33 | 25 | 0.050 | R | | 8 | 4 CM | Y | 1 | Wils,P | |
| 19.743 | 814230 | 5.6 | S | 100 | 7 | 5 | | | 0.050 | B | | 7 | 5.0M | N | 1 | Mikuz,H | |
| 19.747 | 814231 | 5.4 | S | 100 | 9 | 6 | | | 0.114 | N | 7.9 | 26 | 4.5CM | N | 1 | Bernardis,A | |
| 19.75 | 814232 | 5.0 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 19.7541 | 814233 | 5.4 | S | AAVSO | | 5 | | | 0.05 | B | | 7 | 5.0 | Y | 1 | Sicoli,P | |
| 19.76 | 814234 | 5.0 | S | DCS 6B | | 6 | | | 0.050 | B | | 10 | 5 M | N | 1 | van der Laan,T.A | |
| 19.76 | 814235 | 4.3 | B | 100 | 30 | 4 | | | 0.050 | B | | 7 | 4.5 | Y | 2 | Merlin,J.-C | |
| 19.764 | 814236 | 6.3 | M | 101 | 72 | 0 | | | 0.070 | R | 14 | 20 | 4.5 | Y | 1 | Luga,M | |
| 19.774 | 814237 | 4.5 | B | 100 | 25 | 5 | 0.5 | | 0.102 | R | 14.7 | 60 | | Y | | Medway,K | L |
| 19.785 | 814238 | 5.6 | M | 101 | | | | | 0.050 | B | | 7 | 5.5 | N | 1 | Stott,D | M |
| 19.79 | 814239 | 5.5 | | | | | | | 0.034 | B | | 9 | | | 3 | Pereira,A | B |
| 19.84 | 814240 | 4.5 | S | DCS 6B | 15 | 5 | | | 0.040 | B | | 7 | 5 M | Y | 3 | Bus,E.P | |
| 19.85 | 814241 | 4.5 | S | DCS 6B | | 7 | | | 0.100 | B | | 14 | 4.5MC | N | 1 | van Loo,F.R | |
| 19.907 | 814242 | 5.3 | B | 100 | 9 | | | | 0.114 | N | 8.7 | 100 | | Y | 1 | Rodriguez C.,J.A | N |
| 19.948 | 814243 | 6.1 | M | 100 | 4.2 | 4 | | | 0.114 | N | 8 | 45 | 3.5 | Y | 1 | Mac Kenzie,G | O |
| 19.96 | 814244 | 4.4 | S | AA | 17 | 6 | | | 0.050 | B | | 7 | | | | Green,D.W.E | E |
| 19.977 | 814245 | 5.4 | S | 100,110 | 11 | 4 | | | 0.035 | B | | 7 | 4.9M | N | 3 | Morrison,W | P |
| 19.993 | 814246 | 6.5 | S | 100 | 2.8 | 7 | | | 0.203 | N | 6 | 101 | 5.0M | Y | 1 | Hudak,D.M | |

NOTE A Strong moonlight. SAO 127894 comparison star.
NOTE B Moonlight.
NOTE C 52% moon 15 degrees away.
NOTE D Moon 7d.
NOTE E Coma diameter approximate.
NOTE F Condensation.
NOTE G 9.0.
NOTE H First quarter moon, clear. (Observer gave limit as approximately 8.0. Ed.)
NOTE I Tail PA approximate. Moon nearby, cloudy.
NOTE J Coma diameter approximate. Tail almost invisible because of moon.
NOTE K Telescopic limit is 7.5.
NOTE L Comet easily seen in 10x40 mm finder. (Observer gave limit as 11.0. Ed.)
NOTE M Patchy cloud.
NOTE N Moon and fog.
NOTE O Appeared to be very slightly elliptical (centre point in coma appeared brighter than last night but no overall mag. change). Temperature: -12 deg. C.
NOTE P Moon 20 deg. away.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.007 | 830531 | 0.1 | 0.204 | N | 8 | 58,203 | 20 | 3.5 | 1 | Robinson,P.C | A |
| 19.024 | 830532 | 0.6 | 0.203 | R | 13 | 85 | 10 | 3.7 | 1 | Fox,J.H | B |
| 19.030 | 830533 | 0.3 | 0.200 | N | 8 | 81,130 | 16 | 3 | 1 | Robinson,R.L | C |
| 19.806 | 830534 | 0.11 | 0.125 | N | 5.8 | 28, 40, 60 | 35 | 4 | 1 | Riccabone,G | D |
| 19.957 | 830535 | 0.33 | 0.114 | N | 8 | 45, 90,150 | 75 | 3.5 | 1 | Mac Kenzie,G | E |
| 19.988 | 830536 | 0.48 | 0.200 | N | 8 | 81,130 | 14 | 3 | 1 | Robinson,R.L | F |

NOTE A Ray tail at PA 60, there was a diffuse tail on the south side of the "ray" tail; diffuse tail at PA 60-90; jet (in coma) at PA 290. The center of the coma was brighter on the west side of stellar central condensation. The north semicircle of the coma was dimmer than the rest and not as extensive. Moonlight interfered with the observation.
NOTE B Bright sky background makes coma extent less than previous nights. Still better defined edge to W. Nucleus not very distinct.
NOTE C Central condensation notably brighter than on 15/12/85. During a brief period of improved seeing a bright line appeared to project forward from the central condensation.
NOTE D Three measurements of the diameter of the comet's nucleus all yielded 54 arc sec. Magnifications of 80 and 144 also used. Two drawings included. Moonlight and intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE E Magnification of 300x also used.
NOTE F Inner coma had a wedge-shape and was brighter than outer region of coma. During a short period of good seeing a thin ray projected forward. Two tails appeared to be present: a longer main tail at PA 293 and a short projection on the south side at PA 242. The central condensation was distinctly stellar in nature. (Values of PA given appear to be in error. They should probably be subtracted from 360 for true values. Ed.)

DATE: 19 DEC 1985

DATE: 19 DEC 1985

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Eyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.966 | 850526 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 2.00 | Kodak 2415 | | Y | S | 6/P | 1 | Dilsizian,R | A |

NOTE A Exposures limited below 5 minutes to allow for stellar guiding with a minimum of "proper motion" distortion in resolution.

DATE: 20 DEC 1985

NETWORK: AMATEUR OBSERVATION

DATE: 20 DEC 1985

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.003 | 814247 | 4.6 | M | 101 | 10.1 | 7 | | | 0.05 | B | | 7 | 5.0M | Y | 1 | DeYoung,J.A | |
| 20.01 | 814248 | | | | | 7 | 0.2 | 70 | 0.317 | N | 6 | 68 | | | | Bortle,J.E | A |
| 20.01 | 814249 | 4.6 | M | AA | 12 | 8 | | | 0.203 | N | 6 | 49 | | | | Green,D.W.E | B |
| 20.01 | 814250 | 4.9 | S | AAVSO | 7 | 6 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 20.015 | 814251 | 6.0 | B | 100 | | 2 | | | 0.05 | B | | 7 | 4.3 | | 1 | Benavides,A | |
| 20.024 | 814252 | 6.0 | B | 100 | 16 | 1 | | | 0.05 | B | | 7 | 4.5 | | | Lairet,R | |
| 20.024 | 814253 | 6.2 | M | 100 | | | 0.11 | | 0.035 | B | | 10 | | Y | 3 | Torres,E | C |
| 20.038 | 814254 | | B | 100 | | 1 | | | 0.05 | B | | 18 | 4.5 | | | Lairet,R | |
| 20.10 | 814255 | 4.9 | M | 101 | | 6 | | | 0.080 | B | | 20 | 4.5M | Y | 10 | Morris,C.S | |
| 20.125 | 814256 | 6.3 | | 100 | 5 | 4 | 0.33 | 90 | 0.060 | R | 15 | 35 | 5.0M | Y | | Underhay,E | |
| 20.1264 | 814257 | 5.5 | S | IHW | 9 | 7 | 0.18 | 71 | 0.080 | B | | 20 | 4.6 | | 3 | Machholz,D | D |
| 20.174 | 814258 | 5.9 | B | 100 | 15 | 4 | | | 0.050 | B | | 10 | 5.0C | Y | 1 | Stapleton,J | E |
| 20.188 | 814259 | | | 100 | 15 | 4 | 0.50 | 320 | 0.254 | N | 5.6 | 157 | 5.0C | Y | 1 | Stapleton,J | F |
| 20.39 | 814260 | 5.2 | S | 100 | | | | | 0.08 | B | | 11 | 3.0 | N | 1 | Momose,M | G |
| 20.392 | 814261 | 5.4 | S | 100 | 15 | 5 | 0.33 | 90 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |
| 20.420 | 814262 | 5.6 | M | 101 | 8 | 7 | 0.17 | 60 | 0.070 | B | | 10 | 5.0M | Y | 1 | Kato,T | |
| 20.420 | 814263 | 4.9 | M | 100 | 18 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 20.427 | 814264 | 4.9 | M | 100 | 18 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,H | |
| 20.434 | 814265 | 6.3 | M | 101 | 6 | 6 | 0.20 | 60 | 0.15 | N | 8.5 | 50 | 5.0M | Y | 1 | Kato,T | |
| 20.44 | 814266 | 5.5 | B | 100 | 7.7 | 7 | 0.4 | 80 | 0.05 | B | | 7 | 4.0M | N | 1 | Kanai,K | |
| 20.44 | 814267 | 5.5 | M | 100 | 6.5 | 8 | 0.42 | 65 | 0.08 | B | | 11 | 5 M | Y | 1 | Mitsuma,S | H |
| 20.45 | 814268 | 4.7 | S | 100 | | | | | 0.05 | B | | 10 | M | N | 1 | Seargent,D | |
| 20.472 | 814269 | 5.5 | M | 100 | 4.7 | 6 | | | 0.12 | N | 6 | 36 | 3.0MC | Y | 1 | Kishi,A | |
| 20.542 | 814270 | 6.1 | M | 100 | 3.1 | 5 | | | 0.060 | R | 15 | 45 | 4.5M | N | 1 | Purvinskis,R | I |
| 20.69 | 814271 | 6.5: | B | M | 8 | | | | 0.03 | B | | 8 | | | | Zinvyev,V.A | |
| 20.722 | 814272 | 5.9 | M | 100 | | | | | 0.060 | R | 4.5 | 10 | 4.5M | Y | 1 | Chodorowski,F | |
| 20.722 | 814273 | 5.4 | B | | 2.4 | 3 | 0.6 | | 0.030 | B | | 8 | 5.0M | Y | 1 | Winkler,R | |
| 20.760 | 814274 | 6.1 | M | 100 | 72 | 0 | | | 0.070 | R | 14 | 20 | 6.0 | Y | 1 | Luga,M | J |
| 20.760 | 814275 | 7.1 | S | 100 | 3.9 | 5 | | | 0.090 | R | 14 | 46 | 4.0 | Y | 2 | Hirth,G | K |
| 20.7687 | 814276 | 5.9 | B | 100 | | 7 | | | 0.05 | B | | 10 | 5.0 | N | 2 | Franciosi,C | |
| 20.770 | 814277 | 5.7 | B | | 8.0 | 4 | | | 0.063 | R | 13.3 | 44 | 5.5M | Y | 1 | Bartnik,M | |
| 20.81 | 814278 | 5.4 | | | | | | | 0.034 | B | | 9 | | | 3 | Pereira,A | |
| 20.813 | 814279 | 6.3 | M | CZ | | 5 | | | 0.05 | B | | 7 | 4 | N | 1 | Silhan,J | L |
| 20.861 | 814280 | 6.0 | M | CZ | 18 | 3 | | | 0.10 | B | | 25 | 4.5M | Y | 1 | Hajek,P | M |
| 20.944 | 814281 | 6.1 | M | 100 | 4.4 | 4 | | | 0.114 | N | 8 | 45 | 3.7 | Y | 1 | Mac Kenzie,G | N |

NOTE A Vague, narrow tail.
NOTE B Coma diameter approximate.
NOTE C (Observer gave limit as 9.0. Ed.)
NOTE D 62% moon 26 degrees away.
NOTE E Bright moon clear.
NOTE F Coma bright. (PA value may have been incorrectly determined. Ed.)
NOTE G Bright moon. (Translated by IHW staff. Ed.)
NOTE H 9.3.
NOTE I Wispy cloud interrupted observing.
NOTE J Clouds passing.
NOTE K Moon.
NOTE L Moonlight.
NOTE M Coma dia. less than 10 arc min. among running clouds.
NOTE N Temperature: -13 deg. C.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.023 | 830537 | | 0.035 | B | | 10 | 35 | | 4 | Cifuentes,E | A |
| 20.113 | 830538 | 0.29 | 0.204 | N | 8 | 81,203 | 36 | 3.5 | 1 | Robinson,P.C | B |
| 20.776 | 830539 | 0.09 | 0.125 | N | 5.8 | 28, 40, 60 | 35 | 3.5 | 1 | Riccabone,G | C |
| 20.958 | 830540 | 0.28 | 0.114 | N | 8 | 45 | 99 | 3.7 | 1 | Mac Kenzie,G | |

NOTE A Tail faintly visible in "V" shape. Easy to get one (side) of 6 or 7 arc min., one of 15 arc min. (not precisely measured because moon was near. (Observer gave limit as 9.0. Translated by IHW staff. Ed.)
NOTE B Ray tail at PA 70; short ray at PA 100; faint "hood" at PAs 200, 180, and 155; jet at PA 240. "Hood" was very faint and possibly detached from coma. The inner coma within about 1' of stellar central condensation was generally triangular. Hood sizes: at PA 200, 2.9'; at PA 180, 5.2'; at PA 155, 5.8'. Moonlight interfered with the observation.
NOTE C Three measurements of the diameter of the false nucleus with an illuminated reticle yielded 54 arc sec. and 62 arc sec. Magnification of 80 also used. Two drawings included. Moonlight and intense city lights enhanced by the presence of light haze interfered with the observation. (Translated by IHW staff. Ed.)

DATE: 21 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.014 | 814282 | 6.4 | B | 100 | 10 | 5 | | | 0.06 | R | 8.3 | 30 | 3.7 | N | 1 | Fox,J.H | A |
| 21.035 | 814283 | 5.9 | B | 100 | | 2 | | | 0.05 | B | | 7 | 4.3 | Y | 1 | Benavides,A | |
| 21.035 | 814284 | 5.9 | B | 100 | 16 | 1 | 0.40 | 59 | 0.05 | B | | 7 | 4.5 | | | Lairet,R | |
| 21.063 | 814285 | 5.9 | M | 100 | | | | | 0.035 | B | | 10 | | Y | 3 | Torres,E | B |
| 21.073 | 814286 | | B | 100 | | 1 | | | 0.05 | B | | 18 | 4.5 | | | Lairet,R | |
| 21.09 | 814287 | 5.7 | B | 100 | 12 | 7 | | | 0.080 | B | | 20 | 3.5 | Y | | Kronk,G | C |
| 21.09 | 814288 | 5.0 | M | 101 | | 6 | | | 0.080 | B | | 20 | 4.5M | Y | 10 | Morris,C.S | |
| 21.10 | 814289 | 6.4 | B | 100 | 7.7 | 8 | | | 0.335 | N | 4.5 | 56 | 3.5 | Y | | Kronk,G | C |
| 21.129 | 814290 | 6.1 | S | 100 | | 3 | | | 0.318 | N | 8 | 41 | 5.3 | N | 1 | Hathaway,W | D |
| 21.376 | 814291 | 5.5 | M | 100 | 12 | 6 | | | 0.030 | B | | 8 | 4.5M | Y | 1 | Kato,T | |
| 21.380 | 814292 | 6.1 | M | 100 | 5.5 | 6 | 0.15 | 60 | 0.10 | N | 10 | 55 | 4.5M | Y | 1 | Kato,T | |
| 21.424 | 814293 | | M | 100 | 18 | 5 | | | 0.035 | B | | 7 | 3 | Y | 1 | Watanabe,H | |
| 21.438 | 814294 | 5.8 | B | 100 | | | | | 0.07 | B | | 10 | 3.7CM | Y | 2 | Date,M | |
| 21.495 | 814295 | 5.7 | M | 100 | 3.5 | 5 | | | 0.12 | N | 6 | 36 | 2.5MC | Y | 1 | Kishi,A | |
| 21.50 | 814296 | 4.8 | S | 100 | 8 | | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Yasuki,M | |
| 21.65 | 814297 | 4.6 | B | M | 50 | 6 | 2.2 | 40 | 0.05 | B | | 7 | | | | Budilka,P | |
| 21.6652 | 814298 | 6.0 | M | 100 | | 7 | | | 0.05 | B | | 10 | 5.5 | N | 1 | Franciosi,C | |
| 21.688 | 814299 | 6.7 | S | 100 | 4.2 | 5 | | | 0.090 | R | 14 | 46 | 4.0 | Y | 2 | Birth,G | D |
| 21.69 | 814300 | 5.4 | B | M | 3 | | | | 0.05 | B | | 7 | | | | Nesterov,Yu | |
| 21.704 | 814301 | 5.6 | B | 100 | 4 | 5 | | | 0.030 | B | | 8 | 4.5M | N | 1 | Zische,E | |
| 21.706 | 814302 | 5.4 | B | IHW | 7.7 | 5 | | | 0.080 | B | | 20 | 4.5 | Y | 1 | Guthier,O | |
| 21.708 | 814303 | 5.8 | | | | | | | 0.080 | B | | 15 | 4 | Y | 1 | Nagele,A | E |
| 21.715 | 814304 | 6.2 | B | 100 | | 8 | | | 0.060 | R | 8 | 15 | 5.0M | Y | 1 | Schambeck,C.M | |
| 21.729 | 814305 | 6.1 | B | 100 | | 3 | | | 0.07 | B | | 10 | 4.0 | Y | 1 | Deconinck,M | D |
| 21.733 | 814306 | 5.3 | S | 100 | 15 | 6 | | | 0.080 | B | | 15 | 5 CM | Y | 1 | Korth,S | F |
| 21.740 | 814307 | 5.8 | B | 4A | 10.5 | 6 | | | 0.050 | B | | 7 | 5.0M | N | 1 | Koschny,D | |
| 21.740 | 814308 | 5.8 | | 100 | 25 | 6 | | | 0.050 | B | | 10 | 4.3 | Y | 2 | Thomas,A | G |
| 21.75 | 814309 | 5.3 | S | 100 | 12 | 5 | | | 0.056 | B | | 8 | 4.4M | N | 1 | Fischer,D | |
| 21.750 | 814310 | 4.7 | | 100 | 15 | 6 | | | 0.050 | B | | 10 | 4.5 | N | 1 | Marekfia,G | G |
| 21.75 | 814311 | 4.3 | B | 100 | 30 | 4 | 0.67 | 66 | 0.050 | B | | 7 | 5.0 | Y | 2 | Merlin,J.-C | |
| 21.760 | 814312 | 5.2 | M | 100 | | | | | 0.089 | R | 5.5 | 18 | 4.5 | N | 1 | Ventura,F | H |
| 21.77 | 814313 | 5.2 | B | AA | 9 | 6 | | | 0.050 | B | | 7 | 4.5M | N | | Schmeer,P | |
| 21.77 | 814314 | 5.2 | M | 100 | 11 | 7 | | | 0.05 | B | | 10 | 4.5 | Y | 1 | Bottger,B | |
| 21.785 | 814315 | 5.8 | | 100 | | | | | 0.030 | B | | 8 | M | | 1 | Ratz,M | |
| 21.788 | 814316 | 4.9: | B | 100 | 9.9 | 5 | 0.25 | 56 | 0.10 | B | | 14 | 5.0M | Y | 1 | Hasubick,W | |
| 21.789 | 814317 | 5.8 | | 100 | | | | | 0.030 | B | | 8 | M | | 1 | Ratz,R | |
| 21.792 | 814318 | 5.7 | B | 100 | 13 6 | 5 | 0.2 | 70 | 0.200 | R | 15 | 120 | 4.0M | Y | 1 | Kalauch,K.-D | |
| 21.799 | 814319 | 4.8 | B | 101,100 | 12 | 7 | | | 0.050 | B | | 7 | 4.5M | Y | 1 | Linder,J | I |
| 21.802 | 814320 | 5.6 | S | 100 | | | | | 0.05 | B | | 10 | 4.5MCZ | Y | 7 | Melandri,F | J |
| 21.802 | 814321 | 4.8 | | 100 | 15 | 4 | 0.7 | 70 | 0.200 | SC | 10 | 111 | 4.5 | Y | 2 | Weissferdt,F | K |
| 21.809 | 814322 | 5.2 | | 100 | 15 12 | 7 | | | 0.081 | B | | 22 | 4 M | Y | 1 | Sternwarte Hof | G |
| 21.810 | 814323 | 5.0 | B | 101,100 | 10 | 7 | 0.33 | 70 | 0.100 | B | | 14 | 4.5M | Y | 1 | Linder,J | L |
| 21.823 | 814324 | 4.3 | | 100 | 6.8 | 5 | | | 0.08 | B | | 15 | 3.5 | Y | 1 | Dietrich,M | M |
| 21.828 | 814325 | 5.6 | B | 100 | | 6 | | | 0.050 | B | | 10 | 5.0 | N | 1 | Lehmann,T | |
| 21.830 | 814326 | 4.9 | B | 101,100 | 8 | 7 | | | 0.030 | B | | 8 | 4.5M | Y | 1 | Linder,J | L |
| 21.833 | 814327 | | B | 100 | 6 | | | | 0.07 | B | | 20 | 4.5M | Y | 1 | Filimon,E | |
| 21.833 | 814328 | 6.3 | M | 100 | 4.4 | 4 | | | 0.063 | R | 6.7 | 26 | 6.0C | Y | 1 | Rudolph,M | |
| 21.835 | 814329 | 5.6 | B | | | 3 | | | 0.080 | R | 6.2 | 12 | 4.0M | Y | 1 | Lieder,F | |
| 21.844 | 814330 | 6.1 | B | | | 6 | | | 0.050 | B | | 10 | M | Y | 1 | Linke,H | |
| 21.845 | 814331 | | | | 4 | 3 | | | 0.130 | N | 8 | 40 | 4.0M | Y | 1 | Lieder,F | |
| 21.965 | 814332 | 5.6 | S | 100 | 15 | 4 | | | 0.035 | B | | 7 | 5.0M | N | 3 | Morrison,W | |
| 21.972 | 814333 | 4.8 | M | 100 | 10.0 | 7 | 0.5 | 60 | 0.05 | B | | 7 | 4.5M | Y | 1 | DeYoung,J.A | N |

NOTE A Strong moonlight. SAO 127826 and SAO 127836 comparison stars.
NOTE B (Observer gave limit as 8.0. Ed.)
NOTE C Moonlight.
NOTE D Moon.
NOTE E (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are SAO 127836, 127881.
NOTE F Coma diameter approximate. Tail almost invisible because of moon.
NOTE G (Observer indicated "A" method [Argelander?]. Ed.)
NOTE H The coma could be much larger than the 9' recorded since at times the faint outer parts could be made out in spite of the strong moonlight.
NOTE I Strong. Coma diameter approximate.
NOTE J Veiled sky.
NOTE K 9 day old moon. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE L Moonlight. PA approximate.
NOTE M Moon. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE N Bright moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.017 | 830541 | 0.6 | 0.203 | R | 13 | 85,150 | 10 | 3.7 | 1 | Fox,J.H | A |
| 21.063 | 830542 | | 0.035 | B | | 10 | 30 | | 4 | Cifuentes,E | B |
| 21.743 | 830543 | 0.25 | 0.356 | SC | 11 | 200 | 20 | | 1 | Verdenet,M | C |
| 21.757 | 830544 | 0.15 | 0.40 | N | 5 | 81,254 | 20 | 5.0 | 2 | Merlin,J.-C | D |
| 21.776 | 830545 | 0.11 | 0.125 | N | 5.8 | 28, 40, 60 | 14 | 2.5 | 1 | Riccabone,G | E |
| 21.797 | 830546 | 0.07 | 0.36 | SC | 11 | 434 | 5 | 5 | 1 | Korth,S | F |
| 21.803 | 830547 | 0.30 | 0.36 | SC | 11 | 123 | 7 | 5 | 1 | Korth,S | G |

NOTE A Darker "wedge" about 120 deg. extent at about PA 90. Coma well seen to NW, W, SW. Contrast low from interfering moonlight. Dark wedge seen at 85x and 150x, but does not extend to nucleus.
NOTE B Tail approximately 35 arc min. long. Straight. (Observer gave limit as 9.0. Translated by IHW staff. Ed.)
NOTE C Moonlight. (Additional drawing submitted made using 11x80 binoculars (1.97'/mm). Ed.)
NOTE D Tail streamer at PA 44; tail at PA 66, tail denser along axis; tail streamer at PA 88; jet at PA 318. Parabolic hood tailward. Brighter area sunward.
NOTE E Moonlight, intense city lights, and haze interfered with the observation. Dimensions were indirectly measured and are not reliable. (Translated by IHW staff. Ed.)
NOTE F Jet or part of tail 49" long at PA 38; jet 16" long at PA 60; jet or part of tail 61" long starting at PA 140, curving to PA 120. Bright moon disturbed observation of faint structures. City lights interfered with the observation. Attention: a zenith mirror was used!
NOTE G Tail? 6' long at PA 70; jet or tail? 3' long at PA 110. Bright moon disturbed observation of tail. City lights interfered with the observation. Attention: a zenith-mirror was used!

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.074 | 850527 | 0.135 | 2.8 | | 15.2 x10.2 | 3.00 | Ektachrome | 200/24 | N | M | 002/S | 1 | Brutsche,E | |
| 21.080 | 850528 | 0.135 | 2.8 | | 15.2 x10.2 | 5.00 | Ektachrome | 200/24 | N | M | 003/S | 1 | Brutsche,E | |

DATE: 21 DEC 1985

DATE: 21 DEC 1985

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.688 | 850529 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 1.00 | Kodak 2415 | | Y | | 8/P | 1 | Conrad,R | A |
| 21.745 | 850530 | 1.690 | 5.6 | 0.305 | 1.2 x 0.8 | 5.00 | Agfachrome | 1000/31 | N | | 9/S | 1 | Korth,S | B |
| 21.774 | 850531 | 0.300 | 5.6 | | 6.9 x 4.6 | 10.00 | Agfachrome | 1000/ | N | | 001/P | 1 | Brandli,W | C |

NOTE A City lights interfered with the observation, Vienna, from room!
NOTE B Moonlight interfered with the observation. City lights interfered with the observation. (Observer indicated both type O and type X guiding. Ed.)
NOTE C Photo equipment mounted parallel to telescope, electric drive. (Translated by IHW staff. Ed.)

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.010 | 814334 | 5.5 | S | 100 | 10 | 1 | | | 0.05 | B | | 10 | 4 CM | N | 3 | House,R.R | |
| 22.02 | 814335 | 4.8 | S | AAVSO | 9 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | A |
| 22.02 | 814336 | | | | 3.5 | 6 | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | A |
| 22.035 | 814337 | 5.9 | M | 100 | | | | | 0.050 | B | | 7 | | Y | 4 | Torres,E | B |
| 22.053 | 814338 | 5.8 | B | 100 | 16 | 1 | 0.47 | 58 | 0.05 | B | | 7 | 3.7 | | | Lairet,R | |
| 22.065 | 814339 | 6.0 | M | 100 | | 1 | | | 0.050 | B | | 7 | | Y | 4 | Torres,E | C |
| 22.069 | 814340 | 6.0 | B | 100 | | 2 | | | 0.05 | B | | 7 | 3.7 | | 1 | Benavides,A | |
| 22.09 | 814341 | 4.5 | S | AA | 11 | 5 | | | 0.203 | N | 6 | 49 | | | | Green,D.W.E | D |
| 22.10 | 814342 | 5.2 | M | 101 | | 6 | | | 0.080 | B | | 20 | 4.0MC | Y | 9 | Morris,C.S | |
| 22.563 | 814343 | 6.2 | M | 100 | 3.3 | | | | 0.060 | R | 15 | 45 | 4.0M | N | 1 | Purvinskis,R | E |
| 22.667 | 814344 | 5.9 | M | 100 | | | | | 0.060 | R | 4.5 | 10 | 4.0M | Y | 1 | Chodorowski,F | |
| 22.684 | 814345 | 6.1 | B | 100 | | | | | 0.063 | R | 13.3 | 21 | 4.0M | N | 1 | Pilski,A | |
| 22.688 | 814346 | | | 100 | 6 | 5 | | | 0.064 | R | 6.3 | 20 | 3.5MC | N | 1 | Maciejewski,W | |
| 22.69 | 814347 | 6.5 | S | 100 | 3.6 | 7 | 0.08 | 67 | 0.20 | N | 6 | 31 | 5.0M | Y | 1 | Jahn,J | |
| 22.694 | 814348 | | | 100 | 4.5 | 6 | | | 0.150 | R | 15 | 56 | 3.5MCT | N | 1 | Richert,M | |
| 22.708 | 814349 | 6.6 | S | 100 | 3.6 | 5 | | | 0.090 | R | 14 | 46 | 4.0 | Y | 2 | Hirth,G | F |
| 22.708 | 814350 | 5.2: | S | 100 | 15 | 6 | | | 0.080 | B | | 15 | 5.5CM | Y | 1 | Korth,S | G |
| 22.710 | 814351 | 5.6 | B | | | 3 | | | 0.080 | R | 6.2 | 12 | 4.0M | Y | 1 | Lieder,F | |
| 22.71 | 814352 | 5.9 | B | 100 | | 7 | | | 0.050 | B | | 12 | 3.5M | Y | 1 | Mosch,J | |
| 22.712 | 814353 | 5.1: | B | 100 | | 5 | | | 0.10 | B | | 14 | 5.0M | Y | 1 | Hasubick,W | |
| 22.714 | 814354 | 5.8 | M | AAVSO | 5 | 6 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | H |
| 22.715 | 814355 | 5.6 | | | | | | | 0.035 | B | | 7 | 4.9CM | N | 1 | Marx,H | I |
| 22.715 | 814356 | 4.8 | S | 100 | 15 | 6 | 1.3 | | 0.152 | N | 5 | 44 | 5.2 | Y | 2 | Moeller,M | J |
| 22.7173 | 814357 | 6.2 | B | 100 | | 6 | | | 0.05 | B | | 10 | 5.0MC | N | 2 | Franciosi,C | |
| 22.719 | 814358 | 4.9 | B | | 3.7 | 2 | 0.7 | | 0.030 | B | | 8 | 5.0M | Y | 1 | Winkler,R | |
| 22.72 | 814359 | 5.5 | S | DCS 7 | | 6 | | | 0.050 | B | | 10 | 4.5MT | N | 1 | van der Laan,T.A | |
| 22.722 | 814360 | 5.3 | S | 100 | 8 | 5 | | | 0.056 | B | | 8 | 4.3M | N | 1 | Fischer,D | |
| 22.7229 | 814361 | 5.2 | S | 100 | 26 20 | 7 | | 62 | 0.08 | B | | 10 | 4.4M | Y | 1 | Znasik,M | F |
| 22.725 | 814362 | 4.2 | S | 100 | 8 | 8 | | | 0.050 | B | | 7 | 4.2MC | N | 5 | Meozzi,D | |
| 22.726 | 814363 | 6.3 | M | 100 | 4.4 | 4 | | | 0.063 | R | 6.7 | 26 | 5.5C | N | 1 | Rudolph,M | |
| 22.729 | 814364 | 4.3 | | 100 | 6.8 | 5 | | | 0.08 | B | | 15 | 3.5 | Y | 1 | Dietrich,M | K |
| 22.729 | 814365 | 6.1 | B | | | 6 | | | 0.050 | B | | 10 | M | Y | 1 | Linke,H | |
| 22.73 | 814366 | 5.0 | S | 100 | | | | | 0.08 | B | | 20 | 4.7 | | 3 | Shanklin,J.D | |
| 22.73 | 814367 | 5.7 | B | 100 | 10 | 6 | | | 0.050 | B | | 7 | CM | Y | 2 | Jannink,D.W | L |
| 22.73 | 814368 | 4.3 | S | DCS 7 | 17 | 6 | | | 0.046 | R | 4 | 8 | 5.5M | Y | 3 | van de Weg,R.L.W | |
| 22.736 | 814369 | 5.5 | M | 100 | 7 | 6 | 0.13 | | 0.080 | B | | 10 | 5.0M | N | 1 | Mikuz,H | |
| 22.74 | 814370 | 5.9 | B | DCS 6B | 10 | 4 | | | 0.063 | B | | 8 | 4 CM | N | 1 | Geenen,J.J | |
| 22.74 | 814371 | 4.5 | S | DCS 7 | 14 | 8 | 1.0 | 50 | 0.060 | B | | 12 | 5.5M | Y | 3 | van de Weg,R.L.W | |
| 22.74 | 814372 | 4.3 | B | 100 | 30 | 4 | 1.00 | 64 | 0.050 | B | | 7 | 5.5 | Y | 2 | Merlin,J.-C | |
| 22.750 | 814373 | | | | 4 | 3 | | | 0.130 | N | 8 | 40 | 4.0M | Y | 1 | Lieder,F | |
| 22.750 | 814374 | 4 | | 100 | 5 | 5 | | | 0.114 | N | 7.9 | 30 | 4 | | 1 | Kerber,F | M |
| 22.750 | 814375 | 5.8 | B | 100 | | 4 | | | 0.068 | R | 11.7 | 35 | 4 M | Y | 2 | Paradowski,M | |
| 22.750 | 814376 | 6.0 | S | CZ | 3 | 2 | | | 0.10 | C | 10 | 25 | 3.5M | Y | 1 | Polak,J | |
| 22.753 | 814377 | 5.2 | B | 100 | 10 | 7 | | | 0.050 | B | | 7 | M | Y | 1 | Bohme,D | N |
| 22.757 | 814378 | 5.7 | B | 100 | | 4 | | | 0.064 | R | 6.3 | 25 | 4 M | Y | 2 | Paradowski,M | |
| 22.757 | 814379 | 5.0 | S | 100 | 4.0 | 5 | | | 0.063 | R | 13.3 | 34 | 3.5C | Y | 4 | Skjaeraasen,O | O |
| 22.760 | 814380 | 5.6 | M | CZ | | 4 | | | 0.05 | B | | 7 | 4.2M | | 2 | Pravec,P | |
| 22.764 | 814381 | 5.7 | B | 100 | | 4 | | | 0.05 | B | | 7 | 4 M | Y | 2 | Paradowski,M | |
| 22.764 | 814382 | | | | 15 | 4 | 1 | 50 | 0.10 | N | 6 | 38 | 4.2M | | 2 | Pravec,P | |
| 22.764 | 814383 | 5.7 | B | 100 | 4 | 6 | | | 0.063 | R | 13 | 34 | 4.5M | N | 1 | Zische,E | |
| 22.767 | 814384 | 6.3 | B | 100 | 3 | 8 | | | 0.113 | N | 8 | 22 | 5.0M | Y | 1 | Schambeck,C.M | |
| 22.770 | 814385 | 6.3 | | | 12 | 4 | | | 0.050 | R | 11 | 22 | 5.5M | Y | 1 | Kliche,J | |
| 22.776 | 814386 | 5.6 | B | 100 | 4.3 | 3 | 1.0 | 293 | 0.05 | B | | 10 | 5.2M | Y | 1 | Bretschneider,H | |
| 22.785 | 814387 | 6.0 | B | 100 | | 3 | | | 0.07 | B | | 10 | 3.5 | Y | 1 | Deconinck,M | F |
| 22.785 | 814388 | 5.4 | B | SAO,IEW | 6.7 | 5 | | 62 | 0.080 | B | | 20 | 4.0 | Y | 1 | Guthier,O | P |
| 22.791 | 814389 | 5.6 | B | 100 | 6.5 | | | | 0.07 | B | | 20 | 4.0M | Y | 2 | Filimon,E | |
| 22.792 | 814390 | 5.7 | S | | 10.0 | 4 | | | 0.063 | R | 13.3 | 44 | 6.0M | Y | 1 | Bartnik,M | |
| 22.792 | 814391 | 5.7 | B | 100 | 14 8 | 5 | 0.2 | 60 | 0.200 | R | 15 | 120 | 4.5M | Y | 1 | Kalauch,K.-D | |
| 22.795 | 814392 | 6.2 | B | 100 | | 8 | | | 0.060 | R | 8 | 15 | 5.0M | Y | 1 | Schambeck,C.M | |
| 22.800 | 814393 | 5.7 | B | 100 | | 6 | | | 0.050 | B | | 10 | 4.5 | N | 1 | Lehmann,T | |
| 22.813 | 814394 | 5.0 | | | 40 | 5 | 2.2 | 65 | 0.200 | SC | 10 | 200 | 4.5C | N | 1 | Lucius,D | Q |
| 22.813 | 814395 | 5.0 | | | 40 | 5 | 2.2 | 65 | 0.080 | B | | 15 | 4.5 | N | 1 | Lucius,D | Q |
| 22.833 | 814396 | 5.2 | | 100 | 10 8 | 7 | | | 0.081 | B | | 22 | 3.8M | Y | 1 | Sternwarte Hof | M |
| 22.857 | 814397 | 5.1 | B | 4A | 20 | 8 | | | 0.06 | R | | 15 | 5.5 | Y | 1 | Ward,A | |
| 22.958 | 814398 | | | 100 | 4.4 | 4 | | | 0.114 | N | 8 | 45 | 3.5 | Y | 1 | Mac Kenzie,G | R |

NOTE A Moonlight.
NOTE B (Observer gave limit as 9.5. Ed.)
NOTE C (Observer gave limit as 10.0. Ed.)
NOTE D Coma diameter approximate.
NOTE E Bright moonlight.
NOTE F Moon.
NOTE G Coma diameter approximate. Tail almost invisible because of moon.
NOTE H Naked eye!
NOTE I Comparison stars 2 Psc, 1 Psc. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE J PA 70, 120. Moon.
NOTE K Moon. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE L Telescopic limit is 7.
NOTE M (Observer indicated "A" method [Argelander?]. Ed.)
NOTE N Coma diameter exceeds value given.
NOTE O No light pollution but unfortunately even though the background sky was very dark, thin clouds along the horizon worsened the seeing tremendously.
NOTE P Tail length 2 to 3 deg.
NOTE Q (Observer indicated "A" method [Argelander?]. Ed.) Coma diameter approximate.
NOTE R A very faint tail seemed to become visible rarely (PA: 39; length about 25'). This was not confirmed and should be considered spurious and was not included on diagram. No magnitude estimate was made because of lack of comparison stars.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.042 | 830548 | | 0.050 | B | | 7 | 40 | | 3 | Cifuentes,E | A |
| 22.714 | 830549 | 0.88 | 0.063 | R | 13.3 | 52 | | 5.9 | | Kosa-Kiss,A | B |
| 22.716 | 830550 | 0.9 | 0.063 | R | 13.3 | 52 | | | 1 | Csukas,M | C |
| 22.736 | 830551 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | D |
| 22.750 | 830552 | | 0.75 | N | 4 | 115 | | | | Delfs,M | E |
| 22.755 | 830553 | 0.06 | 0.40 | N | 5 | 81,254 | 15 | 5.5 | 2 | Merlin,J.-C | F |
| 22.755 | 830554 | 0.49 | 0.063 | R | 13.3 | 34, 53 | 13 | 3.5 | 4 | Skjaeraasen,O | G |
| 22.763 | 830555 | 0.09 | 0.36 | SC | 11 | 326 | 6 | 5.5 | 1 | Korth,S | H |
| 22.799 | 830556 | | 0.25 | N | 6 | 75 | | | 1 | Guthier,O | I |
| 22.813 | 830557 | 0.71 | 0.200 | SC | 10 | 200 | 60 | 4.0 | 1 | Lucius,D | J |

DATE: 22 DEC 1985

DATE: 22 DEC 1985

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.813 | 830558 | 1.0 | 0.080 | B | | 15 | 60 | 4.0 | 1 | Lucius,D | J |
| 22.823 | 830559 | 2 | 0.05 | R | 7 | 15, 30, 40 | 20 | 4.0 | 1 | Kopp,M | K |
| 22.958 | 830560 | 0.20 | 0.114 | N | 8 | 45, 90 | 59 | 3.5 | 1 | Mac Kenzie,G | |
| 22.965 | 830561 | | 0.050 | B | | 7 | 20 | | 3 | Cifuentes,E | L |

NOTE A Tail very faint because of nearby moon. (Observer gave limit as 9.5. Translated by IHW staff. Ed.)
NOTE B Schematic drawing. Moonlight interfered with the observation. (Duration not indicated. Time of observation is end time. Ed.)
NOTE C Halo diameter = 12'; DC = 8; Tail at PA 109, 23' length. A 30' tail had PA 135 6' to nucleus, PA 140 15' to nucleus, PA 152 34' to nucleus. [sic] (Duration not indicated. Time of observation end time. Ed.) Schematic drawing.
NOTE D Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Additional drawing submitted made using 11x80 binoculars (1.97'/mm). Ed.)
NOTE E Wide tail probably not existing (but is indicated in the drawing. Ed.). (Translated by IHW staff. Ed.)
NOTE F Tail at PA 64, largely widening and tail denser along axis; jet at PA 163; jet at PA 235; jet at PA 326, diffuse. Oval shaped coma. "Bright" area toward south-east.
NOTE G Field: 48'. Lumicon Deep Sky filter used. The site during this observation was in a little village far away from any town where the seeing usually is very good. Unfortunately, there was moist [sic] in the air and thin clouds along the horizon (also in the direction of Halley) when I observed from there. In addition, the moonlight interfered severely so the seeing was not as good as I had hoped forehand. Temperature: -4 C. No tail was detectable, and the head of the comet looked totally circular and the surface brightness decreased smooth and gradually outwards from the innermost small central condensation. It was very difficult to distinguish between the outermost parts of the coma and the background (which was satisfactorily dark).
NOTE H Part of tail? 74 arc sec. long at PA 135; jet 11 arc sec. long at PA 195.
NOTE I Condensation not very conspicuous. (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE J Tail at PA 65.
NOTE K Stability of star image: good. Temperature: 6 deg. C. Coma less diffuse, brightness towards the center; tail: irregular structure at the borders brightness differences within the tail. Vertex distance: V = 14.0' Semi latus rectum: P1 = 10.5', P2 = 10.0'. Tail PA 40. Moonlight interfered with the observation.
NOTE L Tail visible - large and small openings near ends of "V". Length estimated 1 deg. (Observer gave limit as 10.0. Translated by IHW staff. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.688 | 850532 | 0.500 | 6.2 | 0.080 | 4.1 x 2.7 | 10.00 | ORWO NP 27 | 400/27 | N | S | 08/P | 1 | Richert,M | A |
| 22.717 | 850533 | 0.300 | 5.6 | | 6.9 x 4.6 | 4.00 | Agfachrome | 1000/31 | N | | 10/S | 1 | Korth,S | B |
| 22.817 | 850534 | 0.200 | | | 10.3 x 6.9 | 10.00 | Agfachrome | 1000/ | N | X | 2/P | 1 | Lucius,D | C |

NOTE A Twilight, moonlight, and city lights interfered with the observation. OG 5 filter used. (Observer's image identifier is preceded by prefix 86/. Ed.)
NOTE B UV-Haze filter used. City lights interfered with the observation. (Observer indicated both type O and type X guiding. Ed.)
NOTE C City lights interfered with the observation.

DATE: 23 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.035 | 814399 | 4.2 | B | 100 | | 3 | | | 0.06 | R | 12 | 56 | 5.3 | Y | 1 | Onofre D.,D | |
| 23.063 | 814400 | 5.8 | B | 100 | 16 | 1 | 0.53 | 59 | 0.05 | B | | 7 | 4.0 | | | Lairet,R | |
| 23.083 | 814401 | 6.0 | S | 4A | 6 | 5 | | | 0.080 | B | | 11 | | Y | 3 | Pryal,J | A |
| 23.365 | 814402 | 5.0 | M | 100 | 15 | 6 | | | 0.035 | B | | 7 | 4 | Y | 1 | Watanabe,A | |
| 23.368 | 814403 | 5 | M | 100 | 15 | 6 | | | 0.035 | B | | 7 | 4 | Y | 1 | Watanabe,H | |
| 23.42 | 814404 | 6.5 | B | SAO | 10 | 6 | | | 0.15 | N | 6 | 23 | 5 | Y | 3 | Tanikawa,M | B |
| 23.455 | 814405 | 5.0 | M | 100 | 7 | 6 | | | 0.030 | B | | 8 | 4.5M | Y | 1 | Kato,T | |
| 23.456 | 814406 | 7.0 | B | | 4 | 5 | 0.07 | 60 | 0.10 | N | 10 | 55 | 4.5M | Y | 1 | Kato,T | |
| 23.46 | 814407 | 4.8 | S | 100 | 9 | 8 | 0.07 | 90 | 0.08 | B | | 11 | 4.0 | N | 3 | Momose,M | C |
| 23.500 | 814408 | 6.0 | S | 100 | 2.5 | 5 | | | 0.08 | R | 12.5 | 40 | 4.0M | Y | 1 | Feisheng,J | |
| 23.53 | 814409 | 6.0 | B | M | | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 23.63 | 814410 | 4.9 | B | E | 12 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 23.67 | 814411 | 4.9 | B | E | 12 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 23.67 | 814412 | 5.7 | M | M | 23 | 6 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 23.677 | 814413 | | | 100 | 3 | 4 | | | 0.080 | R | 6.2 | 31 | 2.5MCT | N | 2 | Richert,M | |
| 23.677 | 814414 | 6.2 | S | 100 | 2 | 3 | | | 0.064 | R | 12 | 20 | 4.7M | N | 1 | Urbanski,P | |
| 23.68 | 814415 | 5.9 | B | 100 | | 7 | | | 0.050 | B | | 12 | 3.5M | Y | 1 | Mosch,J | |
| 23.688 | 814416 | 6.0 | B | 100 | | 4 | | | 0.030 | B | | 8 | 3.5MCT | N | 2 | Richert,M | |
| 23.698 | 814417 | 4.9 | M | 100 | 11 9 | 3 | 0.47 | 84 | 0.08 | B | | 11 | 3.0M | N | 1 | Gubo,H | |
| 23.698 | 814418 | | | 100 | 5 | 4 | | | 0.064 | R | 6.3 | 20 | 3.0MC | N | 1 | Maciejewski,W | |
| 23.698 | 814419 | 5.5 | B | 100 | 5 | 3 | | | 0.090 | N | 7.2 | 26 | 4.5 | Y | 1 | Vohla,F | |
| 23.70 | 814420 | 4.9 | B | E | 12 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 23.705 | 814421 | 6.1 | M | CZ | 5 | 6 | | | 0.03 | B | | 8 | 4.2M | N | 1 | Silhan,J | D |
| 23.705 | 814422 | 4.9 | B | | 5 | 2 | 0.9 | | 0.030 | B | | 8 | 5.0M | Y | 1 | Winkler,R | |
| 23.71 | 814423 | 6.0 | M | AA | 6 | 6 | | | 0.106 | R | 5.7 | 24 | | | | Keszthelyi,S | E |
| 23.7104 | 814424 | 5.3 | S | 100 | 25 | 8 | 0.42 | 60 | 0.08 | B | | 10 | 4.8M | Y | 1 | Znasik,M | F |
| 23.712 | 814425 | 5.8 | M | CZ | 7 | 4 | | | 0.05 | B | | 7 | 4 M | N | 1 | Silhan,J | G |
| 23.715 | 814426 | 5.2 | S | 100 | 8 | 6 | | | 0.04 | B | | 10 | 4.2CM | N | 1 | Fischer,D | |
| 23.717 | 814427 | 5.5 | B | 100 | 4.6 | 3 | 1.0 | 295 | 0.05 | B | | 10 | 3.5M | Y | 1 | Bretschneider,H | |
| 23.722 | 814428 | 5.8 | M | CZ | 5 | 6 | | | 0.055 | R | | 12 | 4 M | N | 1 | Silhan,J | |
| 23.729 | 814429 | 6.0 | M | 100 | 66 | 0 | | | 0.070 | R | 14 | 20 | 4.5 | Y | 1 | Luga,M | |
| 23.729 | 814430 | 5.1 | B | 100 | 10 | 7 | | | 0.050 | B | | 7 | M | Y | 1 | Bohme,D | H |
| 23.74 | 814431 | 5.6 | S | 100 | | | | | 0.08 | B | | 20 | 4.0 | | 3 | Shanklin,J.D | |
| 23.740 | 814432 | 5.2: | S | 100 | 12 | 6 | 0.8 | 60 | 0.080 | B | | 15 | 5.2C | Y | 1 | Korth,S | I |
| 23.740 | 814433 | 5.2 | S | 100 | 9 | 6 | | | 0.050 | B | | 16 | 4.0M | N | 1 | Nolle,M | |
| 23.746 | 814434 | 5.7 | M | AAVSO | 7 | 6 | 0.4 | 87 | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | J |
| 23.747 | 814435 | > 5.0 | S | 100 | | 4 | | | 0.08 | B | | 11 | 3 | Y | 1 | Gainsford,M.J | K |
| 23.747 | 814436 | 6.0 | M | 100 | 25 | 4 | | | 0.067 | R | 12 | 60 | 4.5M | Y | 1 | Kosinski,J | L |
| 23.75 | 814437 | 5.4 | S | 100 | 12 10 | 7 | 0.25 | 60 | 0.065 | B | | 12 | 4.0 | N | 3 | Foulkes,M | M |
| 23.750 | 814438 | 5.1 | S | 100 | 5 | 4 | | | 0.080 | B | | 10 | 4.8 | | 1 | Rogers,J.H | N |
| 23.750 | 814439 | | | 100 | 4.7 | 7 | 0.04 | 40 | 0.21 | N | 5 | 43 | 5.5CM | Y | 1 | Taylor,M.D | O |
| 23.75 | 814440 | 5.4 | B | DCS 7 | 9 | 8 | 0.08 | 55 | 0.115 | N | 8 | 45 | 4.5MC | Y | 1 | van Munster,T | |
| 23.750 | 814441 | 6.3 | M | 100 | 4.5 | 4 | | | 0.063 | R | 6.7 | 26 | 5.5C | N | 1 | Rudolph,M | |
| 23.75 | 814442 | 4.9 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 23.753 | 814443 | 4.8 | | 100 | 7.5 5 | 7 | 0.25 | 60 | 0.081 | B | | 22 | 4.2M | Y | 2 | Sternwarte Hof | P |
| 23.760 | 814444 | | | | 6 | 5 | 0.13 | 70 | 0.200 | R | 14 | 40 | 4.8 | | 1 | Rogers,J.H | Q |
| 23.76 | 814445 | 5.2 | S | DCS 6B | 4 | 7 | | | 0.050 | B | | 10 | 4.5MC | Y | 1 | van Loo,F.R | |
| 23.760 | 814446 | 5.4 | M | CZ | 5.5 | 5 | | | 0.05 | B | | 7 | 4.3M | | 2 | Pravec,P | |
| 23.762 | 814447 | | | 100 | 4 | 4 | | | 0.25 | N | 6 | 40 | 3 | Y | 1 | Gainsford,M.J | K |
| 23.763 | 814448 | 4.4 | S | 100 | | | | | 0.05 | B | | 10 | 2.5 | N | 1 | Hurst,G.M | R |
| 23.764 | 814449 | 6.2 | B | | 5 | 6 | | | 0.200 | N | 7.2 | 36 | 5.0 | Y | 1 | Lipski,P | S |
| 23.764 | 814450 | 4.5 | S | 100 | 4.6 | 7 | 0.05 | 65 | 0.05 | B | | 10 | 4.2M | Y | 3 | Abbott,J | T |
| 23.767 | 814451 | | | CZ | 4.5 3 | 6 | 0.5 | 80 | 0.10 | N | 6 | 38 | 4.3M | | 2 | Pravec,P | |
| 23.77 | 814452 | 4.3 | B | 100 | 30 | 3 | 1.00 | 51 | 0.060 | B | | 9 | 6.0 | Y | 2 | Merlin,J.-C | |
| 23.774 | 814453 | 5.8 | M | 100 | 6.0 | 4 | 0.1 | 38 | 0.04 | B | | 8 | 5.5CM | Y | 1 | Taylor,M.D | |
| 23.78 | 814454 | 4.1 | S | DCS 7 | 15 | 4 | | | 0.046 | R | 4 | 8 | 5.8M | Y | 3 | van de Weg,R.L.W | |
| 23.78 | 814455 | 4.4 | S | DCS 7 | 12 | 7 | 1.5 | 50 | 0.060 | B | | 12 | 5.8M | Y | 3 | van de Weg,R.L.W | |
| 23.781 | 814456 | 5.7 | B | 100 | 10 7 | 5 | 0.3 | 35 | 0.200 | R | 15 | 120 | 4.5 | Y | 1 | Kalauch,K.-D | |
| 23.785 | 814457 | 5.8 | B | 100 | 9.2 | 4 | | | 0.07 | B | | 10 | 3.5 | Y | 1 | Deconinck,M | F |
| 23.799 | 814458 | 6.0 | S | 100 | 4.2 3 | 5 | 0.04 | 75 | 0.076 | R | 12 | 37 | 5.5CM | Y | 1 | Taylor,M.D | U |
| 23.799 | 814459 | 5.6 | M | 100 | 6 | 5 | 0.05 | 38 | 0.07 | B | | 16 | 5.5CM | Y | 1 | Taylor,M.D | U |
| 23.94 | 814460 | 4.3 | S | AA | 20 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | V |
| 23.969 | 814461 | 5.0 | B | 9 | 5.3 | 2 | | | 0.06 | R | 15 | 41 | 4.0 | Y | 2 | Rodriguez,V | |
| 23.97 | 814462 | 4.4 | S | AA | 18 | 6 | | | 0.035 | B | | 7 | | | | Green,D.W.E | V |

NOTE A Bright moon. (Observer gave limit as 9. Ed.)
NOTE B m2 (observer's symbol believed to mean "approximately equal to", Ed.) 10.
NOTE C Bright moon. (Translated by IHW staff. Ed.)
NOTE D Cirrus.
NOTE E + 7x50 B and 8 mag. nucleus. [sic]
NOTE F Moon.
NOTE G Cirrus.
NOTE H Coma diameter exceeds value given.
NOTE I Tail still very diffuse.
NOTE J Naked eye!
NOTE K Moon and cloud.
NOTE L Coma diameter uncertain.
NOTE M Moon up.
NOTE N No definite asymmetry. Moon.
NOTE O Antoniadi III. Moonlight!
NOTE P (Observer indicated "A" method [Argelander?]. Ed.)
NOTE Q Coma slightly asymmetric. Tail very faint, PA approximate. Nucleus resolved at 170x.
NOTE R Seen through thick clouds.
NOTE S Oval.
NOTE T Comparison stars 4.0, 5.0, 4.8, 5.5. Moonlight.
NOTE U Antoniadi III. Moon.
NOTE V Coma diameter approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.43 | 830562 | 1.37 | 0.15 | N | 6 | 23 | 14 | 3 | 2 | Tanikawa,M | A |
| 23.712 | 830563 | 0.97 | 0.106 | R | 5.7 | 24, 48, 60 | 10 | 5.2 | 1 | Keszthelyi,S | B |
| 23.729 | 830564 | 0.5 | 0.11 | R | 11 | 30 | 40 | 5.5 | 1 | Adamoli,G | C |
| 23.743 | 830565 | | 0.750 | N | 7.7 | 115 | | | 1 | Freydank,H | D |
| 23.746 | 830566 | 0.88 | 0.063 | R | 13.3 | 52 | 5.9 | | | Kosa-Kiss,A | E |
| 23.750 | 830567 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | F |
| 23.790 | 830568 | 0.07 | 0.36 | SC | 11 | 439 | 15 | 5 | 1 | Korth,S | G |
| 23.813 | 830569 | 0.21 | 0.203 | SC | 10 | 80,220 | 10 | 4.0 | 2 | Foulkes,M | H |
| 23.835 | 830570 | 2 | 0.05 | R | 7 | 25, 40 | 15 | 4.0 | 1 | Kopp,M | I |

DATE: 23 DEC 1985

DATE: 23 DEC 1985

NOTE A Dia. and m2 (observer's symbol believed to mean "approximately equal to", Ed.) 10' and 10, respectively. DC = 6/10. m1 = 6.5.
NOTE B Coma "bump" at PA 30 and at PA 180. (Translated by IHW staff. Ed.)
NOTE C City lights and moonlight interfered with the observation. Tail at PA 65. Tail very faint.
NOTE D Haze. 3 days before full moon. Brightness about 5.1 mag., dia. about 50'. (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Feature at PA 87 deg. Schematic drawing. Moonlight interfered with the observation. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F Intense moon. (Duration not indicated. Time of observation is assumed to start time. Additional drawing submitted made using 11x80 binoculars. Ed.)
NOTE G Tail at about PA 100 center of tail; jet 8 arc sec. long at PA 20. Tail very faint and diffuse, darker between PA's 75 and 125, can be traced to a length of about 0.5 deg. City lights interfered with the observation.
NOTE H Coma 6'x4', DC = 8. Coma noticeably elliptical in PA 60-240. Central brightening in coma appeared star-like offset from centre of coma. Faint tail glimpsed using AV (averted vision?, Ed.), 6' at PA 60.
NOTE I Coma less diffuse, brightness towards the center; tail at the end: irregular structure. Vertex distance: V = 13.0. Semi latus rectum: P1 = 10.5', P2 = 10.5'. Tail PA 42 deg. Moonlight interfered with the observation. Stability of star image: fair. Temperature: 5 deg. C.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.716 | 850535 | 0.750 | 6.3 | | 2.7 x 1.8 | 15.00 | ORWO | 400/27 | N | C | 5/N | 1 | Znasik,M | A |
| 23.733 | 850536 | 0.840 | 13.3 | 0.080 | 2.5 x 1.6 | 30.00 | ORWO NP 27 | 400/27 | N | O | 601/P | 1 | Schneidereit,J | |
| 23.739 | 850537 | 0.300 | 4 | | 6.9 x 4.6 | 2.00 | Fotopan HL | 400/27 | N | O | 7/P | 1 | Slusarczyk,J | |
| 23.741 | 850538 | 1.000 | 5.6 | | 2.1 x 1.4 | 20.00 | Fomapan | 400/27 | N | O | 6/N | 1 | Zimnikoval,P | B |

NOTE A Large format (11.8x8.6 cm) film used.
NOTE B Large format (6x6 cm) film used.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.026 | 814463 | 5.9 | M | 100 | | | 1 | | 0.050 | B | | 7 | | Y | 4 | Torres,E | A |
| 24.033 | 814464 | 6.5 | B | 100 | 10 | 5 | | | 0.203 | R | 13 | 85 | 4.0 | N | 1 | Fox,J.H | B |
| 24.054 | 814465 | 5.8 | B | 100 | 12 | 1 | 0.60 | 57 | 0.05 | B | | 7 | 5.0 | | | Lairet,R | |
| 24.060 | 814466 | 5.9 | B | 100 | | 2 | 0.25 | 63 | 0.05 | B | | 7 | 4.3 | | 1 | Benavides,A | |
| 24.367 | 814467 | 5.2 | M | 100 | 8 | 6 | | | 0.030 | B | | 8 | 4.0MT | Y | 1 | Kato,T | |
| 24.37 | 814468 | 5.3 | M | 100 | | | | | 0.05 | B | | 7 | 4.5M | Y | 2 | Suzuki,K | |
| 24.37 | 814469 | | | 100 | 3.5 | 5 | 0.5 | | 0.31 | N | 5.7 | 147 | 4.5M | Y | 2 | Suzuki,K | C |
| 24.375 | 814470 | 4.9 | M | 100 | 10 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 24.375 | 814471 | 4.9 | M | 100 | 10 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,H | |
| 24.382 | 814472 | 5.5 | B | 100 | 25 | | | | 0.05 | B | | 7 | 4.0M | Y | 1 | Hayashi,H | |
| 24.384 | 814473 | | | | 4 | 6 | 0.07 | 60 | 0.10 | N | 10 | 55 | 4.5M | Y | 1 | Kato,T | |
| 24.416 | 814474 | 5.3 | M | 100 | 6.4 | 6 | | | 0.12 | N | 6 | 36 | 3.0C | Y | 1 | Kishi,A | |
| 24.425 | 814475 | 5.4 | M | 100 | 6.5 | 8 | 0.42 | 65 | 0.08 | B | | 11 | 4.5M | N | 1 | Mitsuma,S | D |
| 24.456 | 814476 | 5.0 | S | 100 | 12 | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | E |
| 24.462 | 814477 | 5.3 | M | 100 | 10 | 5 | 0.83 | 95 | 0.05 | B | | 7 | 5.0 | Y | 7 | Ichikawa,K | |
| 24.468 | 814478 | | | 100 | 3.7 | 3 | | | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | F |
| 24.47 | 814479 | 4.6 | S | 4A | 8 | 6 | | | 0.08 | B | | 11 | 3.0 | N | 3 | Momose,M | G |
| 24.479 | 814480 | 5.8 | B | 100 | | | | | 0.07 | B | | 10 | 3.7M | Y | 1 | Date,M | |
| 24.49 | 814481 | 5.8 | S | AAVSO | 5 | 4 | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Hayashi,A | |
| 24.61 | 814482 | 5.7 | M | M | 20 | 6 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 24.63 | 814483 | 4.8 | B | E | 12 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 24.63 | 814484 | 6.0 | | | 3 | 5 | | | 0.045 | B | | 7 | 4.0M | Y | 1 | Speil,J | H |
| 24.66 | 814485 | 4.8 | B | E | 12 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 24.687 | 814486 | 5.5 | B | 100 | 4.2 | 4 | 1.0 | 305 | 0.05 | B | | 10 | 4.5MT | Y | 1 | Bretschneider,H | |
| 24.691 | 814487 | 5.3 | S | 100 | | 6 | | | 0.05 | B | | 7 | M | Y | 1 | Dziura,W | |
| 24.691 | 814488 | 4.7 | B | | 5.2 | 3 | 1.0 | | 0.030 | B | | 8 | 5.0M | Y | 1 | Winkler,R | |
| 24.698 | 814489 | 5.6 | B | 100 | 5 | 4 | | | 0.090 | N | 7.2 | 26 | 4.5 | Y | 1 | Vohla,F | |
| 24.70 | 814490 | 4.8 | B | E | 12 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 24.70 | 814491 | 5.7 | M | M | 20 | 6 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 24.708 | 814492 | | | 100 | 3.5 | 4 | | | 0.064 | R | 6.3 | 25 | 4 M | Y | 2 | Paradowski,M | |
| 24.710 | 814493 | 4 | B | 101,100 | | 6 | | | 0.050 | B | | 7 | 3 M | N | 1 | Linder,J | I |
| 24.715 | 814494 | 5.1 | B | SAO,IHW | 6.7 | 5 | | | 0.080 | B | | 20 | 4.0 | Y | 1 | Guthier,O | |
| 24.72 | 814495 | 5.6 | B | 100 | | 7 | | | 0.050 | B | | 12 | 3.5M | Y | 1 | Mosch,J | |
| 24.729 | 814496 | 6.0 | B | | | 7 | | | 0.050 | B | | 10 | M | Y | 1 | Linke,H | |
| 24.729 | 814497 | 5.6 | B | 100 | | 4 | | | 0.08 | B | | 10 | 4 M | Y | 2 | Paradowski,M | |
| 24.733 | 814498 | 5.1 | B | SAO,IHW | | | | | 0.125 | R | 6 | 35 | 4.0 | Y | 1 | Guthier,O | |
| 24.736 | 814499 | 5.6 | B | 100 | | 4 | | | 0.05 | B | | 7 | 4 M | Y | 2 | Paradowski,M | |
| 24.74 | 814500 | 5.7 | M | M | 20 | 6 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 24.75 | 814501 | 4.8 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 24.764 | 814502 | | | | 10 | 2 | | | 0.050 | R | 11 | 22 | 5.0M | Y | 1 | Kliche,J | J |
| 24.781 | 814503 | 5.6 | B | | 12.0 | 5 | | | 0.063 | R | 13.3 | 44 | 5.0M | Y | 1 | Bartnik,M | |
| 24.785 | 814504 | 6.2 | M | 100 | 4.5 | 4 | | | 0.063 | R | 6.7 | 26 | 5.0MC | N | 1 | Rudolph,M | |
| 24.79 | 814505 | 4.8 | B | E | 8 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 24.797 | 814506 | 5.1 | B | 100 | | | | | 0.050 | B | | 7 | | Y | 1 | Bohme,D | |
| 24.806 | 814507 | 5.5 | B | 100 | 10 7 | 6 | 0.3 | 60 | 0.200 | R | 15 | 120 | 4.5 | Y | 1 | Kalauch,K.-D | |
| 24.819 | 814508 | 4.0 | | 100 | 7 | 4 | | | 0.08 | B | | 15 | 3.5 | Y | 1 | Dietrich,M | K |
| 24.938 | 814509 | 6.0: | B | 100 | 15 | | | | 0.08 | B | | 15 | | N | 2 | Losada,R | |
| 24.94 | 814510 | 4.5 | S | AA | 10 | 4 | | | 0.080 | B | | 20 | | | | Green,D.W.E | J |
| 24.968 | 814511 | 5.7 | B | 100 | | 3 | | | 0.05 | B | | 7 | 4.9 | | 3 | Benavides,A | |
| 24.989 | 814512 | 5.4 | S | 100,101 | 8.5 | 5 | | | 0.035 | B | | 7 | 4.5M | N | 3 | Morrison,W | |
| 24.990 | 814513 | | | 100 | | 4 | 0.1 | 72 | 0.113 | N | 8 | 45 | 4.9 | Y | | Benavides,A | |

NOTE A (Observer gave limit as 9.0. Ed.)
NOTE B Strong moonlight.
NOTE C Meter: coma diameter is P1 + P2. Blue.
NOTE D 9.1.
NOTE E Bright gibbous moon, thin clouds. (Observer gave limit as approximately 8.0. Ed.)
NOTE F Bright gibbous moon, thin clouds.
NOTE G Bright moon. (Translated by IHW staff. Ed.)
NOTE H Icy wind.
NOTE I Little fog. [sic]
NOTE J Coma diameter approximate.
NOTE K Moon. (Observer indicated "A" method [Argelander?]. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.010 | 830571 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | A |
| 24.028 | 830572 | | 0.050 | B | | 7 | 20 | | 3 | Cifuentes,E | B |
| 24.035 | 830573 | 0.6 | 0.203 | R | 13 | 85,150 | 10 | 4.0 | 1 | Fox,J.H | C |
| 24.722 | 830574 | | 0.25 | N | 6 | 75 | | | 1 | Guthier,O | D |
| 24.743 | 830575 | | 0.203 | SC | 10 | 226 | | | 2 | Freydank,H | E |
| 24.938 | 830576 | | 0.080 | B | | 15 | | | 4 | Losada,R | F |

NOTE A Comet Halley has a nuclear magnitude of 7.2 (check stars: SAO 76017, HR 72). (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Tail visible. Length estimate: 1 deg. Openings toward beginning and end. Tails of gas (ion) and dust. (Observer gave limit as 9.0. Translated by IHW staff. Ed.)
NOTE C Coma elongated NS and slightly notched E. Notch may just be outlined by two bright lobes NE and SE of nucleus.
NOTE D The condensation has revived, with a kernel-like center of 20-30". (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E 2 days before full moon. Brightness 5.1 mag.; dia. about 50". (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)

DATE: 25 DEC 1985

DATE: 25 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.000 | 814514 | 5.8 | M | 100 | | | 1.5 | | 0.050 | B | | 7 | | Y | 4 | Torres,E | A |
| 25.003 | 814515 | 4.8 | M | 100 | 22 | 7 | 0.58 | 290 | 0.05 | B | | 10 | 6.5 | Y | 4 | Fabre,R | B |
| 25.014 | 814516 | 5.6 | B | 100 | 12 | 2 | 0.67 | 52 | 0.05 | B | | 7 | 5.0 | | | Lairet,R | |
| 25.024 | 814517 | 5.9 | B | 100 | 15 10 | 5 | | | 0.203 | R | 13 | 85 | 4.0 | N | 1 | Fox,J.H | C |
| 25.133 | 814518 | 5.6 | M | 4A | 7.1 | 6 | | | 0.06 | B | | 20 | 4.0MC | N | 1 | de la Rosa Jr,A | D |
| 25.1340 | 814519 | 5.3 | S | DCS | 9 | 8 | 0.17 | 71 | 0.080 | B | | 20 | 4.5 | | 3 | Machholz,D | E |
| 25.167 | 814520 | 6.1 | S | 100 | 35 | 6 | | | 0.203 | SC | 10 | 125 | 3.5CM | Y | 1 | Gronek,J.D | F |
| 25.371 | 814521 | 5.0 | S | 100 | 10 | 5 | 0.42 | 90 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |
| 25.39 | 814522 | 4.7 | S | 4A | 12 | 7 | 0.10 | | 0.08 | B | | 11 | 4.5 | N | 3 | Momose,M | G |
| 25.394 | 814523 | 5.2 | M | 100 | 6 | 6 | | | 0.030 | B | | 8 | 4.5M | Y | 1 | Kato,T | |
| 25.42 | 814524 | 5.6 | B | | 10 | 6 | | | 0.05 | B | | 10 | 3.5 | N | 1 | Uda,K | |
| 25.55 | 814525 | 5.8 | B | M | | | | | 0.05 | B | | 7 | | | | Ponomaryov,E | |
| 25.61 | 814526 | 5.7 | M | M | 20 | 6 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 25.64 | 814527 | 5 | B | M | 8 | | | | 0.03 | B | | 8 | | | | Zinvyev,V.A | |
| 25.66 | 814528 | 5.7 | M | M | 20 | 6 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 25.66 | 814529 | 4.9 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 25.70 | 814530 | 5.7 | M | M | 20 | 6 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 25.70 | 814531 | 4.8 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 25.7083 | 814532 | 5.3 | S | 100 | 20 | 7 | 0.50 | 61 | 0.08 | B | | 10 | 4.4M | Y | 1 | Znasik,M | H |
| 25.715 | 814533 | 6.0 | M | 100 | 60 | 0 | | | 0.070 | R | 14 | 20 | 4.0MT | Y | 1 | Luga,M | |
| 25.729 | 814534 | 5.4 | B | 100 | 2.8 | 4 | | | 0.068 | R | 11.7 | 35 | 4 M | Y | 2 | Paradowski,M | |
| 25.730 | 814535 | 5.7 | B | 100 | 7 | | | | 0.050 | B | | 7 | 3.0C | N | 1 | Ruiz,J | |
| 25.73 | 814536 | 5.3 | B | M | 3 | | | | 0.05 | R | | 20 | | | | Nesterov,Yu | |
| 25.733 | 814537 | 6.0 | M | 100 | 60 | 0 | | | 0.070 | R | 14 | 20 | 4.0MT | Y | 1 | Luga,M | |
| 25.736 | 814538 | 5.5 | B | 100 | | 4 | | | 0.064 | R | 6.3 | 10 | 4 M | Y | 2 | Paradowski,M | |
| 25.74 | 814539 | 5.7 | M | M | 20 | 6 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 25.743 | 814540 | 5.4 | B | 100 | 7.7 | 4 | | | 0.08 | B | | 10 | 4 M | Y | 2 | Paradowski,M | |
| 25.750 | 814541 | 4.7 | S | 100 | | 6 | | | 0.050 | B | | 7 | 4.5 | N | 1 | Lunde,R | I |
| 25.750 | 814542 | 5.9: | | | | 5 | | | 0.080 | B | | 15 | 3 | Y | 2 | Nagele,A | J |
| 25.757 | 814543 | 5.4 | B | 100 | | 4 | | | 0.05 | B | | 7 | 4 M | Y | 2 | Paradowski,M | |
| 25.76 | 814544 | 4.8 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 25.799 | 814545 | 5.2 | M | 100 | | | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | K |
| 25.81 | 814546 | 4.6 | S | 100 | 9.5 | 4 | 0.30 | 68 | 0.125 | R | 5 | 32 | 4.3 | N | | Clark,M.L | |
| 25.813 | 814547 | 5.6 | M | 100 | 20 | 5 | | | 0.050 | B | | 16 | 4.5C | N | 1 | Lozano,L | |
| 25.832 | 814548 | 4.5 | B | 100 | 9 | | | | 0.114 | N | 8.7 | 100 | | Y | 1 | Rodriguez C.,J.A | H |
| 25.85 | 814549 | 5.5 | S | DCS 6B | 5 | 8 | | | 0.050 | B | | 10 | 4 MC | N | 1 | van Loo,F.R | |
| 25.88 | 814550 | 5.4 | | | | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | L |
| 25.965 | 814551 | 5.1 | S | 100,101 | 14 | 4 | | | 0.035 | B | | 7 | 4.5M | N | 4 | Morrison,W | |
| 25.979 | 814552 | 5.4 | S | 100 | 4.6 | 7 | | | 0.203 | N | 6 | 101 | 4.5M | Y | 1 | Hudak,D.M | |
| 25.985 | 814553 | 4.3 | S | 100 | 9 | 3 | | | 0.05 | B | | 10 | 4 M | Y | 1 | House,R.R | M |
| 25.990 | 814554 | 4.8 | M | 100 | 10.0 | 7 | 0.4 | 55 | 0.05 | B | | 7 | 5.0 | Y | 1 | DeYoung,J.A | N |

NOTE A (Observer gave limit as 8.5. Ed.)
NOTE B (PA value appears to be measured incorrectly. Ed.)
NOTE C Strong moonlight. SAO 146160 comparison star.
NOTE D Clear skies, moonlight, street lights.
NOTE E 95% moon 88 degrees away.
NOTE F Good see.
NOTE G Bright moon. (Translated by IHW staff. Ed.)
NOTE H Moon.
NOTE I Strong moon.
NOTE J (Observer indicated "A" method [Argelander?]. Ed.) Comparison star is 60 Aqr.
NOTE K Clouds.
NOTE L Moonlight.
NOTE M Hazy sky.
NOTE N Jets?

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.024 | 830577 | 0.6 | 0.203 | R | 13 | 85,150 | 10 | 4.0 | 1 | Fox,J.H | A |
| 25.995 | 830578 | | 0.15 | N | 8 | 64, 98,160 | 56 | | | Robotham,R | |

NOTE A Two brighter "wisps" extending E away from nucleus, but not contacting it. Three faint stars in E coma.

DATE: 26 DEC 1985 DATE: 26 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.00 | 814555 | 4.7 | S | AAVSO | 8 | 5 | | | 0.050 | B | | 10 | | | | Bortle,J.E | A |
| 26.01 | 814556 | 4.1 | S | AA | 18 | 5 | | | 0.035 | B | | 7 | | | | Green,D.W.E | B |
| 26.010 | 814557 | 5.6 | B | 100 | 10 | 1 | 0.40 | 57 | 0.05 | B | | 7 | 3.8 | Y | 1 | Lairet,R | |
| 26.03 | 814558 | 4.1 | S | AA | 18 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | B |
| 26.069 | 814559 | 5.5 | M | 4A | 4.7 | 6 | | | 0.06 | B | | 20 | 4.4MC | N | 1 | de la Rosa Jr,A | C |
| 26.104 | 814560 | 5.6 | B | 100 | | 4 | | | 0.050 | B | | 10 | 4.5M | Y | 1 | Stapleton,J | D |
| 26.11 | 814561 | 4.1 | S | 100 | 20 | 5 | 0.75 | 65 | 0.080 | B | | 11 | 4.3 | Y | 1 | Spratt,C.E | E |
| 26.11 | 814562 | 4.2 | S | 100 | 20 | 6 | 1 | 65 | 0.140 | SN | 3.6 | 28 | 4.3 | Y | 1 | Spratt,C.E | F |
| 26.125 | 814563 | 6.2 | S | 4A | 5 | 3 | | | 0.080 | B | | 11 | 8 | Y | 4 | Pryal,J | G |
| 26.2500 | 814564 | 4.7 | M | 4A | 8 | 6 | | | 0.05 | B | | 7 | 5.0 | Y | 1 | Cook,A.J | H |
| 26.257 | 814565 | 4.9 | S | 100 | 12 | 5 | 0.58 | 70 | 0.07 | B | | 10 | 5.0 | Y | 1 | Kobayashi,J | |
| 26.385 | 814566 | 5.2 | M | 100 | 8 | 6 | | | 0.030 | B | | 8 | 4.0M | Y | 2 | Kato,T | |
| 26.39 | 814567 | 4.7 | S | 4A | 12 | 5 | 0.25 | | 0.08 | B | | 11 | 4.0 | N | 3 | Momose,M | I |
| 26.410 | 814568 | 5 | M | 100 | 10 | 6 | | | 0.035 | B | | 7 | 3 | Y | 1 | Watanabe,H | |
| 26.413 | 814569 | 5.0 | M | 100 | 10 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 26.49 | 814570 | 4.8 | S | 100 | 5 | | | | 0.07 | B | | 10 | 3.5M | Y | 1 | Yasuki,M | |
| 26.65 | 814571 | 6.0 | | | 3 | 5 | | | 0.045 | B | | 7 | 3.5M | Y | 1 | Speil,J | J |
| 26.700 | 814572 | 5.7 | S | SAO | | | | | 0.31 | N | 5 | 31 | | | | Giampaolo,G | |
| 26.712 | 814573 | | | 100 | 5 | 4 | | | 0.064 | R | 6.3 | 20 | 3.5MC | N | 1 | Maciejewski,W | |
| 26.722 | 814574 | 4.9 | S | 100 | 6.7 | 6 | | | 0.050 | B | | 7 | 4.0CM | N | 1 | Piccinini,M | |
| 26.723 | 814575 | 5.3 | M | 100 | | 8 | | | 0.030 | B | | 8 | 4.5M | Y | 1 | Villa,M | |
| 26.73 | 814576 | 5.6 | B | DCS 7 | | 6 | 1.0 | 75 | 0.080 | B | | 11 | M | N | 3 | Both,S.J.J | |
| 26.733 | 814577 | | | 100 | 19 | | | | 0.030 | B | | 8 | 4.5M | Y | 1 | Villa,M | |
| 26.74 | 814578 | 5.5 | B | AA | 13 | 6 | | | 0.050 | B | | 7 | 4.5M | N | | Schmeer,P | |
| 26.760 | 814579 | | | 100 | | 7 | | | 0.05 | B | | 10 | 4.5MZ | Y | 1 | Melandri,F | K |
| 26.760 | 814580 | 4.4 | S | 100 | 11 | 6 | | | 0.080 | B | | 20 | 4.0MC | N | 5 | Meozzi,D | |
| 26.792 | 814581 | | | 100 | | 4 | | | 0.07 | B | | 10 | 3.0 | N | 1 | Deconinck,M | L |
| 26.865 | 814582 | 6.3 | M | CZ | 16 | | | | 0.05 | B | | 7 | 4.7CM | Y | 1 | Kourimsky,M | |
| 26.93 | 814583 | 4.0 | M | AA | 13 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | B |
| 26.93 | 814584 | 4.1 | S | AA | 15 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | B |
| 26.93 | 814585 | 4.1 | S | AA | 13 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | B |
| 26.967 | 814586 | 6.5 | B | 9 | | 1 | | 310 | 0.05 | B | | 10 | 2.5 | Y | 3 | Rodriguez,V | M |
| 26.999 | 814587 | 5.7 | M | 100 | | | 1.25 | | 0.050 | B | | 7 | | Y | 4 | Torres,E | N |

NOTE A Moonlight.
NOTE B Coma diameter approximate.
NOTE C Clear skies, moonlight, street lights.
NOTE D Full moon, high clouds.
NOTE E Moon!
NOTE F Fan-shaped tail despite moon.
NOTE G Hazy - fog, and near full moon.
NOTE H Moon bright.
NOTE I Bright moon. (Translated by IHW staff. Ed.)
NOTE J Full moon.
NOTE K Veiled sky.
NOTE L Moon.
NOTE M The valley - Caracas.
NOTE N Dust tail 35 arc min. (Observer gave limit as 7.5. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.002 | 830579 | | 0.050 | B | | 7 | 25 | | 3 | Cifuentes,E | A |
| 26.032 | 830580 | | 0.254 | N | 6 | 48 | 22 | 3.0 | 6 | Troiani,D.M | B |
| 26.997 | 830581 | 0.21 | 0.203 | R | 13 | 110 | | | | Phillips,J | C |

NOTE A Gas tail visible, length estimate 1 degree 30 arc min., long and very straight. So-called dust tail very diffuse, toward Se [sic]. Bright central condensation, bright coma, very visible. Brighter than the preceding day. (Observer gave limit as 8.5. Translated by IHW staff. Ed.)
NOTE B Seeing (1-3): 2. Sky darkness (1-5): 1. DC = 5.
NOTE C City lights. Still a fuzzy oval elongated east-west with central condensation. No definite tail visible. Only magnitude 3.0 visible with naked eye due to light pollution. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 27 DEC 1985

DATE: 27 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.056 | 814588 | | | 100 | 12 | 1 | 0.33 | 57 | 0.05 | B | | 7 | 3.7 | | | Lairet,R | |
| 27.068 | 814589 | | | 100 | | 3 | 0.25 | 64 | 0.05 | B | | 7 | 4.5 | | 1 | Benavides,A | |
| 27.0938 | 814590 | 4.8 | S | DCS | 8 | 5 | 0.15 | 68 | 0.080 | B | | 20 | 4.5 | | 3 | Machholz,D | A |
| 27.0979 | 814591 | 4.9 | S | DCS | 10 | 6 | 0.22 | 68 | 0.152 | N | 8.0 | 76 | 4.5 | | 3 | Machholz,D | A |
| 27.10 | 814592 | 5.2 | M | 100 | | 7 | 0.5 | | 0.080 | B | | 20 | 3.5M | Y | 14 | Morris,C.S | |
| 27.11 | 814593 | 5.2 | M | 100 | | 6 | | | 0.050 | R | | 8 | 3.5M | Y | 14 | Morris,C.S | |
| 27.18 | 814594 | 4.8 | M | 100 | | | | | 0.05 | B | | 10 | 5.0M | Y | 2 | Hale,A | B |
| 27.385 | 814595 | 5.0 | M | 100 | 9 | 7 | | | 0.030 | B | | 8 | 4.0M | Y | 2 | Kato,T | |
| 27.39 | 814596 | 4.7 | S | 4A | 8 | 6 | 0.13 | | 0.08 | B | | 11 | 4.5 | N | 3 | Momose,M | C |
| 27.40 | 814597 | 5.7 | B | 100 | 4.5 | 8 | 0.3 | 80 | 0.05 | B | | 7 | 4.0M | N | 1 | Kanai,K | |
| 27.403 | 814598 | 5.0 | B | 100 | | | | | 0.035 | B | | 7 | | | 1 | Okada,M | D |
| 27.420 | 814599 | 5.0 | M | 100 | 6.2 | 6 | | | 0.12 | N | 6 | 36 | 3.0C | N | 1 | Kishi,A | |
| 27.424 | 814600 | 5.2 | M | 100 | 8 | 5 | | | 0.035 | B | | 7 | 3 | Y | 1 | Watanabe,K | |
| 27.427 | 814601 | 5.2 | M | 100 | 10 | 5 | | | 0.035 | B | | 7 | 3 | Y | 1 | Watanabe,A | |
| 27.472 | 814602 | 5.6 | S | 100 | 5.3 | 2 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | E |
| 27.476 | 814603 | 6.1 | B | 100 | | | | | 0.07 | B | | 10 | 2.5M | Y | 1 | Date,M | |
| 27.50 | 814604 | 4.5 | V | M | | | | | | EY | | | | | | Poroshin,A | |
| 27.58 | 814605 | 5.8 | B | M | | | | | 0.05 | B | | 7 | | | | Ponomaryov,E | |
| 27.663 | 814606 | 5.7 | B | 100 | | | | | 0.05 | B | | 7 | 4.5CM | Y | 1 | Kukkonen,I.T | |
| 27.667 | 814607 | 6.2 | M | 4A | 15 | 5 | | | 0.150 | N | 5.3 | 45 | 5.2 | Y | 1 | Wikholm,L | |
| 27.684 | 814608 | 5.1 | B | 100 | 5.4 | 5 | | | 0.080 | R | 15 | 39 | 3.5MC | Y | 1 | Szulc,M | |
| 27.688 | 814609 | | | | 1.8 | 5 | 0.1 | 60 | 0.076 | R | 16 | 139 | 4.5CM | Y | 1 | Kukkonen,I.T | F |
| 27.690 | 814610 | 5.9: | S | 100 | 12 | 6 | 0.33 | 70 | 0.485 | N | 4.3 | 115 | 4.0 | N | 1 | Moeller,M | G |
| 27.698 | 814611 | 5.8 | B | CZ | 8 | 8 | | | 0.10 | O | | 25 | 5.5MC | Y | 1 | Micek,I | |
| 27.71 | 814612 | 5.8 | B | DCS 6B | 13 | 4 | | | 0.063 | B | | 8 | 4 CMT | N | 1 | Geenen,J.J | |
| 27.719 | 814613 | 5 | M | CZ | | | | | 0.10 | B | | 25 | 3.5MC | Y | 1 | Valasek,V | H |
| 27.721 | 814614 | 4.6 | S | 100 | 8.2 | 6 | | | 0.05 | B | | 10 | 2.5M | N | 1 | Hurst,G.M | I |
| 27.722 | 814615 | 5.7 | B | 100 | 2 | 6 | | | 0.050 | B | | 16 | 4.4 | Y | 1 | Castino,R | G |
| 27.722 | 814616 | 6.3 | B | 100 | 2 | 7 | | | 0.113 | N | 8 | 22 | 5.0M | Y | 1 | Schambeck,C.M | |
| 27.722 | 814617 | 5.7 | M | 100 | 8 | 3 | | | 0.09 | M | 11 | 56 | 3.5M | Y | 2 | Westlund,M | |
| 27.725 | 814618 | | | | 5.8 | 6 | | | 0.08 | B | | 15 | 2.5M | N | 1 | Hurst,G.M | I |
| 27.726 | 814619 | 5.0 | S | 100 | 3.3 | 5 | | | 0.063 | R | 13.3 | 53 | 2.5C | N | 1 | Skjaeraasen,O | J |
| 27.73 | 814620 | 4.5 | S | DCS 7 | | 6 | | | 0.018 | B | | 3 | 4 MTC | Y | 5 | Bus,E.P | |
| 27.73 | 814621 | 4.5 | S | DCS 7 | 12 | 6 | | | 0.040 | B | | 7 | 4 MTC | Y | 5 | Bus,E.P | |
| 27.73 | 814622 | 5.7 | B | 100 | 8 | 6 | | | 0.080 | R | 5 | 22 | CM | Y | 2 | Jannink,D.W | K |
| 27.733 | 814623 | 6.0 | M | 100 | 5.6 | 5 | 0.1 | 20 | 0.07 | B | | 16 | 5.0CM | Y | 1 | Taylor,M.D | L |
| 27.736 | 814624 | 6.2 | B | 100 | | 7 | | | 0.06 | R | 8 | 15 | 5.0M | Y | 1 | Schambeck,C.M | |
| 27.74 | 814625 | 4.7 | S | 100 | | | | | 0.08 | B | | 20 | 4.0 | | 3 | Shanklin,J.D | |
| 27.74 | 814626 | 5.4 | B | 100 | | | | | 0.05 | B | | 10 | 5 M | N | 8 | Bouma,R.J | |
| 27.74 | 814627 | 5.0 | S | 100 | 5 | 7 | 1.0 | 70 | 0.05 | B | | 10 | 5 M | N | 8 | Bouma,R.J | M |
| 27.740 | 814628 | 5.5 | B | CZ | 20 | 5 | | | 0.04 | B | | 7 | 5.8 | Y | 1 | Brancik,K | |
| 27.740 | 814629 | | | 100 | 7 | 7 | 0.06 | 85 | 0.21 | N | 5 | 37 | 5.0CM | Y | 1 | Taylor,M.D | N |
| 27.744 | 814630 | 4.3 | S | 100 | 7.5 | 5 | | | 0.08 | B | | 11 | 3.5 | Y | 1 | Gainsford,M.J | O |
| 27.750 | 814631 | 4.5 | S | 100 | 9 | 6 | | | 0.080 | B | | 20 | 3.8MC | N | 5 | Meozzi,D | |
| 27.750 | 814632 | 4.7 | S | 100 | 1.8 | 9 | 0.12 | 65 | 0.05 | B | | 10 | 4.3M | Y | 3 | Abbott,J | P |
| 27.75 | 814633 | 4.7 | S | DCS 7 | | | | | 0.050 | B | | 10 | M | N | 1 | Aerts,L | |
| 27.750 | 814634 | 5.3 | S | 100 | 6 | 5 | 0.1 | 20 | 0.04 | B | | 8 | 5.0CM | Y | 1 | Taylor,M.D | Q |
| 27.75 | 814635 | 5.5 | S | DCS 6B | | 8 | | | 0.050 | B | | 10 | 4 MC | N | 1 | van Loo,F.R | |
| 27.751 | 814636 | 4.8 | S | 100 | 4.2 | 7 | | | 0.25 | N | 6 | 60 | 3.5 | Y | 1 | Gainsford,M.J | O |
| 27.757 | 814637 | 5.3 | S | 100 | 8 6 | 7 | 0.17 | 60 | 0.065 | B | | 12 | 4.5 | N | 3 | Foulkes,M | R |
| 27.760 | 814638 | 4.5 | B | 100 | 20 | 5 | 0.42 | | 0.102 | R | 14.7 | 60 | | Y | | Medway,K | S |
| 27.764 | 814639 | 5.1 | S | 100 | 4 | 4 | 0.53 | 60 | 0.050 | B | | 10 | 5.0 | | 3 | Rogers,J.H | T |
| 27.767 | 814640 | 5.7 | M | 100 | | | | | 0.060 | R | 4.5 | 10 | 4.0M | Y | 1 | Chodorowski,F | U |
| 27.77 | 814641 | 4.0 | S | DCS 7 | 14 | 5 | | | 0.046 | R | 4 | 8 | 5.5M | Y | 1 | van de Weg,R.L.W | |
| 27.77 | 814642 | 4.0 | S | DCS 7 | 12 | 7 | 2.5 | 51 | 0.060 | B | | 12 | 5.5M | Y | 1 | van de Weg,R.L.W | V |
| 27.771 | 814643 | 6.0 | M | 100 | 25 | 4 | | | 0.067 | R | 12 | 60 | 4.5M | Y | 1 | Kosinski,J | |
| 27.777 | 814644 | 5.8 | B | 100 | 2.7 | 6 | | | 0.330 | N | 4.5 | 59 | 4.2 | Y | 1 | Castino,R | G |
| 27.795 | 814645 | 4.6 | S | 100 | 6.8 | 6 | | | 0.05 | B | | 10 | 3.5M | Y | 1 | Hurst,G.M | I |
| 27.799 | 814646 | 5.8 | M | CZ | 25 | 3 | | | 0.05 | B | | 7 | 4.5M | Y | 1 | Hajek,P | |
| 27.802 | 814647 | | | | 5.8 | 6 | 0.4 | 67 | 0.08 | B | | 15 | 3.5M | Y | 1 | Hurst,G.M | W |
| 27.813 | 814648 | 5.9 | B | 55 | 15 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | X |
| 27.850 | 814649 | 5.2 | B | 4A | 15 | 7 | | | 0.06 | R | | 15 | 4.5 | Y | 1 | Ward,A | Y |
| 27.890 | 814650 | 5.3 | B | 4A | 15 | 6 | | | 0.05 | B | | 10 | 4.5 | Y | 1 | Ward,A | Y |
| 27.94 | 814651 | 4.0 | S | AA | 15 | 7 | 1 | | 0.080 | B | | 20 | | | | Green,D.W.E | Z |
| 27.95 | 814652 | 4.0 | S | AA | 15 | 7 | 1 | | 0.035 | B | | 7 | | | | Green,D.W.E | Z |
| 27.96 | 814653 | 3.9 | M | AA | 15 | 7 | 1 | | 0.050 | B | | 7 | | | | Green,D.W.E | Z |
| 27.96 | 814654 | 4.2 | S | AA | 15 | 7 | 1 | | 0.050 | B | | 7 | | | | Green,D.W.E | Z |
| 27.969 | 814655 | 4.8 | M | 100 | 8 | 5 | 0.2 | 50 | 0.05 | B | | 7 | 5.0 | Y | 3 | DeYoung,J.A | |
| 27.978 | 814656 | 5.3 | S | 100 | 9.5 | 4 | | | 0.035 | B | | 7 | 4.7M | N | 3 | Morrison,W | |
| 27.98 | 814657 | 4.4 | M | AA | 9 | 8 | | | 0.203 | N | 6 | 38 | | | | Green,D.W.E | M |
| 27.98 | 814658 | 4.5 | S | AA | 9 | 8 | | | 0.203 | N | 6 | 38 | | | | Green,D.W.E | M |
| 27.99 | 814659 | 4.7 | S | AAVSO | 7 | 6 | | | 0.050 | B | | 10 | | | | Bortle,J.E | Q |
| 27.99 | 814660 | 4.8 | S | AA | 7 | 8 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | M |

NOTE A 99% moon 112 degrees away.
NOTE B Observation affected by full moon and scattered thin cirrus.
NOTE C Bright moon. (Translated by IHW staff. Ed.)
NOTE D Full moon. (Translated by IHW staff. Ed.)
NOTE E (Observer gave limit as approximately 8.0. Ed.)
NOTE F Coma diameter determined as an average of five transit time observations.
NOTE G Moon.
NOTE H Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE I Full moon and cirrus.
NOTE J Severe light pollution made the background sky awfully bright, and in addition, thin clouds made it difficult/impossible to see the outer parts of the coma.
NOTE K Telescopic limit is 7.5.
NOTE L Moonlight. Antoniadi II.
NOTE M Coma diameter approximate.
NOTE N Seeing Antoniadi II. Moonlight.
NOTE O Moon and cloud.
NOTE P Comparison stars 5.3, 4.7, 5.0, 4.0. Moonlight.
NOTE Q Moonlight.
NOTE R Moon up.
NOTE S Full moon, drifting thin clouds interfered. (Observer gave limit as 11.0. Ed.)
NOTE T Coma roughly circular, tail very faint, straight, length approximate. Moon.
NOTE U Clouds.
NOTE V Many details, (rays/envelope) in inner coma in 0.100 Newtonian at magnification of 129. Within 0.5 hour clear changes in position of the rays.
NOTE W Tail length uncertain. Field very low.
NOTE X Full moon. (Observer gave limit as 11.5. Ed.)
NOTE Y Misty near horizon.

DATE: 27 DEC 1985

DATE: 27 DEC 1985

NOTE Z Coma diameter and tail length approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.002 | 830582 | | 0.050 | B | | | 25 | 7.5 | 3 | Cifuentes,E | A |
| 27.715 | 830583 | 0.6 | 0.11 | R | 11 | 30, 70 | 20 | 5.5 | 1 | Adamoli,G | B |
| 27.719 | 830584 | 1.6 | 0.090 | M | 11 | 56 | 10 | 3.5 | 2 | Westlund,M | C |
| 27.739 | 830585 | 0.48 | 0.063 | R | 13.3 | 34, 53,120 | 10 | 2.5 | 1 | Skjaeraasen,O | D |
| 27.748 | 830586 | 0.21 | 0.203 | SC | 10 | 80,220 | 14 | 4.5 | 2 | Foulkes,M | E |
| 27.785 | 830587 | 0.4 | 0.254 | N | 6.4 | 41 | 10 | 4.3 | 3 | Abbott,J | F |
| 27.825 | 830588 | 2 | 0.05 | R | 7 | 25, 30, 40 | 25 | 4.0 | 1 | Kopp,M | G |
| 27.949 | 830589 | 1 | 0.100 | B | 4 | 14 | 23 | 6.0 | 2 | Nowak,G.T | H |

NOTE A Two tails visible, a gap in "V" (shape). Gas (tail) much longer. Lengths: gas, 1 deg. 15'; dust, 35'. Dust tail has attained approximately half the length of the gas tail. Lengths: gas, 1 deg. 15'; dust, 35'. (Translated by IHW staff. Ed.)
NOTE B Tail at PA 45.
NOTE C Full moon.
NOTE D Lumicon Deep Sky filter used. Moist, no wind, -12 C, turbulence, severe light pollution. Very thin fog-like clouds caused much of the bad seeing. Halley looked totally circular, no tail was observed, and the changes of brightness outwards from the almost star-like central condensation were very smooth/gradual.
NOTE E Coma 5'x4', DC = 8. Coma centre star-like. At a first glance the coma appeared circular. However an elliptical extension was seen using averted vision. Tail faint. Seemed to have a brighter spike along its centre line. Very faint structure (jet???) [sic] glimpsed at PA 120 deg.
NOTE F Moonlight interfered with the observation. Central condensation near stellar. Forward projection at PA 265 deg., approximately 1.2 arc min. Tail spans PA 53 deg. through 66 deg., approximately 3.2x10.4 arc min. Semi latus rectum approximately 2.4 arc min. (both). Vertex distance 2.8 arc min. Near stellar central condensation dominating the coma. Southern edge of tail better defined than the indistinct northern edge. A forward projection in PA 256 deg. appeared from the coma.
NOTE G Stability of star image: good, temperature: -2 deg. C. Tail: more regular structure, bright, though moonlight. Vertex distance: V = 13.5'. Semi latus rectum: P1 = 11.0', P2 = 10.5'. Tail PA = 47 deg. Coma less diffuse. Moonlight interfered with the observation.
NOTE H Gas tail at PA 0, dust tail at PA 320.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.681 | 850539 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 1.00 | Kodak 2415 | | Y | | 9/P | 1 | Conrad,R | A |
| 27.863 | 850540 | 0.500 | 8 | | 4.1 x 2.7 | 2.00 | Fujichrome | 400/27 | N | O | 3/S | 2 | Townsend,R | |

NOTE A City lights interfered with the observation; Vienna, from room!

NETWORK: AMATEUR OBSERVATION

DATE: 28 DEC 1985

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.024 | 814661 | 6.0 | B | 100 | 10 | 5 | | | 0.06 | R | 8.3 | 30 | 3.8 | N | 1 | Fox,J.H | A |
| 28.05 | 814662 | 5.5 | B | 100 | 10 | 6 | | | 0.080 | B | | 20 | 4.0 | Y | | Kronk,G | B |
| 28.056 | 814663 | 5.6 | B | 100 | 8 | 2 | 0.67 | 54 | 0.05 | B | | 7 | 4.0 | | | Lairet,R | |
| 28.09 | 814664 | 4.9 | M | 100 | | 7 | 1.25 | 68 | 0.080 | B | | 20 | 4.0M | Y | 14 | Morris,C.S | |
| 28.09 | 814665 | 5.0 | B | 100 | | | | | 0.080 | B | | 20 | 4.0M | Y | 14 | Morris,C.S | |
| 28.095 | 814666 | 5.6 | B | 100 | 6 | 7 | | | 0.05 | B | | 10 | 4.0 | N | 2 | Saxon,V.P | C |
| 28.38 | 814667 | 4.6 | S | 4A | 9 | 7 | | | 0.08 | B | | 11 | 4.5 | N | 3 | Momose,M | D |
| 28.389 | 814668 | 5.0 | M | 100 | 7 | 7 | | | 0.030 | B | | 8 | 3.5M | Y | 2 | Kato,T | E |
| 28.39 | 814669 | 5.1 | S | AAVSO | 6 | 5 | 0.33 | 65 | 0.13 | N | 6.3 | 24 | 4.0M | Y | 1 | Hayashi,A | |
| 28.39 | 814670 | 5.2 | M | 100 | 3.5 | 7 | | | 0.08 | B | | 11 | 4.5MC | Y | 1 | Mitsuma,S | |
| 28.39 | 814671 | 5.0 | B | | 10 | 6 | | | 0.05 | B | | 10 | 4.0 | N | 1 | Uda,K | |
| 28.39 | 814672 | 4.5 | | | | 6 | | | 0.08 | B | | 11 | 5.0 | Y | 2 | Washi,S | F |
| 28.396 | 814673 | 5.6 | B | 100 | 5 | 4 | | | 0.108 | N | 4 | 16 | 5.5MT | Y | 2 | Turner,N | |
| 28.403 | 814674 | 5.0 | S | 100 | 7 | 5 | 0.17 | 80 | 0.07 | B | | 10 | 2.5 | Y | 1 | Kobayashi,J | |
| 28.403 | 814675 | 5.5 | B | 100 | | | | | 0.07 | B | | 10 | 4.0CM | Y | 2 | Date,M | |
| 28.423 | 814676 | 5.2 | B | 100 | | 7 | | | 0.050 | B | | 7 | 2.9 | Y | 3 | Bembrick,C | |
| 28.441 | 814677 | | | 100 | 10 | 4 | | | 0.10 | N | 6 | 32 | 3.0M | Y | 2 | Moriya,M | G |
| 28.458 | 814678 | 5.6 | S | 100 | 6 | 2 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | H |
| 28.47 | 814679 | 4.8 | S | 100 | 5 | | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Yasuki,M | |
| 28.489 | 814680 | 5.0 | S | 100 | 10 | 3 | | | 0.050 | B | | 12 | 4.0 | Y | 1 | Batza,H | I |
| 28.50 | 814681 | 5 : | | 100 | 10 | | | | 0.080 | B | | 11 | 2 MC | N | 3 | Watanabe,N | J |
| 28.57 | 814682 | 5.4 | B | M | 5 | 4 | 2 | 60 | 0.05 | B | | 7 | | | | Guryanov,S | |
| 28.677 | 814683 | 6.5 | B | 100 | | | | | 0.04 | B | | 8 | 3.0C | N | 1 | Czerniewski,W | |
| 28.694 | 814684 | 5.6 | B | 100 | 4 | 6 | | | 0.063 | R | 13.3 | 21 | 5.5M | Y | 1 | Pilski,A | |
| 28.696 | 814685 | 4.6 | S | 100 | 17 | 7 | 1 | 70 | 0.050 | B | | 7 | 4.4 | Y | 2 | Moeller,M | I |
| 28.721 | 814686 | 5.2 | M | AAVSO | 7 | 7 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | K |
| 28.733 | 814687 | 5.4 | M | 100 | 7 | 4 | | | 0.03 | B | | 8 | 4.5M | N | 2 | Taylor,M.D | L |
| 28.735 | 814688 | 5.8 | B | 55 | 12 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | 1 | Medway,K | M |
| 28.74 | 814689 | 5.4 | S | 100 | | | | | 0.08 | B | | 20 | 5.3 | | 3 | Shanklin,J.D | |
| 28.74 | 814690 | 5.4 | S | 100 | | | | | 0.05 | B | | 7 | 5.3 | | 3 | Shanklin,J.D | |
| 28.74 | 814691 | 5.0 | S | 100 | | | | | | EY | | | 5.3 | | 3 | Shanklin,J.D | |
| 28.777 | 814692 | 4.5 | B | 100 | 25 | 5 | 1 | | 0.080 | B | | 11 | | Y | | Medway,K | N |
| 28.788 | 814693 | 4.8 | S | 100 | | 6 | | | 0.050 | B | | 7 | 4.0 | N | 1 | Lunde,R | O |
| 28.792 | 814694 | 5.5 | B | 4A | | | | | 0.050 | B | | 7 | 5.5 | Y | 1 | van der Mey,L | |
| 28.796 | 814695 | 4.7 | S | 100 | | 6 | | 75 | 0.08 | B | | 11 | 4.8 | Y | 1 | Gainsford,M.J | P |
| 28.801 | 814696 | 4.5 | S | 100 | 3.3 | 6 | | 75 | 0.25 | N | 6 | 60 | 4.8 | Y | 1 | Gainsford,M.J | Q |
| 28.803 | 814697 | 5.2 | B | 4A | 15 | 7 | | | 0.05 | B | | 10 | 5 | Y | 1 | Ward,A | |
| 28.826 | 814698 | 5.6 | M | 100 | 5.8 | 5 | 0.1 | 50 | 0.07 | B | | 16 | 5.0CM | Y | 1 | Taylor,M.D | R |
| 28.93 | 814699 | 4.4 | S | AA | 14 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | S |
| 28.94 | 814700 | 4.5: | M | AA | 8 | 8 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | S |
| 28.94 | 814701 | 4.7 | S | AA | 8 | 8 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | S |
| 28.95 | 814702 | 4.2 | S | AA | 14 | 7 | 1 | | 0.050 | B | | 7 | | | | Green,D.W.E | T |
| 28.96 | 814703 | 4.2 | M | AA | 12 | 7 | 1 | | 0.080 | B | | 20 | | | | Green,D.W.E | T |
| 28.96 | 814704 | 4.5 | S | AA | 12 | 7 | 1 | | 0.080 | B | | 20 | | | | Green,D.W.E | T |
| 28.965 | 814705 | 5.0 | S | 100 | 12 | 4 | 0.25 | 70 | 0.035 | B | | 7 | 5.3M | Y | 3 | Morrison,W | |
| 28.968 | 814706 | 5.6 | M | 100 | | | 1.43 | | 0.050 | B | | 7 | | Y | 4 | Torres,E | U |
| 28.972 | 814707 | 5.6 | S | 100 | 4.4 | 7 | 0.1 | 70 | 0.203 | N | 6 | 101 | 5.0 | Y | 1 | Rudak,D.M | V |
| 28.99 | 814708 | 4.7 | S | AAVSO | 7 | 6 | | 60 | 0.050 | B | | 10 | | | | Bortle,J.E | W |

NOTE A Strong moonlight. SAO 146004 comparison star.
NOTE B Clouds and moon.
NOTE C City lights and moon.
NOTE D Bright moon. (Translated by IHW staff. Ed.)
NOTE E Diffuse cloud.
NOTE F Coma diameter 10 arc min. <. [sic] (Observer indicated "Y" method. Ed.)
NOTE G Seeing 3/5.
NOTE H Cloudy and twilight. (Observer gave limit as approximately 7.5. Ed.)
NOTE I Moon.
NOTE J (Observer indicated "F" method. Ed.)
NOTE K Naked eye!
NOTE L Moon. Antoniadi III.
NOTE M Gibbous moon and comet in clear sky. (Observer gave limit as 11.5. Ed.)
NOTE N Gibbous moon rising in NE sky. (Observer gave limit as 10.5. Ed.)
NOTE O Moon strong.
NOTE P Moon and cloud. Tail = ?, PA approximate.
NOTE Q Moon and cloud. Tail = ?, PA uncertain.
NOTE R Moonlight in E. Antoniadi II. Tail suspected to 0.3 deg.
NOTE S Coma diameter approximate.
NOTE T Coma diameter and tail length approximate.
NOTE U (Observer gave limit as 7.5. Ed.)
NOTE V Tail length and PA approximate.
NOTE W PA approximate. Moonlight.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.017 | 830590 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | A |
| 28.024 | 830591 | 0.6 | 0.203 | R | 13 | 85,225 | 10 | 3.8 | 1 | Fox,J.H | B |
| 28.026 | 830592 | | 0.203 | SC | 10 | 169 | | | 1 | Lohvinenko,T.W | C |
| 28.965 | 830593 | | 0.050 | B | | 7 | 20 | 7.5 | 3 | Cifuentes,E | D |
| 28.990 | 830594 | | 0.203 | SC | 10 | 70 | | 6.0 | | Williams,D.J | E |

NOTE A Today the nuclear magnitude is observed to be 7.6 (check star: SAO 76017) and an integrated magnitude of 5.6 (check star: 14 Piscium). The diameter of the nucleus is measured to be 20.3" and the diameter of the coma is measured to be 243.61". (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B NE tail spike seen best at 225x but glimpsed at 85x. The two S bright streaks seen only at 225x.
NOTE C A closer look at the comet shows it as a whitish-gray and a bluish white 'ion tail' at PA 51.5. The tail is straight like an arrow. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Only one tail visible, long and straight. Estimated 1 deg. 26 arc min. long. (Translated by IHW staff. Ed.)
NOTE E I can see a faint streak east of the comet. The tail is visible! The nucleus is still compact and star-like. (Duration not indicated. Time of observation is start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.954 | 850541 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 2.25 | Kodak 2415 | | Y | S | 7/P | 1 | Dilsizian,R | A |

NOTE A Exposures limited below 5 minutes to allow for stellar guiding with a minimum of "proper motion" distortion in resolution.

DATE: 29 DEC 1985 DATE: 29 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.000 | 814709 | 5.8 | B | 100 | | | | | 0.08 | B | | 11 | 4.0 | N | 1 | Gorski,L | A |
| 29.007 | 814710 | 4.7 | M | 100 | 22 | 7 | 0.6 | 290 | 0.05 | B | | 10 | 6.5 | Y | 4 | Fabre,R | B |
| 29.007 | 814711 | 6.0 | B | 100 | 15 | 6 | | | 0.06 | R | 8.3 | 30 | 4.0 | N | 1 | Fox,J.H | C |
| 29.01 | 814712 | 5.4 | B | 100 | 13 | 6 | | | 0.080 | B | | 20 | 4.0 | Y | | Kronk,G | |
| 29.011 | 814713 | 3.5: | B | 100 | | 6 | | 66 | 0.05 | B | | 20 | 3.5 | Y | 8 | da Silva,L.A.L | D |
| 29.012 | 814714 | 4.0 | B | 100 | 3.5 | 3 | | | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 29.021 | 814715 | 5.6 | B | 100 | 8 | 1 | 0.53 | 55 | 0.05 | B | | 7 | 6.0 | | | Lairet,R | |
| 29.03 | 814716 | 6.0 | B | 100 | 7.8 | 6 | 0.46 | 80 | 0.335 | N | 4.5 | 56 | 4.0 | Y | | Kronk,G | E |
| 29.042 | 814717 | 5.3: | | SAO 86 | | | | | 0.050 | B | | 7 | | Y | 1 | Minton,R.B | F |
| 29.094 | 814718 | 5.8 | S | 100 | 8 | 6 | | | 0.080 | B | | 11 | 3.9C | Y | 1 | Bailey,G | |
| 29.38 | 814719 | 4.5 | S | 4A | | | | | 0.08 | B | | 11 | 4.5 | Y | 3 | Momose,M | |
| 29.40 | 814720 | 5.4 | M | 100 | 5.9 | 7 | 0.42 | 65 | 0.08 | B | | 11 | 4.5M | Y | | Mitsuma,S | |
| 29.413 | 814721 | 5.2 | B | 100 | | | | | 0.05 | B | | 7 | 4.5C | Y | 1 | Hayashi,H | |
| 29.413 | 814722 | | | | 15 | 5 | 0.33 | | 0.12 | N | 6 | 40 | | | | Hayashi,H | |
| 29.42 | 814723 | 4.5 | S | 100 | 10 | 7 | 1.0 | | 0.08 | B | | 15 | 5.3TC | Y | 1 | Lovejoy,T | |
| 29.43 | 814724 | 5.3 | S | AAVSO | 4 | 5 | | | 0.13 | N | 6.3 | 24 | 3.0M | Y | 1 | Hayashi,A | |
| 29.44 | 814725 | 4.3 | S | 100 | | | | | 0.025 | B | | 3 | 5 | Y | 1 | Seargent,D | |
| 29.44 | 814726 | | | | | | 0.6 | 70 | 0.08 | B | | 15 | | | | Seargent,D | |
| 29.445 | 814727 | 5.2 | S | 100 | | 7 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 29.448 | 814728 | 5.0 | M | 100 | 6 | | | | 0.13 | N | 6 | 47 | 4.0 | Y | 1 | Ichikawa,K | |
| 29.450 | 814729 | | | | 5 | 9 | 0.1 | 90 | 0.15 | N | 8 | 50 | 5.0 | Y | 1 | Williams,P.F | |
| 29.47 | 814730 | 4.7 | S | 100 | 5 | | | | 0.07 | B | | 10 | 3.5M | Y | 1 | Yasuki,M | |
| 29.50 | 814731 | 5.8 | B | M | | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 29.56 | 814732 | 5.7 | B | M | | | | | 0.05 | B | | 7 | | | | Ponomaryov,E | |
| 29.67 | 814733 | 4.8 | B | E | 12 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 29.70 | 814734 | 5.3 | B | M | 13 | 2 | | | 0.07 | N | 8 | 33 | | | | Shitikov,A | |
| 29.72 | 814735 | 5.0 | M | 100 | 15 | 6 | | | 0.06 | R | 4 | 10 | 5.0 | Y | 3 | Granslo,B.H | G |
| 29.72 | 814736 | 5.7 | S | DCS 7 | | 6 | 0.67 | 80 | 0.080 | B | | 11 | | Y | 3 | Both,S.J.J | |
| 29.720 | 814737 | 5.1 | M | 100 | 18 | 8 | | | 0.030 | B | | 8 | 5.0 | Y | 5 | Villa,M | |
| 29.725 | 814738 | 4.6 | S | 100 | 6.7 | 7 | | | 0.05 | B | | 10 | 4.0T | N | 1 | Hurst,G.M | |
| 29.73 | 814739 | 5.5 | S | 100 | | | | | 0.08 | B | | 20 | 5.3 | | 1 | Shanklin,J.D | |
| 29.73 | 814740 | 4.3 | S | DCS 7 | 15 | 5 | 2 | 70 | 0.040 | B | | 7 | 5.5 | Y | 7 | Bus,E.P | H |
| 29.73 | 814741 | 4.9 | B | DCS 7 | | | | | 0.040 | B | | 7 | 5.5 | Y | 7 | Bus,E.P | |
| 29.73 | 814742 | 5.2 | B | M | | | | | 0.03 | B | | 8 | | | | Tsygankov,D | |
| 29.732 | 814743 | | | | 6.7 | 7 | 0.50 | 70 | 0.08 | B | | 15 | 4.6 | Y | 1 | Hurst,G.M | |
| 29.738 | 814744 | 5.0 | B | 4A | 20 | 7 | | | 0.05 | B | | 10 | 5 | Y | 1 | Ward,A | |
| 29.740 | 814745 | 4.6 | S | 100 | 7.5 | 6 | | 75 | 0.08 | B | | 11 | 5 | Y | 1 | Gainsford,M.J | |
| 29.740 | 814746 | 4.7 | M | 100 | | 7 | | | 0.089 | R | 13.7 | 32 | C | Y | 1 | Linger,S | I |
| 29.742 | 814747 | 5.1 | B | 4A | 20 | 7 | | | 0.06 | R | | 15 | 5 | Y | 1 | Ward,A | |
| 29.750 | 814748 | 5.7 | B | 100 | 3.8 | 6 | 0.08 | 95 | 0.330 | N | 4.5 | 59 | 4.7 | Y | 1 | Castino,R | J |
| 29.7500 | 814749 | 5.7 | B | 100 | | 7 | | | 0.05 | B | | 10 | 5.7C | Y | 2 | Franciosi,C | |
| 29.750 | 814750 | 5.7 | M | 100 | 5.5 | 5 | 0.1 | 40 | 0.04 | B | | 8 | 5.3C | Y | 1 | Taylor,M.D | K |
| 29.753 | 814751 | 4.7 | S | 100 | 4 | 7 | 0.23 | 70 | 0.25 | N | 6 | 60 | 5 | Y | 1 | Gainsford,M.J | |
| 29.753 | 814752 | 5.5 | S | 100 | 6 | 3 | 0.53 | 60 | 0.050 | B | | 10 | 5.6 | Y | 3 | Rogers,J.H | L |
| 29.753 | 814753 | 5.8 | M | 100 | 4.1 | 5 | 0.1 | 40 | 0.07 | B | | 16 | 5.3C | Y | 1 | Taylor,M.D | M |
| 29.760 | 814754 | 4.8 | S | 100 | 4.0 | 8 | 0.20 | 83 | 0.05 | B | | 10 | 4.8M | Y | 3 | Abbott,J | N |
| 29.778 | 814755 | 4.5 | B | 100 | 20 | 5 | | | 0.102 | R | 14.7 | 60 | | Y | | Medway,K | O |
| 29.79 | 814756 | 5.5 | | | 8 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | P |
| 29.799 | 814757 | 5.2 | B | 4A | | | | | 0.050 | B | | 7 | 5.5 | Y | 1 | van der Mey,L | Q |
| 29.82 | 814758 | 4.3 | B | 100 | 25 | 4 | | | 0.050 | B | | 7 | 5.5 | Y | 2 | Merlin,J.-C | |
| 29.834 | 814759 | 4.6 | S | 100 | 6.7 | 7 | | | 0.05 | B | | 10 | 3.0 | Y | 1 | Hurst,G.M | R |
| 29.84 | 814760 | 5.0 | S | DCS 8 | 4 | 7 | | | 0.050 | B | | 10 | 3.5MC | N | 1 | van Loo,F.R | |
| 29.95 | 814761 | 4.3 | M | AA | 13 | 7 | 1 | | 0.050 | B | | 7 | | | | Green,D.W.E | S |
| 29.95 | 814762 | 4.5 | S | AA | 13 | 7 | 1 | | 0.050 | B | | 7 | | | | Green,D.W.E | S |
| 29.955 | 814763 | 5.3 | M | 100 | 5.5 | 8 | 0.5 | 90 | 0.203 | N | 8 | 128 | 5.0 | Y | 1 | Hannon,J | |
| 29.96 | 814764 | 4.3 | M | AA | 15 | 5 | | | 0.035 | B | | 7 | | | | Green,D.W.E | H |
| 29.96 | 814765 | 4.2 | S | AA | 15 | 5 | | | 0.035 | B | | 7 | | | | Green,D.W.E | H |
| 29.96 | 814766 | 4.4 | S | AA | 10 | 7 | 1 | | 0.080 | B | | 20 | | | | Green,D.W.E | S |
| 29.972 | 814767 | 5.7 | S | 100 | 4.3 | 7 | 0.17 | 70 | 0.203 | N | 6 | 101 | 5.0 | Y | 1 | Hudak,D.M | T |
| 29.975 | 814768 | 5.6 | B | 100 | | 4 | 0.28 | 79 | 0.05 | B | | 7 | 5.0 | N | 3 | Benavides,A | |
| 29.98 | 814769 | 4.5 | M | AA | 6.5 | 8 | | | 0.203 | N | 6 | 38 | | | | Green,D.W.E | H |
| 29.98 | 814770 | 4.8 | S | AA | 6.5 | 8 | | | 0.203 | N | 6 | 38 | | | | Green,D.W.E | H |
| 29.986 | 814771 | 5.3 | B | 100 | | | | | 0.050 | B | | 10 | 5 C | Y | 1 | Robinson,R.L | |
| 29.986 | 814772 | 6.0 | B | 100 | | | | | 0.080 | B | | 20 | 6.0 | Y | | Smith,D | |
| 29.99 | 814773 | 4.8 | S | AAVSO | 9 | 6 | 0.8 | 55 | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 29.99 | 814774 | 4.9 | S | AA | 10 | 8 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | H |
| 29.993 | 814775 | | | | | 5 | | 63 | 0.05 | B | | 20 | 4.0 | Y | 8 | da Silva,L.A.L | U |
| 29.993 | 814776 | 4.0 | B | 100 | | 3 | | | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 29.997 | 814777 | 5.7 | M | 100 | | | 1.25 | | 0.050 | B | | 7 | | Y | 4 | Torres,E | V |

NOTE A Intermittent clouds.
NOTE B (PA value appears to be measured incorrectly. Ed.)
NOTE C SAO 146074 comparison star.
NOTE D Clouds and moonlight.
NOTE E Some moonlight.
NOTE F Used 7x50 binoculars out-of-focus. Estimated comet Halley to be halfway between Pi Aqu (SAO 127520) and 60 Aqu (SAO 146160). The first = 4.6 and the second = 5.9.
NOTE G Coma diameter uncertain.
NOTE H Coma diameter approximate.
NOTE I Clear. (Observer gave limit as 9.5. Ed.)
NOTE J Moon.
NOTE K Antoniadi II. Tail fanned.
NOTE L Coma slightly pear-shaped; tail very faint, broad.
NOTE M Tail fanned.
NOTE N Comparison stars 5.3, 4.7, 5.0, 4.0. Tail length and PA approximate. Moonlight.
NOTE O Slight mist. (Observer gave limit as 11.5. Ed.)
NOTE P (Observer gave limit as 8.6. Ed.)
NOTE Q First time seen with naked eye.
NOTE R Field very low.
NOTE S Coma diameter approximate. Tail length is lower limit.
NOTE T Tail length and PA approximate.
NOTE U Clouds (cumulus).
NOTE V (Observer gave limit as 7.5. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.003 | 830595 | 0.6 | 0.203 | R | 13 | 85,225 | 10 | 4.0 | 1 | Fox,J.H | A |
| 29.729 | 830596 | 0.25 | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | B |
| 29.733 | 830597 | 3.64 | 0.050 | B | | 12 | 50 | 6.5 | 2 | Pesci,S | C |

DATE: 29 DEC 1985



| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.740 | 830598 | 0.4 | 0.254 | N | 6.4 | 41 | 20 | 4.8 | 3 | Abbott,J | D |
| 29.742 | 830599 | 0.22 | 0.298 | N | 5 | 40, 65,269 | 27 | 6.0 | 1 | Stott,D | E |
| 29.747 | 830600 | 0.11 | 0.125 | N | 5.8 | 28, 40, 60 | 52 | 4.0 | 1 | Riccabone,G | F |
| 29.766 | 830601 | 0.37 | 0.406 | N | 5 | 68 | 5 | | 2 | Farroni,G | G |
| 29.782 | 830602 | 2.0 | 0.08 | B | | 15 | 179 | 4.6 | 1 | Hurst,G.M | H |
| 29.997 | 830603 | 0.46 | 0.200 | N | 8 | 81,130 | 20 | 5 | 1 | Robinson,R.L | I |
| 29.998 | 830604 | | 0.050 | B | | 7 | 15 | 7.5 | 3 | Cifuentes,E | J |

NOTE A Tail extension visible in both 0.203 m and 0.060 m finder at about PA 100. Coma brighter along W edge. Nucleus more condensed than recent nights. Central spike seen only at 225x.

NOTE B (Duration not indicated. Time of observation is assumed to be start time. Additional drawing submitted made using 11x80 binoculars (2'/mm). Ed.)

NOTE C About 1.9 deg. of tail easily visible through binocular. Total coma magnitude 4.5; DC 7/8. Comet easily visible naked eye at 15 deg. above horizon. Jet at PA 66. No other feature recorded.

NOTE D Moonrise as twilight ended. Moonlight and twilight interfered with the observation. Central condensation near stellar. Southernmost forward projection at PA 259 deg., approximately 1.0 arc min. Northernmost forward projection at PA 299 deg., approximately 1.6 arc min. Southernmost tail section at PA 75 deg., approximately 4.0 arc min. Central tail section at PA 69 deg., approximately 7.6 arc min. Northernmost tail section at PA 56 deg., approximately 12.8 arc min. Root tail width approximately 3.6 arc min. Semi latus rectum (northward) 2.4 arc min. Semi latus rectum (southward) 2.0 arc min. Vertex distance 2.4 arc min. Near stellar central condensation dominating the appearance of the coma. Asymmetrical coma about two axes and nonregular coma about edge - two forward projections appeared at PA 259 deg. and PA 299 deg. Tail surface brightness comparable with outer coma brightness. Evidence of tail structure - a faint southernmost component in PA 75, a central section in PA 69 and a dominant 12.8' tail in PA 56.

NOTE E Tail at PA 72. Jet at PA 320. Coma is irregular in shape with a spur at PA 104 deg. Tail seems offset from central condensation.

NOTE F Strongly pronounced luminous "mustaches" at PA 130 and at PA 47. Magnifications of 80 and 144 also used. Two drawings included. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)

NOTE G Apparent dimensions of the comet 5.4'x7.2'.

NOTE H Well condensed coma with nuclear condensation offset, PA 255 from coma center. Tail clearly seen in 15x80 binoculars, but only suspected with 10x50 binoculars, as a broad straight extension to the coma in PA 70 deg., length 30'. Coma diameter 6.7', DC 7.

NOTE I The central condensation was almost nonexistent. The coma simply gradually brightened toward the central region. A dark lane in the tail just behind the head appeared briefly and then was not seen again.

NOTE J Gas tail straight, easily visible (especially in the first third). Not able to see dust tail. Estimated length 1 deg. 15'. Positioned at low altitude above horizon. (Translated by IHW staff. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.012 | 850542 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 4.50 | Kodak 2415 | | Y | O | 14/P | 1 | Crist,M | A |
| 29.020 | 850543 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 10.00 | Kodak 2415 | | Y | O | 15/P | 1 | Crist,M | B |
| 29.032 | 850544 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 12.00 | Kodak 2415 | | Y | O | 16/P | 1 | Crist,M | C |
| 29.050 | 850545 | 1.583 | 8 | 0.203 | 1.3 x 0.9 | 15.00 | Kodak 2415 | | Y | S | 8/P | 1 | Minton,R.B | D |
| 29.442 | 850546 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.50 | Kodak 2415 | | Y | O | 1/S | 6 | Garradd,G | |
| 29.738 | 850547 | 0.600 | 1.7 | 0.350 | 3.4 x 2.3 | 15.00 | Ilford FP4 | 125/ | N | O | 1/T | 1 | Valisa,P | E |
| 29.741 | 850548 | 0.500 | 5.6 | | 4.1 x 2.7 | 8.17 | Kodak Tri-X | 400/ | N | X | 3/P | 1 | Ward,A | F |
| 29.742 | 850549 | 1.780 | 5 | 0.356 | 1.2 x 0.8 | 24.00 | 3M 1000 | 1000/ | N | M | 1/P | 1 | Mobberley,M | |
| 29.743 | 850550 | 0.058 | 2 | | 34.5 x23.4 | 5.00 | Fujichrome | 400/27 | N | O | 4/S | 2 | Townsend,R | |
| 29.748 | 850551 | 0.394 | 2.4 | 0.165 | 5.2 x 3.5 | 15.00 | Kodak Tri-X | | N | | 703/P | | Soc. Astro. de France | G |
| 29.975 | 850552 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 2.00 | Kodak 2415 | | Y | S | 8/P | 1 | Dilsizian,R | H |
| 29.976 | 850553 | 0.050 | 4.0 | | 39.6 x27.0 | 5.00 | Kodak Tri-X | | N | | 172/P | | Gianforte,J.S | I |

NOTE A Moon 3 deg. above horizon. City lights interfered with the observation. (Observer's image identifier is followed by suffix A. Ed.) Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.

NOTE B Moon 4 deg. above horizon. City lights interfered with the observation. (Observer's image identifier is followed by suffix A. Ed.) Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.

NOTE C Moon 9 deg. above horizon. Moonlight interfered with the observation. (Observer's image identifier is followed by suffix A. Ed.) Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.

NOTE D (Print submitted by observer is a composite of three 5 min. exposures; the first and second were separated by 10 min. and the second and third were separated by 1 min. Ed.)

NOTE E Instrument is Schmidt camera. Large format film used.

NOTE F UV filter used.

NOTE G Photgraph made by B. Fouquet.

NOTE H Exposures limited below 5 minutes to allow for stellar guiding with a minimum of "proper motion" distortion in resolution.

NOTE I (Observer's image identifier is 107-2. Observer listed emulsion speed as ASA 800. Ed.)

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.981 | 870106 | 42P-O | CL | 0.400 | 6.3 | | 6.25 | Ektachrome | 400/27 | N | C | 16/P | 1 | Grieser,D | A |
| 29.998 | 870107 | 42P-O | CL | 0.400 | 6.3 | | 4.00 | Ektachrome | 400/27 | N | C | 20/P | 1 | Grieser,D | A |

NOTE A Gamma Aquarii in same field. Prism glass type uncertain. Film emulsion at ambient temperature of 0 C.

DATE: 30 DEC 1985 DATE: 30 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.00 | 814778 | 6.0 | B | 100 | 10 | 5 | 0.5 | 75 | 0.15 | N | 8 | 60 | 5.5 | Y | 4 | Gilchrist,D.K | A |
| 30.00 | 814779 | 4.5 | S | 100 | 20 | 7 | 1 | 110 | 0.203 | N | 7 | 54 | 5.0 | Y | 1 | Harrington,P | B |
| 30.003 | 814780 | 6.1 | M | 100 | | | 0.83 | 88 | 0.050 | B | | 10 | 5.0 | Y | 1 | Smith,A | C |
| 30.007 | 814781 | 5.0 | B | 100 | 30 | 8 | 0.75 | 90 | 0.20 | SC | 10 | 77 | 5.5 | Y | 1 | Hodonsky,K | |
| 30.014 | 814782 | 6.1 | B | 100 | 20 | 6 | 2 | 90 | 0.152 | R | 5 | 24 | 4.7 | N | 1 | Fox,J.H | D |
| 30.02 | 814783 | 5.4 | B | 100 | 8.9 | 8 | 2.0 | 68 | 0.15 | N | 8 | 30 | 6.1 | Y | 1 | McBride,P | E |
| 30.021 | 814784 | 4.8 | M | 100 | 35 | 7 | 1.53 | 63 | 0.125 | B | | 20 | 6.2 | Y | 1 | Ariail,R.B | |
| 30.021 | 814785 | 4.7 | M | 100 | 22 | 7 | 0.63 | 290 | 0.05 | B | | 10 | 6.5 | Y | 4 | Fabre,R | F |
| 30.035 | 814786 | 5.8 | B | 100 | | | | | 0.08 | B | | 11 | 5.0 | Y | 1 | Gorski,L | |
| 30.045 | 814787 | | | 100 | | 2 | | 58 | 0.152 | N | 8 | 38 | 4.5 | | | Lairet,R | |
| 30.05 | 814788 | 5.5 | B | 100 | 12 | | | | 0.080 | B | | 20 | 4.0 | Y | | Kronk,G | |
| 30.05 | 814789 | 6.1 | B | 100 | 6.8 4.5 | | 0.48 | 69 | 0.335 | N | 4.5 | 56 | 4.0 | Y | | Kronk,G | G |
| 30.052 | 814790 | 6.1 | B | 100 | | | | | 0.035 | B | | 7 | 5.5 | Y | 4 | Gilchrist,D.K | |
| 30.056 | 814791 | 6.1 | | SAO 86 | | | | | 0.050 | B | | 7 | 5 | Y | 1 | Minton,R.B | H |
| 30.072 | 814792 | 5.4 | M | 100 | 4.1 | 7 | 1.4 | 60 | 0.203 | N | 4.5 | 34 | 4.4C | N | 1 | de la Rosa Jr,A | I |
| 30.08 | 814793 | 5.2 | | 4A | 5 | 6 | 0.7 | 70 | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | J |
| 30.09 | 814794 | | | 4A | 7 | 7 | 1.0 | 70 | 0.32 | N | 4 | 33 | 5.5 | Y | 1 | Keen,R | K |
| 30.135 | 814795 | 6.0 | S | 100 | 36 | 6 | | | 0.203 | SC | 10 | 125 | 3.5CM | Y | 1 | Gronek,J.D | L |
| 30.351 | 814796 | 5.5 | M | 100 | 8 | 5 | 0.58 | 110 | 0.444 | N | 4.4 | 221 | 5.4 | Y | 1 | Glassett,W | M |
| 30.406 | 814797 | 5.1 | S | 100 | 15 | 5 | 0.58 | 80 | 0.07 | B | | 10 | 2.0 | Y | 1 | Kobayashi,J | |
| 30.42 | 814798 | 4.4 | S | 100 | | 7 | 2.0 | | 0.08 | B | | 15 | 6.0 | Y | 3 | Lovejoy,T | N |
| 30.458 | 814799 | 5.0 | S | 100 | 10 | 3 | | | 0.050 | B | | 12 | 4.0 | Y | 1 | Batza,H | O |
| 30.60 | 814800 | 5.6 | B | M | | | | | 0.05 | B | | 7 | | | | Ponomaryov,E | |
| 30.663 | 814801 | 6.3 | B | 100 | | | | | 0.04 | B | | 8 | 3.0C | N | 1 | Czerniewski,W | P |
| 30.68 | 814802 | 4.9 | B | AAVSO | 8 | 6 | 2.5 | 66 | 0.05 | R | 4 | 7 | | | | Chernis,K | |
| 30.68 | 814803 | 5.1 | B | AAVSO | 5.5 | 6 | 1 | 66 | 0.20 | N | 4 | 30 | | | | Selevich,G | |
| 30.684 | 814804 | 6.0 | B | 100 | 3 | 7 | 0.25 | | 0.063 | R | 13.3 | 21 | 5.5C | Y | 1 | Pilski,A | |
| 30.688 | 814805 | 5.3 | B | 100 | | | | | 0.050 | B | | 7 | 5.0 | Y | 1 | Bohme,D | |
| 30.688 | 814806 | 5.9 | M | CZ | 4 | 8 | | | 0.055 | R | | 12 | 5.4T | N | 1 | Silhan,J | |
| 30.694 | 814807 | 5.5 | B | 100 | | | | | 0.050 | B | | 10 | 6.0 | Y | 1 | Trebacz,A | |
| 30.698 | 814808 | 5.8 | M | CZ | 8 | 7 | | | 0.05 | B | | 7 | 5.6 | Y | 1 | Silhan,J | |
| 30.701 | 814809 | 5.2 | M | 100 | | | | | 0.060 | R | 4.5 | 10 | 6.1 | Y | 1 | Chodorowski,F | |
| 30.705 | 814810 | | | | 15 10 | 5 | 0.08 | 63 | 0.064 | R | 12 | 32 | 6.1 | Y | 1 | Chodorowski,F | |
| 30.705 | 814811 | 5.4 | B | CZ | 15 | | | | 0.04 | B | | 7 | | Y | 1 | Brancik,K | Q |
| 30.705 | 814812 | 5.2 | S | 100 | | 7 | 0.5 | | 0.05 | B | | 7 | 6.5M | Y | 1 | Dziura,W | |
| 30.705 | 814813 | 5.6 | M | CZ | 6 | 6 | | | 0.03 | B | | 8 | 5.8 | Y | 1 | Silhan,J | |
| 30.705 | 814814 | 5.7 | M | 100 | 6.5 | 7 | 0.2 | 66 | 0.09 | M | 11 | 56 | 5.5 | Y | 3 | Westlund,M | |
| 30.708 | 814815 | 5.3 | M | 100 | | | | | | EY | | | 6.1 | Y | 1 | Chodorowski,F | |
| 30.708 | 814816 | 5.4 | B | 100 | 7 | 4 | | | 0.08 | B | | 10 | 4 C | Y | 1 | Paradowski,M | |
| 30.708 | 814817 | 4.9 | M | CZ | 12 | | | | 0.10 | B | | 25 | 5 C | Y | 1 | Valasek,V | R |
| 30.71 | 814818 | 5.7 | B | 100 | 3 | 9 | | | 0.203 | SC | 10 | 44 | 5.0C | Y | 2 | Maraziti,A | S |
| 30.711 | 814819 | 5.5 | B | 100 | 10.2 | 5 | | | 0.066 | R | 15.2 | 30 | 4.5 | Y | 1 | Gora,D | |
| 30.712 | 814820 | 5.3 | M | 100 | | | | | 0.030 | B | | 6 | 6.1 | Y | 1 | Chodorowski,F | |
| 30.712 | 814821 | 5.6 | M | CZ | 6 | 6 | | | 0.055 | R | | 12 | 5.8 | Y | 1 | Silhan,J | T |
| 30.714 | 814822 | 5.5 | | 100 | 7 | 8 | | 340 | 0.050 | B | | 10 | 4.0 | Y | 4 | Thomas,A | U |
| 30.7188 | 814823 | 5.3 | S | 100 | 26 | 8 | 0.68 | 56 | 0.08 | B | | 10 | 5.6 | Y | 1 | Znasik,M | |
| 30.719 | 814824 | | | | | | | | 0.250 | N | 6 | 36 | 4.2 | Y | 1 | Guthier,O | V |
| 30.72 | 814825 | 5.7 | B | 100 | | | | | 0.05 | B | | 7 | 5.0C | Y | 2 | Maraziti,A | |
| 30.720 | 814826 | | | 100 | 9 | | | | 0.050 | B | | 7 | 3.0C | N | 1 | Ruiz,J | |
| 30.72 | 814827 | 5.3 | B | M | | | | | 0.08 | B | | 40 | | | | Palko,Yu | |
| 30.720 | 814828 | 4.7 | M | 100 | | 6 | | | 0.089 | R | 5.5 | 18 | 4.2 | N | 1 | Ventura,F | W |
| 30.721 | 814829 | 5.2 | B | IHW | | | 2 | | 0.080 | B | | 20 | 4.2 | Y | 1 | Guthier,O | |
| 30.722 | 814830 | 6.0 | M | 100 | 30 | 4 | 1.33 | 45 | 0.050 | B | | 6 | 5.8M | Y | 2 | Honko,M | |
| 30.722 | 814831 | | | 100 | | 4 | | | 0.10 | R | 10 | 25 | 4 C | Y | 1 | Paradowski,M | |
| 30.729 | 814832 | 4.8 | S | 100 | | 7 | | | 0.050 | B | | 7 | 5.0 | N | 1 | Lunde,R | X |
| 30.729 | 814833 | 5.3 | M | 100 | | 6 | | | 0.08 | B | | 10 | 4.5C | N | 1 | Rapavy,P | Y |
| 30.736 | 814834 | 6.0 | M | 100 | 25 | 5 | 1 | 50 | 0.067 | R | 12 | 60 | 5.0C | Y | 1 | Kosinski,J | Z |
| 30.736 | 814835 | 5.3 | M | 100 | | 7 | | 71 | 0.05 | B | | 12 | 3.5 | Y | 1 | Tanti,T | a |
| 30.740 | 814836 | 6.0 | B | 100 | 25 | 5 | 1 | 50 | 0.067 | R | 12 | 60 | 5.0C | Y | 1 | Nieborek,T | |
| 30.743 | 814837 | 5.2 | B | 100 | 9 6 | 6 | 0.3 | 30 | 0.200 | R | 15 | 120 | 5.5 | Y | 1 | Kalauch,K.-D | |
| 30.750 | 814838 | 6.0 | | | 9.6 6.7 | 6 | 0.3 | 302 | 0.050 | R | 11 | 22 | 6.0 | Y | 1 | Kliche,J | |
| 30.75 | 814839 | 4.2 | B | 100 | 20 | 5 | 1.15 | 51 | 0.050 | B | | 7 | 6.5 | Y | 2 | Merlin,J.-C | |
| 30.750 | 814840 | 4.9 | S | 100 | 7 | 6 | | | 0.050 | B | | 7 | 4.6C | Y | 3 | Piccinini,M | |
| 30.758 | 814841 | 5.8 | B | 100 | | 7 | | | 0.050 | B | | 7 | 5.0C | Y | 1 | Temprano,J | |
| 30.766 | 814842 | 4.2 | S | 100 | 8 | 7 | | | 0.050 | B | | 7 | 5.2M | N | 1 | Meozzi,D | |
| 30.77 | 814843 | 5.3 | B | DCS 7 | 7 | 8 | 0.08 | 55 | 0.115 | N | 8 | 45 | 4.5C | Y | 1 | van Munster,T | |
| 30.771 | 814844 | 5.2 | B | | | 3 | | | 0.080 | R | 6.2 | 12 | 4.0 | Y | 1 | Lieder,F | |
| 30.78 | 814845 | 4.2 | B | DCS 7 | 11 | 3 | | | 0.050 | B | | 7 | 3 C | N | 2 | Verhoeven,P.G | |
| 30.785 | 814846 | 5.9 | M | CZ | 32 | 4 | | | 0.05 | B | | 7 | 5.0 | Y | 1 | Hajek,P | |
| 30.792 | 814847 | 5.4 | B | | 16.0 | 5 | | | 0.063 | R | 13.3 | 44 | 6.0 | Y | 1 | Bartnik,M | |
| 30.792 | 814848 | 5.0 | B | 4A | | | 0.67 | 86 | 0.050 | B | | 7 | 5.8 | Y | 1 | van der Mey,L | b |
| 30.80 | 814849 | 5.3 | | | 4 | | | | 0.034 | B | | 9 | | | 1 | Pereira,A | c |
| 30.813 | 814850 | 5.5 | M | 100 | 20 | 5 | | | 0.050 | B | | 10 | 3.5C | N | 1 | Lozano,L | d |
| 30.94 | 814851 | 4.2 | S | AA | 12 | 6 | | | 0.035 | B | | 7 | | | | Green,D.W.E | e |
| 30.95 | 814852 | 4.2 | M | AA | 12 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | e |
| 30.95 | 814853 | 4.4 | S | AA | 12 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | e |
| 30.96 | 814854 | 4.3 | S | AA | 10 | 7 | 2 | 56 | 0.080 | B | | 20 | | | | Green,D.W.E | f |
| 30.963 | 814855 | 5.4 | B | 100 | | 5 | 0.31 | 65 | 0.05 | B | | 7 | 5.1 | N | 3 | Benavides,A | |
| 30.969 | 814856 | 5.0 | B | 100 | | | | | 0.050 | B | | 10 | 4.8C | Y | 1 | Robinson,R.L | |
| 30.981 | 814857 | | | 100 | 7.1 6.2 | 5 | 0.28 | 53 | 0.113 | N | 8 | 45 | 5.0 | N | 3 | Benavides,A | g |
| 30.983 | 814858 | | | | 4.0 | 7 | | | 0.203 | R | 13 | 110 | | Y | 1 | Phillips,J | |
| 30.99 | 814859 | 4.7 | S | AA | 7 | 7 | 1.0 | 64 | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 30.99 | 814860 | 4.8 | S | AAVSO | | | | | | EY | | | | | | Bortle,J.E | h |
| 30.99 | 814861 | | | | | 6 | 1.5 | 64 | 0.120 | B | | 20 | | | | Bortle,J.E | |
| 30.99 | 814862 | | | | 4.2 | | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | |
| 30.99 | 814863 | | | | 3.5 | | 0.5 | 64 | 0.500 | N | 5 | 96 | | | | Bortle,J.E | i |
| 30.993 | 814864 | 5.0 | S | 4A | 5.0 | 3 | | | 0.08 | R | 11 | 21 | 4.7C | N | 1 | Graves,D | j |
| 30.997 | 814865 | 5.6 | B | 100 | 8 | 2 | 0.60 | 58 | 0.05 | B | | 7 | 4.5 | | | Lairet,R | |

NOTE A Faint tail. Coma diameter, tail length and position angle are rough estimations.
NOTE B Bluish color = coma.
NOTE C Tail very faint.
NOTE D SAO 145989 comparison star.
NOTE E Nucleus undefined.
NOTE F (PA value appears to be measured incorrectly. Ed.)
NOTE G 45 deg. alt. Some moon.
NOTE H Used 7x50 binoculars out-of-focus. Magnitude was close to that of SAO 145989, RA 22h 14m, Dec. -1 deg. 50m, Mv = 6.1, SP = A2.
NOTE I Clear skies, street lights.
NOTE J Moon and cloud interference. Modified Sidgwick method used.
NOTE K Moon and cloud interference.

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NOTE L Good see.
NOTE M Finally a long thin tail! Nucleus seems to show envelopes being thrown off. View was limited to short intervals between clouds and even a few rain drops; the clouds covered the sky. See drawing.
NOTE N Tail visible in 8x30 binoculars.
NOTE O Moon & haze.
NOTE P Very bad weather.
NOTE Q A cloud cover came... [sic]
NOTE R Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE S Nucleus magnitude 9.7.
NOTE T Comet seen with naked eye?
NOTE U In 20x70, elongated. (Observer indicated "A" method [Argelander?]. PA value appears to be incorrect. Ed.)
NOTE V Core magnitude 8 to 9.
NOTE W A tail was suspected both at the eastern end and at the western (!) end of the coma. The western tail (?) appears as a faint glowing extension of the coma. Strong haze prevents a good estimate of its size.
NOTE X Faint haze.
NOTE Y Coma ellipt.
NOTE Z Tail length approximate. Smokey chimneys.
NOTE a Seeing good, transparency poor. Haze. Wind. Artificial light.
NOTE b Type I tail.
NOTE c (Observer gave limit as 8.6. Ed.)
NOTE d Fog.
NOTE e Coma diameter approximate.
NOTE f Coma diameter and tail length approximate.
NOTE g Observation completed 851231 at 0010. Due to clouds observations were momentarily suspended. (Translated by IHW staff. Ed.)
NOTE h Like slightly diffuse star.
NOTE i Tail only 0.3' wide!
NOTE j Urban city lights.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.003 | 830605 | 0.6 | 0.203 | R | 13 | 85,150,225 | 10 | 4.7 | 1 | Fox,J.H | A |
| 30.003 | 830606 | | 0.105 | N | 4.2 | | | 6.0 | | Williams,D.J | B |
| 30.005 | 830607 | 0.1 | 0.204 | N | 8 | 58,271 | 14 | 5.0 | 1 | Robinson,P.C | C |
| 30.024 | 830608 | 2 | 0.13 | SC | 10 | 32,100 | 30 | 6.0 | 1 | Hays Jr,R.H | D |
| 30.037 | 830609 | 0.29 | 0.203 | N | 6 | 38, 61,116 | 16 | 5.5 | 1 | Williams,J | E |
| 30.350 | 830610 | | 0.444 | N | 4.4 | 44, 99 | 144 | 5.4 | 1 | Glassett,W | F |
| 30.700 | 830611 | 1.6 | 0.090 | M | 11 | 56 | 15 | 5.0 | 3 | Westlund,M | |
| 30.722 | 830612 | 0.05 | 0.100 | B | | 25 | 10 | 3.8 | 1 | Havrilak,M | |
| 30.757 | 830613 | 0.05 | 0.100 | B | | 25 | 20 | 3.8 | 1 | Gojdic,S | |
| 30.757 | 830614 | 0.25 | 0.356 | SC | 11 | 200 | 100 | | 1 | Verdenet,M | G |
| 30.807 | 830615 | 0.05 | 0.83 | R | 19.7 | 800 | 9 | 4.8 | 3 | Soc. Astro. de France | H |
| 30.819 | 830616 | 0.04 | 0.83 | R | 19.7 | 800 | 19 | | 3 | Soc. Astro. de France | I |
| 30.832 | 830617 | 2 | 0.05 | R | 7 | 40 | 25 | 4.5 | 4 | Kopp,M | J |
| 30.940 | 830618 | 1 | 0.203 | SC | 10 | 80 | 6 | 5.0 | 1 | Farrington,W.R | K |
| 30.983 | 830619 | 0.22 | 0.203 | R | 13 | 110 | | | | Phillips,J | L |
| 30.995 | 830620 | 0.35 | 0.200 | N | 8 | 81,130,203 | 15 | 4.8 | 1 | Robinson,R.L | M |

NOTE A Nucleus appears wedge shaped, fanned with apex to E. "Winged" extensions best seen at 150x, but also glimpsed at 225x. Tail very visible at 85x with many streaks. UHC nebula filter used with no enhancing effect, only overall dimming of field.
NOTE B Halley appears as a round, fuzzy object using the 16x. The 30x gives a more impressive veiw. A faint tail does extend east of the comet. (Separate drawings at 16x and 30x submitted. Duration not indicated. Time of observation is start time. Ed.)
NOTE C Ray tail at PA 75; diffuse tail >8' length at PA 75-100; diffuse tail about 3' length at PA 50-75. Diffuse tail at PA 75-100 was much longer than tail at PA 50-75. The west quarter of the coma was the brightest. The center was highly condensed but not stellar. City lights interfered with the observation.
NOTE D Ray or spine N edge tail at PA 60 from 'nucleus'. NE streamer at PA 45; SE streamer at PA 120; fan or hood from PA approximately 40 to 180 vertex distance approximately 2'. 'Nucleus' was very tiny and about mag. 11.
NOTE E Looked basically the same as before - coma brightening towards the center. However, the impression of a tail was much stronger, though not certain. City lights interfered with the observation.
NOTE F Tail length 35 arc min. but clouds closed in before accurate measurement possible.
NOTE G (Additional drawing submitted made using 11x80 binoculars (2.0'/mm). Ed.)
NOTE H Jet at PA 8, 28" long; jet at PA 172, 35" long; jet at PA 217, 26" long; jet at PA 345, 25" long. Drawing made by Alain Perez.
NOTE I Streamer at PA 5, 42" long; streamer at PA 10, 37" long; jet at PA 32, 25" long; tail at PA 80, 60" long; jet at PA 120, 23" long; streamer at PA 145, 35" long; streamer at PA 165, 25" long; jet at PA 207, 18" long. Drawing made by Serge Thebault.
NOTE J Temperature: -1 deg. C. Coma shows a weak but definite intensity peak at center. Tail bright; irregular structure at the end(!). Vertex distance: V = 14.2'. Semi latus rectum: P1 = 11.0', P2 = 10.0'. Tail PA 50 deg.
NOTE K Degree of condensation 5. The comet was much brighter than on the 9th when last observed. The tail now 20' long and very bright. The nucleus was very off-center in the coma and quite bright. The tail was very striking now being about 1.5 coma diameters broad.
NOTE L City lights. Nucleus appears stellar. Tail noted! Tail very, very faint and only glimpsed with averted vision. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE M The central condensation of the coma, in contrast to 24 hours earlier had a bright stellar appearance. My thought when first seeing the comet was that it was passing over a bright star. The northwest quadrant of the coma was noticeably brighter than the rest of the coma. The forward half of the coma was brighter than the aftward half. At times there appeared to be a distinct line of separation of the forward half of the coma from the aftward half. A narrow tail projected eastward for at least a degree.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.001 | 850554 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 10.00 | Kodak 2415 | | Y | O | 17/P | 1 | Crist,M | A |
| 30.008 | 850555 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 1.50 | Kodak 2415 | | Y | O | 18/P | 1 | Crist,M | A |
| 30.017 | 850556 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 20.00 | Kodak 2415 | | Y | O | 19/P | 1 | Crist,M | A |
| 30.029 | 850557 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 5.00 | Kodak 2415 | | Y | O | 20/P | 1 | Crist,M | A |
| 30.685 | 850558 | 0.500 | 5 | 0.100 | 4.1 x 2.7 | 13.00 | ORWO NP 27 | 400/27 | N | C | 1/N | 1 | Rapavy,P | B |
| 30.694 | 850559 | 0.750 | 6.3 | | 2.7 x 1.8 | 20.00 | ORWO | 400/27 | N | C | 6/N | | Znasik,M | C |
| 30.703 | 850560 | 0.400 | 5.5 | | 5.2 x 3.4 | 10.00 | ORWO NP 27 | 400/27 | N | O | 11/N | 1 | Kamenickj',M | D |
| 30.705 | 850561 | 1.000 | 5.6 | | 2.1 x 1.4 | 21.00 | Fomapan | 400/27 | N | | 7/N | 1 | Skvarka,J | E |
| 30.707 | 850562 | 0.500 | | | 4.1 x 2.7 | 15.00 | Fomapan F27 | 400/27 | N | O | 1/N | 1 | Maturkanic,M | F |
| 30.712 | 850563 | 0.400 | 5.5 | | 5.2 x 3.4 | 10.00 | ORWO NP 27 | 400/27 | N | O | 12/N | 1 | Kamenickj',M | D |
| 30.738 | 850564 | 0.400 | 5.5 | | 5.2 x 3.4 | 24.00 | ORWO NP 27 | 400/27 | N | O | 14/N | 1 | Kamenickj',M | D |
| 30.770 | 850565 | 0.394 | 2.4 | 0.165 | 5.2 x 3.5 | 18.00 | Kodak 2415 | | N | | 704/P | | Soc. Astro. de France | G |
| 30.970 | 850566 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 2.50 | Kodak 2415 | | Y | S | 9/P | 1 | Dilsizian,R | H |
| 30.995 | 850567 | 0.200 | 4.5 | | 10.3 x 6.9 | 15.00 | Kodak Tri-X | | N | T | 2/C | 1 | Priester,D.C | I |

NOTE A Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5. (Observer's image identifier is followed by suffix A. Ed.) City lights interfered with the observation.
NOTE B City lights interfered with the observation. Large format (68x87 mm) film used.
NOTE C Large format (11.8x8.6 cm) film used.
NOTE D 6x6 cm format film used.
NOTE E 120 size film used.
NOTE F Twilight and city lights interfered with the observation.
NOTE G Photograph made by B. Fouquet.

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NOTE H Exposures limited below 5 minutes to allow for stellar guiding with a minimum of "proper motion" distortion in resolution.
NOTE I Push processed to 800 ASA.

DATE: 31 DEC 1985

DATE: 31 DEC 1985

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.010 | 814866 | 5.8 | B | 100 | 13 | 9 | 6 | | 65 | 0.05 | B | | 7 | 6.0 | Y | 11 | Chmielewski,W | |
| 31.017 | 814867 | | | 100 | 8 | | 2 | 0.40 | 60 | 0.05 | B | | 7 | 4.5 | | | Lairet,R | |
| 31.019 | 814868 | | | | | | | | | 0.362 | N | 5 | | 5.5 | Y | 1 | Stephan,C | A |
| 31.037 | 814869 | 5.5 | M | 100 | | | | 1.25 | | 0.050 | B | | 7 | | Y | 4 | Torres,E | B |
| 31.052 | 814870 | 4.6 | M | 100 | 7 | | 7 | 0.4 | 55 | 0.05 | B | | 7 | 4.5 | Y | 3 | DeYoung,J.A | C |
| 31.08 | 814871 | 4.8 | | 4A | 10 | | 7 | 1.0 | 70 | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | D |
| 31.09 | 814872 | 4.7 | V | 4A | | | | | | | EY | | | 6.0 | Y | 1 | Keen,R | |
| 31.10 | 814873 | 4.7 | M | 100 | | | 7 | 3.75 | 63 | 0.080 | B | | 20 | 4.5 | Y | 7 | Morris,C.S | |
| 31.10 | 814874 | 4.0 | S | 100 | 20 | | 6 | 1.25 | 60 | 0.080 | B | | 11 | 4.9 | Y | 1 | Spratt,C.E | E |
| 31.108 | 814875 | 4.9 | B | 100 | | | | | | 0.08 | B | | 11 | | | 5 | Edberg,S.J | |
| 31.11 | 814876 | 4.1 | S | 100 | 20 | | 6 | 1 | 60 | 0.140 | SN | 3.6 | 28 | 5.0 | Y | 1 | Spratt,C.E | F |
| 31.11 | 814877 | 4.0 | S | 100 | 18 | | 7 | 0.75 | 60 | 0.200 | SC | 10 | 64 | 5.0 | Y | 1 | Spratt,C.E | G |
| 31.375 | 814878 | 4.7 | S | 100 | 4 | | 5 | | | 0.153 | N | 8.6 | 52 | 3.0 | Y | 1 | Iwaki,Y | |
| 31.399 | 814879 | 5.1 | B | 100 | | | | | | 0.07 | B | | 10 | 3.7 | Y | 1 | Date,M | |
| 31.40 | 814880 | 5.0 | | | 25 | | 7 | | | 0.23 | | 4.4 | 40 | 4.0 | Y | 1 | Washi,I | H |
| 31.401 | 814881 | 4.2 | S | 100 | 9 | | 5 | 1.5 | 80 | 0.07 | B | | 10 | 5.0 | Y | 1 | Kobayashi,J | |
| 31.41 | 814882 | 4.9 | S | AAVSO | 6 | | 6 | 0.67 | 70 | 0.13 | N | 6.3 | 24 | 5.5M | Y | 1 | Hayashi,A | |
| 31.420 | 814883 | 4.8 | M | 100 | 7 | | 6 | | | 0.030 | B | | 8 | 3.5C | Y | 2 | Kato,T | I |
| 31.43 | 814884 | 4.2 | S | 4A | 15 | | 7 | | | 0.08 | B | | 11 | 6.0 | Y | 3 | Momose,M | J |
| 31.44236 | 814885 | 5.2 | B | 100 | | | 5 | 0.33 | 90 | 0.15 | N | 6 | 28 | 5 | Y | 1 | Okumura,S | |
| 31.45 | 814886 | 4.6 | S | 100 | 7 | | 7 | 0.5 | 60 | 0.15 | N | 5.3 | 32 | 5.0C | Y | 1 | Oka,A | |
| 31.46 | 814887 | 4.7 | B | | 10 | | 6 | 1.2 | 70 | 0.16 | N | 4.8 | 24 | 5.5 | Y | 1 | Maeda,S | |
| 31.531 | 814888 | 5.0 | M | 100 | 5.6 | | 8 | | | 0.060 | R | 15 | 45 | 4.0TC | Y | 1 | Purvinskis,R | K |
| 31.58 | 814889 | 4.8 | S | 100 | 7 | | 6 | 0.58 | 73 | 0.41 | N | 4.2 | 86 | 4.5 | N | | Clark,M.L | |
| 31.63 | 814890 | 4.9 | B | M | 4 | | | 0.5 | | 0.05 | B | | 7 | | | | Nesterov,Yu | L |
| 31.64 | 814891 | 5.6 | M | M | 15 | | 6 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 31.667 | 814892 | 5.5 | B | 100 | | | | | | 0.04 | B | | 8 | 4.0C | Y | 1 | Czerniewski,W | |
| 31.67 | 814893 | 5.1 | B | AAVSO | 10 | | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 31.67 | 814894 | 4.7 | B | E | 12 | | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 31.67 | 814895 | 4.7 | B | E | | | | 1 | 52 | 0.16 | N | | 30 | | | | Mormil,V | |
| 31.684 | 814896 | 5.6 | B | 100 | 3 | | 6 | 0.10 | | 0.063 | R | 13.3 | 21 | 4.5C | Y | 1 | Pilski,A | |
| 31.694 | 814897 | 5.3 | M | 100 | | | | | | 0.030 | B | | 6 | 4.5 | Y | 1 | Chodorowski,F | M |
| 31.694 | 814898 | 5.1 | B | 100 | 5.5 | | 6 | 0.93 | 66 | 0.080 | R | 15 | 39 | 3.7C | Y | 1 | Szulc,M | |
| 31.70 | 814899 | 5.2 | B | 100 | 13 | | 6 | | | 0.050 | B | | 7 | 5.3 | Y | 1 | Jahn,J | |
| 31.701 | 814900 | 4.5 | B | | 5.7 | 2.4 | 4 | 1.5 | | 0.030 | B | | 8 | 5.0C | Y | 1 | Winkler,R | |
| 31.705 | 814901 | 4.6 | S | 100 | 23 | | 8 | 2 | 70 | 0.152 | N | 5 | 44 | 5.1 | Y | 2 | Moeller,M | |
| 31.705 | 814902 | 5.5 | M | 100 | 6.5 | | 7 | 0.6 | 75 | 0.09 | M | 11 | 56 | 5.5 | Y | 3 | Westlund,M | |
| 31.71 | 814903 | 5.5 | B | 100 | 7 | | 7 | 1.5 | | 0.050 | B | | 12 | 3.5 | Y | 4 | Mosch,J | N |
| 31.712 | 814904 | 5.3 | S | 100 | 3.3 | | 5 | | | 0.063 | R | 13.3 | 53 | 3.5C | N | 1 | Skjaeraasen,O | O |
| 31.715 | 814905 | 5.4 | | 100 | 7 | | 7 | | | 0.050 | B | | 10 | 4.0 | Y | 2 | Thomas,A | P |
| 31.717 | 814906 | 4.6 | B | CZ | | | 5 | | | 0.08 | B | | 10 | 5.8 | N | 1 | Janecek,V | |
| 31.718 | 814907 | 5.0 | B | | | | 3 | | | 0.080 | R | 6.2 | 12 | 5.0 | Y | 1 | Lieder,F | |
| 31.719 | 814908 | 5.9 | M | CZ | 6 | | 5 | | | 0.055 | R | | 12 | 4.0 | N | 1 | Silhan,J | Q |
| 31.72 | 814909 | 4.9 | B | 100 | 7 | | 6 | | | 0.05 | B | | 10 | 3.5 | N | 1 | Bottger,B | |
| 31.72 | 814910 | 4.7 | S | 100 | 4.5 | | 7 | 0.09 | 68 | 0.08 | B | | 15 | 4.5C | Y | 1 | Glowinski,C | R |
| 31.722 | 814911 | 4.6 | | 100 | 10 | | 6 | 0.2 | 45 | 0.080 | B | | 20 | 4.3 | Y | 1 | Marekfia,G | S |
| 31.726 | 814912 | 5.6 | M | CZ | 8 | | 5 | | | 0.05 | B | | 7 | 4.3 | Y | 1 | Silhan,J | Q |
| 31.726 | 814913 | 5.0 | M | 100 | 6 | | 7 | 1.1 | 65 | 0.05 | B | | 10 | 5.5 | Y | 4 | Vanin,G | |
| 31.729 | 814914 | 4.9 | B | 100 | | | 7 | | | 0.050 | B | | 7 | 5.5 | Y | 1 | Bohme,D | |
| 31.729 | 814915 | 3.8 | | 100 | 6 | | 5 | 0.13 | 50 | 0.08 | B | | 15 | 3.8 | Y | 1 | Dietrich,M | T |
| 31.729 | 814916 | | | | 5 | | 3 | | | 0.130 | N | 8 | 40 | 5.0 | Y | 1 | Lieder,F | |
| 31.73 | 814917 | 5.2 | B | AA | 9 | | 6 | | | 0.050 | B | | 7 | 4.5 | N | | Schmeer,P | U |
| 31.740 | 814918 | 5.2 | M | 100 | 8.2 | | 5 | 0.2 | 35 | 0.07 | B | | 16 | 5.3C | Y | 1 | Taylor,M.D | V |
| 31.750 | 814919 | 5.3 | B | | 16.0 | | 4 | | | 0.063 | R | 13.3 | 44 | 6.0 | Y | 1 | Bartnik,M | |
| 31.750 | 814920 | 4.2 | B | CZ | | | 5 | | | 0.08 | B | | 10 | 5.7 | N | 1 | Elias,P | |
| 31.750 | 814921 | 5.4 | B | IHW | | | 5 | 2.0 | | 0.080 | B | | 20 | 4.4 | Y | 1 | Guthier,O | |
| 31.750 | 814922 | | | 100 | 7 | | 9 | | | 0.076 | R | 12 | 57 | 5.3C | Y | 1 | Taylor,M.D | |
| 31.752 | 814923 | | | | | | | | | 0.250 | N | 6 | 75 | 4.4 | Y | 1 | Guthier,O | W |
| 31.757 | 814924 | | | 100 | 2.7 | | 7 | 0.1 | 62 | 0.076 | R | 12 | 37 | 5.3C | Y | 1 | Taylor,M.D | X |
| 31.760 | 814925 | 5.1 | B | 100 | 10 | 7 | 5 | 0.3 | 40 | 0.200 | R | 15 | 120 | 5.5 | Y | 1 | Kalauch,K.-D | |
| 31.76 | 814926 | 4.8 | M | 100 | 15 | | 6 | 0.4 | 80 | 0.06 | R | 4 | 10 | 5.0 | Y | 3 | Granslo,B.H | Y |
| 31.760 | 814927 | 5.3 | M | 100 | | | | | | 0.076 | R | 12 | 37 | 5.3C | Y | 1 | Taylor,M.D | |
| 31.764 | 814928 | 4.7 | M | 100 | | | | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | Z |
| 31.770 | 814929 | 4.0 | B | 100 | 20 | | 5 | | | 0.102 | R | 14.7 | 60 | | Y | | Medway,K | a |
| 31.771 | 814930 | 4.4 | M | CZ | 25 | | 7 | | | 0.080 | B | | 10 | 5.0 | Y | 2 | Bilek,V | |
| 31.771 | 814931 | 6.1 | M | 100 | 4.7 | | 3 | | | 0.063 | R | 6.7 | 26 | 5.5C | N | 1 | Rudolph,M | |
| 31.781 | 814932 | 5.5 | | | | | | | | 0.050 | B | | 10 | C | Y | 1 | Kauschke,A | |
| 31.781 | 814933 | 4.7 | S | 100 | 8 | | 7 | | | 0.050 | B | | 7 | 5.0 | N | 1 | Lunde,R | b |
| 31.795 | 814934 | 4.4 | B | 100 | 20 | | | | | 0.035 | B | | 7 | | Y | 1 | Rodriguez C.,J.A | c |
| 31.795 | 814935 | 5.4 | M | 100 | 20 | | 6 | | | 0.050 | B | | 10 | 4.5C | Y | 1 | Lozano,L | |
| 31.799 | 814936 | 4.8 | B | 4A | | | | | | 0.030 | B | | 8 | 5.8 | Y | 1 | van der Mey,L | d |
| 31.799 | 814937 | | | | | | | 0.5 | 86 | 0.050 | B | | 7 | 5.8 | Y | 1 | van der Mey,L | e |
| 31.801 | 814938 | 4.5 | S | 100 | | | 6 | 1 | 60 | 0.08 | B | | 11 | 5 | Y | 1 | Gainsford,M.J | f |
| 31.815 | 814939 | 4.6 | S | 100 | 4 | | 7 | 0.23 | 75 | 0.25 | N | 6 | 60 | 5 | Y | 1 | Gainsford,M.J | |
| 31.976 | 814940 | 5.2 | M | 100 | | | | 1.25 | | 0.050 | B | | 7 | | Y | 4 | Torres,E | g |

NOTE A At 57x and 101x - tail pencil-shaped, 1 deg. long - definite blue color! The nucleus is bright and large.
NOTE B (Observer gave limit as 7.5. Ed.)
NOTE C Jets.
NOTE D Modified Sidgwick method used.
NOTE E Dust cloud?
NOTE F Possible dust cloud?
NOTE G Dust bulge included in coma size.
NOTE H Instrument is Wright-Schmidt. Type I. (Observer indicated "Y" method. Ed.)
NOTE I Diffuse cloud.
NOTE J (Observer gives tail length as 60 arc min. followed by a symbol for "less than". Ed.)
NOTE K Magnitude is brighter than given.
NOTE L Brightness flash. Granulation in the central condensation.
NOTE M Clouds.
NOTE N Coma diameter approximate.
NOTE O DC estimated by memorial images of different DC's. [sic] Severe light pollution made the background sky awfully bright, and in addition, thin clouds made it difficult/impossible to see the outer parts of the coma.
NOTE P Observation of tail with Newtonian 175/1120 mm, 35x: about 30'. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE Q On the margin of a cloud.
NOTE R Hazy. Tail length approximate.
NOTE S Short, broad tail. (Translated by IHW staff. Observer indicated "A" method [Argelander?]. Ed.)
NOTE T (Observer indicated "A" method [Argelander?]. Ed.)
NOTE U Omicron Aqr: 4.7 mag., 32 Aqr: 5.3 mag.
NOTE V Antoniadi III. Tail fanned.
NOTE W No core.
NOTE X Tail is only suspected.

NOTE Y (Tail length = )24' [sic]. Ed.)
NOTE Z Clouds. Haze. Wind.
NOTE a Clear sky, seeing fair. (Observer gave limit as 12.0. Ed.)
NOTE b Faint haze.
NOTE c Strong wind.
NOTE d Visible with n/eye.
NOTE e Pear-shaped coma.
NOTE f Tail length uncertain.
NOTE g Dust tail 1 deg. 10 arc min. (Observer gave limit as 8.5. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.000 | 830621 | 0.83 | 0.152 | N | 8 | 38 | | 5.7 | 1 | Cuthill,L | A |
| 31.011 | 830622 | 0.1 | 0.204 | N | 8 | 58,271 | 30 | 5.0 | 1 | Robinson,P.C | B |
| 31.035 | 830623 | | 0.050 | B | | 7 | 20 | 7.5 | 3 | Cifuentes,E | C |
| 31.052 | 830624 | 0.02 | 0.610 | C | 13.5 | 411,823 | 5 | 4.5 | 3 | DeYoung,J.A | D |
| 31.701 | 830625 | 1.6 | 0.090 | M | 11 | 56 | 10 | 5.5 | 3 | Westlund,M | E |
| 31.976 | 830626 | | 0.050 | B | | 7 | 20 | | 3 | Cifuentes,E | F |
| 31.997 | 830627 | 0.44 | 0.254 | N | 5.6 | 55 | 51 | 5 | 2 | Swavely,M.E | G |

NOTE A Tail at PA 55-80. Gas tail at PA 62. Coma DC 6. Axis of head at PA 245. Start and end of observation is uncertain, but the comet and stars are positioned for 31.000 UT. The coma shows a strong intensity at the center. A dust and gas tail are clearly visible between PA 55 deg.-80 deg. Semi latus rectum = 1.3 arc min. Vertex distance = 1.3 arc min. Magnitude est. to be 5.4 in 10x50 binoculars (Morris method).
NOTE B Ray tail at PA 70; diffuse tail about 6' length at PA 50-95; jet about 0.5' length at PA 340; jet about 0.7' long at PA 250. The coma seemed to be divided into equal quarters. Northwest was brightest, southwest next brightest, southeast next, and northeast dimmest. There was a strong stellar nucleus.
NOTE C Gas tail similar to 29/12/85. Projecting first third of length easy to see, much brighter than the rest. Straight. Estimated length 1 deg. 15'. (Translated by IHW staff. Ed.)
NOTE D Jets at PA 10, PA 245, and PA 200. The main tail is at PA 55.
NOTE E First time visible to the naked eye.
NOTE F Both tails visible in "V" shape. Better view of dust tail than gas tail. Excellent appraisal of beginning of the tail (about 1/3 total length). Gas tail measured 1 deg. 15'; dust tail measured 1 deg. 10'. (Observer gave limit as 8.5. Translated by IHW staff. Ed.)
NOTE G The comet was very bright and clear with a definite bluish tint to it. The color is best compared to the visual color of the Great Orion Nebula. The coma was bright with diffused borders and the nucleus was a star-like point. I estimated the total magnitude at 4.8 and by making "drift-method" timings, the size of the coma at 5.25' of arc. The comet showed a strong central visual tail with 2 smaller "streaks" at either side of it. These streaks were of slightly shorter length and gave the appearance of an edge-on view of a cone of material spreading out from the coma. All observed features were drawn from the same general western edge of the coma which occupied about 25% of the edge of the coma. My timings indicated that the nucleus was located at the center of the condensation with DC = 5.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.004 | 850568 | 0.200 | 4.5 | | 10.3 x 6.9 | 10.00 | Kodak Tri-X | | N | T | 3/C | 1 | Priester,D.C | A |
| 31.006 | 850569 | 0.135 | 2.8 | | 15.2 x10.2 | 10.00 | Kodak Tri-X | 400/ | N | | 4/P | 2 | Tatum,R | |
| 31.034 | 850570 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 242/P | 1 | Sabia,J.D | |
| 31.069 | 850571 | 1.000 | 5 | 0.203 | 2.1 x 1.4 | 10.00 | Kodak Tri-X | 400/27 | N | X | 009/P | 1 | Bro,M | B |
| 31.726 | 850572 | 1.000 | 7.1 | 0.140 | 2.1 x 1.4 | 44.00 | ORWO NP 27 | 400/27 | N | | 26/N | | Kohler,N | |

NOTE A Push processed to 800 ASA.
NOTE B Auxiliary lens used. Original instrument characteristics are FL = 2.000, f/10. (The guiding method indicated and the commercial guiding head used are contradictory; this off-axis guider does not permit guiding on the target. Observer's image identifier is 9a. Ed.)

DATE: 1 JAN 1986

DATE: 1 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.000 | 814941 | 4.7 | S | 100 | 16 | 8 | 1.5 | 68 | 0.108 | N | 4 | 24 | 5.0 | Y | 1 | Franch,J | A |
| 1.007 | 814942 | 5.8 | B | 100 | 20 | 6 | 2 | 90 | 0.152 | R | 5 | 24 | 4.7 | N | 1 | Fox,J.H | B |
| 1.01 | 814943 | 5.1 | B | 100 | 11 | 6 | 0.71 | 65 | 0.080 | B | | 20 | 5.0 | Y | | Kronk,G | |
| 1.010 | 814944 | 5.3 | B | 100 | 8 | 2 | 0.80 | 59 | 0.05 | B | | 7 | 6.0 | | | Lairet,R | |
| 1.02 | 814945 | 5.9 | B | 100 | 6.6 5.0 | 7 | | | 0.335 | N | 4.5 | 56 | 5.0 | Y | | Kronk,G | |
| 1.045 | 814946 | 5.6 | B | 100 | | 7 | | | 0.08 | B | | 11 | 5.0 | Y | 1 | Gorski,L | |
| 1.06 | 814947 | 4.7 | V | 4A | | | | | | EY | | | 6.5 | Y | 1 | Keen,R | |
| 1.06 | 814948 | | | 4A | | | 1.0 | 70 | 0.120 | B | | 20 | 6.5 | Y | 1 | Keen,R | |
| 1.06 | 814949 | 4.8 | | 4A | 9 | 7 | 0.8 | 70 | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | C |
| 1.07 | 814950 | | | 4A | 12 | 7 | 2.2 | 70 | 0.32 | N | 4 | 33 | 6.5 | Y | 1 | Keen,R | D |
| 1.073 | 814951 | 5.5 | S | 100 | 7.4 | 5 | | | 0.080 | B | | 11 | 4.5C | Y | 1 | Bailey,G | E |
| 1.103 | 814952 | 5.1 | B | 100 | 7.5 | 8 | 2.0 | 68 | 0.15 | N | 8 | 30 | 6.1 | Y | 1 | McBride,P | F |
| 1.40 | 814953 | 5.5 | B | M | 8 | 4 | 0.3 | | 0.12 | N | | 40 | | | | Knyazyuk,N | |
| 1.440 | 814954 | 5.2 | S | 100 | | 7 | | | 0.05 | B | | 10 | 4.5 | Y | 1 | Williams,P.F | |
| 1.44 | 814955 | 4.3 | S | 100 | | | | | 0.05 | B | | 10 | | Y | 1 | Seargent,D | |
| 1.445 | 814956 | | | | 5 | 9 | 0.1 | 85 | 0.15 | N | 8 | 100 | 4.5 | Y | 1 | Williams,P.F | |
| 1.479 | 814957 | 5.5 | B | 100 | 2.5 | 5 | 0.38 | 55 | 0.08 | R | 12.5 | 40 | 4.5C | Y | 1 | Feisheng,J | |
| 1.58 | 814958 | 5.2 | B | M | 4 | | 0.3 | | 0.05 | B | | 7 | | | | Nesterov,Yu | G |
| 1.639 | 814959 | 6.0 | M | 4A | 15 | 6 | | | 0.150 | N | 5.3 | 45 | 4.9 | Y | 1 | Wikholm,L | |
| 1.64 | 814960 | 5.6 | B | M | 3 | | | | 0.05 | B | | 7 | | | | Mamedov,V | |
| 1.667 | 814961 | 5.6 | B | 100 | | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Kukkonen,I.T | |
| 1.677 | 814962 | 5.5 | S | | 6 | 8 | 2 | 90 | 0.05 | B | | 10 | 6.0 | Y | 1 | Bremseth,P.-J | |
| 1.681 | 814963 | 5.6: | | | | 6 | 0.42 | 60 | 0.080 | B | | 15 | 4 | Y | 2 | Nagele,A | H |
| 1.694 | 814964 | | | | 1.8 | 5 | 0.1 | 55 | 0.076 | R | 16 | 139 | 5.0C | Y | 1 | Kukkonen,I.T | I |
| 1.701 | 814965 | 5.5 | M | 100 | 6.5 | 6 | 0.3 | 77 | 0.09 | M | 11 | 56 | 4.5 | Y | 3 | Westlund,M | J |
| 1.705 | 814966 | 5.0 | B | 4A | | 6 | | | 0.10 | B | | 14 | 4.0 | Y | 1 | Hasubick,W | |
| 1.708 | 814967 | 4.7 | B | 100 | | 7 | | | 0.050 | B | | 7 | 5.0 | N | 1 | Lunde,R | K |
| 1.71 | 814968 | 4.8 | M | 100 | 15 | 6 | 0.8 | 68 | 0.06 | R | 4 | 10 | 5.0 | Y | 3 | Granslo,B.H | |
| 1.722 | 814969 | 4.7 | M | 100 | 9.5 | 7 | 0.6 | 61 | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | L |
| 1.723 | 814970 | 4.0 | S | 100 | 10 | 8 | 1.44 | 57 | 0.050 | B | | 7 | 6.2 | Y | 1 | Meozzi,D | |
| 1.729 | 814971 | 4.2 | S | 100 | 12 | 6 | | 63 | 0.08 | B | | 20 | 6.0 | Y | 2 | Parisio,R | |
| 1.73 | 814972 | 4.7 | S | SAO 86 | 8 | | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Germann,R | |
| 1.740 | 814973 | 5.1 | M | 100 | 6 | 7 | 0.6 | 68 | 0.05 | B | | 10 | 5.5Z | Y | 4 | Vanin,G | |
| 1.750 | 814974 | 5.5 | B | 4A | 3.0 | 6 | 0.05 | 70 | 0.050 | B | | 7 | 4.0 | Y | 1 | Koschny,D | M |
| 1.753 | 814975 | 5.3 | B | 100 | | | | | 0.050 | B | | 10 | 4.0 | N | 1 | Lehmann,T | |
| 1.760 | 814976 | 5.5 | | | | | | | 0.050 | B | | 10 | TC | | 1 | Kauschke,A | |
| 1.760 | 814977 | 4.8 | S | 100 | 7 | 5 | 1.0 | 80 | 0.050 | B | | 7 | 5.0C | Y | 3 | Piccinini,M | |
| 1.771 | 814978 | 6.0 | M | 100 | 60 | 3 | | | 0.070 | R | 14 | 20 | 6.0 | N | 1 | Luga,M | |
| 1.771 | 814979 | 5.0 | B | 100 | 2.2 | 5 | | | 0.20 | N | 4.7 | 104 | 3.5 | Y | 1 | Cappellari,M | |
| 1.792 | 814980 | 5.8 | B | 100 | | 6 | | | 0.113 | N | 8 | 22 | 4.5 | Y | 1 | Schambeck,C.M | |
| 1.934 | 814981 | 6.2 | B | 100 | 9 | 3 | 0.42 | 40 | 0.203 | SC | 10 | 80 | 6.0 | Y | 1 | Farrington,W.R | |
| 1.95 | 814982 | 4.7 | M | AA | | | | | | EY | | | | | | Green,D.W.E | |
| 1.958 | 814983 | 5.0 | M | 100 | 6.5 | 8 | 1 | 90 | 0.203 | N | 8 | 128 | 5.0 | Y | 1 | Hannon,J | |
| 1.97 | 814984 | 4.5 | S | AA | 12 | 7 | 1 | | 0.035 | B | | 7 | | | | Green,D.W.E | N |
| 1.972 | 814985 | 4.9 | S | 100 | 8 | 4 | 0.63 | 55 | 0.035 | B | | 7 | 6.0 | Y | 3 | Morrison,W | |
| 1.976 | 814986 | | | | 6 | | 0.67 | 55 | 0.15 | R | 5 | 31 | 6.0 | Y | 3 | Morrison,W | O |
| 1.976 | 814987 | 5.0 | B | 100 | | | | | 0.050 | B | | 10 | 5 C | Y | 1 | Robinson,R.L | |
| 1.978 | 814988 | | | 100 | | | 1.17 | | 0.050 | B | | 7 | | Y | 5 | Torres,E | P |
| 1.979 | 814989 | 4.7 | M | 100 | 6 | 7 | 0.4 | 55 | 0.05 | B | | 7 | 4.5 | Y | 1 | DeYoung,J.A | |
| 1.98 | 814990 | 4.3 | S | 100 | 20 | 6 | 1 | 90 | 0.05 | B | | 7 | 4.5 | Y | 1 | Harrington,P | |
| 1.983 | 814991 | 4.9 | M | 100 | 10.0 | 7 | 2.0 | 64 | 0.05 | B | | 12 | 6.3 | Y | 1 | Knight,S | Q |
| 1.99 | 814992 | 4.9 | B | AAVSO | | | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 1.99 | 814993 | 4.3 | M | AA | 13 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | R |
| 1.99 | 814994 | 4.5 | M | AA | 13 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | R |
| 1.99 | 814995 | 4.4 | S | AA | 13 | 7 | 2 | | 0.050 | B | | 7 | | | | Green,D.W.E | S |
| 1.99 | 814996 | 4.6 | S | AA | 13 | 7 | 2 | | 0.080 | B | | 20 | | | | Green,D.W.E | N |
| 1.99 | 814997 | 4.7 | S | AAVSO | 7 | 7 | 1.0 | 62 | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 1.99 | 814998 | 4.8 | S | AAVSO | 18 | | | | | EY | | | | | | Bortle,J.E | |
| 1.99 | 814999 | | | | 5.6 | 7 | 1.4 | 62 | 0.120 | B | | 20 | | | | Bortle,J.E | T |
| 1.99 | 815000 | | | | 5.0 | 7 | 1 | 62 | 0.317 | N | 6 | 55 | | | | Bortle,J.E | U |

NOTE A Gas tail.
NOTE B SAO 145989 comparison star.
NOTE C Modified Sidgwick method used.
NOTE D Brighter knot in tail 2.0 deg. from nucleus.
NOTE E Hint of a tail?
NOTE F Nucleus undefined.
NOTE G Granulation in central condensation.
NOTE H (Observer indicated "A" method [Argelander?]. Ed.) Comparison star is SAO 145989.
NOTE I Coma diameter determined as an average of five transit time observations.
NOTE J Cirrus.
NOTE K Faint haze.
NOTE L Seeing good, transparency excellent. Clouds. Type I tail 0.6 deg. at PA 61, type II tail 0.4 deg. at PA 77.
NOTE M Drawing.
NOTE N Coma diameter approximate. Tail length is lower limit.
NOTE O Tail 0.11 deg. wide at end, diffuse central spine of tail 0.13 deg. long.
NOTE P Dust tail 1 deg. 20 arc min. (Observer gave limit as 9.0. Ed.)
NOTE Q Dust tail.
NOTE R Coma diameter approximate.
NOTE S Coma diameter and tail length approximate.
NOTE T Tail 3.5-4' wide at beginning.
NOTE U Nuc. 10.0 mag., tail 2.5' wide, length is lower limit.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.007 | 830628 | 0.6 | 0.203 | R | 13 | 85,150 | 10 | 4.7 | 1 | Fox,J.H | A |
| 1.024 | 830629 | | 0.203 | SC | 10 | 70 | | 6.0 | | Williams,D.J | B |
| 1.031 | 830630 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | C |
| 1.037 | 830631 | | 0.203 | SC | 10 | 169 | | | 1 | Lohvinenko,T.W | D |
| 1.057 | 830632 | 0.38 | 0.254 | N | 5.6 | 60,120,180 | 16 | 6.7 | 2 | Knisely,D | E |
| 1.075 | 830633 | | 0.152 | N | 4.5 | 18 | 21 | 6.5 | 1 | Troiani,D.M | F |
| 1.084 | 830634 | | 0.203 | N | 6 | 32 | 25 | 6.5 | 1 | Troiani,D.M | G |
| 1.68 | 830635 | 0.26 | 0.114 | N | 8 | 100 | 101 | 7 | 2 | Pesci,S | H |
| 1.691 | 830636 | 0.39 | 0.076 | R | 16 | 139 | 30 | 5.0 | 1 | Kukkonen,I.T | I |
| 1.698 | 830637 | 1.6 | 0.090 | M | 11 | 56 | 10 | 4.5 | 3 | Westlund,M | J |
| 1.753 | 830638 | 0.6 | 0.060 | R | 15 | 45 | 10 | 4.0 | 1 | Koschny,D | K |
| 1.764 | 830639 | 0.2 | 0.103 | M | 10.5 | 35 | 20 | 5.0 | 3 | Piccinini,M | L |
| 1.942 | 830640 | 1 | 0.203 | SC | 10 | 80 | 4 | 6.0 | 1 | Farrington,W.R | M |
| 1.981 | 830641 | | 0.050 | B | | 7 | 25 | | 5 | Cifuentes,E | N |

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.984 | 830642 | | 0.200 | N | 8 | 81,130,203 | 16 | 5 | 1 | Robinson,R.L | O |

NOTE A Very mottled appearance near nucleus. Extensions from nucleus more apparent at 150x.
NOTE B Halley seems to be stuck at its present brightness. Just detectable with the eye. (Duration not indicated. Time of observation is start time. Ed.)
NOTE C The nuclear magnitude is 7.2 (check stars: HR 72, AGK 3+0 deg. 0181) and has an integrated magnitude of 5.5 (check star: 14 Piscium). Comet Halley is seen with a blue spike which I believe is the ion tail at PA 23. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D The nuclear diameter of the comet is 30.45" and the coma has a diameter of 243.62". The tail of the comet is blue in colour and is difficult to see. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Comparable to T Aquari in brightness. Nucleus not quite centered in coma. Central disk noted 20" arc in diameter and diffuse. Faint broad central spine noted in tail approximately 10' arc long. PA 45. Possible hints of faint streamer noted near northeast side of coma. Tail slightly irregular in brightness and 2/3 width of coma at its widest.
NOTE F Seeing (1-3): 2. Sky darkness (1-5): 4. Ray at PA 75 deg. Tail was 3/4 deg. long.
NOTE G Seeing (1-3): 2. Sky darkness (1-5): 4-3. Streamer at PA 80 deg. Fan at PA 80 deg. DC = 7. Tail = 2 deg. long.
NOTE H Jet at PA 64 deg. "Water drop" at PA 64 deg. Coma; DC 7/8; about 8' diameter. Coma appears perfectly round at western limb. Central condensation resembles a water drop fading toward east. Tail appears very thin, jet-like. No special feature in comet's coma.
NOTE I Coma elongated, long axis in 55-235 deg. direction. The edge of coma "sharper", more distinct, in the 235 deg. direction. Tail length 0.1 deg.; tail very dim.
NOTE J Cirrus.
NOTE K Only 1 tail at PA 70.
NOTE L Tail PAs 80 deg. and 70 deg. Vertex distance = 3.2', semi latus rectums P1 = 3', P2 = 3.6'. City lights interfered with the observation.
NOTE M Mag 6.2, N mag. 10. Degree of condensation 3. Tail length 25'. Very good seeing tonight allowed the observations of new details. Tail now easily seen and very long. Large diffuse coma now seen outside main coma. P1 = 3', PA 270; P2 = 3', PA 90. Vertex 30". P1 and P2 came off coma, not nucleus. (This observer's P1 and P2 may not follow the standard definition of semi latus rectum. The tail's orientation appears northerly in the drawing. Ed.)
NOTE N Comet naked eye visible today. Both tails excellently visible. Better dust tail (wider and longer) than the gas tail (straighter and fainter). Estimated lengths: dust, 1 deg. 20'; gas, 1 deg. 10'. (Observer gave limit as 9.0. Translated by IHW staff. Ed.)
NOTE O Central condensation again more diffuse, nonstellar in nature. Coma appeared to be brighter on north side and slightly wider than on the south side. A distinct darkening occurred in the coma on the south side. A central bright tail projected to the east for over a degree. The tail had an obvious fan shape.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.071 | 850573 | 0.305 | 2.5 | 0.122 | 6.8 x 4.5 | 8.00 | Kodak 2415 | | Y | S | 159/P | 1 | Minton,R.B | A |
| 1.713 | 850574 | 0.200 | 5.6 | | 10.3 x 6.9 | 15.00 | Kodak 103a-O | | N | O | 2/C | 4 | Cimatti,A | B |
| 1.725 | 850575 | 0.200 | 5.6 | | 10.3 x 6.9 | 10.00 | Kodak 103a-O | | N | O | 3/C | 4 | Cimatti,A | |
| 1.740 | 850576 | 0.200 | 3.5 | | 10.3 x 6.9 | 15.00 | Kodak 103a-O | | N | O | 4/C | 4 | Cimatti,A | |
| 1.758 | 850577 | 1.000 | 8 | 0.125 | 2.1 x 1.4 | 4.00 | Agfa-Pan Pro | 400/27 | N | M | 6/C | 2 | Trixler,F | C |
| 1.769 | 850578 | 1.000 | 8 | 0.125 | 2.1 x 1.4 | 7.00 | Agfa-Pan Pro | 400/27 | N | M | 10/C | 2 | Trixler,F | C |
| 1.794 | 850579 | 0.200 | 5.6 | | 10.3 x 6.9 | 5.00 | Kodak 103a-O | | N | O | 5/C | 4 | Cimatti,A | |
| 1.826 | 850580 | 0.700 | 5 | 0.14 | 2.9 x 2.0 | 30.00 | Kodak IIa-F | | N | M | 44/P | 1 | Ridley,H.B | D |
| 1.964 | 850581 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 5.00 | Kodak 2415 | | Y | S | 1/P | 1 | Dilsizian,R | E |
| 1.977 | 850582 | 0.050 | 4.0 | | 39.6 x27.0 | 6.50 | Kodak Tri-X | | N | | 176/P | | Gianforte,J.S | F |

NOTE A Tail is 1.9 deg. long with condensation in tail 1.5 deg. from nucleus. Some wavy structure in first 1 deg. from head. Instrument is Aero-Ektar aerial camera lens. (Print submitted by observer is a composite of two contiguous 4 min. exposures. Ed.)
NOTE B Twilight interfered with the observation.
NOTE C City lights interfered with the observation.
NOTE D (Observer's image identifier is preceded by prefix ZA. Ed.) Instrument uses photographic plates.
NOTE E Stellar guiding was used because of extremely small apparent movement of the comet within the exposure period (movement during a 24 hour period was 2 minutes of arc [sic] in RA and approximately 0.2-0.3 degrees of arc in declination during this period). The 5.5" Schmidt camera gives a strong "hot spot" near the center of the frame.
NOTE F (Observer's image identifier is 107-6. Observer listed emulsion speed as ASA 800. Ed.)

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.056 | 870108 | 45P-O | N | 0.495 | | 0.065 | 20.00 | Kodak 2415 | | Y | S | 9/P | 1 | Minton,R.B | A |

NOTE A Newtonian spectrograph used. The emissions and their strengths appear to be similar to my spectrum of December 4, 1985. (Prints submitted are composites of two contiguous 10 min. exposures. Observer's image identifiers are NS 9 and NS 10. Ed.)

DATE: 2 JAN 1986 DATE: 2 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.010 | 815001 | 5.5 | B | 100 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | |
| 2.011 | 815002 | | | | | 6 | | | 0.05 | B | | 20 | 3.0 | Y | 8 | da Silva,L.A.L | A |
| 2.02 | 815003 | 5.1 | B | 100 | | 6 | 0.98 | | 0.080 | B | | 20 | 5.5 | Y | | Kronk,G | |
| 2.02 | 815004 | 5.8 | B | 100 | 6.1 4.0 | 8 | | | 0.335 | N | 4.5 | 56 | 5.5 | Y | | Kronk,G | B |
| 2.10 | 815005 | 4.7 | M | 100 | 8 | 7 | 2.0 | 65 | 0.080 | B | | 20 | 6.5 | Y | 16 | Morris,C.S | |
| 2.104 | 815006 | 4.9 | M | 100 | | | | | 0.050 | B | | 7 | | N | 3 | Jeffrey,J | |
| 2.125 | 815007 | 5.7 | B | 100 | 10 | 6 | 0.67 | 280 | 0.050 | B | | 10 | 4.5C | Y | 3 | Stapleton,J | C |
| 2.16 | 815008 | 5 : | M | 4A | | | | | 0.108 | N | 4 | 20 | 4 | Y | 3 | Hale,A | D |
| 2.378 | 815009 | 5.1 | M | 100 | 18 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,H | |
| 2.38 | 815010 | | | 100 | 3.3 | 5 | 0.7 | | 0.31 | N | 5.7 | 147 | 4.0 | Y | 2 | Suzuki,K | E |
| 2.382 | 815011 | 5.1 | M | 100 | 15 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 2.39 | 815012 | 5.1 | B | | 12 | 6 | 0.83 | 300 | 0.05 | B | | 10 | 4.5 | N | 1 | Uda,K | F |
| 2.39 | 815013 | 3.5 | | | 10 | 6 | 2 | | 0.12 | B | | 20 | 6.0 | Y | 1 | Washi,S | G |
| 2.395 | 815014 | 4.5 | B | 100 | 5 | 5 | | | 0.05 | B | | 7 | | Y | 2 | Okuda,M | |
| 2.396 | 815015 | 5.1 | B | 4A | | | 1 | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 2.40 | 815016 | 5.0 | M | 100 | | | 1.2 | | 0.05 | B | | 7 | 4.5 | Y | 1 | Suzuki,K | |
| 2.403 | 815017 | 4.5 | M | 100 | 12.5 | 6 | | | 0.1 | N | 10 | 25 | 6.0 | Y | 1 | Ichikawa,K | |
| 2.403 | 815018 | 4.8 | M | 100 | 7 | 8 | 0.25 | 70 | 0.030 | B | | 8 | 4.5C | Y | 2 | Kato,T | |
| 2.41 | 815019 | 4.8 | S | AAVSO | 6.5 | 6 | 1 | 65 | 0.13 | N | 6.3 | 24 | 5.5 | Y | 1 | Hayashi,A | |
| 2.417 | 815020 | 5.4 | B | 100 | 12 | 6 | 1.0 | | 0.050 | B | | 7 | 6.5 | Y | 3 | Parkinson,M | H |
| 2.419 | 815021 | 4.7 | S | 100 | 4 | 5 | 0.13 | 50 | 0.153 | N | 8.6 | 52 | 3.5 | Y | 1 | Iwaki,Y | |
| 2.427 | 815022 | 5.1 | B | 100 | | | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Date,M | |
| 2.428 | 815023 | 4.6 | S | 100 | 10 | 5 | 2 | 80 | 0.07 | B | | 10 | 6.0 | Y | 1 | Kobayashi,J | |
| 2.43 | 815024 | 5.0 | S | AAVSO | 5 | 6 | 0.83 | 65 | 0.07 | B | | 10 | 5.5 | Y | 1 | Hayashi,A | |
| 2.440 | 815025 | 4.9 | B | 100 | | | | | 0.05 | B | | 7 | 4.5C | Y | 1 | Hayashi,H | |
| 2.440 | 815026 | | | | 15 | 6 | 0.42 | | 0.12 | N | 6 | 40 | | | | Hayashi,H | |
| 2.44 | 815027 | 5.3 | B | | 10 | 6 | 1.2 | 65 | 0.16 | N | 4.8 | 24 | 5.5 | Y | 1 | Maeda,S | |
| 2.44 | 815028 | 5.2 | M | 100 | 5.2 | 8 | 1.1 | 65 | 0.08 | B | | 11 | 5 | Y | 1 | Mitsuma,S | I |
| 2.45 | 815029 | 4.2 | S | 100 | | | | | | EY | | | | Y | 2 | Seargent,D | |
| 2.45 | 815030 | | | | 8 | 7 | 1.5 | 65 | 0.08 | B | | 15 | | Y | 2 | Seargent,D | |
| 2.45 | 815031 | 4.0 | | | 30 | 7 | 2.5 | | 0.23 | | 4.4 | 40 | 6.0 | Y | 1 | Washi,I | J |
| 2.459 | 815032 | | | 100 | 2.5 | 5 | | | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | K |
| 2.45972 | 815033 | | B | | | 6 | 0.67 | 90 | 0.25 | N | 8 | 80 | 6 | Y | 2 | Okumura,S | |
| 2.46 | 815034 | 5.1 | B | 100 | 4.5 | 7 | 0.3 | 65 | 0.05 | B | | 7 | 3.0 | N | 1 | Kanai,K | |
| 2.462 | 815035 | 5.4 | S | 100 | 6 | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | L |
| 2.52 | 815036 | 4.7 | S | 100 | 7.5 | 7 | | | 0.030 | B | | 8 | 5.4 | Y | | Pearce,A | |
| 2.604 | 815037 | | | | 6.2 | 6 | | | 0.254 | N | 6 | 61 | 4.5C | Y | 1 | Bhadriah,L.H.E | M |
| 2.653 | 815038 | 5.7 | M | 100 | | 6 | | | 0.050 | B | | 20 | 4.5C | Y | 1 | Bhadriah,L.H.E | |
| 2.665 | 815039 | 5.0 | B | 100 | 4.6 | 4 | 1.5 | 292 | 0.05 | B | | 10 | 5.5 | Y | 1 | Bretschneider,H | |
| 2.684 | 815040 | 5.2 | B | 100 | 19 | 7 | | | 0.050 | B | | 7 | 6.2 | Y | 1 | Bohme,D | |
| 2.688 | 815041 | 5.5 | B | 100 | 6 | 7 | | | 0.030 | B | | 8 | | Y | 1 | Pfitzner,E | |
| 2.694 | 815042 | 5.9 | S | 100 | 6.2 | 6 | | | 0.090 | R | 14 | 46 | 5.5 | Y | 2 | Hirth,G | |
| 2.708 | 815043 | 4.9 | V | 4A | | 6 | | | | EY | | | 5.5 | Y | 1 | Hasubick,W | N |
| 2.715 | 815044 | 4.8 | B | 4A | | 6 | 1.8 | 60 | 0.10 | B | | 14 | 5.5 | Y | 1 | Hasubick,W | |
| 2.719 | 815045 | 4.8 | M | 4A | 15 12 | 7 | 1.63 | 61 | 0.08 | B | | 11 | 5.0 | Y | 1 | Gubo,H | |
| 2.72 | 815046 | 6.1 | B | 100 | 7.2 | 8 | 0.5 | 65 | 0.203 | SC | 10 | 44 | 5.7C | Y | 2 | Maraziti,A | O |
| 2.722 | 815047 | 4.9 | B | 4A | | 6 | 1.15 | 60 | 0.03 | B | | 8 | 5.5 | Y | 1 | Hasubick,W | |
| 2.726 | 815048 | 4.8 | B | 100 | 8 | 7 | 1.1 | 62 | 0.063 | B | | 9 | 4.5C | Y | 1 | Kammerer,A | |
| 2.726 | 815049 | 4.7 | B | 100 | | 7 | | | 0.050 | B | | 7 | 4.5 | N | 1 | Lunde,R | P |
| 2.729 | 815050 | 5.0 | B | 4A | 7.0 | 7 | 0.3 | 60 | 0.060 | R | 15 | 45 | 5.0 | Y | 1 | Koschny,D | Q |
| 2.729 | 815051 | 4.5 | B | 4A | 12 | 5 | 0.79 | | 0.056 | B | | 8 | 5.5 | Y | 1 | Koch,V | |
| 2.73 | 815052 | 5.0 | B | 100 | 9 | 8 | | | 0.05 | B | | 10 | 4.0 | N | 1 | Bottger,B | |
| 2.731 | 815053 | 5.1 | B | 100 | 5 | 6 | 0.1 | | 0.063 | R | 13 | 21 | 5.0 | N | 2 | Zische,E | |
| 2.733 | 815054 | 3.8 | B | 100 | 0.2 | 5 | 0.40 | 210 | 0.28 | SC | 5 | 70 | 4.1 | Y | 1 | Amoretti,M | |
| 2.736 | 815055 | 4.7 | B | 4A | 12 | 5 | 0.6 | | 0.080 | B | | 20 | 5.5 | Y | 1 | Koch,B.O | |
| 2.74 | 815056 | 5.0 | B | AA | 9 | 6 | 0.7 | 63 | 0.080 | B | | 20 | 5.0 | N | 1 | Schmeer,P | R |
| 2.740 | 815057 | 5.5 | B | 100 | 6 | 6 | 0.8 | 65 | 0.113 | N | 8 | 22 | 5.5 | Y | 1 | Schambeck,C.M | S |
| 2.745 | 815058 | 5.5 | B | 100 | | 5 | | | 0.050 | B | | 10 | 4.0 | N | 1 | Lehmann,T | |
| 2.746 | 815059 | 4.8 | B | | | 3 | | | 0.080 | R | 6.2 | 12 | 4.5 | Y | 1 | Lieder,F | |
| 2.747 | 815060 | | | | 5.6 | 7 | 1 | 305 | 0.250 | N | 6 | 55 | 4.5 | N | 1 | Lunde,R | T |
| 2.75 | 815061 | 5.3 | B | AAVSO | 15 | 6 | 1 | | 0.11 | B | | 20 | | | | Shirokov,A | U |
| 2.757 | 815062 | | | | 6 4.5 | 3 | 0.2 | | 0.130 | N | 8 | 40 | 4.5 | Y | 1 | Lieder,F | |
| 2.789 | 815063 | 5.8 | B | 100 | | 7 | | | 0.050 | B | | 7 | 5.0C | Y | 1 | Temprano,J | |
| 2.799 | 815064 | 5.4 | M | 100 | 6 | 6 | 0.6 | 75 | 0.05 | B | | 10 | 5.0 | N | 5 | Vanin,G | |
| 2.833 | 815065 | 5.3 | B | 100 | | 3 | 0.5 | | 0.050 | B | | 10 | 5.2 | Y | 1 | Kaila,K | V |
| 2.872 | 815066 | 5.8 | B | 4A | | | | | 0.050 | R | 5.6 | 30 | | Y | 1 | Mendez,J | |
| 2.93 | 815067 | 4.5 | S | AA | 11 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | W |
| 2.962 | 815068 | 4.9 | M | 100 | 10.0 | 7 | 2.0 | 61 | 0.05 | B | | 12 | 6.4Z | Y | 1 | Knight,S | X |
| 2.97 | 815069 | 4.3 | S | AA | 10 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | W |
| 2.976 | 815070 | 5.1 | B | 100 | | 5 | 0.43 | 64 | 0.05 | B | | 7 | 5.6 | Y | 3 | Benavides,A | |
| 2.98 | 815071 | 4.6 | M | AA | 8 | 7 | | | 0.203 | N | 6 | 49 | | | | Green,D.W.E | W |
| 2.98 | 815072 | 4.7 | S | AA | 8 | 7 | | | 0.203 | N | 6 | 49 | | | | Green,D.W.E | W |
| 2.990 | 815073 | 5.1 | B | 100 | 6 | 1 | 0.53 | 53 | 0.05 | B | | 7 | 6.0 | | 1 | Lairet,R | |
| 2.999 | 815074 | | | 100 | 6.8 5.6 | 5 | 0.18 | 66 | 0.113 | N | 8 | 45 | 5.9 | Y | 3 | Benavides,A | Y |

NOTE A Many clouds (cumulus).
NOTE B Tear shaped coma. Tail has bright western edge. Tail PA 62 deg. to 83 deg.
NOTE C Lights, tail. (PA approximate and may have been measured incorrectly. Ed.)
NOTE D Observation severely hampered by thick cirrus. The magnitude is only approximate and should be considered as an educated "guestimate". The comet could barely (and briefly) be seen with 10x50 binoculars.
NOTE E Meter: coma diameter is P1 + P2.
NOTE F (PA value may have been incorrectly determined. Ed.)
NOTE G Coma blue green. Type I. (Observer indicated "Y" method. Translated by IHW staff. Ed.)
NOTE H Excellent dark sky, hint of a second shorter tail.
NOTE I 8.5.
NOTE J Instrument is Wright-Schmidt. (Observer indicated "Y" method. Ed.)
NOTE K Clear and twilight.
NOTE L Coma almost round. Clear and twilight. (Observer gave limit as 6.9. Ed.)
NOTE M Slight tail, with averted vision, about 1/2 degree.
NOTE N In focus.
NOTE O Very faint tail.
NOTE P Haze.
NOTE Q Drawing.
NOTE R Omicron Aqr: 4.7 mag., 32 Aqr: 5.3 mag.
NOTE S With naked eye also seen. [sic]
NOTE T Tail length is upper limit. Haze.
NOTE U Coma diameter and tail length approximate.
NOTE V Comet low in the sky. Temp. -20 deg. C.
NOTE W Coma diameter approximate.
NOTE X Dust tail.
NOTE Y Observation completed 860103 at 0018. The coma had a halo indirectly visible. (Translated by IHW staff. Ed.)

DATE: 2 JAN 1986

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(x) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.005 | 830643 | 0.1 | 0.204 | N | 8 | 58,203 | 14 | 5.0 | 1 | Robinson,P.C | A |
| 2.014 | 830644 | | 0.203 | SC | 10 | 70 | | 6.0 | | Williams,D.J | B |
| 2.039 | 830645 | 0.39 | 0.203 | N | 6 | 61,116 | 10 | 5.5 | 1 | Williams,J | C |
| 2.040 | 830646 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | D |
| 2.729 | 830647 | | 0.356 | SC | 11 | 200 | | | 1 | Verdenet,M | E |
| 2.736 | 830648 | 0.6 | | | | 45 | 20 | 5.0 | 1 | Koschny,D | F |
| 2.74 | 830649 | 0.38 | 0.203 | SC | 10 | 44, 77 | 43 | 5.7 | 2 | Maraziti,A | G |
| 2.868 | 830650 | 4 | 0.08 | B | | 11 | | 4.3 | 1 | Fleet,R.W | H |

NOTE A Ray tail at PA 70; diffuse tail >8' long at PA 50-90. Central condensation was "occasionally stellar". Western quadrant of coma was brightest. Coma a bit longer east-west than north-south.
NOTE B Clear tonight. A very faint tail fans outward east of the nucleus. It is very difficult to see with eye because of the city lights and Halley is very low. The nucleus is still very condensed and star-like. (Duration not indicated. Time of observation is start time. Ed.)
NOTE C Coma brightens toward center. There definitely appears to be a faint tail at PA 90. City lights interfered with the observation.
NOTE D The comet is observed as a bluish white with a blue tail with two visible spikes. They are located at PA 21 and PA 49.5. The nuclear magnitude is 7.0 (check star: HR 72, AGK 3+0 deg. 0181) and has an integrated magnitude of 5.4 (check star: 14 Piscium). (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E (Duration not indicated. Time of observation is assumed to be start time. Additional drawing submitted made using 11x80 binoculars (2'/mm). Ed.)
NOTE F Only 1 tail at PA 60.
NOTE G Tail at PA 65 deg. Drawing interrupted by clouds after 3 minutes from start. Approximative orientation and scale; correct drawing of coma and tail. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE H Main tail at PA 276. Fan (?) at PA 295. Low altitude, end of tail lost in Milky Way, no magnitude estimate. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.003 | 850583 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 8.00 | Kodak 2415 | | Y | O | 26/P | 1 | Crist,M | A |
| 2.022 | 850584 | 0.135 | 2.8 | | 15.2 x10.2 | 8.00 | Kodak Tri-X | 400/ | N | | 5/P | 2 | Tatum,R | |
| 2.025 | 850585 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 244/P | 1 | Sabia,J.D | B |
| 2.026 | 850586 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 16.00 | Kodak 2415 | | Y | O | 27/P | 1 | Crist,M | A |
| 2.039 | 850587 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 245/P | 1 | Sabia,J.D | B |
| 2.392 | 850588 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 11.00 | Kodak 2415 | | Y | | 5/P | 1 | Niijima,T | C |
| 2.446 | 850589 | 0.180 | 2.8 | | 11.4 x 7.6 | 25.00 | Kodak 2415 | | Y | O | 2/S | 12 | Garradd,G | |
| 2.769 | 850590 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 1.00 | Kodak 2415 | | Y | M | 30/P | 1 | Guarro,J | |
| 2.786 | 850591 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 7.00 | Kodak 103a-F | | N | M | 31/P | 1 | Guarro,J | |
| 2.793 | 850592 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 7.00 | Kodak 2415 | | Y | M | 32/P | 1 | Guarro,J | |
| 2.801 | 850593 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 1.00 | Kodak 2415 | | Y | M | 29/P | 1 | Guarro,J | |
| 2.963 | 850594 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 4.00 | Kodak 2415 | | Y | S | 2/P | 1 | Dilsizian,R | D |

NOTE A City lights interfered with the observation. Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE B Photograph made by J. Kamichitis and J.D. Sabia.
NOTE C (Observer's image identifier is 860102-1. Ed.) Large format (70 mm) film used. City lights interfered with the observation.
NOTE D Stellar guiding was used because of extremely small apparent movement of the comet within the exposure period (movement during a 24 hour period was 2 minutes of arc [sic] in RA and approximately 0.2-0.3 degrees of arc in declination during this period). The 5.5" Schmidt camera gives a strong "hot spot" near the center of the frame.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.008 | 870109 | 600G-O | CL | 0.135 | 1.9 | | 33.00 | Kodak Tri-X | 400/27 | N | C | 530/S | 2 | Buchanan,W.T | AB |
| 2.036 | 870110 | 600G-O | CL | 0.135 | 1.9 | | 33.00 | Kodak Tri-X | 400/27 | N | C | 531/S | 2 | Buchanan,W.T | BC |
| 2.052 | 870111 | 600G-O | CL | 0.135 | 1.9 | | 17.00 | Kodak Tri-X | 400/27 | N | C | 532/S | 2 | Buchanan,W.T | BD |

NOTE A (Observer's image identifier is E-115-30. Ed.)
NOTE B Error in polar alignment. Comet in north edge of zodiacal light, visible to naked eye. All spectra lie along a meridian from south to north with increasing wavelength. Second order violet-green.
NOTE C (Observer's image identifier is E-115-31. Ed.)
NOTE D (Observer's image identifier is E-115-32. Ed.)

DATE: 3 JAN 1986

DATE: 3 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.005 | 815075 | 3.5 | B | 100 | | 5 | | 58 | 0.05 | B | | 20 | 5.5 | Y | 8 | da Silva,L.A.L | A |
| 3.010 | 815076 | 3.9 | B | 100 | | 3 | | | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 3.02 | 815077 | 5.0 | B | 4A | 14 | 6 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | B |
| 3.02 | 815078 | | | | 48 | 6 | | | | EY | | | 6.0 | Y | 1 | Jacobson,E | |
| 3.031 | 815079 | 4.9 | M | 101 | 37 | 7 | 3 | 63 | 0.080 | B | | 20 | 5.5 | Y | 2 | Ariail,R.B | |
| 3.10 | 815080 | 5.0 | | 4A | 10 | 6 | 2.0 | 60 | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | C |
| 3.10 | 815081 | 4.9 | V | 4A | | | | | | EY | | | 6.0 | Y | 1 | Keen,R | |
| 3.118 | 815082 | 4.9 | M | 100 | | | | | 0.050 | B | | 7 | | N | 3 | Jeffrey,J | |
| 3.236 | 815083 | 4.7 | M | 4A | 22 | 7 | 0.67 | 290 | 0.05 | B | | 10 | 5.0 | Y | 1 | Fabre,R | D |
| 3.366 | 815084 | 4.9 | B | 100 | | | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hayashi,H | |
| 3.366 | 815085 | | | | 10 | 6 | 0.58 | | 0.12 | N | 6 | 40 | | | | Hayashi,H | |
| 3.375 | 815086 | 4.4 | M | 100 | 6.2 | 5 | 1.5 | 75 | 0.1 | N | 10 | 56 | 6.0 | Y | 1 | Ichikawa,K | |
| 3.395 | 815087 | 5.1 | M | 100 | 4.5 | 7 | 0.75 | 60 | 0.08 | B | | 11 | 5 | Y | 1 | Mitsuma,S | |
| 3.396 | 815088 | 5.3 | B | 100 | | 6 | | | 0.05 | B | | 7 | 4.5C | Y | 1 | Hasegawa,T | |
| 3.41 | 815089 | 5.0 | S | AAVSO | 4 | 5 | | | 0.13 | N | 6.3 | 24 | 4.0 | Y | 1 | Hayashi,A | |
| 3.52 | 815090 | 4.7 | S | 100 | | 7 | | | 0.030 | B | | 8 | 5.4 | Y | | Pearce,A | |
| 3.52 | 815091 | 4.8 | B | 100 | | | | | 0.030 | B | | 8 | 5.4 | Y | | Pearce,A | |
| 3.52 | 815092 | | | 100 | | | 1 | 60 | 0.203 | N | 6 | 38 | 5.4 | Y | | Pearce,A | |
| 3.54 | 815093 | 4.6 | S | 100 | 7 | 5 | 0.88 | 77 | 0.05 | B | | 7 | 4.2 | N | | Clark,M.L | |
| 3.58 | 815094 | 4.3 | B | M | | | | | | EY | | | | | | Poroshin,A | |
| 3.688 | 815095 | 6.3 | M | CZ | 14 | | | | 0.05 | B | | 7 | 4.0CT | Y | 1 | Kourimsky,M | |
| 3.690 | 815096 | 5.4 | B | 100 | | 7 | 1.8 | 65 | 0.050 | B | | 12 | 4.0T | Y | 1 | Mosch,J | |
| 3.690 | 815097 | 5.1 | M | CZ | | 3 | | | 0.05 | B | | 7 | 4.7 | | 2 | Pravec,P | |
| 3.694 | 815098 | 5.8 | B | | 6.5 | 4 | 0.2 | | 0.200 | N | 7.2 | 36 | 4.5T | Y | 1 | Lipski,P | |
| 3.70 | 815099 | 4.9 | M | 100 | 15 | 6 | 0.8 | 62 | 0.06 | R | 4 | 10 | 5.5 | Y | 4 | Granslo,B.H | |
| 3.70 | 815100 | 4.4 | | DCS 7 | | 6 | | | | EY | | | 5 C | N | 2 | Kroon,B | E |
| 3.701 | 815101 | 5.7 | S | 100 | 4.7 | 6 | | | 0.090 | R | 14 | 46 | 4.6 | Y | 2 | Hirth,G | F |
| 3.701 | 815102 | 5.4 | B | 100 | 6 | 7 | 1.3 | | 0.080 | R | 6.2 | 50 | | Y | 1 | Pfitzner,E | |
| 3.701 | 815103 | | | CZ | 6.5 4.5 | 6 | 1 | 90 | 0.10 | N | 6 | 38 | 4.8 | | 2 | Pravec,P | |
| 3.706 | 815104 | 5.1 | B | 100 | 4.5 | 4 | 1.8 | 292 | 0.05 | B | | 10 | 5.0 | Y | 1 | Bretschneider,H | |
| 3.708 | 815105 | 5.2 | B | CZ | | 3 | | | 0.03 | B | | 6 | 6.0 | | 1 | Vaclik,F | G |
| 3.709 | 815106 | 5.6 | B | 100 | 11.9 | 6 | | | 0.066 | R | 15.2 | 30 | 4.5 | Y | 1 | Gora,D | |
| 3.713 | 815107 | 5.2 | B | 100 | 11 | 8 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Bohme,D | |
| 3.715 | 815108 | 4.9 | B | 4A | 9.4 4.7 | 6 | 2.17 | 60 | 0.10 | B | | 14 | 6.0 | Y | 1 | Hasubick,W | |
| 3.717 | 815109 | 5.1 | B | 100 | 5.0 | 6 | | | 0.063 | R | 8.4 | | 4.2 | Y | 1 | Witte,F | H |
| 3.719 | 815110 | 4.9 | S | 4A | | 6 | | | 0.03 | B | | 8 | 6.0 | Y | 1 | Hasubick,W | |
| 3.722 | 815111 | 4.9 | M | 4A | 14 12 | 7 | 1.5 | 60 | 0.08 | B | | 11 | 5.5 | Y | 1 | Gubo,H | |
| 3.722 | 815112 | 5.0 | B | 4A | 10.0 | 7 | 0.3 | 60 | 0.070 | B | | 20 | 5.0 | Y | 1 | Koschny,D | I |
| 3.726 | 815113 | 4.9 | M | 100 | 10 | 7 | 0.6 | 58 | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | J |
| 3.729 | 815114 | 4.9 | V | 4A | | 6 | | | | EY | | | 6.0 | Y | 1 | Hasubick,W | K |
| 3.729 | 815115 | 5.0 | B | | | 3 | | | 0.080 | R | 6.2 | 12 | 4.0 | Y | 1 | Lieder,F | |
| 3.729 | 815116 | 4.7 | B | 100 | | 7 | 0.5 | 307 | 0.050 | B | | 7 | 4.5 | N | 1 | Lunde,R | L |
| 3.73 | 815117 | 4.5 | S | SAO 85 | 9 | 6 | 0.42 | 86 | 0.205 | N | 6 | 80 | 5.5 | Y | 1 | Germann,R | M |
| 3.73 | 815118 | 4.1 | S | DCS 7 | 12 | 5 | 2.0 | 70 | 0.040 | B | | 7 | 5.5 | Y | 7 | Bus,E.P | |
| 3.73 | 815119 | 4.4 | B | DCS 7 | | | | | 0.040 | B | | 7 | 5.5 | Y | 7 | Bus,E.P | |
| 3.73 | 815120 | 5.4 | B | DCS 7 | | 5 | 1.0 | | 0.080 | B | | 15 | 4.5C | N | 1 | Keijmel,P.C | |
| 3.735 | 815121 | 4.9 | S | 100 | | 6 | | 65 | 0.08 | B | | 11 | 4.5 | Y | 1 | Gainsford,M.J | N |
| 3.74 | 815122 | 5.4 | S | 100 | | | | | 0.08 | B | | 20 | 5.5 | | 1 | Shanklin,J.D | |
| 3.740 | 815123 | | | 100 | 2.4 2 | 7 | 0.05 | 56 | 0.21 | N | 5 | 43 | 5.3C | Y | 1 | Taylor,M.D | O |
| 3.743 | 815124 | | | | 5 | 3 | 0.2 | | 0.130 | N | 8 | 40 | 4.0 | Y | 1 | Lieder,F | |
| 3.743 | 815125 | 4.7 | S | 100 | 8.4 | 8 | 0.55 | 50 | 0.05 | B | | 10 | 5.3 | Y | 1 | Hurst,G.M | |
| 3.746 | 815126 | 4.9 | S | 100 | 3.5 | 7 | 0.30 | 75 | 0.25 | N | 6 | 60 | 4.5 | Y | 1 | Gainsford,M.J | N |
| 3.747 | 815127 | 4.8 | S | 4A | 5.9 | 5 | | | 0.08 | R | 15 | 40 | 4.5 | Y | 2 | Storey,D | P |
| 3.748 | 815128 | | | | 9 | 8 | 0.55 | 50 | 0.08 | B | | 15 | 5.3 | Y | 1 | Hurst,G.M | |
| 3.750 | 815129 | 5.0 | | 100 | | | | | | EY | | | 5.5 | Y | 1 | Hurst,G.M | |
| 3.750 | 815130 | 5.1 | B | CZ | 8 | 4 | 0.5 | 35 | 0.10 | B | | 25 | 5.8 | Y | 2 | Polak,J | |
| 3.757 | 815131 | 5.2 | | | | | 1 | 60 | 0.080 | B | | 15 | 3 | Y | 2 | Nagele,A | Q |
| 3.760 | 815132 | 5.1 | S | 100 | 4.0 | 9 | 0.21 | 62 | 0.050 | B | | 10 | 4.9 | Y | 3 | Abbott,J | R |
| 3.760 | 815133 | | B | 100 | | 9 | | | 0.050 | B | | 10 | 4.9 | Y | 3 | Abbott,J | S |
| 3.76 | 815134 | 5.0 | B | 100 | 8 | 5 | | | 0.080 | B | | 20 | C | Y | 1 | Jannink,D.W | T |
| 3.760 | 815135 | 5.2 | M | 100 | 6 | 5 | 0.15 | 76 | 0.04 | B | | 8 | 5.3C | Y | 1 | Taylor,M.D | U |
| 3.761 | 815136 | 4.8 | B | 4A | 30 | 8 | 1.5 | 85 | 0.06 | R | | 25 | 5.5 | Y | 1 | Ward,A | V |
| 3.764 | 815137 > | 4.5 | | 100 | | | | | | EY | | | 4.5 | Y | 1 | Gainsford,M.J | W |
| 3.764 | 815138 | 5.0 | S | 100 | | | | | | EY | | | 6.0 | Y | 6 | Foulkes,M | X |
| 3.771 | 815139 | 4.8 | S | 100 | 8 6 | 7 | 1.17 | 55 | 0.065 | B | | 12 | 6.0 | Y | 6 | Foulkes,M | X |
| 3.771 | 815140 | 5.4 | M | 100 | 5 | 5 | 0.15 | 76 | 0.07 | B | | 16 | 5.3C | Y | 1 | Taylor,M.D | Y |
| 3.78 | 815141 | 5.2 | B | AAVSO | | 6 | 1 | | 0.11 | B | | 20 | | | | Shirokov,A | Z |
| 3.781 | 815142 | 4.5 | B | 4A | 8 | 8 | 0.42 | | 0.20 | N | 6 | 60 | C | N | 4 | Gallego,J | |
| 3.785 | 815143 | 5.7 | B | 4A | | | | | 0.050 | R | 5.6 | 30 | | Y | 1 | Mendez,J | |
| 3.785 | 815144 | 5.0 | B | IHW | | 5 | | | 0.080 | B | | 20 | 4.8 | Y | 1 | Guthier,O | |
| 3.791 | 815145 | 4.7 | B | 100 | | | | | 0.03 | B | | 8 | 5.0 | Y | 1 | Filimon,E | a |
| 3.791 | 815146 | | B | 100 | 4.5 | 6 | 0.75 | 65 | 0.07 | B | | 20 | 5.0 | Y | 1 | Filimon,E | a |
| 3.791 | 815147 | 4.7 | B | 100 | | | | | 0.030 | B | | 8 | 4.0 | Y | 2 | Kellner,A | |
| 3.80 | 815148 | 5.5 | S | 100 | | | | | 0.20 | R | 12 | 40 | 4.5 | | 1 | Shanklin,J.D | |
| 3.806 | 815149 | 5.3 | S | 100 | | 5 | | | 0.050 | B | | 10 | 4.9 | Y | 1 | Rogers,J.H | b |
| 3.806 | 815150 | | | | 4 | 6 | 0.2 | 50 | 0.200 | R | 14 | 40 | 4.9 | Y | 1 | Rogers,J.H | c |
| 3.809 | 815151 | 5.4 | M | 100 | 20 | 6 | | | 0.050 | B | | 10 | 4.0C | N | 1 | Lozano,L | |
| 3.810 | 815152 | 5.5 | B | 4A | | | | | 0.035 | B | | 7 | | Y | 1 | Mendez,J | |
| 3.81 | 815153 | 5.1 | S | DCS 7 | 5.5 | 7 | | | 0.100 | B | | 14 | 4 C | Y | 7 | van Loo,F.R | |
| 3.854 | 815154 | 5.5 | B | 4A | 20 | | 1 | | 0.08 | B | | 15 | | Y | 1 | Losada,R | Z |
| 3.990 | 815155 | 4.7 | M | 100 | 6 | 6 | 0.4 | 55 | 0.05 | B | | 7 | 5.0 | Y | 1 | DeYoung,J.A | |

NOTE A Artificial lights near; cumulus. PA not certain.
NOTE B Stellar condensation.
NOTE C Modified Sidgwick method used.
NOTE D (PA value appears to be measured incorrectly. Ed.)
NOTE E Tail length determined in 15x80 binoculars: 2.0 deg.
NOTE F Lights.
NOTE G Probably well adapted, not dark adapted, of course - there is no dark sky in Czechoslovakia.
NOTE H Coma diameter approximate. Very weak tail, length 1.5-2.0 deg.
NOTE I Drawing.
NOTE J Seeing good, transparency excellent.
NOTE K In focus.
NOTE L Haze.
NOTE M Tail length and PA approximate.
NOTE N Twilight.
NOTE O 0.1 deg. tail only suspected.
NOTE P Seeing II Ant. [sic] Transparency good. Slight sky glow.
NOTE Q (Observer indicated "A" method [Argelander?]. Ed.) Tail length is lower limit.
NOTE R Comparison stars 5.3, 4.7, 5.0, 4.0.
NOTE S Comparison stars 6.3, 6.0. Central condensation was magnitude 6.3, near stellar.

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NOTE T Telescopic limit is 8.
NOTE U Nearby star.
NOTE V Positive blue colour.
NOTE W Negative observation.
NOTE X Transparent.
NOTE Y Fanned tail to 1 deg. suspected.
NOTE Z Tail length approximate.
NOTE a Unrestrained visibility. (Translated by IHW staff. Ed.)
NOTE b Small coma. Low, in haze.
NOTE c See drawing.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.080 | 830651 | 0.38 | 0.254 | N | 5.6 | 53, 60,120 | 10 | 6.5 | 2 | Knisely,D | A |
| 3.727 | 830652 | 1.5 | 0.070 | B | | 20 | 15 | 5.0 | 1 | Koschny,D | B |
| 3.738 | 830653 | 0.4 | 0.254 | N | 6.4 | 41, 65,130 | 14 | 4.7 | 3 | Abbott,J | C |
| 3.748 | 830654 | 4 | 0.05 | B | | 10 | 25 | 5.3 | 1 | Hurst,G.M | D |
| 3.761 | 830655 | 0.11 | 0.298 | N | 5 | 40, 65,269 | 19 | 5.5 | 1 | Stott,D | E |
| 3.776 | 830656 | | 0.200 | N | 6 | 60 | 15 | | 4 | Gallego,J | F |
| 3.776 | 830657 | 1.95 | 0.065 | B | | 12 | 14 | 5.6 | 6 | Foulkes,M | G |
| 3.806 | 830658 | 0.35 | 0.200 | R | 14 | 40 | 10 | 4.9 | 1 | Rogers,J.H | H |
| 3.854 | 830659 | 2 | 0.080 | B | | 15 | | | 1 | Losada,R | I |

NOTE A Central spine at PA 45; jet at PA 0; faint jet at PA 85; tail gap at PA 50; faint streamer at PA 40. Central condensation not seen well at high power. Coma not quite symmetrical and had some very faint radial streaks from center outward. Streamer or jet noted at about PA 0 approximately 10' arc long. Other faint radial streamer at 85 about 4' arc long. Central condensation about 10" to 20" arc in diameter and diffuse. Central spine in tail visible at PA 45 about 15' to 20' arc long. "Hole" or void noted on SE part of coma along central spine. Tail became fainter at 0153 hrs. along from void down south part of tail very suddenly. Tail condensations at 1/2 deg. and 1 deg. from nucleus. Faint streamer in tail about 20' arc from nucleus, about 10' arc long. Magnification of 240x also used.
NOTE B Only 1 tail at PA 60.
NOTE C Central condensation near stellar. Southern tail component at PA 63 deg., approximately 4.4 arc min. Northern (main) tail component at PA 52 deg. approximately 12.8 arc min. by 2.8' at root tapering to 1.6'. Semi latus rectum (S) approximately 2.4 arc min. Semi latus rectum (N) approximately 1.6 arc min. Vertex distance approximately 2.0 arc min. Central condensation near stellar and of high contrast with respect to the surrounding coma. Central condensation appeared "planetary" at lower powers but more diffuse at 130x. The coma appeared asymmetrical with the vertex distance different to the (unequal) semi-latus rectum values. Two principal features were observed as tail structures with a hint of a streamer between them. The northernmost of these tail components formed the principal long tail.
NOTE D Intense central condensation displaced PA 230 from centre of coma. Tail PA 50 straight, brighter on north edge. South edge defined but diffuse material between. Tail bright for about 10' then faint and fan shaped to overall length 33'.
NOTE E Tail at PA 65 deg. Hood at PA 200-260. Coma spur at PA 130. Hood is a difficult object. Tail shows some irregularities.
NOTE F Field 60'. Central condensation of stellar appearance. Tail difficult to see due to light pollution.
NOTE G Diameter = 8'x6', DC = 7. Coma size estimated as 1/3 distance between stars 6.3 and 6.0 just south of comet. Coma slightly elongated in direction PA 60-240. Tail noticeable, 70', PA 55. South preceding edge the more obvious.
NOTE H Coma bright, condensed, DC 6, with unresolved centre. At 170x there is still a faint unresolved nucleus. No jets. Roughly circular, diameter 4'. "Fan" very faint, not well defined. "Spine" of tail faint, 12' long at PA 50 deg.
NOTE I The coma has an interesting size and shape. From the outer part of this surge to the east a bright "appendix", which seems to be the start of the cometary tail. With a Celestron 8", the nucleus appears stellar and pointing to the west, that is, to the sun. [sic] (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.718 | 850595 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 304/P | | Jager,M | A |
| 3.746 | 850596 | 0.500 | 5.6 | | 4.1 x 2.7 | 8.00 | Kodak Tri-X | 400/ | N | X | 11/P | 1 | Ward,A | B |
| 3.751 | 850597 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | 3M | 1000/ | N | O | 23/T | 1 | Martin,D | |
| 3.754 | 850598 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | 3M | 1000/ | N | O | 24/T | 1 | Martin,D | |
| 3.758 | 850599 | 1.000 | 8 | 0.125 | 2.1 x 1.4 | 2.00 | Agfa-Pan Pro | 400/27 | N | M | 18/C | 2 | Trixler,F | C |
| 3.761 | 850600 | 0.500 | 8 | | 4.1 x 2.7 | 8.00 | Fujichrome | 400/27 | N | O | 5/S | 1 | Townsend,R | |
| 3.777 | 850601 | 0.500 | 5.6 | | 4.1 x 2.7 | 8.00 | Kodak Tri-X | 400/ | N | X | 15/P | 1 | Ward,A | B |
| 3.783 | 850602 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M | 1000/ | N | O | 25/T | 1 | Martin,D | |
| 3.786 | 850603 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M | 1000/ | N | O | 26/T | 1 | Martin,D | |
| 3.791 | 850604 | 0.200 | 4.5 | | 10.3 x 6.9 | 3.00 | 3M | 1000/ | N | O | 27/T | 1 | Martin,D | |
| 3.794 | 850605 | 0.200 | 4.5 | | 10.3 x 6.9 | 3.00 | 3M | 1000/ | N | O | 28/T | 1 | Martin,D | |
| 3.802 | 850606 | 0.400 | 6.3 | | 5.2 x 3.4 | 3.00 | 3M | 1000/ | N | O | 29/T | 1 | Martin,D | |
| 3.805 | 850607 | 0.400 | 6.3 | | 5.2 x 3.4 | 3.00 | 3M | 1000/ | N | O | 30/T | 1 | Martin,D | |
| 3.810 | 850608 | 0.400 | 6.3 | | 5.2 x 3.4 | 4.00 | 3M | 1000/ | N | O | 31/T | 1 | Martin,D | |
| 3.815 | 850609 | 0.400 | 6.3 | | 5.2 x 3.4 | 4.00 | 3M | 1000/ | N | O | 32/T | 1 | Martin,D | |
| 3.819 | 850610 | 0.400 | 6.3 | | 5.2 x 3.4 | 3.00 | 3M | 1000/ | N | O | 33/T | 1 | Martin,D | |

NOTE A Coma 25 (greater than) 20 arc min. [sic]; magnitude 4; tails 3 deg. at PA 60, greater than 5 deg. at PA 64. (Print submitted is composite of two 3 min. exposures separated by 3 min. Ed.) Instrument is Schmidt camera.
NOTE B UV filter used.
NOTE C City lights interfered with the observation.

DATE: 4 JAN 1986

DATE: 4 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.003 | 815156 | 5.2 | B | 100 | | 5 | 0.62 | 63 | 0.05 | B | | 7 | 5.0 | N | 3 | Benavides,A | |
| 4.003 | 815157 | 5.2 | S | 100 | 6.5 | 5 | 0.18 | 60 | 0.035 | B | | 7 | 5.3C | Y | 3 | Morrison,W | |
| 4.104 | 815158 | 5.5 | S | 4A | 10 | 6 | 0.5 | 280 | 0.080 | B | | 11 | | Y | 3 | Pryal,J | A |
| 4.219 | 815159 | 4.7 | M | 4A | 22 | 7 | 0.75 | 290 | 0.05 | B | | 10 | 5.5 | Y | 1 | Fabre,R | B |
| 4.229 | 815160 | 5 : | | | | | 4 | | 0.050 | B | | 7 | 6.0 | Y | 2 | Krisciunas,K | C |
| 4.372 | 815161 | 4.8 | M | 100 | 7 | 7 | | | 0.030 | B | | 8 | 4.5CT | Y | 2 | Kato,T | |
| 4.375 | 815162 | 5.1 | M | 100 | 5 | 7 | 0.25 | 70 | 0.06 | R | 13.3 | 40 | 4.5CT | Y | 2 | Kato,T | |
| 4.38 | 815163 | 4.3 | S | 4A | 10 | 6 | 1.33 | 60 | 0.08 | B | | 11 | 6.0 | N | 3 | Momose,M | |
| 4.389 | 815164 | 4.8 | S | 100 | 4 | 4 | | 50 | 0.153 | N | 8.6 | 33 | 3.5 | Y | 1 | Iwaki,Y | |
| 4.41 | 815165 | 5.0 | M | SAO | 7 | 5 | 0.67 | 65 | 0.06 | R | 12 | 22 | 3.5 | Y | 4 | Nakamura,A | |
| 4.427 | 815166 | 5.3 | M | 100 | 5.7 | 6 | | | 0.2 | C | 10 | 50 | 5.5 | Y | 3 | Ichikawa,K | |
| 4.43 | 815167 | 5.0 | S | AAVSO | 4 | 5 | 0.5 | 65 | 0.13 | N | 6.3 | 24 | 4.5 | Y | 1 | Hayashi,A | |
| 4.431 | 815168 | 4.9 | S | 100 | 11 | 5 | 0.67 | 60 | 0.07 | B | | 10 | 5.5 | Y | 3 | Ichikawa,K | |
| 4.433 | 815169 | 4.9 | B | 100 | | 7 | 0.2 | 60 | 0.050 | B | | 7 | 6.0 | Y | 2 | Bembrick,C | D |
| 4.440 | 815170 | 5.0 | S | 100 | | 7 | | | 0.05 | B | | 10 | 4.0 | Y | 1 | Williams,P.F | |
| 4.44 | 815171 | | | SAO | 8 | 7 | 0.33 | 85 | 0.15 | N | 6 | 23 | 4 | Y | 2 | Tanikawa,M | E |
| 4.44 | 815172 | 4.9 | B | SAO | | | | | 0.05 | B | | 7 | 4 | Y | 2 | Tanikawa,M | |
| 4.44 | 815173 | 5.3 | M | 100 | 4.7 | 6 | | | 0.080 | B | | 11 | 4 C | N | 5 | Watanabe,N | |
| 4.445 | 815174 | | | | 4 | 8 | 0.1 | 85 | 0.15 | N | 8 | 50 | 4.0 | Y | 1 | Williams,P.F | |
| 4.448 | 815175 | 5.5 | B | 100 | 2.5 | 6 | 0.42 | 55 | 0.08 | R | 12.5 | 40 | 6.0 | Y | 1 | Feisheng,J | |
| 4.50 | 815176 | 5.5 | B | M | 5 | 7 | 0.4 | 45 | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 4.54 | 815177 | 5.0 | B | M | 5 | 7 | | | 0.05 | B | | 7 | | | | Sikoruk,L | |
| 4.54 | 815178 | 4.5 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.55 | 815179 | 4.8 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.55 | 815180 | 4.4 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.55 | 815181 | 4.8 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.56 | 815182 | 4.9 | B | E | 19 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.57 | 815183 | 4.8 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.58 | 815184 | 4.9 | B | E | 20 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.583 | 815185 | 5.8 | M | 100 | 6.2 | 6 | | | 0.254 | N | 6 | 61 | 4.7 | Y | 1 | Bhadrish,L.H.E | F |
| 4.59 | 815186 | 4.7 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 4.62 | 815187 | 5.0 | B | 100 | 4 | 6 | 0.2 | | 0.045 | B | | 7 | 4.0 | Y | 1 | Speil,J | G |
| 4.67 | 815188 | 4.6 | S | | 7 | 7 | 1.7 | 64 | 0.050 | B | | 9 | 7.5 | Y | 2 | Pesci,S | H |
| 4.690 | 815189 | 5.4 | B | 100 | | 7 | | | 0.050 | B | | 12 | 3.0T | Y | 1 | Mosch,J | |
| 4.696 | 815190 | 5.0 | M | AAVSO | 7 | 9 | | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | I |
| 4.698 | 815191 | 5.9 | B | | 7.0 | 4 | 0.2 | | 0.200 | N | 7.2 | 36 | 3.5TC | Y | 1 | Lipski,P | |
| 4.70 | 815192 | 4.0 | | DCS 7 | | 6 | | | | EY | | | 4 C | N | 2 | Kroon,B | J |
| 4.708 | 815193 | 5.0 | S | | 6 | 8 | 1.5 | 90 | 0.05 | B | | 10 | 5.5 | Y | 1 | Bremseth,P.-J | |
| 4.7118 | 815194 | 5.2 | B | 100 | | 7 | 0.67 | 61 | 0.05 | B | | 10 | 6.3T | Y | 1 | Franciosi,C | K |
| 4.719 | 815195 | 4.6 | B | 100 | | 7 | | | 0.050 | B | | 7 | 5.0 | N | 1 | Lunde,R | L |
| 4.719 | 815196 | 5.0 | | | | | 1.2 | 60 | 0.080 | B | | 15 | 4 | Y | 2 | Nagele,A | M |
| 4.719 | 815197 | 4.6 | B | IHW | 5.0 | 6 | 2.5 | 64 | 0.080 | B | | 20 | 5.2 | Y | 1 | Guthier,O | N |
| 4.72 | 815198 | 4.7 | S | DCS 7 | | | | | 0.040 | B | | 12 | 5 | Y | 3 | Feijth,H | |
| 4.722 | 815199 | 5.5 | M | 123 | 5.0 | 6 | | | 0.114 | N | 8 | 36 | 4.5 | N | 1 | Pennelli,G | |
| 4.726 | 815200 | 4.8 | S | 100 | | 7 | | | 0.030 | B | | 8 | 4.5C | N | 1 | Bernardis,A | |
| 4.726 | 815201 | | | | 4.8 | 7 | 1 | 308 | 0.250 | N | 6 | 55 | 5.0 | N | 1 | Lunde,R | O |
| 4.73 | 815202 | 4.9 | B | 100 | 6 | 6 | | | 0.050 | B | | 7 | C | Y | 1 | Jannink,D.W | P |
| 4.730 | 815203 | 4.7 | M | 100 | 6 | 7 | 0.5 | 60 | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | Q |
| 4.732 | 815204 | 5.2 | B | 100 | 6.8 | 7 | 0.40 | 90 | 0.330 | N | 4.5 | 59 | 6.3 | Y | 1 | Castino,R | |
| 4.733 | 815205 | 4.1 | S | 100 | 10 | 6 | | 63 | 0.08 | B | | 20 | 6.5 | Y | 2 | Parisio,R | |
| 4.736 | 815206 | 5.1 | B | 100 | 7.7 | 7 | 0.42 | 83 | 0.056 | B | | 8 | 4.7C | N | 1 | Fischer,D | R |
| 4.74 | 815207 | 4.7 | S | 100 | | 7 | 0.6 | 68 | 0.08 | B | | 15 | 5.0C | Y | 1 | Glowinski,C | S |
| 4.743 | 815208 | 5.3 | B | 100 | 5.8 | 8 | 0.83 | 83 | 0.14 | SN | 3.6 | 28 | 4.6C | N | 1 | Fischer,D | R |
| 4.743 | 815209 | 4.8 | M | 100 | 15 | 7 | 0.6 | 64 | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | T |
| 4.745 | 815210 | 4.2 | S | 100 | 6.0 | 4 | | | 0.05 | B | | 7 | 4.7C | Y | 1 | Haver,R | |
| 4.747 | 815211 | 5.4 | B | 100 | | | | | 0.050 | B | | 10 | 4.0 | N | 1 | Lehmann,T | |
| 4.748 | 815212 | 3.9 | S | 100 | 6 | 7 | | | 0.080 | B | | 20 | 4.5C | N | 5 | Meozzi,D | |
| 4.75 | 815213 | 5.6 | M | 100 | | 5 | | | 0.15 | N | 8 | 56 | 5.0C | Y | 1 | Sardini,D | |
| 4.75 | 815214 | 5.0 | B | DCS 7 | 12 | 5 | | | 0.063 | B | | 8 | 3.5C | N | 1 | Geenen,J.J | |
| 4.7534 | 815215 | 5.5 | B | 100 | 7 | 6 | 0.08 | 80 | 0.080 | B | | 11 | 4.0C | Y | 1 | Brogioni,A | U |
| 4.76 | 815216 | 4.4 | B | 4A | 18 | 6 | 1.75 | 62 | 0.050 | B | | 7 | 5.5 | Y | 2 | Merlin,J.-C | |
| 4.763 | 815217 | 5.1 | B | 100 | 7 | 6 | 0.38 | 90 | 0.050 | B | | 16 | 6.3 | Y | 1 | Castino,R | |
| 4.778 | 815218 | 4.9 | M | 100 | 4 | 3 | 1 | 65 | 0.06 | R | 5.7 | 20 | 5.8 | Y | 2 | Cardiel,N | |
| 4.781 | 815219 | 4.8 | B | 4A | 8 | 4 | 1.0 | | 0.05 | B | | 20 | | Y | 3 | Gallego,J | |
| 4.785 | 815220 | 4.8 | B | 4A | 15 | 7 | 1 | | 0.206 | N | 6 | 60 | 5.5 | Y | 1 | Gomez,A | V |
| 4.79 | 815221 | 5.1 | B | AA | 9 | 6 | | | 0.050 | B | | 7 | 4.5 | N | 1 | Schmeer,P | W |
| 4.79 | 815222 | 5.0 | | | 4 | | 0.07 | | 0.034 | B | | 9 | 8 | | 1 | Pereira,A | X |
| 4.7916 | 815223 | 5.1 | B | AAVSO | | 3 | | | 0.05 | B | | 7 | 5.5 | Y | 1 | Sicoli,P | |
| 4.792 | 815224 | 4.7 | B | 4A | 5 | | | | 0.05 | B | | 8 | 6 | Y | 1 | Cano,M | Y |
| 4.800 | 815225 | 5.6 | B | 4A | | | | | 0.050 | R | 5.6 | 30 | | Y | 1 | Mendez,J | |
| 4.813 | 815226 | 4.8 | B | 4A | 10 | | 1.5 | | 0.256 | N | 5.6 | 44 | | Y | 2 | Pedraz,S | |
| 4.94 | 815227 | 4.5 | M | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 4.94 | 815228 | 4.5 | S | AA | 10 | 8 | | | 0.050 | B | | 7 | | | | Green,D.W.E | Z |
| 4.94 | 815229 | 4.7 | S | AA | 9 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | Z |
| 4.95 | 815230 | 4.5 | M | AA | 9 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | Z |
| 4.969 | 815231 | 5.0 | B | 100 | 6 | 3 | 0.60 | 62 | 0.05 | B | | 7 | 6.0 | | | Lairet,R | |
| 4.98 | 815232 | 4.8 | B | AAVSO | 8 | 7 | 2.0 | 65 | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 4.98 | 815233 | 4.3 | M | AA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 4.98 | 815234 | 4.4 | S | AA | 10 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | Z |
| 4.98 | 815235 | 4.8 | S | AA | | | | | | EY | | | | | | Bortle,J.E | |
| 4.993 | 815236 | 5.1 | M | 100 | 7.6 | 8 | 2.1 | 62 | 0.05 | B | | 12 | 6.3Z | Y | 1 | Knight,S | a |

NOTE A (Observer gave limit as 10. Ed.)
NOTE B (PA value appears to be measured incorrectly. Ed.)
NOTE C Strong zodiacal light.
NOTE D Suspected tail?
NOTE E m2 (observer's symbol believed to mean "approximately equal to", Ed.) 10.
NOTE F Slight tail; with averted vision, about 1/2 degree.
NOTE G Comet low above horizon.
NOTE H On Jan. 4.7 also noted with 4.5 inches Newtonian f/8 at 45x a jet 15 arc min. long at PA 50 deg. [very faint].
NOTE I Naked eye!
NOTE J Tail length determined in 15x80 binoculars: 2.4 deg.
NOTE K Seeing worst.
NOTE L Deep twilight.
NOTE M (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are 31 Aqr, 32 Aqr.
NOTE N Brighter core.
NOTE O Tail length is upper limit.
NOTE P Telescopic limit is 6.5.
NOTE Q Tail length (I) 0.5 deg, (II) 0.3 deg.
NOTE R PA approximate.
NOTE S Hazy.

NOTE T Seeing good, transparency excellent.
NOTE U I perceive detail. (Roughly translated by IHW staff. Ed.)
NOTE V Drawing 1.
NOTE W Omicron Aqr: 4.7 mag., 32 Aqr: 5.3 mag.
NOTE X Tail length very uncertain. (Observer gave limit as 8. Ed.)
NOTE Y See draw. D.1.
NOTE Z Coma diameter approximate.
NOTE a Dust tail.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.224 | 830660 | 6 | 0.33 | N | 4.5 | 50, 70,100 | 15 | 5.5 | 1 | Fabre,R | A |
| 4.44 | 830661 | 1.38 | 0.15 | N | 6 | 23 | 14 | 4 | 2 | Tanikawa,M | B |
| 4.696 | 830662 | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | C |
| 4.70 | 830663 | 1.04 | 0.114 | N | 8 | 45 | 86 | 7.5 | 2 | Pesci,S | D |
| 4.734 | 830664 | 2 | 0.05 | R | 7 | 30, 35, 40 | 45 | 4.0 | 5 | Kopp,M | E |
| 4.743 | 830665 | 2.97 | 0.035 | R | 14 | 12, 15 | | 5.3 | 1 | Sajtz,A | F |
| 4.760 | 830666 | 0.25 | 0.356 | SC | 11 | 200 | 30 | | 1 | Verdenet,M | G |
| 4.764 | 830667 | | 0.25 | N | 6 | 75 | | | 1 | Guthier,O | H |
| 4.778 | 830668 | 2.6 | 0.06 | R | 5.7 | 20 | 20 | 5.8 | 2 | Cardiel,N | I |
| 4.781 | 830669 | | 0.050 | B | | 20 | | | 3 | Gallego,J | J |
| 4.785 | 830670 | | 0.206 | N | 6 | 60 | | 5.5 | 8 | Gomez,A | K |
| 4.792 | 830671 | | 0.050 | B | | 8 | | 6 | 1 | Cano,M | L |
| 4.795 | 830672 | 0.2 | 0.11 | R | 11 | 30, 70 | 30 | 5.5 | 1 | Adamoli,G | M |
| 4.797 | 830673 | 0.5 | 0.15 | N | 5 | 25, 75 | 15 | 5.5 | 2 | Merlin,J.-C | N |
| 4.813 | 830674 | | 0.256 | N | 5.6 | 44 | | | 2 | Pedraz,S | O |

NOTE A The north (PA 0 deg.) semi latus rectum is still longer than the south portion. The bright spine in the center of the tail is clearly visible. Note the clean straight line of the tail on the northern upper section. Two drawings supplied at scales of 6 arc min./mm and 10 arc min./mm. Magnification of 150x also used.
NOTE B m1 = 4.9. Dia. = 8'. DC = 7/10. m2 and feature at PA 85 (observer's symbol believed to mean "approximately equal to", Ed.) 10 and 20' long, respectively.
NOTE C Schematic drawing. (Duration not indicated. Time of observation is assumed to be end time. Ed.)
NOTE D Coma DC 7/8, about 7' diameter. Clearly visible main tail jet-like at PA 64, about 1.7 deg. long. (Estimate made with 12x50 binoculars.) Seen a probable second tail [sic], PA 50 deg. about 15' long (1/4 deg.) very faint. No special feature in comet's coma. Field 1.9.
NOTE E Stability of star images: fair, temperature: 0 deg. C. Coma bright, shows definite intensity peak at center, great latitude of tail, bright(!!) too. Vertex distance: V = 14.0'. Semi latus rectum: P1 = 11.5', P2 = 10.5'. Tail PA = 55 deg. Magnifications of 15, 20, 25 also used. City lights interfered with the observation.
NOTE F Coma 10', tail at PA 60-65 (plot), length 1.3 deg. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE G (Additional drawing submitted made using 11x80 binoculars (2.01'/mm). Ed.)
NOTE H Condensation conspicuously bright. Jets in PA 126, 45" and PA 63, 36". (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE I Tail long: 1 deg. at PA 65.
NOTE J Field 3 deg. Stellar central condensation. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE K (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE L Field 9 deg. Limiting magnitude through binoc.: 9.0. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE M Tail at PA 80. Central condensation of coma little and very bright. City lights interfered with the observation.
NOTE N Tail at PA 62, nearly parallel edges, very condensed over 15'; jet at PA 141, diffuse; jet at PA 319, more contrasted. Plume sunward.
NOTE O (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.012 | 850611 | 0.058 | 1.4 | | 34.5 x23.4 | 10.00 | Kodak Tri-X | | N | T | 4/C | 1 | Priester,D.C | A |
| 4.060 | 850612 | 0.305 | 2.5 | 0.122 | 6.8 x 4.5 | 20.00 | Kodak 2415 | | Y | S | 166/P | 1 | Minton,R.B | B |
| 4.715 | 850613 | 7.417 | 7.3 | 1.016 | 0.3 x 0.2 | 40.00 | | | N | | 1/N | 1 | Manulis,I | C |
| 4.769 | 850614 | 0.600 | 1.7 | 0.350 | 3.4 x 2.3 | 13.00 | Kodak Tri-X | 400/ | N | | 1/T | 1 | Molinari,L | D |
| 4.777 | 850615 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 1.00 | Kodak 103a-F | | N | M | 31/P | 1 | Guarro,J | E |
| 4.785 | 850616 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 7.50 | Kodak 103a-F | | N | M | 132/P | 1 | Guarro,J | F |
| 4.803 | 850617 | 0.600 | 1.7 | 0.350 | 3.4 x 2.3 | 35.00 | Kodak Tri-X | 400/ | N | | 2/T | 1 | Molinari,L | G |
| 4.981 | 850618 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 4.25 | Kodak 2415 | | Y | S | 3/P | 1 | Dilsizian,R | H |

NOTE A Push processed to 800 ASA.
NOTE B (Prints submitted by observer are composites of five contiguous 4 min. exposures. Ed.) Instrument is Aero-Ektar serial camera lens.
NOTE C Instrument is Ritchey-Chretien design. Observer assisted by E. Drucker.
NOTE D Instrument is Schmidt camera. (Observer supplied other nonessential notes on original report form. Ed.) 120 size film used.
NOTE E (Observer's image identifier is followed by suffix A. Ed.)
NOTE F (Observer's image identifier is 32A. Ed.)
NOTE G Kodak Wratten 36 filter used. Instrument is Schmidt camera. (Observer supplied other nonessential notes on original report form. Ed.) 120 size film used.
NOTE H Stellar guiding was used because of extremely small apparent movement of the comet within the exposure period (movement during a 24 hour period was 2 minutes of arc [sic] in RA and approximately 0.2-0.3 degrees of arc in declination during this period). The 5.5" Schmidt camera gives a strong "hot spot" near the center of the frame.

DATE: 5 JAN 1986

DATE: 5 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.007 | 815237 | 5.5 | B | 100 | 20 | 6 | 2 | 85 | 0.06 | R | 8.3 | 30 | 4.7 | N | 1 | Fox,J.H | A |
| 5.010 | 815238 | 4.6 | B | 100 | | | | | 0.080 | B | | 20 | 5.8 | Y | | Smith,D | |
| 5.018 | 815239 | 6.1 | M | 100 | | | 0.67 | 90 | 0.050 | B | | 10 | 5.0 | Y | 1 | Smith,A | B |
| 5.028 | 815240 | 4.8 | M | 101 | 30 | 7 | 1.5 | 65 | 0.080 | B | | 20 | 5.4 | Y | 2 | Ariail,R.B | |
| 5.028 | 815241 | | | | | | | | | EY | | | 5.5 | Y | 1 | Stephan,C | C |
| 5.031 | 815242 | | | 100 | 30 | 7 | 0.30 | 292 | 0.200 | SC | 10 | 78 | 6.2 | Y | 2 | Saraceno,J | D |
| 5.031 | 815243 | 5.1 | B | 100 | | | | | 0.050 | B | | 7 | | | | Saraceno,J | |
| 5.063 | 815244 | 5.3 | S | 100 | 7.6 | 6 | | | 0.080 | B | | 11 | 4.5C | Y | 1 | Bailey,G | E |
| 5.07 | 815245 | 4.8 | V | 4A | | | | | | EY | | | 6.0 | Y | 1 | Keen,R | |
| 5.08 | 815246 | 4.9 | | 4A | 8 | 7 | 2.4 | 60 | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | F |
| 5.094 | 815247 | | | 100 | 4.8 | 5 | | | 0.20 | SC | 10 | 70 | 4.5C | Y | 1 | Bailey,G | G |
| 5.1632 | 815248 | 4.8 | S | DCS | 5 | 4 | | | 0.050 | R | | 8 | 4.5 | | 3 | Machholz,D | |
| 5.376 | 815249 | 4.8 | B | 100 | | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Hayashi,H | |
| 5.376 | 815250 | | | | 10 | 6 | 0.75 | | 0.12 | N | 6 | 40 | | | | Hayashi,H | |
| 5.385 | 815251 | 5.0 | M | 100 | 4.5 | 8 | 1.5 | | 0.08 | B | | 11 | 5 | Y | | Mitsuma,S | H |
| 5.389 | 815252 | 4.7 | M | 100 | 7 | 7 | 0.33 | 70 | 0.06 | R | 13.3 | 40 | 4.5C | Y | 2 | Kato,T | |
| 5.389 | 815253 | 5.1 | B | 4A | | | | | 0.035 | B | | 7 | | | 1 | Okada,M | |
| 5.39 | 815254 | 4.7 | S | 100 | 5 | 7 | | | 0.07 | B | | 10 | 4.0C | Y | 1 | Yasuki,M | |
| 5.393 | 815255 | 4.5 | M | 100 | 8 | 8 | 0.50 | 70 | 0.030 | B | | 8 | 4.5C | Y | 2 | Kato,T | |
| 5.40 | 815256 | 4.9 | M | 100 | | | 1.2 | | 0.05 | B | | 7 | 5.5 | Y | 1 | Suzuki,K | |
| 5.40 | 815257 | | | 100 | 3.3 | 5 | | | 0.21 | N | 5.0 | 88 | 5.5 | Y | 1 | Suzuki,K | I |
| 5.402 | 815258 | 4.2 | M | 100 | 7.6 | 6 | | | 0.12 | N | 6 | 36 | 4.0C | Y | 1 | Kishi,A | |
| 5.406 | 815259 | 4.2 | M | 100 | 6.2 | 7 | | | 0.1 | N | 10 | 40 | 3.5 | Y | 1 | Ichikawa,K | |
| 5.41 | 815260 | 4.7 | S | AAVSO | 8 6 | 6 | 1.2 | 65 | 0.13 | N | 6.3 | 24 | 6.5 | Y | 1 | Hayashi,A | |
| 5.417 | 815261 | 4.7 | B | 100 | | 7 | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Hasegawa,T | |
| 5.42 | 815262 | 4.2 | S | 100 | 5 | 7 | 1.0 | | 0.08 | B | | 15 | 5.3TC | Y | 1 | Lovejoy,T | |
| 5.42 | 815263 | 5.0 | M | SAO | 9 | 6 | 1.6 | 65 | 0.06 | R | 12 | 22 | 4.5 | Y | 5 | Nakamura,A | |
| 5.42 | 815264 | 4.8 | B | | 10 | 6 | 0.83 | 300 | 0.05 | B | | 10 | 5.0 | N | 1 | Uda,K | D |
| 5.43 | 815265 | 4.9 | B | 100 | 3.4 | 8 | 1.5 | 70 | 0.05 | B | | 7 | 4.0 | Y | 1 | Kanai,K | |
| 5.431 | 815266 | 4.9 | B | 100 | | | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Date,M | |
| 5.451 | 815267 | 4.9 | B | 100 | 4.0 | 7 | 1.9 | | 0.070 | B | | 10 | 5.0 | Y | 2 | Nakamura,Y | |
| 5.451 | 815268 | | | 100 | 2 | 5 | | | 0.152 | N | 8 | 64 | | | 1 | Tregaskis,T.B | J |
| 5.455 | 815269 | 5.3 | S | 100 | | 3 | | | 0.05 | B | | 10 | | | 1 | Tregaskis,T.B | K |
| 5.52 | 815270 | 4.8 | B | E | 14 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.52 | 815271 | 4.9 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.52 | 815272 | 4.9 | B | M | 5 | 7 | 0.4 | 40 | 0.05 | B | | | | | | Konstantinov,S | |
| 5.54 | 815273 | 4.7 | B | 100 | | 6 | | | 0.030 | B | | 8 | 5.4 | Y | | Pearce,A | |
| 5.54 | 815274 | 4.6 | S | 100 | | | | | 0.030 | B | | 8 | 5.4 | Y | | Pearce,A | |
| 5.54 | 815275 | 4.8 | B | 100 | 7.5 | 7 | | | 0.065 | B | | 20 | 5.4 | Y | | Pearce,A | |
| 5.54 | 815276 | 5.0 | B | M | 5 | | | | 0.05 | B | | 7 | | | | Sikoruk,L | |
| 5.54 | 815277 | 4.6 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.54 | 815278 | 5.7 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.54 | 815279 | 5.0 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.55 | 815280 | 5.1 | B | M | 3 | 5 | | | 0.05 | B | | 7 | | | | Petrov,P | |
| 5.56 | 815281 | 5.1 | S | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.57 | 815282 | 5.0 | S | E | 15 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.58 | 815283 | 5.1 | S | E | 15 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.59 | 815284 | 5.4 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 5.594 | 815285 | 4.7 | M | 100 | 5.0 | 6 | | | 0.254 | N | 6 | 61 | 4.7 | Y | 1 | Bhadriab,L.H.E | L |
| 5.60 | 815286 | 4.2 | V | M | | | | | | EY | | | | | | Poroshin,A | |
| 5.68 | 815287 | 4.9 | B | AAVSO | 6 | 6 | 0.8 | 66 | 0.20 | N | 4 | 30 | | | | Selevich,G | |
| 5.691 | 815288 | 5.0 | B | CZ | 15 | 5 | 1 | 40 | 0.04 | B | | 7 | 6.1 | Y | 1 | Brancik,K | |
| 5.691 | 815289 | 5.6 | S | 100 | 3 | 4 | | | 0.064 | R | 12 | 20 | 5.1C | N | 1 | Urbanski,P | |
| 5.694 | 815290 | 4.9 | M | CZ | | 5 | | | 0.05 | B | | 7 | 4.6 | | 2 | Pravec,P | |
| 5.697 | 815291 | 4.4 | M | CZ | 23 | | | | 0.10 | B | | 25 | 4.7C | Y | 1 | Valasek,V | M |
| 5.70 | 815292 | 5.5 | M | AA | 3 | 7 | 0.6 | 80 | 0.106 | R | 5.7 | 24 | | | | Keszthelyi,S | N |
| 5.70 | 815293 | 4.1 | | DCS 7 | | 6 | | | | EY | | | 5 C | N | 2 | Kroon,B | O |
| 5.700 | 815294 | 4.7 | M | 100 | 7.5 | 7 | | | 0.089 | R | 5.5 | 18 | 5.5 | N | 1 | Ventura,F | |
| 5.701 | 815295 | | | CZ | 3.5 3 | 5 | 1 | 60 | 0.10 | N | 6 | 38 | 4.6 | | 2 | Pravec,P | |
| 5.701 | 815296 | 5.2 | M | 100 | 8 | 5 | | | 0.064 | R | 12.5 | 31 | 4.0C | Y | 1 | Szymocha,M | P |
| 5.708 | 815297 | 3.8 | S | 100 | 9 | 7 | | | 0.080 | B | | 20 | 4.2C | N | 5 | Meozzi,D | |
| 5.708 | 815298 | 5.2 | B | 100 | | 4 | | | 0.064 | R | 6.3 | 10 | 5.0 | Y | 2 | Paradowski,M | |
| 5.71 | 815299 | 4.8 | B | M | | | | | 0.08 | B | | 40 | | | | Palko,Yu | |
| 5.712 | 815300 | 4.8 | M | AAVSO | 9 | 9 | 0.3 | 80 | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | Q |
| 5.712 | 815301 | 5.0 | M | CZ | 6 | 7 | | | 0.05 | B | | 7 | 5.3 | Y | 1 | Silhan,J | R |
| 5.715 | 815302 | 5.5 | B | 100 | 13.4 | 6 | | | 0.066 | R | 15.2 | 30 | 4.5 | Y | 1 | Gora,D | |
| 5.715 | 815303 | | | | 5.2 | 7 | 1 | 306 | 0.250 | N | 6 | 55 | 5.5 | N | 1 | Lunde,R | S |
| 5.717 | 815304 | | | 100 | | 8 | 1.0 | | 0.030 | B | | 8 | 5.5 | Y | 6 | Villa,M | |
| 5.7187 | 815305 | 4.9 | S | | 22 | 8 | 0.82 | 48 | 0.08 | B | | 10 | 5.4 | Y | 1 | Znasik,M | |
| 5.72 | 815306 | 4.4 | B | AAVSO | 8 | 6 | 2 | 60 | 0.05 | R | 4 | 7 | | | | Chernis,K | T |
| 5.720 | 815307 | 4.9 | B | 100 | | | | | 0.050 | B | | 10 | 6.5 | Y | 1 | Trebacz,A | |
| 5.722 | 815308 | 4.8 | M | CZ | | 8 | | | 0.080 | B | | 10 | 4.0 | N | 1 | Bilek,V | U |
| 5.722 | 815309 | 4.6 | B | 100 | | 7 | 1.5 | | 0.050 | B | | 7 | 5.5 | N | 1 | Lunde,R | |
| 5.725 | 815310 | 5.5 | | 100 | 2 | 6 | 0.8 | 92 | 0.06 | R | 6.9 | 20 | | Y | 1 | Guerrini,F | |
| 5.726 | 815311 | 4.9 | M | 100 | 11 | 6 | 1.0 | 62 | 0.07 | B | | 20 | 5.5 | Y | 1 | Tanti,T | V |
| 5.729 | 815312 | 4.8 | M | 100 | 6 | 8 | | | 0.05 | B | | 10 | 5.0Z | Y | 8 | Melandri,F | W |
| 5.729 | 815313 | 5.2 | B | 100 | 15 | 7 | 1 | 75 | 0.08 | B | | 20 | 5 | N | 2 | Knain,E | X |
| 5.729 | 815314 | 5.1 | B | 100 | | 4 | | | 0.05 | B | | 7 | 4.5 | Y | 2 | Paradowski,M | |
| 5.729 | 815315 | 4.6 | B | CZ | 9 | 6 | 0.8 | 30 | 0.10 | B | | 25 | 6.2 | Y | 2 | Polak,J | |
| 5.729 | 815316 | 5.0 | B | CZ | | 3 | | | 0.03 | B | | 6 | 5.5 | | 1 | Vaclik,F | Y |
| 5.73 | 815317 | 5.5 | B | 100 | 7.9 7 | 9 | 0.4 | 65 | 0.203 | SC | 10 | 44 | 5.8C | Y | 2 | Maraziti,A | Z |
| 5.733 | 815318 | 5.0 | B | 100 | | | | | 0.050 | B | | 10 | 6.5 | Y | 1 | Slusarczyk,J | |
| 5.7395 | 815319 | 5.3 | B | 100 | 7 | 6 | 0.17 | 80 | 0.080 | B | | 11 | 4.0C | Y | 1 | Brogioni,A | a |
| 5.74 | 815320 | 4.9 | S | 100 | | | | | 0.08 | B | | 10 | 4.3 | | 1 | Shanklin,J.D | b |
| 5.740 | 815321 | 5.4 | M | CZ | | 3 | | | 0.060 | B | | 12 | 5.4 | Y | 1 | Barak,R | |
| 5.74 | 815322 | 5.0 | B | 100 | 10 | 8 | 0.4 | 60 | 0.05 | B | | 7 | 5.8C | Y | 2 | Maraziti,A | c |
| 5.742 | 815323 | 4.9 | M | 100 | | | | | 0.030 | B | | 8 | 5.5 | Y | 6 | Villa,M | |
| 5.743 | 815324 | 4.6 | S | 100 | | | | 60 | 0.08 | B | | 11 | | N | 1 | Gainsford,M.J | d |
| 5.743 | 815325 | 5.3 | M | 100 | | 6 | | | 0.08 | B | | 10 | 4.0C | N | 1 | Rapavy,P | e |
| 5.750 | 815326 | 4.8 | M | 100 | 10 | 4 | | | 0.05 | B | | 10 | 5 C | Y | 1 | Menichetti,R | |
| 5.750 | 815327 | 6.0 | B | 100 | 4 | 5 | 0.4 | 70 | 0.050 | R | 5.6 | 19 | 6.2 | Y | 2 | Sciezor,T | f |
| 5.757 | 815328 | 4.7 | B | 4A | 25 | 7 | 1.5 | 85 | 0.06 | R | | 25 | 5.5 | Y | 1 | Ward,A | g |
| 5.757 | 815329 | 4.8 | M | 100 | | | | | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | V |
| 5.770 | 815330 | 4.7 | B | 100 | | | | | 0.03 | B | | 8 | 5.5 | Y | 1 | Filimon,E | h |
| 5.770 | 815331 | | B | 100 | 6 | 6 | 1 | 65 | 0.07 | B | | 20 | 5.5 | Y | 1 | Filimon,E | h |
| 5.771 | 815332 | 4.1 | B | CZ | | 5 | | | 0.08 | B | | 10 | 5.6 | Y | 1 | Elias,P | |
| 5.781 | 815333 | 5.9 | M | 100 | 60 | 3 | | | 0.070 | R | 14 | 20 | 6.0 | Y | 1 | Luga,M | |
| 5.781 | 815334 | 4.7 | B | 100 | 18 | | 0.92 | 45 | 0.030 | B | | 8 | 5.3 | Y | 2 | Kellner,A | |
| 5.781 | 815335 | 5.1 | M | 100 | 8 | 7 | 2.2 | 63 | 0.050 | B | | 7 | 7.0T | Y | 1 | Mikuz,H | |
| 5.781 | 815336 | 4.7 | B | 4A | | | | | 0.030 | B | | 8 | 5.5 | Y | 1 | van der Mey,L | i |
| 5.781 | 815337 | | | | | | 1.25 | 67 | 0.050 | B | | 7 | 5.5 | Y | 1 | van der Mey,L | j |

DATE: 5 JAN 1986 DATE: 5 JAN 1986

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.791 | 815338 | 4.7 | B | 4A | 15 | | 7 | 1 | 90 | 0.030 | B | | 8 | 5.5 | Y | 1 | Ward,A | |
| 5.792 | 815339 | 4.9 | M | 100 | 3 | | 5 | | | 0.06 | R | 5.7 | 20 | 4.9C | Y | 3 | Cardiel,N | |
| 5.795 | 815340 | 4.6 | S | 100 | 8 | 7 | 7 | 1 | 50 | 0.065 | B | | 12 | 5.0 | N | 1 | Foulkes,M | k |
| 5.809 | 815341 | 5.2 | M | 100 | 22 | | 6 | | | 0.050 | B | | 10 | 4.5C | Y | 1 | Lozano,L | |
| 5.809 | 815342 | 4.9 | S | 100 | 11 | | 7 | 0.83 | | 0.05 | B | | 10 | 3.8 | Y | 1 | Hurst,G.M | l |
| 5.812 | 815343 | 4.9 | S | 100 | 11 | | 8 | 0.83 | | 0.08 | B | | 15 | 3.8 | Y | 1 | Hurst,G.M | l |
| 5.96 | 815344 | 4.3 | M | AA | | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 5.96 | 815345 | 4.5 | S | AA | 10 | | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | c |
| 5.97 | 815346 | 4.4 | M | AA | | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 5.97 | 815347 | 4.6 | S | AA | 10 | | 6 | | | 0.035 | B | | 7 | | | | Green,D.W.E | c |
| 5.972 | 815348 | 4.7 | M | 100 | 6 | | 7 | 0.4 | 65 | 0.05 | B | | 7 | 5.0 | Y | 1 | DeYoung,J.A | |
| 5.972 | 815349 | | B | 100 | 8 | | 3 | 0.67 | 58 | 0.05 | B | | 7 | 5.0 | | | Lairet,R | |
| 5.978 | 815350 | | | | | | 4 | | | 0.05 | B | | 20 | 3.5 | Y | 8 | da Silva,L.A.L | m |
| 5.979 | 815351 | 4.9 | S | 100 | 5.0 | | 7 | | | 0.203 | N | 6 | 101 | 4.5 | Y | 1 | Hudak,D.M | |
| 5.979 | 815352 | 5.2 | M | 100 | | | | | | 0.050 | B | | 7 | | Y | 4 | Torres,E | n |

NOTE A SAO 145940 and SAO 145916 comparison stars.
NOTE B Tail length estimated by plots.
NOTE C 7x35 mm binoculars also used. Tail still bluish tint. Nucleus very stellar - a goldish-red color. Very colorful. This at 57x and 101x in 36.2 cm refl. Tail somewhat brighter and 1/4 deg. larger than on Dec. 31 UT.
NOTE D (PA value may have been incorrectly determined. Ed.)
NOTE E Fine sight with star shining thru coma!
NOTE F Modified Sidgwick method used.
NOTE G Coma distended (or tail!).
NOTE H 7.9.
NOTE I Meter: coma diameter is P1 + P2.
NOTE J Round stellar-like nucleus. Clear and twilight.
NOTE K Clear and twilight. (Observer gave limit as approximately 6.5. Ed.)
NOTE L Slight tail, with averted vision, about 1/2 degree.
NOTE M Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE N + 7x50 B and 7.5 mag. nucleus + naked eye. [sic]
NOTE O Tail length determined in 15x80 binoculars: 3.0 deg.
NOTE P Small tail barely visible.
NOTE Q Naked eye.
NOTE R Mist, during the public observation with some 30 visitors.
NOTE S Tail length is upper limit.
NOTE T Tail length is lower limit. PA approximate.
NOTE U Clouds.
NOTE V Seeing good, transparency good/excellent. Clouds.
NOTE W Veiled sky.
NOTE X Dew, cold air.
NOTE Y Probably well adapted, not dark adapted, of course - there is no dark sky in Czechoslovakia.
NOTE Z Elliptical coma.
NOTE a I perceive detail. (Roughly translated by IHW staff. Ed.)
NOTE b Thin cloud clearing.
NOTE c Coma diameter approximate.
NOTE d Cloudy. Tail = ?, PA uncertain.
NOTE e Coma ellipt.
NOTE f Very clear skies.
NOTE g Faint blue colour.
NOTE h Unrestrained visibility. (Translated by IHW staff. Ed.)
NOTE i Visible with naked eye.
NOTE j Type I tail.
NOTE k Variable cloud.
NOTE l Fan tail, PA 65 to 81.
NOTE m Twilight.
NOTE n (Observer gave limit as 9.0. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.007 | 830675 | 0.6 | 0.203 | R | 13 | 85,150,225 | 10 | 4.7 | 1 | Fox,J.H | A |
| 5.018 | 830676 | | 0.254 | N | 6 | 170 | 33 | 3.0 | 6 | Troiani,D.M | B |
| 5.698 | 830677 | 0.97 | 0.106 | R | 5.7 | 24 | 48 | 5.7 | 1 | Keszthelyi,S | C |
| 5.712 | 830678 | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | D |
| 5.724 | 830679 | 0.9 | 0.063 | R | 13.3 | 52 | | | 1 | Csukas,M | E |
| 5.732 | 830680 | 0.4 | 0.06 | R | 6.9 | 20 | 21 | 4.8 | 1 | Guerrini,F | F |
| 5.733 | 830681 | 0.05 | 0.100 | B | | 25 | 30 | 3.8 | 1 | Gojdic,S | |
| 5.733 | 830682 | | 0.050 | R | 5.6 | 19 | 10 | 6.2 | 2 | Sciezor,T | G |
| 5.738 | 830683 | 1.2 | 0.080 | B | | 20 | 15 | 5 | 1 | Knain,E | H |
| 5.740 | 830684 | 0.35 | 0.203 | SC | 10 | 44, 77,167 | 30 | 5.8 | 2 | Maraziti,A | I |
| 5.755 | 830685 | 3 | 0.05 | B | 8 | 10 | 14 | 5 | 1 | Menichetti,R | J |
| 5.781 | 830686 | 0.21 | 0.203 | SC | 10 | 80,220 | 10 | 5.0 | 1 | Foulkes,M | K |
| 5.799 | 830687 | 1.99 | 0.065 | B | | 12 | 10 | 5.0 | 1 | Foulkes,M | L |
| 5.814 | 830688 | 1.0 | 0.08 | B | | 15 | 25 | 3.8 | 1 | Hurst,G.M | M |
| 5.977 | 830689 | | 0.050 | B | | 7 | 25 | | 3 | Cifuentes,E | N |

NOTE A Inner coma circular, but has mottled appearance. Outer coma almost heart shaped: blunt to W with lobes necking in [sic] at tail. Tail streaked, brighter along N edge. Nucleus slightly elongated NW-SE at 225x.
NOTE B Seeing (1-3): 2. Sky darkness (1-5): 1. Rays at PA 35 deg. and at PA 180 deg. Streamer at PA 95 deg. DC = 5.
NOTE C Tail 0.6 at PA 80.
NOTE D Schematic drawing. (Duration not indicated. Time of observation is assumed to be end time. Ed.)
NOTE E Total magnitude = 4.6, coma diameter 8'x6'; DC = 9; tail at PA 53, 17' length. A 20' tail had PA 95 10' to nucleus, PA 98 20' to nucleus, PA 101 23' to nucleus. [sic] (Duration not indicated. Time of observation is end time. Ed.) Schematic drawing.
NOTE F Halley's Comet magnitude 5.5.
NOTE G Very good observing conditions. The skies perfectly free of any artificial light pollution. The comet visible by naked eye as a patch of 5.5 mag. (Two drawings supplied at scales of 1.2 and 0.7 arc min./mm. Ed.)
NOTE H Diffuse, faint tail. Tail consists of long thin extremely diffuse filaments. Rays at PA 75.
NOTE I Elliptical coma - not pointlike (word translated by IHW staff, Ed.) nucleus. Tail at PA 65 clearly seen, maybe curved towards north at its end. Coma diameter = 7.9'x7'; DC = 8. Vertex distance = 4'. Semi latus rectum P1 = P2 = 3.6'.
NOTE J Magnitude 4.8 (Bobrovnikoff method). Diameter 10', DC 4. Vertex distance = 4.5', semi latus rectums P1 = 4.5', P2 = 4.5'.
NOTE K Tail at PA 50, length 10'. Spike at PA 330, length 3'. Spike at PA 20, length 3'. Coma diameter = 5'x4'. DC = 6. Coma slightly elliptical. Centre appeared as a small but bright spot. Slighty fainter elliptical area extended out at PA 110 deg. Tail faint. Some slightly brighter areas were detected but these were faint (i.e., features given above).
NOTE L Coma diameter 8'x7', DC = 7. Coma slightly elliptical, centre bright - almost star like. Tail faint but obvious, 1 deg. at PA 50.
NOTE M Tail overall length 50' fanned. PA 65-81. Bright for approximately one third of overall length then faint and widening. Central condensation offset opposite to tail.
NOTE N Low altitude above horizon. Tail not seen well, seeing only beginning of both gas and dust tails. (Observer gave limit as 9.0. Translated by IHW staff. Ed.)

DATE: 5 JAN 1986

DATE: 5 JAN 1986

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.005 | 850619 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 6.00 | Kodak 2415 | | Y | O | 33/P | 1 | Crist,M | A |
| 5.038 | 850620 | 0.420 | 8 | | 4.9 x 3.3 | 20.00 | Kodak Tri-X | 400/27 | N | O | 021/P | 1 | Bro,M | B |
| 5.048 | 850621 | 0.420 | 8 | | 4.9 x 3.3 | 10.00 | Kodak Tri-X | 400/27 | N | O | 022/P | 1 | Bro,M | B |
| 5.056 | 850622 | 0.152 | 2.0 | | 13.5 x 9.0 | 12.00 | Kodak 2415 | | Y | S | 24/P | 2 | Minton,R.B | C |
| 5.387 | 850623 | 1.760 | 5.8 | 0.300 | 1.2 x 0.8 | 13.00 | Kodak 2415 | | Y | | 103/P | 1 | Niijima,T | D |
| 5.393 | 850624 | 0.850 | 3.4 | 0.25 | 2.4 x 1.6 | 10.33 | Kodak 6415 | | Y | C | 6/P | 1 | Kojima,T | E |
| 5.699 | 850625 | 0.500 | | | 4.1 x 2.7 | 20.00 | Fomapan F27 | 400/27 | N | O | 3/N | 1 | Maturkanic,M | F |
| 5.700 | 850626 | 0.750 | 6.3 | | 2.7 x 1.8 | 13.00 | ORWO | 400/27 | N | C | 7/N | 1 | Znasik,M | G |
| 5.702 | 850627 | 0.135 | 1.8 | | 15.2 x10.2 | 1.50 | Fujichr. Pro | 100/ | Y | | 11/P | 2 | Conrad,R | H |
| 5.727 | 850628 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 26.00 | Ilford HP5 | | N | O | 24/T | 1 | Mikuz,H | I |
| 5.727 | 850629 | 0.250 | 4 | | 8.2 x 5.5 | 26.00 | Ilford HP5 | | N | O | 2/T | 1 | Mikuz,H | J |
| 5.741 | 850630 | 0.500 | 5.6 | | 4.1 x 2.7 | 4.00 | Kodak Tri-X | 400/ | N | X | 2/P | 1 | Ward,A | K |
| 5.747 | 850631 | 0.500 | 5.6 | | 4.1 x 2.7 | 8.00 | Kodak Tri-X | 400/ | N | X | 3/P | 1 | Ward,A | K |
| 5.754 | 850632 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 21.00 | Ilford HP5 | | N | O | 25/T | 1 | Mikuz,H | I |
| 5.756 | 850633 | 0.500 | 5.6 | | 4.1 x 2.7 | 15.00 | Kodak Tri-X | 400/ | N | X | 4/P | 1 | Ward,A | L |
| 5.765 | 850634 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 4.00 | Ilford HP5 | | N | O | 26/T | 1 | Mikuz,H | I |
| 5.968 | 850635 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 4.00 | Kodak 2415 | | Y | S | 4/P | 1 | Dilsizian,R | M |
| 5.999 | 850636 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 20.00 | Kodak 2415 | | Y | S | 31/C | 1 | Chester,G.R | |

NOTE A Clouds interrupted the session. Only one exposure possible. (Observer's image identifier is 33A. Ed.) City lights interfered with the observation. Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE B Auxiliary lens used. Original instrument characteristics are FL = 0.210, f/4.
NOTE C Instrument is Kollmorgen lens. (Observer's image identifier is preceded by prefix K2-. Ed.)
NOTE D (Observer's image identifier is preceded by prefix Nj. Ed.)
NOTE E Instrument is Wright-Schmidt. Large format (120 size) film used.
NOTE F Twilight and city lights interfered with the observation.
NOTE G Large format (11.8x8.6 cm) film used.
NOTE H Zodiacal light intefered with the observation. UV filter used. (This probably means a UV blocking, clear glass filter. Ed.)
NOTE I (Observer's image identifier is followed by suffix A. Ed.)
NOTE J 120 size film (6x6 cm).
NOTE K UV filter used.
NOTE L O21 yellow [sic] filter also used. UV filter used.
NOTE M Stellar guiding was used because of extremely small apparent movement of the comet within the exposure period (movement during a 24 hour period was 2 minutes of arc [sic] in RA and approximately 0.2-0.3 degrees of arc in declination during this period). The 5.5" Schmidt camera gives a strong "hot spot" near the center of the frame.

DATE: 6 JAN 1986 DATE: 6 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.000 | 815353 | 4.7 | S | 100 | 15.4 | 8 | 0.5 | 68 | 0.108 | N | 4 | 24 | 5.0 | Y | 1 | Franch,J | A |
| 6.00 | 815354 | 4.8 | B | AAVSO | 8 | 6 | 2.0 | 65 | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 6.00 | 815355 | | | | 6 | 6 | 1 | 65 | 0.120 | B | | 20 | | | | Bortle,J.E | B |
| 6.00 | 815356 | | | | 4 | 6 | 1 | 65 | 0.317 | N | 6 | 55 | | | | Bortle,J.E | C |
| 6.01 | 815357 | 4.9 | B | 100 | 8 | | 1 | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 6.010 | 815358 | 4.8 | B | 100 | | | | | 0.080 | B | | 20 | 5.8 | Y | | Smith,D | |
| 6.02 | 815359 | 5.1 | B | 100 | 12 | 6 | 1 | | 0.050 | B | | 10 | 4.5 | Y | 1 | Birkner,A | D |
| 6.02 | 815360 | 5.7 | B | 100 | 8.4 5.6 | | 0.58 | | 0.335 | N | 4.5 | 56 | | Y | | Kronk,G | E |
| 6.048 | 815361 | 6.3 | M | 100 | | | 0.50 | 90 | 0.050 | B | | 10 | 5.0 | Y | 1 | Smith,A | |
| 6.05 | 815362 | 5.6 | B | 4A | 10 | 3 | | | 0.035 | B | | 7 | 4.5 | Y | 1 | Jacobson,E | F |
| 6.05 | 815363 | | | | 42 | 3 | | | | EY | | | 4.5 | Y | 1 | Jacobson,E | |
| 6.07 | 815364 | 4.8 | V | 4A | | | | | | EY | | | 5.5 | Y | 1 | Keen,R | |
| 6.07 | 815365 | 4.9 | | 4A | 8 | 7 | 2.2 | 60 | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | G |
| 6.094 | 815366 | 4.8 | M | 100 | | | | | 0.050 | B | | 7 | | N | 3 | Jeffrey,J | |
| 6.208 | 815367 | 4.7 | M | 4A | 22 | 7 | 1.17 | 290 | 0.05 | B | | 10 | 5.5 | Y | 1 | Fabre,R | H |
| 6.38 | 815368 | 4.4 | S | 4A | 10 | 6 | 1.17 | | 0.08 | B | | 11 | 5.5 | Y | 3 | Momose,M | |
| 6.39 | 815369 | 5.0 | M | 100 | 4.5 | 8 | 1.5 | 60 | 0.08 | B | | 11 | 5 C | Y | 1 | Mitsuma,S | I |
| 6.394 | 815370 | 4.5 | M | 100 | 7 | 7 | 0.50 | 60 | 0.030 | B | | 8 | 4.5C | Y | 1 | Kato,T | |
| 6.397 | 815371 | 4.7 | M | 100 | 4 | 7 | 0.33 | 55 | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | |
| 6.40 | 815372 | 5.0 | B | 100 | 4.5 | 7 | 1.8 | 60 | 0.05 | B | | 7 | 4.0 | N | 1 | Kanai,K | |
| 6.40 | 815373 | 4.8 | S | AAVSO | 6.5 | 6 | 1.5 | 65 | 0.13 | N | 6.3 | 24 | 6.0 | Y | 1 | Hayashi,A | |
| 6.41 | 815374 | 5.0 | B | AAVSO | 5 | 6 | 1 | 65 | 0.07 | B | | 10 | 6.0 | Y | 1 | Hayashi,A | |
| 6.412 | 815375 | 4.1 | M | 100 | 7.6 | 7 | | | 0.12 | N | 6 | 36 | 3.0C | Y | 1 | Kishi,A | |
| 6.417 | 815376 | 5.3 | B | 100 | | 5 | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hasegawa,T | |
| 6.424 | 815377 | 5.2 | B | 100 | | | | | 0.07 | B | | 10 | 4.7 | Y | 1 | Date,M | |
| 6.438 | 815378 | 5.4 | B | 100 | 3.6 | 6 | 0.43 | 55 | 0.08 | R | 12.5 | 40 | 5.5 | Y | 1 | Feisheng,J | |
| 6.44 | 815379 | 5.0 | B | | 10 | 6 | 0.7 | | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 6.446 | 815380 | 4.6 | S | 100 | 8 | 6 | 1 | 80 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |
| 6.451 | 815381 | 5.5 | S | 100 | 10 | 3 | | | 0.050 | B | | 12 | 3.5 | Y | 1 | Batza,H | J |
| 6.46 | 815382 | | | SAO | 10 | 7 | 0.17 | 85 | 0.15 | N | 6 | 23 | 3 | Y | 2 | Tanikawa,M | K |
| 6.46 | 815383 | 4.9 | B | SAO | | | | | 0.05 | B | | 7 | 3 | Y | 2 | Tanikawa,M | |
| 6.465 | 815384 | 5.6 | S | 100 | | 3 | | | 0.05 | B | | 10 | | | 1 | Tregaskis,T.B | L |
| 6.470 | 815385 | | | 100 | 3 | 4 | | | 0.152 | N | 8 | 64 | | | 1 | Tregaskis,T.B | M |
| 6.52 | 815386 | 5.6 | B | M | 5 | 6 | 0.1 | 61 | 0.05 | B | | 7 | | | | Guryanov,S | N |
| 6.54 | 815387 | 4.6 | B | E | 19 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 6.54 | 815388 | 4.6 | B | E | 17 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 6.58 | 815389 | 5.0 | B | E | 19 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 6.58 | 815390 | 4.9 | B | E | 20 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 6.58 | 815391 | 5.0 | S | E | | | | | 0.05 | R | 8 | 20 | | | | Zagaynov,V.A | |
| 6.583 | 815392 | 5.1 | M | 4A | 4.2 | 5 | | | 0.254 | N | 6 | 61 | 3.5C | Y | 1 | Bhadriah,L.H.E | O |
| 6.60 | 815393 | 4.5 | M | E | 13 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 6.62 | 815394 | 4.8 | B | E | 10 | 4 | 2 | 63 | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.63 | 815395 | 5.6 | M | | 13 | 6 | 0.5 | | 0.04 | B | | 12 | | | | Maydik,A | |
| 6.64 | 815396 | 7 : | B | M | 8 | | | | 0.04 | B | | 8 | | | | Zinvyev,V.A | |
| 6.65 | 815397 | 5.6 | M | M | 13 | 6 | 0.7 | | 0.04 | B | | 12 | | | | Maydik,A | |
| 6.65 | 815398 | 5.3 | B | M | 9 | 4 | | | 0.07 | N | 8 | 33 | | | | Yurchenko,Yu | |
| 6.66 | 815399 | 4.9 | B | E | 9 | 4 | 1 | 63 | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.670 | 815400 | 5.2 | M | 100 | | | | | 0.060 | R | 4.5 | 10 | 4.5 | Y | 1 | Chodorowski,F | P |
| 6.67 | 815401 | 5.6 | | M | 13 | 6 | 0.7 | | 0.04 | B | | 12 | | | | Maydik,A | |
| 6.674 | 815402 | | | | 15 10 | 5 | 0.08 | 67 | 0.064 | R | 12 | 32 | 4.5 | Y | 1 | Chodorowski,F | |
| 6.678 | 815403 | 5.3 | M | 100 | | | | | 0.030 | B | | 6 | | Y | 1 | Chodorowski,F | |
| 6.694 | 815404 | 5.0 | B | 100 | 12 | 7 | 0.3 | | 0.050 | B | | 7 | 5.5 | Y | 1 | Bohme,D | |
| 6.698 | 815405 | | | 100 | 3 | 4 | | | 0.150 | R | 15 | 56 | 3.0CT | N | 1 | Richert,M | |
| 6.70 | 815406 | 5.1 | B | E | 9 | 4 | 2 | 63 | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.705 | 815407 | 5.9 | B | 100 | 5 | 5 | | | 0.064 | R | 6.3 | 20 | 3.0TC | | 1 | Maciejewski,W | |
| 6.71 | 815408 | 3.7 | | DCS 7 | | 6 | | | | EY | | | 4 C | N | 2 | Kroon,B | Q |
| 6.718 | 815409 | 5.0 | B | | | 3 | | | 0.080 | R | 6.2 | 12 | 4.0T | | 1 | Lieder,F | |
| 6.73 | 815410 | | | | 7 | 4 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.733 | 815411 | | | | 4.6 | 7 | 1 | 309 | 0.250 | N | 6 | 55 | 5.0 | N | 1 | Lunde,R | R |
| 6.736 | 815412 | 5.6 | M | 100 | 6.5 | 2 | 0.6 | 77 | 0.09 | M | 11 | 56 | 5.0 | Y | 3 | Westlund,M | |
| 6.7361 | 815413 | 5.4 | B | 100 | | 7 | 0.75 | 65 | 0.05 | B | | 10 | 5.4C | Y | 2 | Franciosi,C | D |
| 6.740 | 815414 | 4.7 | M | 100 | 6 | 7 | 0.5 | | 0.089 | R | 5.5 | 18 | 5.5 | N | 1 | Ventura,F | S |
| 6.748 | 815415 | 5.0 | M | AAVSO | 11 | 9 | 0.8 | 43 | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | T |
| 6.750 | 815416 | 5.1 | B | 100 | 7 | 6 | 0.37 | 80 | 0.050 | B | | 16 | 6.2 | Y | 1 | Castino,R | |
| 6.75 | 815417 | 4.9 | S | 100 | | | | | 0.08 | B | | 10 | 5.0 | | 1 | Shanklin,J.D | |
| 6.75 | 815418 | 5.8 | S | 100 | | | | | 0.20 | R | 12 | 40 | 5.0 | | 1 | Shanklin,J.D | |
| 6.750 | 815419 | 4.2 | S | 100 | 4.0 | 6 | 0.2 | 60 | 0.080 | B | | 20 | 4.3C | Y | 1 | Baroni,S | U |
| 6.750 | 815420 | 4.9 | S | 100 | | 6 | 1.33 | 70 | 0.08 | B | | 11 | 4.2 | Y | 4 | Gainsford,M.J | V |
| 6.75 | 815421 | 4.4 | B | 4A | 15 | 6 | | | 0.050 | B | | 7 | 5.0 | Y | 2 | Merlin,J.-C | |
| 6.753 | 815422 > | 4.2 | | 100 | | | | | | EY | | | 4.2 | Y | 4 | Gainsford,M.J | W |
| 6.757 | 815423 | 5.1 | S | 100 | 3 | 6 | 0.65 | 60 | 0.050 | B | | 10 | 5.0 | Y | 1 | Rogers,J.H | X |
| 6.760 | 815424 | 5.0 | S | 99, 100 | 8 4 | 6 | | | 0.065 | B | | 12 | 4.5 | N | 1 | Foulkes,M | Y |
| 6.764 | 815425 | | | | 4 | 6 | 0.25 | 50 | 0.200 | R | 14 | 40 | 5.0 | Y | 1 | Rogers,J.H | Z |
| 6.764 | 815426 | 4.8 | B | 4A | 20 | 6 | 1 | 90 | 0.06 | R | | 25 | 5 | Y | 1 | Ward,A | a |
| 6.771 | 815427 | 4.6 | S | 4A | 7.2 | 6 | | | 0.08 | R | 15 | 40 | 4.5 | Y | 2 | Storey,D | b |
| 6.775 | 815428 | 4.7 | S | 100 | 11 | 8 | 0.30 | 50 | 0.05 | B | | 10 | 4.0 | Y | 1 | Hurst,G.M | c |
| 6.781 | 815429 | 4.9 | S | 100 | 11 | 8 | 1 | | 0.08 | B | | 15 | 4.0 | Y | 1 | Hurst,G.M | d |
| 6.788 | 815430 | 4.8 | B | 4A | | | | | 0.030 | B | | 8 | 4.5 | Y | 1 | van der Mey,L | e |
| 6.788 | 815431 | | | | | | 0.5 | 70 | 0.050 | B | | 7 | 4.5 | Y | 1 | van der Mey,L | e |
| 6.896 | 815432 | 5.5 | B | 4A | 20 | | 2 | | 0.08 | B | | 15 | | Y | 2 | Losada,R | f |
| 6.92 | 815433 | 4.6 | S | AA | 8 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | g |
| 6.95 | 815434 | 4.4 | M | AA | | | | | 0.080 | B | | 20 | | | | Green,D.W.E | |
| 6.95 | 815435 | 4.7 | S | AA | 8 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | g |
| 6.958 | 815436 | 5.1 | B | 100 | | 6 | 0.68 | 65 | 0.05 | B | | 7 | 5.4 | N | 1 | Benavides,A | |
| 6.958 | 815437 | 5.0 | M | 100 | 6.0 | 8 | 1 | 90 | 0.203 | N | 8 | 128 | 5.0 | Y | 1 | Hannon,J | |
| 6.96 | 815438 | 4.6 | M | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 6.96 | 815439 | 4.8 | S | AA | 8 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | g |
| 6.98 | 815440 | 4.8 | B | AAVSO | 6 | 7 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 6.985 | 815441 | 3.9 | B | 100 | | 6 | | 67 | 0.05 | B | | 20 | 5.0 | N | 8 | da Silva,L.A.L | J |

NOTE A Gas tail.
NOTE B First 0.7 deg. of tail quite bright. Tail length is lower limit.
NOTE C Separate rays suspected in tail. Tail length is lower limit.
NOTE D Tail length approximate.
NOTE E Tear shaped coma. Tail PA 66 deg. to 76 deg.
NOTE F Condensation/cold.
NOTE G Modified Sidgwick method used.
NOTE H (PA value appears to be measured incorrectly. Ed.)
NOTE I 7.8.
NOTE J Twilight.
NOTE K m2 (observer's symbol believed to mean "approximately equal to", Ed.) 9.

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NOTE L Clear and twilight. (Observer gave limit as approximately 7. Ed.)
NOTE M Round coma. Fuzzy nucleus. Clear and twilight.
NOTE N Tail length is lower limit.
NOTE O Slight tail, with averted vision, about 1/2 degree. Poor seeing.
NOTE P Clouds.
NOTE Q Tail length determined in 15x80 binoculars: 1.8 deg.
NOTE R Tail length is upper limit. Some haze.
NOTE S Tail length (I) 0.5 deg.
NOTE T Naked eye.
NOTE U Fan tail at PA 40-100.
NOTE V Slight mist.
NOTE W Negative observation.
NOTE X Some haze. Coma size approximate. Straight tail.
NOTE Y Hazy.
NOTE Z Tail = diffuse spine, PA 50 deg. + hood with S edge in PA 100 deg. as in previous drawings but more distinct in tonight's better sky. Tail length approximate.
NOTE a Misty.
NOTE b Seeing III. Transparency = fair. Slight haze + sky glow.
NOTE c Tail length and PA approximate.
NOTE d Tail length approximate. PA 30 to 51.
NOTE e Mediocre visibility.
NOTE f Tail length is lower limit.
NOTE g Coma diameter approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.007 | 830690 | | 0.108 | N | 4 | 24 | 20 | 5.0 | 1 | Franch,J | A |
| 6.010 | 830691 | | 0.203 | SC | 10 | 81 | | | 2 | Lohvinenko,T.W | B |
| 6.025 | 830692 | 0.44 | 0.203 | N | 6 | 61,116 | 10 | 5.5 | 1 | Williams,J | C |
| 6.031 | 830693 | 2 | 0.13 | SC | 10 | 32,100 | 20 | 6.0 | 1 | Hays Jr,R.H | D |
| 6.031 | 830694 | | 0.203 | SC | 10 | 290 | | | 2 | Lohvinenko,T.W | E |
| 6.073 | 830695 | | 0.445 | N | 4.5 | 50 | | | 2 | Lohvinenko,T.W | F |
| 6.214 | 830696 | 5 | 0.33 | N | 4.5 | 50, 70,100 | 15 | 5.5 | 1 | Fabre,R | G |
| 6.47 | 830697 | 1.38 | 0.15 | N | 6 | 23 | 14 | 3 | 2 | Tanikawa,M | H |
| 6.707 | 830698 | 0.06 | 0.100 | B | | 25 | 25 | 3.8 | 1 | Havrilak,M | |
| 6.720 | 830699 | 0.05 | 0.100 | B | | 25 | 15 | 3.8 | 1 | Gojdic,S | |
| 6.733 | 830700 | 1.6 | 0.090 | M | 11 | 56 | 10 | 5.0 | 3 | Westlund,M | |
| 6.740 | 830701 | 0.09 | 0.125 | N | 5.8 | 28, 40, 60 | 60 | 5.0 | 1 | Riccabone,G | I |
| 6.741 | 830702 | | 0.080 | B | | 20 | | 5.8 | 2 | Zanotta,M.V | J |
| 6.748 | 830703 | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | K |
| 6.752 | 830704 | 0.11 | 0.298 | N | 5 | 40, 65,269 | 16 | 5.8 | 1 | Stott,D | L |
| 6.778 | 830705 | 1.2 | 0.08 | B | | 15 | 40 | 4.0 | 1 | Hurst,G.M | M |
| 6.896 | 830706 | | 0.080 | B | | 15 | | | 2 | Losada,R | N |
| 6.995 | 830707 | | 0.15 | N | 8 | 64, 98 | 76 | 5.0 | 1 | Robotham,R | O |

NOTE A Gas tail at PA 68; dust tail at about PA 75. The 4.7 magnitude comet's coma had an estimated extent of 15.4'. The nucleus was quite prominent and near 6.5 magnitude; it was, as yet, not completely starlike. The gas tail was fairly prominent extending for at least 0.5 deg. A developing dust tail was seen on the comet's northeast edge. Scale = 10.0'/mm.
NOTE B The comet is observed to have an integrated magnitude of 5.2 (check stars: HR 8615, HR 8688) and a nuclear magnitude of 6.9 (check stars: AGK 3+0 deg. 0181). The PA of the ion tail is 40.5. The nuclear diameter is 71.06" and the coma diameter is observed to be 284.22". (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Bright coma, gradually brightening toward central condensation which is not quite starlike. I feel confident that a tail extends about 10' of arc or so in PA 90. This tail is very faint. No other detail. City lights interfered with the observation.
NOTE D Envelope spanned PA approximately 45-180. Vertex dist. = 4'. Quite diffuse and less than half-circle. Central spine at PA 70; NE streamer at PA 30; SE streamer at PA 110. Very tiny 'nucleus' mag. about 11, displaced slightly west of center in coma. Coma had mottled texture, like globular cluster.
NOTE E This close up of the comet clearly shows three spikes which are observed to be at PAs 42, 49.5, and 58. The coma is seen as a blue along with these bluish-yellow mixture of the spikes and ion tail. [sic] The nucleus is observed to be a golden white. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F Through this telescope we can make out the ion tail very well. The tail is blue in colour and measured to be about 1.27 deg. (4591.33"). (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE G The north semi latus rectum was noted to be larger and extended greater than the south latus rectum. A brighter area (hot spot) was noted at PA 270 near the nucleus. A bright spine was noted in the center of the tail with a 'hot spot' in it. Magnification of 150x also used.
NOTE H m1 = 4.9. Dia. = 8'. DC = 7/10. m2 and features at PA 85 (observer's symbol believed to mean "approximately equal to", Ed.) 9 and 10' long each, respectively.
NOTE I Nebular region of greater luminosity at PA 58. Nucleus diameter 37 arc sec. Magnification of 80 and 144 also used. Two drawings included. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE J Broad tail with central spine at PA 65 deg. Darker area that split the tail in two parts at PA about 60 deg. (Duration not indicated. Ed.)
NOTE K Schematic drawing. (Duration not indicated. Time of observation is assumed to be end time. Ed.)
NOTE L Hood 1 at PA 170. Hood 2 at PA 340. Tail at PA 44. Coma spur at PA 110. Nuclear condensation shows two hoods almost opposite each other and jet at PA 250 which almost seems "detached" from the nucleus condensation.
NOTE M Central condensation displaced PA 225 deg. in coma. Very intense almost star-like centre. Tail very broad, fan-shaped and diffuse, PA 30 to 51. Haze, low. ZLM 5.0, 5.5 variable.
NOTE N Faint tail, but truly long, more than earliest days (approximately greater than 2 deg.). (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE O Tail seen more easily at 64x than 98x. Drawn on 1986 Jan. 7.000 at 98x.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.006 | 850637 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 8.00 | Kodak 2415 | | Y | O | 34/P | 1 | Crist,M | A |
| 6.007 | 850638 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 4.00 | 3M 1000 | 1000/ | N | X | 311/S | 2 | Woidyla,B | B |
| 6.016 | 850639 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 16.00 | Kodak 2415 | | Y | O | 35/P | 1 | Crist,M | C |
| 6.023 | 850640 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 20.00 | Agfachrome | 1000/ | N | | 01/S | 1 | Chester,G.R | D |
| 6.033 | 850641 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 4.50 | 3M 1000 | 1000/ | N | X | 315/S | 2 | Woidyla,B | B |
| 6.044 | 850642 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 7.50 | 3M 1000 | 1000/ | N | X | 316/S | 2 | Woidyla,B | B |
| 6.049 | 850643 | 1.530 | 6.0 | 0.254 | 1.3 x 0.9 | 2.83 | Kodak 2415 | | Y | O | 16/S | 1 | Lund,L | |
| 6.055 | 850644 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 7.00 | 3M 1000 | 1000/ | N | X | 321/S | 2 | Woidyla,B | B |
| 6.064 | 850645 | 0.400 | | | 5.2 x 3.4 | 4.50 | Fujichrome | 400/ | N | X | 340/S | 2 | Woidyla,B | B |
| 6.108 | 850646 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 11.00 | Kodak Tri-X | | N | M | 14/S | 1 | Webb,R | E |
| 6.118 | 850647 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 8.00 | Kodak Tri-X | | N | M | 13/S | 1 | Webb,R | F |
| 6.381 | 850648 | 0.850 | 3.4 | 0.25 | 2.4 x 1.6 | 10.00 | Kodak 6415 | | Y | C | 7/P | 1 | Kojima,T | G |
| 6.401 | 850649 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 13.58 | Kodak 2415 | | Y | | 6/P | 1 | Niijima,T | H |
| 6.427 | 850650 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 0.25 | Kodak 2415 | | Y | | 7/P | 1 | Niijima,T | I |
| 6.427 | 850651 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 0.50 | Kodak 2415 | | Y | | 8/P | 1 | Niijima,T | I |
| 6.427 | 850652 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 1.00 | Kodak 2415 | | Y | | 9/P | 1 | Niijima,T | I |
| 6.451 | 850653 | 0.300 | 1.5 | | 6.9 x 4.6 | 20.00 | Kodak 2415 | | Y | O | 1/P | 2 | Nassr,J.L | J |
| 6.689 | 850654 | 2.800 | 10 | 0.28 | 0.7 x 0.5 | 5.00 | Kodak Tri-X | 400/27 | N | O | 13/N | 1 | Darvann,T.A | |
| 6.699 | 850655 | 0.500 | | | 4.1 x 2.7 | 20.00 | Fomapan F27 | 400/27 | N | O | 5/N | 1 | Maturkanic,M | K |
| 6.756 | 850656 | 0.500 | 5.6 | | 4.1 x 2.7 | 8.00 | Kodak Tri-X | 400/ | N | X | 13/P | 1 | Ward,A | L |
| 6.761 | 850657 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | O | 10/T | 2 | Genebriera,J | |

DATE: 6 JAN 1986 DATE: 6 JAN 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.775 | 850658 | 0.700 | 5 | 0.14 | 2.9 x 2.0 | 38.00 | Kodak IIa-F | | N | M | 48/P | 1 | Ridley,H.B | M |
| 6.802 | 850659 | 1.270 | 5 | 0.254 | 1.6 x 1.1 | 10.00 | Kodak 2415 | | Y | O | 44/P | 1 | Johnstone,G.F | |
| 6.965 | 850660 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 4.50 | Kodak 2415 | | Y | S | 5/P | 1 | Dilsizian,R | N |

NOTE A (Observer's image identifier is 34A. Ed.) City lights interfered with the observation. Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE B (Observer's image identifer is preceded by prefix 1. Ed.)
NOTE C (Observer's image identifier is 35A. Ed.) City lights interfered with the observation. Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE D Start time and duration approximate.
NOTE E Poor seeing. Cut off by fog/weather. Inner coma and starlike central condensation visible on all original negatives. Film pushed processed slightly. (Observer indicated C-type guiding as well as M. Ed.)
NOTE F Guided on stars. Poor seeing and exposures shortened by fog (low stratus) movement. Inner coma and starlike central condensation visible on all original negatives. Film push processed slightly. (Observer indicated C-type guiding as well as M. Ed.)
NOTE G Instrument is Wright-Schmidt. Large format (120 size) film used.
NOTE H (Observer's image identifier is 860106-2. Ed.) Large format (70 mm) film used. City lights interfered with the observation.
NOTE I (Observer's image identifier is 860106-5 [sic]. Ed.) Large format (70 mm) film used. City lights interfered with the observation.
NOTE J The film was fogged when a red flashlight accidentally shone on it. Hypersensitized at 46F-80F.
NOTE K Twilight and city lights interfered with the observation.
NOTE L UV filter used.
NOTE M (Observer's image identifier is preceded by prefix ZA. Ed.) Instrument uses photographic plates.
NOTE N Stellar guiding was used because of extremely small apparent movement of the comet within the exposure period (movement during a 24 hour period was 2 minutes of arc [sic] in RA and approximately 0.2-0.3 degrees of arc in declination during this period). The 5.5" Schmidt camera gives a strong "hot spot" near the center of the frame.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.014 | 870112 | 600G-O | CL | 0.135 | 1.9 | | 33.00 | Kodak 2415 | | Y | C | 701/S | 2 | Buchanan,W.T | AB |
| 6.029 | 870113 | 42P-O | CL | 0.400 | 6.3 | | 3.00 | Ektachrome | 400/27 | N | C | 31/P | 1 | Grieser,D | C |
| 6.045 | 870114 | 600G-O | CL | 0.135 | 1.9 | | 29.00 | Kodak 2415 | | Y | C | 703/S | 2 | Buchanan,W.T | BD |

NOTE A Frame has airplane trails. (Observer's image identifier is E-117-01. Ed.)
NOTE B Zodiacal light interfered with the observation. Halley barely visible to naked eye. All spectra lie along a meridian from south to north with wavelength increasing.
NOTE C Prism glass type uncertain. Film emulsion at ambient temperature of 0 C.
NOTE D Second order violet-green. Focused at R for best focus in violet. (Observer's image identifier is E-117-03. Ed.)

DATE: 7 JAN 1986

DATE: 7 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.000 | 815442 | 4.9 | S | 100 | 4 | 6 | 0.5 | 85 | 0.05 | B | | 10 | 5.5 | N | 2 | House,R.R | |
| 7.003 | 815443 | 5.5 | B | 100 | 15 | 6 | | | 0.06 | R | 8.3 | 30 | 3.8 | N | 1 | Fox,J.H | A |
| 7.040 | 815444 | 4.8 | M | 100 | 23 | 7 | 2.5 | 68 | 0.080 | B | | 20 | 6.2 | Y | 1 | Ariail,R.B | |
| 7.0965 | 815445 | 4.8 | S | DCS | 6 | 6 | 0.68 | 75 | 0.080 | B | | 20 | 5.6 | | 2 | Machholz,D | |
| 7.0979 | 815446 | 4.9 | S | DCS | 4.5 | 7 | 0.48 | 75 | 0.050 | R | 12.0 | 13 | 5.6 | | 2 | Machholz,D | |
| 7.1007 | 815447 | 4.6 | | DCS | 10 | 2 | | | | EY | | | 5.6 | | 2 | Machholz,D | |
| 7.115 | 815448 | 4.7 | M | 100 | 3.3 | 8 | 0.3 | 45 | 0.203 | N | 4 | 35 | 4.0 | Y | 4 | Poulos,D | |
| 7.115 | 815449 | 5.5 | B | 100 | 10 | 6 | 0.33 | 300 | 0.050 | B | | 10 | 5.0C | Y | 1 | Stapleton,J | B |
| 7.117 | 815450 | 5.0 | B | 100 | 6 | 8 | 0.7 | | 0.05 | B | | 10 | 5.3 | Y | 1 | Saxon,V.P | |
| 7.118 | 815451 | 4.9 | M | 100 | | | | | 0.050 | B | | 7 | | Y | 3 | Jeffrey,J | |
| 7.13 | 815452 | 4.7 | M | 100 | 5.5 | 8 | 5.0 | 64 | 0.080 | B | | 20 | 6.5 | Y | 7 | Morris,C.S | C |
| 7.139 | 815453 | 4.9 | B | 100 | | 5 | | | 0.08 | B | | 11 | 4.5 | N | 1 | Edberg,S.J | |
| 7.14 | 815454 | 4.8 | M | 100 | | | | | 0.050 | B | | 12 | 6.5 | Y | 7 | Morris,C.S | |
| 7.15 | 815455 | 4.7 | M | 4A | | | 3.5 | 70 | 0.05 | B | | 10 | 6 | Y | 3 | Hale,A | |
| 7.15 | 815456 | 4.7 | B | 4A | | | 1 | 70 | | EY | | | 6 | Y | 3 | Hale,A | |
| 7.15 | 815457 | 4.7 | | 100 | | | 5 | 64 | | EY | | | 6.5 | Y | 7 | Morris,C.S | |
| 7.15 | 815458 | 5.5 | M | 100 | 3.5 | | | | 0.256 | N | 4.5 | 156 | 6.5 | Y | 7 | Morris,C.S | |
| 7.15 | 815459 | 5.1 | M | 100 | | | | | 0.256 | N | 4.5 | 45 | 6.5 | Y | 7 | Morris,C.S | |
| 7.1667 | 815460 | 4.6 | M | 100 | 6 | 7 | 3.35 | 67 | 0.05 | B | | 7 | 6.0 | Y | 2 | Cook,A.J | |
| 7.387 | 815461 | 4.7 | M | 100 | 6 | 8 | | | 0.030 | B | | 8 | 4.0C | Y | 1 | Kato,T | |
| 7.39 | 815462 | 4.9 | S | AAVSO | 5 | 6 | 1.2 | 65 | 0.13 | N | 6.3 | 24 | 5.0 | Y | 1 | Hayashi,A | |
| 7.397 | 815463 | 4.9 | M | 100 | 3 | 7 | 0.13 | 60 | 0.10 | N | 10 | 55 | 4.0C | Y | 1 | Kato,T | |
| 7.40 | 815464 | 4.9 | B | 100 | 2.3 | 8 | 0.7 | 60 | 0.05 | B | | 7 | 4.0 | N | 1 | Kanai,K | |
| 7.40 | 815465 | 5.2 | B | M | 4 | 4 | 0.3 | | 0.12 | N | | 40 | | | | Knyazyuk,N | |
| 7.40 | 815466 | 4.8 | M | 100 | | | 0.8 | | 0.05 | B | | 7 | 4.5 | Y | 2 | Suzuki,K | |
| 7.41 | 815467 | 5.0 | M | 100 | 3.5 | 8 | | | 0.08 | B | | 11 | 4.5C | N | 1 | Mitsuma,S | D |
| 7.419 | 815468 | 5.4 | S | 100 | 3.0 | 8 | | | 0.08 | R | 11.4 | 46 | C | N | 1 | Wakatsuki,M | |
| 7.430 | 815469 | 4.1 | M | 100 | 3.8 | 7 | | | 0.12 | N | 6 | 36 | 1.0C | N | 1 | Kishi,A | |
| 7.440 | 815470 | 4.9 | S | 100 | | 8 | | | 0.05 | B | | 10 | 3.0 | Y | 1 | Williams,P.F | |
| 7.446 | 815471 | 5.3 | B | 100 | 6.3 3.0 | 6 | 0.45 | 55 | 0.08 | R | 12.5 | 40 | 6.0 | Y | 1 | Feisheng,J | |
| 7.53 | 815472 | 4.7 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 7.53 | 815473 | 4.6 | B | E | 20 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 7.54 | 815474 | 4.6 | B | E | 20 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 7.54 | 815475 | 4.4 | B | E | 19 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 7.55 | 815476 | 4.4 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 7.55 | 815477 | 4.6 | B | AAVSO | | | 2 | 66 | 0.10 | B | | 20 | | | | Churyumov,K | E |
| 7.57 | 815478 | 4.6 | B | E | 13 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 7.57 | 815479 | 4.8 | B | E | 19 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 7.57 | 815480 | 4.6 | B | E | 12 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 7.58 | 815481 | 4.1 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 7.58 | 815482 | 4.5 | B | E | 13 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 7.59 | 815483 | 4.5 | M | E | 12 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 7.60 | 815484 | 4.1 | V | M | | | | | | EY | | | | | | Poroshin,A | |
| 7.62 | 815485 | 4.1 | B | AAVSO | | | 0.2 | | 0.04 | B | | 12 | | | | Korneev,V | |
| 7.62 | 815486 | | | | | | | | | | | | | | | Konstantinov,S | F |
| 7.63 | 815487 | 5.0 | B | M | 3 | | 0.8 | | 0.08 | R | | 29 | | | | Nesterov,Yu | G |
| 7.667 | 815488 | 5.6 | M | 100 | 15 | 6 | 0.08 | 290 | 0.150 | N | 5.3 | 45 | 4.5 | Y | 1 | Wikholm,L | |
| 7.687 | 815489 | 5.0 | S | 100 | 2.7 | 6 | | | 0.063 | R | 13.3 | 34 | 3.0C | N | | Skjaeraasen,O | |
| 7.688 | 815490 | 4.8 | B | CZ | 15 | 5 | | | 0.04 | B | | 7 | 5.0 | Y | 1 | Brancik,K | |
| 7.688 | 815491 | 4.9 | | | | | | | 0.080 | B | | 15 | 3 | Y | 1 | Nagele,A | H |
| 7.701 | 815492 | 4.8 | B | IHW | | 5 | 2.0 | | 0.080 | B | | 20 | 4.0 | Y | 1 | Guthier,O | |
| 7.701 | 815493 | 4.4 | M | CZ | | | | | 0.10 | B | | 25 | 4 C | Y | 1 | Valasek,V | I |
| 7.701 | 815494 | 4.9 | M | 100 | 6.5 | 3 | 0.3 | 79 | 0.09 | M | 11 | 56 | 4.5 | Y | 4 | Westlund,M | |
| 7.708 | 815495 | 4.5 | S | 100 | 8 | 7 | 0.76 | 59 | 0.080 | B | | 20 | 5.9 | Y | 1 | Meozzi,D | |
| 7.71 | 815496 | 3.8 | | DCS 7 | | 6 | | | | EY | | | 4 C | N | 4 | Kroon,B | J |
| 7.711 | 815497 | 4.4 | S | 100 | 8 | 7 | 1.24 | 67 | 0.050 | B | | 7 | 5.9 | Y | 1 | Meozzi,D | |
| 7.712 | 815498 | | | 100 | 4.2 | 7 | | | 0.15 | N | 6.6 | 50 | 4 T | Y | | Dal Santo,M | K |
| 7.712 | 815499 | 4.9 | B | 100 | | | | | 0.05 | B | | 7 | 4 T | Y | 1 | Dal Santo,M | L |
| 7.715 | 815500 | 4.8 | M | CZ | 5 | 8 | | | 0.080 | B | | 10 | 4.3 | Y | 1 | Bilek,V | M |
| 7.715 | 815501 | 4.8 | M | 100 | | 7 | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | N |
| 7.719 | 815502 | 5.0 | M | 4A | 15 10 | 8 | 1.5 | 72 | 0.08 | B | | 11 | 5.0 | Y | 1 | Gubo,H | |
| 7.719 | 815503 | | | | 4.5 | 7 | 1 | 309 | 0.250 | N | 6 | 55 | 5.0 | N | 1 | Lunde,R | O |
| 7.719 | 815504 | 5.1 | B | 100 | | 6 | | | 0.113 | N | 8 | 22 | 4.5 | Y | 1 | Schambeck,C.M | |
| 7.721 | 815505 | 4.8 | M | 100 | | | | | 0.030 | B | | 8 | 5.5 | Y | 7 | Villa,M | |
| 7.722 | 815506 | 4.7 | B | 100 | 4 | 8 | 0.67 | 65 | 0.08 | B | | 20 | 5.0 | Y | 2 | Milani,G | P |
| 7.724 | 815507 | 4.9 | M | AAVSO | 7 | 9 | 0.8 | 30 | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | Q |
| 7.729 | 815508 | 4.5 | B | 4A | | 7 | 1.8 | 60 | 0.10 | B | | 14 | 4.0 | Y | 1 | Hasubick,W | |
| 7.729 | 815509 | 4.5 | B | 4A | | 6 | | | 0.080 | B | | 20 | 4.0 | Y | 1 | Koch,B.O | |
| 7.729 | 815510 | 4.8 | B | 100 | 4 | 8 | | | 0.08 | B | | 20 | 5.0 | Y | 2 | Milani,G | P |
| 7.729 | 815511 | 4.8 | S | 100 | 6.5 | 7 | 1.5 | 73 | 0.050 | B | | 7 | 4.9C | Y | 5 | Piccinini,M | |
| 7.729 | 815512 | 4.5 | | AAVSO | 3 | 6 | 2.3 | 67 | 0.080 | B | | 11 | | | | Stomeo,E | R |
| 7.729 | 815513 | | | 100 | | | 1.2 | | 0.114 | N | 8.7 | 25 | 5.5 | Y | 7 | Villa,M | |
| 7.735 | 815514 | 3.9 | S | 100 | | | | | | EY | | | 6.0Z | Y | 3 | Haver,R | |
| 7.736 | 815515 | 4.7: | B | 100 | | | | | 0.03 | B | | 6 | 5.0 | Y | 2 | Milani,G | P |
| 7.738 | 815516 | 4.5: | S | 100 | | | | | | EY | | | 5.0 | Y | 2 | Milani,G | P |
| 7.740 | 815517 | 4.0 | S | 100 | 8.0 | 5 | 3.73 | 65 | 0.05 | B | | 7 | 6.0Z | Y | 3 | Haver,R | S |
| 7.747 | 815518 | 5.0 | B | 100 | 2.8 | 6 | 0.40 | 80 | 0.080 | B | | 20 | 5.5C | Y | 2 | Dionisi,M | T |
| 7.747 | 815519 | 4.9 | M | 100 | | 6 | | | 0.08 | B | | 10 | 5.0C | N | 1 | Rapavy,P | U |
| 7.750 | 815520 | 4.4 | M | 100 | 9 | 6 | | | 0.05 | B | | 10 | 5 C | Y | 1 | Menichetti,R | |
| 7.750 | 815521 | 4.8 | M | 100 | | 8 | | | 0.05 | B | | 10 | 5.0Z | Y | 1 | Melandri,F | V |
| 7.75 | 815522 | 4.9 | B | 100 | 2.5 | 6 | 0.18 | 65 | 0.20 | N | 4.7 | 104 | 4 | Y | 1 | Cappellari,M | |
| 7.757 | 815523 | 4.5 | B | 100 | | 7 | 1 | | 0.050 | B | | 7 | 5.0 | N | 1 | Lunde,R | W |
| 7.95 | 815524 | 4.7 | B | AA | 7.5 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | X |
| 7.95 | 815525 | 4.4 | M | AA | 7.5 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | X |
| 7.95 | 815526 | 4.6 | S | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 7.96 | 815527 | 4.5 | S | 100 | 20 | 7 | 1.5 | 70 | 0.05 | B | | 7 | 5.0 | Y | 1 | Harrington,P | |
| 7.96 | 815528 | 4.6 | B | AA | 9 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | X |
| 7.96 | 815529 | 4.3 | M | AA | 9 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | X |
| 7.96 | 815530 | 4.4 | S | AA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 7.962 | 815531 | 5.0 | B | 100 | 8 | 3 | 0.80 | 60 | 0.05 | B | | 7 | 5.5 | | | Lairet,R | |
| 7.967 | 815532 | 5.0 | B | 100 | | | | | 0.152 | N | 8 | 38 | | | | Lairet,R | |
| 7.969 | 815533 | 4.8 | B | 99 | | 6 | 0.93 | 73 | 0.05 | B | | 7 | 4.5 | N | 1 | Benavides,A | |
| 7.977 | 815534 | 4.6 | M | 100 | 6 | 7 | 0.6 | 65 | 0.05 | B | | 7 | 5.3 | Y | 1 | DeYoung,J.A | |
| 7.98 | 815535 | 4.4 | B | AAVSO | 5.5 | 7 | | | 0.050 | B | | 10 | | | | Bortle,J.E | Y |
| 7.984 | 815536 | 5.0 | B | 100 | | | | | 0.152 | N | 8 | 38 | | | | Lairet,R | |
| 7.986 | 815537 | 4.8 | S | 100 | 6.5 | 5 | 0.60 | 60 | 0.035 | B | | 7 | 5.4C | Y | 3 | Morrison,W | |
| 7.986 | 815538 | | | | 4.5 | | 0.62 | 60 | 0.15 | R | 5 | 31 | 5.4C | Y | 3 | Morrison,W | Z |
| 7.987 | 815539 | 3.8 | S | 100 | | 6 | | 39 | 0.05 | B | | 20 | 4.5 | N | 8 | da Silva,L.A.L | a |
| 7.994 | 815540 | 5.0 | B | 100 | | | | | 0.152 | N | 8 | 45 | | | | Lairet,R | b |

NOTE A Twilight. SAO 145832 and SAO 145916 comparison stars.

NOTE B Near city lights. (PA approximate and may have been measured incorrectly. Ed.)
NOTE C Maximum width of tail = 30'.
NOTE D 7.3.
NOTE E The tail in the form of a conoid with the distinctly seen nucleus. Tail length is lower limit.
NOTE F Envelope in the head.
NOTE G Granulation in the central condensation.
NOTE H (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are 31 Aqr, 32 Aqr.
NOTE I Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE J Tail length determined in 15x80 binoculars: 2.0 deg.
NOTE K Coma dia. estimate is not very good.
NOTE L Good sky.
NOTE M Fog.
NOTE N Clouds. Twilight.
NOTE O Tail length is upper limit. Some haze.
NOTE P Cirri at the horizon.
NOTE Q Naked eye.
NOTE R Type I tail was 2.3 deg. long at PA 67 deg; 1 deg. from the head it forked with the tines separated by 8 deg. in PA. (Editor's description of sketch.) Type II tail was 2.0 deg. long with PA spanning 43 to 80 deg.
NOTE S Tail fan-shaped. See drawing.
NOTE T Coma diameter accuracy +/-1.5. Tail length accuracy +/-0.22.
NOTE U Coma ellipt. Observation interrupted by clouds.
NOTE V Veiled sky.
NOTE W Some haze.
NOTE X Coma diameter approximate.
NOTE Y Sharp brightness increase.
NOTE Z Diffuse central spine of tail 0.20 deg. long.
NOTE a Twilight. PA uncertain.
NOTE b Magnification approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.003 | 830708 | 0.6 | 0.203 | R | 13 | 85 | 10 | 3.8 | 1 | Fox,J.H | A |
| 7.004 | 830709 | | 0.254 | N | 6 | 40 | 16 | 3.0 | 6 | Troiani,D.M | B |
| 7.005 | 830710 | | 0.203 | SC | 10 | 70 | 15 | 6.0 | | Williams,D.J | C |
| 7.072 | 830711 | | 0.127 | R | | 50 | | | 2 | Lohvinenko,T.W | D |
| 7.167 | 830712 | 3 | 0.050 | B | | 7 | 28 | 6.0 | 2 | Cook,A.J | |
| 7.686 | 830713 | 0.44 | 0.063 | R | 13.3 | 34, 53 | 13 | 3.0 | 1 | Skjaeraasen,O | E |
| 7.698 | 830714 | 1.6 | 0.090 | M | 11 | 56 | 10 | 4.5 | 4 | Westlund,M | |
| 7.708 | 830715 | | 0.25 | N | 6 | 150 | | | 1 | Guthier,O | F |
| 7.720 | 830716 | 0.2 | 0.25 | N | 6 | 80,170 | 35 | 5 | 2 | Adamoli,G | G |
| 7.724 | 830717 | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | H |
| 7.728 | 830718 | 1.2 | 0.150 | N | 1 | 33 | 6 | 4.5 | 1 | Dal Santo,M | |
| 7.736 | 830719 | 0.58 | 0.150 | N | 1 | 100 | 4 | 4.5 | 1 | Dal Santo,M | |
| 7.738 | 830720 | 0.9 | 0.063 | R | 13.3 | 52 | | | 1 | Csukas,M | I |
| 7.741 | 830721 | 3 | 0.050 | B | | 7 | 5 | 6.0 | 3 | Haver,R | J |
| 7.766 | 830722 | 0.25 | 0.200 | N | 4 | 50 | 15 | 6.0 | 3 | Haver,R | K |

NOTE A SW part of nucleus brighter and better defined than the rest, looks almost like an "eyebrow". May be a seeing effect from the turbulence. Little of tail is visible except for one bright streak at about PA 90. W edge of coma better defined than E.
NOTE B Seeing (1-3): 2. Sky darkness (1-5): 1. Envelope at PA 250 deg. Fan at PA 260 deg. Tail was 1 deg. long, even with light pollution.
NOTE C I can see a tail using the 8". The tail appears to have a dark streak running from the coma down the middle of the tail.
NOTE D An aurora display now in progress along with a 30% cloud cover really hampers the comet. Under these conditions the sky is seen with difficulty. Blue in colour with a yellowish-white nucleus. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Lumicon Deep Sky filter used. Clear blue sky, twilight, extremely thin clouds covered a great portion of the sky, rather humid, -11 C. Some atmospherical turbulence. Due to the bright sky background, only the innermost, densest part of Halley's coma was observable through my little instrument.
NOTE F Two disc-shapes seen in condensation with separation of 30-40". Diameter of condensation about 15-20" (at 35x, also good to see). Long jets sitting on the condensation at PA 294, 2.6' and PA 196, 2.8'. Coma is surprisingly rich in detail. (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE G Tail at PA 60. Major axis of central condensation at PA 340. The central condensation is elongated at high magnification and very bright and looks rather irregular, while the coma is round.
NOTE H Schematic drawing. (Duration not indicated. Time of observation is assumed to be end time. Ed.)
NOTE I Total magnitude = 4.9; coma diameter = 9'x7'; DC 9; halo diameter 30'; tail at PA 60, 17' length. A 27' tail had PA 95 9' to nucleus, PA 109 17' to nucleus, PA 115 28' to nucleus. [sic] (Duration not indicated. Time of observation is end time. Ed.) Schematic drawing.
NOTE J Tail spans PA 61 to 69 (at end indicated in drawing, Ed.).
NOTE K Jet at PA 235.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.023 | 850661 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 247/P | 1 | Sabia,J.D | A |
| 7.102 | 850662 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | T | 28/P | 1 | Healy,D | B |
| 7.697 | 850663 | 0.500 | | | 4.1 x 2.7 | 20.00 | Fomapan F27 | 400/27 | N | O | 6/N | 1 | Maturkanic,M | C |
| 7.735 | 850664 | 0.500 | 5 | 0.100 | 4.1 x 2.7 | 10.00 | ORWO NP 27 | 400/27 | N | C | 2/N | 1 | Rapavy,P | D |
| 7.741 | 850665 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 4.00 | Ilford FP4 | 125/22 | N | O | 2/C | 1 | Paolinetti,R | E |
| 7.760 | 850666 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 14.00 | 3M 1000 | 1000/ | N | X | 5/S | 1 | Vanin,G | |
| 7.962 | 850667 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 4.50 | Kodak 2415 | | Y | S | 6/P | 1 | Dilsizian,R | F |
| 7.986 | 850668 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 20.00 | Kodak 2415 | | Y | S | 6/C | 1 | Chester,G.R | |
| 7.993 | 850669 | 0.200 | 4.5 | | 10.3 x 6.9 | 5.00 | Kodak Tri-X | | N | T | 7/C | 1 | Priester,D.C | G |

NOTE A Horizon haze apparent. Photographs made by J. Kamichitis and J.D. Sabia. Clouds near horizon appear.
NOTE B (Observer's image identifier is 28-10A. Ed.)
NOTE C Twilight and city lights interfered with the observation.
NOTE D City lights interfered with the observation. Large format (68x87 mm) film used.
NOTE E (Observer's image identifier is followed by suffix A. Ed.)
NOTE F Stellar guiding was used because of extremely small apparent movement of the comet within the exposure period (movement during a 24 hour period was 2 minutes of arc [sic] in RA and approximately 0.2-0.3 degrees of arc in declination during this period). The 5.5" Schmidt camera gives a strong "hot spot" near the center of the frame.
NOTE G Push processed to 800 ASA.

DATE: 8 JAN 1986

DATE: 8 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.000 | 815541 | 4.4 | S | 100 | 11.5 | 8 | 0.2 | 68 | 0.108 | N | 4 | 24 | 5.0 | Y | 1 | Franch,J | A |
| 8.006 | 815542 | 5.4 | M | 100 | | | 0.67 | 90 | 0.050 | B | | 10 | 4.7 | Y | 1 | Smith,A | |
| 8.010 | 815543 | 4.5 | S | 100 | 5.5 | 8 | 0.67 | 50 | 0.152 | N | 5.5 | 69 | 4.7 | Y | 1 | Hudak,D.M | B |
| 8.010 | 815544 | 4.4 | B | 99 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | |
| 8.02 | 815545 | 4.7 | B | 4A | 9 | | 1.17 | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 8.02 | 815546 | 5.5 | B | 4A | 6.6 | | | | 0.335 | N | 4.5 | 56 | | Y | | Kronk,G | C |
| 8.024 | 815547 | 4.4 | B | 100 | 35 | 8 | 1 | 90 | 0.20 | SC | 10 | 77 | 5.5 | Y | 1 | Hodonsky,K | |
| 8.024 | 815548 | 4.5 | B | 100 | 8.1 | 7 | | | 0.050 | B | | 7 | 3.0C | N | 6 | Will,M | |
| 8.042 | 815549 | 5.3 | B | 4A | | | | | 0.08 | B | | 11 | 5.3 | Y | 3 | Gorski,L | |
| 8.070 | 815550 | 4.7 | S | 100 | 5 | 6 | 0.6 | 60 | 0.05 | B | | 10 | 5 | Y | 2 | House,R.R | D |
| 8.07 | 815551 | 4.6 | V | 4A | | | | | | EY | | | 6.0 | Y | 1 | Keen,R | |
| 8.07 | 815552 | 4.7 | | 4A | 6 | 8 | 3.0 | 60 | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | E |
| 8.080 | 815553 | | | 100 | 39 | 7 | 0.20 | 295 | 0.200 | SC | 10 | 78 | 6.2 | Y | 2 | Saraceno,J | F |
| 8.080 | 815554 | 5.0 | B | 100 | | | | | 0.050 | B | | 7 | | | | Saraceno,J | |
| 8.09 | 815555 | 4.5 | M | 100 | 5.5 | 7 | 5.33 | 64 | 0.080 | B | | 20 | 5.5 | Y | 16 | Morris,C.S | |
| 8.094 | 815556 | 4.8 | B | 100 | 15 | 8 | 1 | | 0.08 | B | | 11 | 5.3 | Y | 1 | Saxon,V.P | |
| 8.095 | 815557 | 4.7 | S | 100 | | | 0.6 | | 0.05 | B | | 7 | 5 | Y | 2 | House,R.R | G |
| 8.10 | 815558 | 4.5 | | 100 | | | 4.5 | 64 | | EY | | | 5.5 | Y | 16 | Morris,C.S | |
| 8.10 | 815559 | 4.2 | S | 100 | 18 | 7 | 2 | 60 | 0.080 | B | | 11 | 5.0 | Y | 2 | Spratt,C.E | H |
| 8.104 | 815560 | 5.0 | B | 100 | 10 | 7 | 0.42 | 300 | 0.050 | B | | 10 | 4.5C | Y | 1 | Stapleton,J | I |
| 8.12 | 815561 | 4.4 | M | 100 | | | | | 0.015 | B | | 6 | 5.5 | Y | 16 | Morris,C.S | |
| 8.13 | 815562 | 4.7 | M | 4A | | | 4 | 65 | 0.05 | B | | 10 | 6 | Y | 3 | Hale,A | |
| 8.13 | 815563 | 4.6 | B | 4A | | | 1 | 65 | | EY | | | 6 | Y | 3 | Hale,A | |
| 8.13 | 815564 | 4.4 | M | 100 | | | | | 0.050 | B | | 12 | 5.5 | Y | 16 | Morris,C.S | |
| 8.13 | 815565 | 4.4 | M | 100 | | | | | 0.080 | B | | 20 | 5.5 | Y | 16 | Morris,C.S | |
| 8.13 | 815566 | 4.4 | | 100 | | | | | | EY | | | 5.5 | Y | 16 | Morris,C.S | |
| 8.215 | 815567 | 4.7 | M | 4A | 22 | 7 | 1.5 | 295 | 0.05 | B | | 10 | 5.5 | Y | 1 | Fabre,R | J |
| 8.378 | 815568 | 4.4 | M | 100 | 6 | 7 | 0.50 | 60 | 0.030 | B | | 8 | 5.0CT | Y | 1 | Kato,T | |
| 8.38 | 815569 | 4.7 | M | 100 | 4.4 | 8 | 1 | 60 | 0.08 | B | | 11 | 5 | Y | 1 | Mitsuma,S | K |
| 8.38 | 815570 | | | SAO | 8 | 8 | 0.33 | 85 | 0.15 | N | 6 | 23 | 5 | Y | 4 | Tanikawa,M | L |
| 8.38 | 815571 | 4.9 | B | SAO | | | | | 0.05 | B | | 7 | 5 | Y | 4 | Tanikawa,M | |
| 8.382 | 815572 | 4.6 | B | 4A | | | | | 0.035 | B | | 7 | | N | 1 | Okada,M | |
| 8.39 | 815573 | 4.7 | B | 100 | 3.4 | 7 | 0.7 | 65 | 0.05 | B | | 7 | 3.5 | N | 1 | Kanai,K | |
| 8.39 | 815574 | 3.5 | | | 8 | 7 | 0.5 | | 0.08 | B | | 11 | 5.0 | Y | 2 | Washi,S | M |
| 8.393 | 815575 | 4.7 | B | 100 | | | | | 0.05 | B | | 7 | 4.5CT | Y | 1 | Hayashi,H | |
| 8.393 | 815576 | | | | 10 | 5 | 0.67 | | 0.12 | N | 6 | 40 | | | | Hayashi,H | |
| 8.396 | 815577 | 4.7 | B | 100 | | 7 | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Hasegawa,T | |
| 8.397 | 815578 | | | | 2 | 7 | 0.07 | 55 | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | |
| 8.40 | 815579 | 4.9 | S | AAVSO | 4 | 6 | 0.5 | 65 | 0.13 | N | 6.3 | 24 | 3.5 | Y | 1 | Hayashi,A | |
| 8.42 | 815580 | 5.0 | B | | 15 | 6 | 1.0 | 60 | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 8.425 | 815581 | 4.7 | B | 100 | | 7 | | | 0.05 | B | | 7 | 2.9 | Y | 3 | Bembrick,C | |
| 8.440 | 815582 | 4.9 | S | 100 | | 8 | | | 0.05 | B | | 10 | 3.0 | Y | 1 | Williams,P.F | N |
| 8.44 | 815583 | 3.8 | S | 100 | | 7 | 1 | | 0.08 | B | | 15 | 4 T | Y | 2 | Seargent,D | O |
| 8.444 | 815584 | 5.3 | B | 100 | 7.0 3.5 | 6 | 0.47 | 55 | 0.08 | R | 12.5 | 40 | 6.0 | Y | 1 | Feisheng,J | |
| 8.455 | 815585 | 4.2 | M | 100 | 10 | | | | 0.1 | N | 10 | 40 | 3.5 | Y | 1 | Ichikawa,K | |
| 8.54 | 815586 | 4.4 | B | E | 16 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 8.58 | 815587 | 3.8 | B | E | 13 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 8.59 | 815588 | 4.8 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 8.59 | 815589 | 4.5 | B | E | 19 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 8.60 | 815590 | 4.3 | B | E | 19 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 8.60 | 815591 | 4.4 | B | E | 20 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 8.60 | 815592 | 4.6 | B | E | 18 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 8.677 | 815593 | 5.0 | B | 100 | | | | | 0.04 | B | | 8 | 3.0C | N | 1 | Czerniewski,W | |
| 8.68 | 815594 | 5.0 | B | AAVSO | | | 2 | 66 | 0.10 | B | | | | | | Churyumov,K | O |
| 8.681 | 815595 | 5.5 | S | 4A | 3 | 4 | | | 0.064 | R | 12 | 20 | 5.0C | N | 1 | Urbanski,P | |
| 8.688 | 815596 | 4.8 | B | CZ | 15 | 5 | | | 0.04 | B | | 7 | 5.0 | Y | 1 | Brancik,K | |
| 8.694 | 815597 | 4.0 | S | 100 | 19 | 8 | 1.5 | 60 | 0.152 | N | 5 | 44 | 4.7 | Y | 2 | Moeller,M | |
| 8.696 | 815598 | 4.6 | B | 4A | 10.3 | 7 | | | 0.063 | R | 8.4 | | 3.8 | Y | 1 | Witte,F | P |
| 8.698 | 815599 | 4.4 | M | CZ | | | | | 0.10 | B | | 25 | 4 C | Y | 1 | Valasek,V | Q |
| 8.70 | 815600 | 4.8 | S | 4A | 5.3 | 8 | 0.13 | 60 | 0.050 | R | 10 | 13 | 3.5T | N | 2 | Jahn,J | R |
| 8.701 | 815601 | 5.0 | M | CZ | | 7 | | | 0.05 | B | | 7 | 3 | N | 1 | Silhan,J | S |
| 8.701 | 815602 | 4.9 | M | 100 | 6.5 | 3 | 0.5 | 79 | 0.09 | M | 11 | 56 | 5.0 | Y | 4 | Westlund,M | |
| 8.708 | 815603 | 4.9 | B | 100 | 15 | 7 | 2 | 62 | 0.08 | B | | 20 | 5.5 | N | 2 | Knain,E | T |
| 8.729 | 815604 | 4.6 | | 100 | | 7 | 1.7 | | 0.063 | N | 11 | 20 | 6.0 | Y | 2 | Lunde,R | |
| 8.733 | 815605 | 5.2 | B | 100 | 11 8 | 5 | 0.3 | 35 | 0.200 | R | 15 | 120 | 5.0 | Y | 1 | Kalauch,K.-D | |
| 8.747 | 815606 | 4.9 | M | 4A | 4.5 | 7 | 1.5 | 62 | 0.08 | B | | 11 | 4.7 | Y | 1 | Fleet,R.W | |
| 8.752 | 815607 | 5.2 | B | 100 | 35 | 8 | 1.5 | 17 | 0.065 | B | | 20 | 6.3 | Y | 1 | McBain,J | |
| 8.758 | 815608 | 5.5 | B | 100 | | 7 | | | 0.050 | B | | 7 | 4.0TC | Y | 1 | Temprano,J | U |
| 8.771 | 815609 | 4.7 | B | 4A | 5 | | | | 0.05 | B | | 8 | 6 | Y | 1 | Cano,M | V |
| 8.771 | 815610 | 5.5 | | | | | | | 0.050 | B | | 10 | T | | 1 | Kauschke,A | W |
| 8.771 | 815611 | 4.5 | B | 100 | | 7 | 1 | | 0.050 | B | | 7 | 5.0 | N | 1 | Lunde,R | X |
| 8.781 | 815612 | 4.7 | M | 100 | 3 | 6 | | | 0.06 | R | 5.7 | 20 | 5.0C | N | 3 | Cardiel,N | |
| 8.785 | 815613 | 4.7 | B | 4A | 8 | 8 | 0.42 | | 0.05 | B | | 20 | C | N | 4 | Gallego,J | |
| 8.785 | 815614 | 4.7 | B | 4A | | | | | 0.030 | B | | 8 | 4.5 | Y | 1 | van der Mey,L | Y |
| 8.94 | 815615 | 4.6 | S | 4A | 20 | 7 | 1.5 | 70 | 0.05 | B | | 7 | 5.0 | Y | 1 | Harrington,P | |
| 8.96 | 815616 | 4.8 | B | AA | 10 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | P |
| 8.96 | 815617 | 4.3 | M | AA | 10 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | P |
| 8.96 | 815618 | 4.4 | S | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 8.962 | 815619 | 5.0 | M | 100 | 6.3 | 8 | 1 | 90 | 0.203 | N | 8 | 128 | 5.0 | Y | 1 | Hannon,J | |
| 8.962 | 815620 | 4.8 | M | 100 | 7.6 | 7 | 1.7 | 66 | 0.05 | B | | 12 | 6.1Z | Y | 1 | Knight,S | Z |
| 8.977 | 815621 | 4.6 | M | 4A | 6 | 7 | 1.0 | 65 | 0.05 | B | | 7 | 5.3 | Y | 1 | DeYoung,J.A | |
| 8.979 | 815622 | 4.7 | S | 100 | 5.0 | 9 | 0.67 | 60 | 0.203 | N | 6 | 101 | 5.0 | Y | 1 | Hudak,D.M | a |
| 8.98 | 815623 | 4.4 | B | AAVSO | 5.5 | 7 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 8.98 | 815624 | 4.8 | B | AA | 8.5 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | P |
| 8.98 | 815625 | 4.6 | S | AAVSO | 8.5 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | P |
| 8.984 | 815626 | 4.8 | B | 99 | | 6 | 1.05 | 67 | 0.05 | B | | 7 | 5.1 | N | 1 | Benavides,A | |
| 8.987 | 815627 | 4.8 | B | 100 | 8 | 3 | 0.60 | 51 | 0.05 | B | | 7 | | | | Lairet,R | |

NOTE A Gas tail.
NOTE B Tail and PA approximate.
NOTE C Tail PA 55 deg. to 82 deg.
NOTE D Naked eye coma only.
NOTE E Modified Sidgwick method used.
NOTE F (PA value may have been incorrectly determined. Ed.)
NOTE G Naked eye coma only.
NOTE H Dust bulge 50 deg.-110 deg. included in coma size.
NOTE I Windy, clear, short tail. (PA approximate and may have been measured incorrectly. Ed.)
NOTE J (PA value appears to be measured incorrectly. Ed.)
NOTE K 7.4.
NOTE L m2 (observer's symbol believed to mean "approximately equal to", Ed.) 9.
NOTE M (Observer indicated "Y" method, Ed.)

NOTE N Altitude 3 deg.
NOTE O Tail length is lower limit.
NOTE P Coma diameter approximate.
NOTE Q Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE R PA approximate.
NOTE S Mist, during the public observation with some 30 visitors.
NOTE T Dew.
NOTE U Clouds.
NOTE V See draw. D.2.
NOTE W Tail length = y.
NOTE X Some haze.
NOTE Y Poor visibility.
NOTE Z Dust tail.
NOTE a Tail length and PA approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.000 | 830723 | 0.83 | 0.152 | N | 8 | 38 | | 5.5 | 1 | Cuthill,L | A |
| 8.017 | 830724 | 0.6 | 0.203 | R | 13 | 85,150,225 | 10 | 4.7 | 1 | Fox,J.H | B |
| 8.219 | 830725 | | 0.33 | N | 4.5 | 50,150 | 10 | 5.5 | 1 | Fabre,R | C |
| 8.38 | 830726 | 1.41 | 0.15 | N | 6 | 23 | 14 | 5 | 4 | Tanikawa,M | D |
| 8.674 | 830727 | | 0.150 | R | 15 | 180 | | | | Anklam,W | E |
| 8.694 | 830728 | | 0.314 | R | 15.9 | 200 | | | | Anklam,W | E |
| 8.694 | 830729 | | 0.203 | SC | 10 | 51 | | | | Moller,D | F |
| 8.697 | 830730 | | 0.203 | SC | 10 | 254 | | | | Moller,D | F |
| 8.700 | 830731 | 1.6 | 0.090 | M | 11 | 56 | 5 | 5.0 | 4 | Westlund,M | G |
| 8.708 | 830732 | | 0.150 | N | 7.3 | 50 | | | | Briesemeister,J | H |
| 8.720 | 830733 | 1.2 | 0.080 | B | | 20 | 15 | 5.5 | 1 | Knain,E | I |
| 8.736 | 830734 | | 0.750 | N | 7.7 | 115 | | | 1 | Freydank,H | J |
| 8.743 | 830735 | | 0.750 | N | 7.7 | 115 | | | 2 | Freydank,E | E |
| 8.771 | 830736 | | 0.050 | B | | 8 | | 6 | 1 | Cano,M | K |
| 8.785 | 830737 | | 0.050 | B | | 20 | | | 4 | Gallego,J | L |
| 8.938 | 830738 | 0.02 | 0.23 | R | 12 | 122,250,600 | | | 1 | O'Meara,S.J | E |

NOTE A Tail at PA 50-75. Gas tail at PA 60. Coma DC = 6. Axis of head at PA 245. The coma has a strong intensity at center and has increased in size since last observed (Dec. 31). The tail is visible between PA 50 deg. and 75 deg. and a gas tail at 60 deg. PA. Semi latus rectum = 1.7'. Vertex distance = 1.7'. Magnitude estimated to be 5.2 using 10x50 binoculars (Morris method).
NOTE B Tail seen at all magnifications, but filamentary structure not visible at 225x. Three filaments clearly seen at 150x, single filament at 85x. S-SW "cap" on nucleus seen at 150, 225x.
NOTE C Jets or streamers were noted radiating from the north and south semi latus rectums. Center of tail from nucleus to 45' down center of tail brighter than surrounding area and well defined. Tail appears broader than last observations. Jets/streamers at PA 310-300/260-250; hotspot/spine at PA 295; tail at PA 295. Scale = 15'/mm.
NOTE D Diameter (observer's symbol believed to mean "approximately equal to", Ed.) 8'. DC = 8/10. Features specified as I and II at PA 85, lengths (observer's symbol believed to mean "approximately equal to", Ed.) 20' each.
NOTE E (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F (Duration not indicated. Time of observation is start time. Ed.)
NOTE G Second time visible to the naked eye.
NOTE H DC = 6. Nucleus very bright. (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE I Rays at PA 62. Tail stretching out of field. Tail at PA 35 (end). (The second mention of a tail refers to a short linear feature at a different PA than the main tail [for which no PA is given]. A further note following the second mention reads "not certain". Ed.)
NOTE J Haze, brightness about 4.6 mag.; dia. about 50". (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE K Field 9 deg. Limiting magnitude 9.0. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE L Very concentred [sic] (high DC). The southern edge of the tail is very bright. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.003 | 850670 | 0.200 | 4.5 | | 10.3 x 6.9 | 10.00 | Kodak Tri-X | | N | T | 8/C | 1 | Priester,D.C | A |
| 8.014 | 850671 | 0.200 | 4.5 | | 10.3 x 6.9 | 15.00 | Kodak Tri-X | | N | T | 9/C | 1 | Priester,D.C | A |
| 8.017 | 850672 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 8.00 | Kodak 2415 | | Y | O | 1/P | 1 | Crist,M | B |
| 8.025 | 850673 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 11.00 | Kodak 2415 | | Y | O | 2/P | 1 | Crist,M | B |
| 8.056 | 850674 | 0.200 | 4.5 | | 10.3 x 6.9 | 10.00 | Kodak Tri-X | | N | T | 12/C | 1 | Priester,D.C | A |
| 8.072 | 850675 | 0.152 | 2 | | 13.5 x 9.0 | 15.00 | Kodak 2415 | | Y | S | 26/P | 2 | Minton,R.B | C |
| 8.109 | 850676 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/ | N | O | 3/N | 7 | Edberg,S.J | |
| 8.109 | 850677 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | Ilford HP 5 | 500/ | N | O | 48/C | 7 | Edberg,S.J | |
| 8.109 | 850678 | 0.610 | 4 | 0.152 | 3.4 x 2.3 | 3.00 | Kodak Tri-X | 400/ | N | X | 1/N | 1 | Lazerson,H | D |
| 8.113 | 850679 | 0.610 | 4 | 0.152 | 3.4 x 2.3 | 2.00 | Kodak Tri-X | 400/ | N | X | 2/N | 1 | Lazerson,H | D |
| 8.115 | 850680 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | 3M 1000 | 1000/ | N | O | 4/N | 7 | Edberg,S.J | |
| 8.115 | 850681 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | Ilford HP 5 | 500/ | N | O | 49/C | 7 | Edberg,S.J | |
| 8.119 | 850682 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | 3M 1000 | 1000/ | N | O | 5/N | 7 | Edberg,S.J | |
| 8.119 | 850683 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | Ilford HP 5 | 500/ | N | O | 50/C | 7 | Edberg,S.J | |
| 8.122 | 850684 | 0.305 | 4 | | 6.8 x 4.5 | 30.00 | Kodak IIa-F | | N | | 2/P | 1 | Mitchell,R.C | |
| 8.130 | 850685 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | 3M 1000 | 1000/ | N | O | 7/N | 7 | Edberg,S.J | |
| 8.136 | 850686 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/ | N | O | 8/N | 7 | Edberg,S.J | |
| 8.141 | 850687 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | 3M 1000 | 1000/ | N | O | 10/N | 7 | Edberg,S.J | |
| 8.155 | 850688 | 0.050 | 1.4 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 11/N | 7 | Edberg,S.J | |
| 8.447 | 850689 | 0.300 | 1.5 | | 6.9 x 4.6 | 14.00 | Kodak 2415 | | Y | O | 1/P | 2 | Nassr,J.L | E |
| 8.701 | 850690 | 1.000 | 5.6 | | 2.1 x 1.4 | 40.00 | Kodak Tri-X | 320/26 | N | O | 10/N | 1 | Zimnikoval,P | F |
| 8.727 | 850691 | 1.000 | 5.6 | | 2.1 x 1.4 | 20.00 | Kodak Tri-X | 320/26 | N | O | 11/N | 1 | Takacs,R | F |
| 8.742 | 850692 | 1.000 | 5.6 | | 2.1 x 1.4 | 15.00 | Kodak Tri-X | 320/26 | N | O | 12/N | 1 | Skvarka,J | G |
| 8.959 | 850693 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 4.00 | Kodak 2415 | | Y | S | 7/P | 1 | Dilsizian,R | H |
| 8.990 | 850694 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 30.00 | Kodak 2415 | | Y | S | 24/C | 1 | Chester,G.R | I |

NOTE A Push processed to 800 ASA.
NOTE B City lights interfered with the observation. Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE C (Print submitted by observer is a composite of three 5 min. exposures; the first and second were separated by 4 min. and the second and third were separated by 1 min. Ed.)
NOTE D 40-50 mph gusting winds! Santa Ana without inversion layer. Coyotes hunting and baying in area - wild!
NOTE E Same batch of film that was fogged on Jan. 6, 1986. Hypersensitized at 46F-80F.
NOTE F Large format (6x6 cm) film used.
NOTE G 120 size film used.
NOTE H Stellar guiding was used because of extremely small apparent movement of the comet within the exposure period (movement during a 24 hour period was 2 minutes of arc [sic] in RA and approximately 0.2-0.3 degrees of arc in declination during this period). The 5.5" Schmidt camera gives a strong "hot spot" near the center of the frame.
NOTE I (Observer's image identifier is 24A. Ed.)

DATE: 8 JAN 1986

DATE: 8 JAN 1986

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.021 | 870115 | 600G-O | CL | 0.135 | 1.9 | | 16.00 | Kodak 2415 | | Y | C | 711/S | 2 | Buchanan,W.T | AB |
| 8.040 | 870116 | 600G-O | CL | 0.135 | 1.9 | | 30.00 | Kodak 2415 | | Y | C | 712/S | 2 | Buchanan,W.T | BC |

NOTE A (Observer's image identifier is E-117-11. Ed.)
NOTE B Zodiacal light interfered with the observation. Halley barely visible to naked eye. All spectra lie along a meridian from south to north with wavelength increasing.
NOTE C Second order violet-green. Focused at R for best focus in violet. (Observer's image identifier is E-117-12. Ed.)

DATE: 9 JAN 1986

DATE: 9 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.000 | 815628 | 4.6 | B | 4A | | | | | 0.050 | B | | 10 | 5 | Y | 2 | Robinson,R.L | |
| 9.021 | 815629 | 5.2 | B | 4A | | 7 | | | 0.08 | B | | 11 | 3.0 | Y | 1 | Gorski,L | |
| 9.028 | 815630 | | | 4A | 40 | 7 | 0.20 | 297 | 0.200 | SC | 10 | 78 | 6.2 | Y | 2 | Saraceno,J | A |
| 9.028 | 815631 | 4.9 | B | 4A | | | | | 0.050 | B | | 7 | | | | Saraceno,J | |
| 9.03 | 815632 | 5.7 | B | 4A | 5.4 | 8 | 0.53 | | 0.154 | N | 8.0 | 68 | | Y | | Kronk,G | B |
| 9.03 | 815633 | 4.9 | B | 4A | 9 | 8 | | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 9.039 | 815634 | 5.0 | M | 100 | | | 0.83 | 90 | 0.050 | B | | 10 | 4.7 | Y | 1 | Smith,A | |
| 9.08 | 815635 | 4.6 | V | 4A | | | 1.5 | 60 | | EY | | | 6.5 | Y | 1 | Keen,R | |
| 9.08 | 815636 | 4.7 | | 4A | 6 | 8 | 3.0 | 60 | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | C |
| 9.104 | 815637 | 5.0 | B | 100 | 10 | 7 | 0.50 | 310 | 0.050 | B | | 10 | 4.5C | Y | 1 | Stapleton,J | D |
| 9.1160 | 815638 | 4.7 | S | DCS | 5 | 6 | 0.23 | 77 | 0.080 | B | | 20 | 4.6 | | 3 | Machholz,D | |
| 9.1160 | 815639 | 5.0 | B | DCS | 5 | 6 | 0.23 | 77 | 0.080 | B | | 20 | 4.6 | | 3 | Machholz,D | |
| 9.119 | 815640 | 4.7 | S | 4A | 4 | 3 | | | 0.152 | N | 8 | 135 | 5 | Y | 1 | Lewis,D.E | |
| 9.13 | 815641 | 4.5 | M | 100 | | | | | 0.080 | B | | 20 | 4.5 | Y | 17 | Morris,C.S | |
| 9.378 | 815642 | 5.0 | M | 100 | 15 | 5 | | | 0.035 | B | | 7 | 3 | Y | 1 | Watanabe,A | |
| 9.38 | 815643 | 4.7 | B | 100 | 3.4 | 7 | 1.1 | | 0.05 | B | | 7 | 4.0T | N | 1 | Kanzi,K | |
| 9.384 | 815644 | 5.3 | S | 100 | 2.6 | 8 | 0.07 | 68 | 0.15 | N | 6 | 32 | C | N | 1 | Wakatsuki,M | |
| 9.386 | 815645 | 4.7 | B | 100 | | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Hayashi,H | |
| 9.386 | 815646 | | | | 10 | 5 | 1 | | 0.12 | N | 6 | 40 | | | | Hayashi,H | |
| 9.389 | 815647 | 4.5 | B | 4A | | | 1 | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 9.39 | 815648 | 4.7 | M | 4A | 4.1 | 8 | 1.5 | 60 | 0.08 | B | | 11 | 5 C | Y | 1 | Mitsuma,S | E |
| 9.39 | 815649 | | | | 3.4 | 5 | 0.1 | | 0.12 | | | 40 | | | | Knyazyuk,N | |
| 9.39 | 815650 | 5.1 | B | | 10 | 6 | 1.0 | 300 | 0.05 | B | | 10 | 4.0 | N | 1 | Uda,K | F |
| 9.396 | 815651 | 4.5 | M | 100 | 5 | 7 | 0.33 | 60 | 0.030 | B | | 8 | 4.5C | Y | 1 | Kato,T | |
| 9.396 | 815652 | 4.7 | B | 4A | | 5 | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hasegawa,T | |
| 9.398 | 815653 | | | | 3 | 7 | 0.12 | 60 | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | |
| 9.40 | 815654 | 4.3 | S | 4A | | | | | 0.08 | B | | 11 | 4.0 | N | 2 | Momose,M | |
| 9.408 | 815655 | 4.1 | S | 100 | 7 | 6 | 1.5 | 85 | 0.07 | B | | 10 | 3.5 | Y | 1 | Kobayashi,J | |
| 9.41 | 815656 | 4.8 | M | SAO | 9 | 6 | 1.2 | 65 | 0.06 | R | 12 | 22 | 4.5 | Y | 4 | Nakamura,A | |
| 9.43 | 815657 | 4.9 | B | | 15 | 6 | 1.0 | 60 | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 9.43 | 815658 | | | SAO | 8 | 6 | 0.50 | 85 | 0.15 | N | 6 | 23 | 5 | Y | 4 | Tanikawa,M | G |
| 9.43 | 815659 | 4.9 | B | SAO | | | | | 0.05 | B | | 7 | 5 | Y | 4 | Tanikawa,M | |
| 9.431 | 815660 | 5.1 | B | 100 | | | | | 0.07 | B | | 10 | 4.7 | Y | 1 | Date,M | |
| 9.438 | 815661 | 5.1 | B | 100 | 5.5 | 7 | 0.47 | 55 | 0.08 | R | 12.5 | 40 | 5.0C | Y | 1 | Feisheng,J | |
| 9.440 | 815662 | 4.9 | S | 100 | | 8 | | | 0.05 | B | | 10 | 3.0 | Y | 1 | Williams,P.F | H |
| 9.58 | 815663 | 4.8 | B | M | 13 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 9.59 | 815664 | 4.8 | B | E | 11 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 9.60 | 815665 | 4.7 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 9.61 | 815666 | 5.0 | B | E | 14 | | | | 0.03 | B | | 8 | | | | Zagaynov,V.A | |
| 9.61 | 815667 | 5.1 | B | M | | 3 | | | 0.05 | B | | 7 | | | | Mamedov,V | |
| 9.62 | 815668 | 5.0 | B | 4A | 3.5 | 7 | 0.3 | | 0.045 | B | | 7 | 4.0T | Y | 1 | Speil,J | I |
| 9.639 | 815669 | 4.0 | S | 100 | 15 | 8 | 1.2 | 65 | 0.152 | N | 5 | 44 | 4.2 | N | 2 | Moeller,M | J |
| 9.699 | 815670 | 4.3 | B | CZ | | 5 | | | 0.08 | B | | 10 | 4.7 | N | 1 | Janecek,V | |
| 9.70 | 815671 | 5.1 | S | 4A | 4.7 | 7 | 0.46 | 60 | 0.050 | R | 10 | 13 | 4.0T | N | 2 | Jahn,J | K |
| 9.700 | 815672 | 5.2 | B | 100 | | 7 | | | 0.050 | B | | 12 | 3.0T | Y | 1 | Mosch,J | |
| 9.703 | 815673 | 5.2 | M | CZ | 50 | 3 | 3.00 | | 0.060 | B | | 12 | 5.8 | Y | 1 | Barak,R | |
| 9.705 | 815674 | | | 100 | 4.5 | 6 | | | 0.150 | R | 15 | 56 | 3.0 C | N | 1 | Richert,M | |
| 9.71 | 815675 | 4.9 | B | 100 | | | | | 0.05 | B | | 7 | 5.7C | Y | 2 | Maraziti,A | L |
| 9.710 | 815676 | 4.9 | B | 100 | 4.5 | 6 | 0.5 | 58 | 0.150 | C | 15 | 56 | 5.0 | N | 2 | Zische,E | |
| 9.713 | 815677 | 4.9 | B | 100 | 10 | 6 | | | 0.050 | B | | 7 | 5.5 | Y | 1 | Bohme,D | M |
| 9.715 | 815678 | 5.1 | B | 4A | 10 | 8 | 2 | 58 | 0.08 | B | | 20 | 5.5 | N | 2 | Knain,E | N |
| 9.715 | 815679 | 4.9 | M | CZ | | 6 | | | 0.05 | B | | 7 | 3 | | 1 | Silhan,J | O |
| 9.715 | 815680 | 4.9 | S | 4A | 3.0 | 6 | | | 0.063 | R | 13.3 | 53 | 3.0C | N | | Skjaeraasen,O | |
| 9.718 | 815681 | 5.7 | B | | 7.0 | 5 | 0.2 | | 0.200 | N | 7.2 | 36 | 3.0C | Y | 1 | Lipski,P | |
| 9.719 | 815682 | 4.9 | S | 4A | 7 | 6 | 1.5 | 50 | 0.080 | B | | 15 | 4.3C | Y | 1 | Korth,S | P |
| 9.72 | 815683 | 3.5: | | DCS 7 | | 6 | | | | EY | | | 3.5C | N | 2 | Kroon,B | Q |
| 9.72 | 815684 | 4.9 | S | DCS 7 | 10 | 6 | 0.5 | 63 | 0.050 | B | | 10 | 4.5CM | N | 1 | van der Laan,T.A | |
| 9.729 | 815685 | 4.7 | M | 4A | 6 | 7 | 0.33 | 50 | 0.114 | N | 7.9 | 26 | 4.0C | N | 1 | Bernardis,A | |
| 9.729 | 815686 | 4.2 | S | 4A | 7.0 | 5 | 0.3 | 65 | 0.080 | B | | 20 | 4.5C | Y | 1 | Baroni,S | R |
| 9.729 | 815687 | 4.9 | | 100 | 5 | 8 | | | 0.050 | B | | 10 | 4.5 | Y | 2 | Thomas,A | S |
| 9.729 | 815688 | 5.0 | M | 100 | 6 | 3 | 0.8 | 82 | 0.09 | M | 11 | 56 | 4.5 | Y | 4 | Westlund,M | |
| 9.733 | 815689 | 4.4 | B | | 7.4 3.4 | 5 | 2.5 | | 0.030 | B | | 8 | 4.5C | Y | 1 | Winkler,R | |
| 9.74 | 815690 | 4.8 | M | 100 | 12 | 6 | 1.6 | 63 | 0.06 | R | 4 | 15 | 5.5 | Y | 4 | Granslo,B.H | |
| 9.74 | 815691 | 4.4 | S | DCS 7 | | 7 | 2.5 | | 0.045 | B | | 9 | 5 | N | 1 | Comello,G | |
| 9.75 | 815692 | 4.4 | S | 100 | | 7 | 1.0 | | 0.05 | B | | 10 | | Y | 10 | Bouma,R.J | T |
| 9.750 | 815693 | 4.6 | B | 4A | 11 9 | 5 | 0.4 | 32 | 0.200 | R | 15 | 120 | 6.0 | Y | 1 | Kalauch,K.-D | |
| 9.7500 | 815694 | 5.5 | B | 4A | 10 | 7 | 0.33 | 65 | 0.05 | B | | 10 | 4.7C | Y | 2 | Franciosi,C | U |
| 9.753 | 815695 | 4.9 | B | 4A | 5 | 7 | 0.42 | 60 | 0.330 | N | 4.5 | 59 | 6.1 | Y | 1 | Castino,R | |
| 9.76 | 815696 | 4.7 | B | 100 | | | | | 0.05 | B | | 10 | | Y | 10 | Bouma,R.J | |
| 9.763 | 815697 | 4.9 | B | 4A | 5 | 6 | 0.42 | 60 | 0.050 | B | | 16 | 6.1 | Y | 1 | Castino,R | |
| 9.764 | 815698 | 5.5 | B | 4A | | 7 | | | 0.050 | B | | 7 | 4.0TC | Y | 1 | Temprano,J | |
| 9.766 | 815699 | 4.7 | B | 4A | 8 | 8 | | | 0.06 | R | 11.7 | 25 | C | N | 4 | Gallego,J | V |
| 9.7687 | 815700 | 4.9 | B | AAVSO | | 3 | | | 0.05 | B | | 7 | 5.0 | N | 1 | Sicoli,P | |
| 9.771 | 815701 | 4.7 | B | 4A | 5 | | | | 0.05 | B | | 8 | 6 | Y | 1 | Cano,M | W |
| 9.771 | 815702 | 4.8 | M | 100 | 2 | 5 | | | 0.06 | R | 5.7 | 20 | 4.3C | N | 3 | Cardiel,N | X |
| 9.79 | 815703 | 4.8 | | | 6 | | 1 | 60 | 0.034 | B | | 9 | | | 2 | Pereira,A | Y |
| 9.800 | 815704 | 5.2 | B | 4A | 8 | | | | 0.150 | N | 5 | 38 | | N | 2 | Rodriguez C.,J.A | Z |
| 9.95 | 815705 | 5.1 | B | AA | 8.5 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | a |
| 9.95 | 815706 | 4.3 | M | AA | 8.5 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | a |
| 9.95 | 815707 | 4.5 | S | AA | | | | | 0.080 | B | | 20 | | | | Green,D.W.E | |
| 9.96 | 815708 | 4.8 | B | AA | 8.5 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | a |
| 9.96 | 815709 | 5.1 | B | AA | 9 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | a |
| 9.96 | 815710 | 4.4 | M | AA | 9 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | a |
| 9.96 | 815711 | 4.5 | M | AA | 8.5 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | a |
| 9.96 | 815712 | 4.6 | S | AA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 9.96 | 815713 | 4.6 | S | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 9.972 | 815714 | 4.8 | B | 99 | | 6 | 0.62 | 61 | 0.05 | B | | 7 | 4.5 | | 1 | Benavides,A | |
| 9.98 | 815715 | 4.5 | B | AAVSO | 5 | 7 | 2.3 | 61 | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 9.98 | 815716 | 4.4 | V | AAVSO | | | | | | EY | | | | | | Bortle,J.E | b |
| 9.98 | 815717 | | | | | 7 | 2 | 61 | 0.120 | B | | 20 | | | | Bortle,J.E | c |
| 9.98 | 815718 | | | | | 7 | | | 0.500 | N | 5 | 96 | | | | Bortle,J.E | d |
| 9.983 | 815719 | 5.0 | S | 4A | 4.9 | 9 | 0.67 | 60 | 0.203 | N | 6 | 101 | 5.0 | Y | 1 | Hudak,D.M | e |
| 9.999 | 815720 | 4.8 | B | 99 | 8 | 3 | 0.17 | 45 | 0.05 | B | | 7 | 5.3 | | 1 | Lairet,R | |

NOTE A Lunar eclipse. (PA value may have been incorrectly determined. Ed.)
NOTE B Tail PA 49 deg. to 61 deg.
NOTE C Modified Sidgwick method used.
NOTE D Tail, some high clouds. (PA approximate and may have been measured incorrectly. Ed.)
NOTE E 7.6.
NOTE F (PA value may have been incorrectly determined. Ed.)
NOTE G m2 (observer's symbol believed to mean "approximately equal to", Ed.) 9.

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NOTE H Altitude 3 deg.
NOTE I Comet low above horizon, aurora.
NOTE J Twilight.
NOTE K PA approximate.
NOTE L Observation interupted by clouds.
NOTE M Coma diameter exceeds value given.
NOTE N Very cold.
NOTE O Mist; during the public observation with some 30 visitors.
NOTE P Tail data uncertain because of haze.
NOTE Q Tail length determined in 15x80 binoculars: 1.4 deg.
NOTE R Fan tail at PA 40-115.
NOTE S Coma diameter approximate. Observation of tail with Newtonian 175/1220 mm, 35x: about 30'. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE T Tail length is lower limit.
NOTE U Tail length approximate.
NOTE V Bad weather.
NOTE W See draw. D.3.
NOTE X Bad night.
NOTE Y Tail length approximate. (Observer gave limit as 8.6. Ed.)
NOTE Z Fog.
NOTE a Coma diameter approximate.
NOTE b Almost star-like to naked eye.
NOTE c Sunward side of tail brighter.
NOTE d Bright, wide (type II) tail.
NOTE e Tail length and PA approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.000 | 830739 | | 0.15 | N | 8 | 64, 98,160 | 70 | 5.0 | 1 | Robotham,R | A |
| 9.010 | 830740 | | 0.254 | N | 6 | 35 | 10 | 3.0 | 6 | Troiani,D.M | B |
| 9.031 | 830741 | | 0.203 | SC | 10 | 70 | 90 | 6.0 | | Williams,D.J | C |
| 9.063 | 830742 | 0.38 | 0.254 | N | 5.6 | 53, 60,120 | 14 | 6.6 | 2 | Knisely,D | D |
| 9.106 | 830743 | 0.22 | 0.20 | N | 6 | 30, 48, 96 | 6 | 5.2 | 1 | Wilson,A.M | |
| 9.229 | 830744 | 2 | 0.05 | R | 7 | 30, 40 | 30 | 5.0 | 1 | Kopp,M | E |
| 9.44 | 830745 | 1.37 | 0.15 | N | 6 | 23 | 14 | 5 | 3 | Tanikawa,M | F |
| 9.698 | 830746 | | 0.203 | SC | 10 | 254 | | | | Moller,D | G |
| 9.715 | 830747 | 0.49 | 0.063 | R | 13.3 | 34, 53 | 10 | 3.5 | 1 | Skjaeraasen,O | H |
| 9.722 | 830748 | | 0.750 | N | 7.7 | 165 | | | 1 | Freydank,H | I |
| 9.726 | 830749 | 1.6 | 0.090 | M | 11 | 56 | 10 | 4.5 | 4 | Westlund,M | |
| 9.733 | 830750 | 0.09 | 0.125 | N | 5.8 | 28, 40, 60 | 40 | 5.0 | 1 | Riccabone,G | J |
| 9.771 | 830751 | | 0.050 | B | | 8 | | 6 | 1 | Cano,M | K |
| 9.938 | 830752 | 0.15 | 0.23 | R | 12 | 122,250,600 | | | 1 | O'Meara,S.J | L |
| 9.991 | 830753 | 1 | 0.050 | B | | 10 | 16 | 5 | 2 | Robinson,R.L | M |

NOTE A Tail obvious and easily seen at 98x but even more so at 64x. Nucleus harder to see than on Jan. 6/7. Comet is pale blue/white.
NOTE B Seeing (1-3): 2. Sky darkness (1-5): 1. Gas tail at PA 55 deg. Ray at PA 140 deg. Streamer at PA 90 deg. Had both gas and dust tail.
NOTE C A very faint tail is still visible as long as the sky remains dark.
NOTE D Bright bluish inner coma with yellow central condensation. Stellar nucleus? occasionally visible with bluish disk about 10" arc across centered on nucleus. Coma shows many very faint radial streamers near limit of vision out to edge of coma. Tail now almost as broad as coma's northeast edge broadening to 16' arc at tail's end. Faint narrow streamer PA 40 approximately 12' arc long running along north side of tail. Fainter streamer or weak jet about 5' arc long along southeast edge of tail. Inner tail shaped like narrow cone with base of cone near central condensation and tip about 15' arc from nucleus. Possible condensation in coma just south of nucleus. Magnification of 240x also used.
NOTE E Coma shows definite intensity peak at centre; tail's structure irregular + internal brightness differences (shadows!). Vertex distance: V = 11.5'. Semi latus rectums: P1 = 11.0', P2 = 10.0'. Tail PA 56 deg.
NOTE F DC = 6/10. Dia. and two features at PA 85 (observer's symbol believed to mean "approximately equal to", Ed.) 8' and 30' long each, respectively.
NOTE G (Duration not indicated. Time of observation is start time. Ed.)
NOTE H Lumicon Deep Sky filter used. Typical conditions for my site: city lights brightened the sky background and humidity, thin and "foglike" and outstretched clouds and turbulence in the atmosphere worsened the seeing. No tail visible; just the brightest part of the coma. (I know other observers have seen a coma at least 7 times as big as I did.) The very central condensation; the "nucleus", appeared point-like.
NOTE I Lighter haze. Brightness: 4.5 mag.; dia. about 55". (Translated by IHW staff. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE J Light nebular region at PA 114. Slightly darker region at PA 98. Nucleus diameter 43 arc sec. Magnifications of 80 and 144 also used. Two drawings included. Intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE K Field 9. Limiting mag.: 9.0. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE L (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE M Faint fanning of tail near head on the north side. Possibly dust tail.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | POV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.004 | 850695 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 2.50 | Kodak 2415 | | Y | X | 248/P | 1 | Sabia,J.D | A |
| 9.006 | 850696 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 8.00 | Kodak 2415 | | Y | O | 3/P | 1 | Crist,M | B |
| 9.012 | 850697 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 1.50 | Kodak 2415 | | Y | X | 249/P | 1 | Sabia,J.D | A |
| 9.016 | 850698 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 16.00 | Kodak 2415 | | Y | O | 4/P | 1 | Crist,M | B |
| 9.025 | 850699 | 0.100 | 2.8 | | 20.4 x13.7 | 5.00 | Kodak VR1000 | 1000/ | N | T | 4/C | 1 | Priester,D.C | |
| 9.031 | 850700 | 0.100 | 2.8 | | 20.4 x13.7 | 10.00 | Kodak VR1000 | 1000/ | N | T | 5/C | 1 | Priester,D.C | C |
| 9.059 | 850701 | 0.100 | 2.8 | | 20.4 x13.7 | 3.00 | Kodak VR1000 | 1000/ | N | T | 7/C | 1 | Priester,D.C | C |
| 9.062 | 850702 | 0.100 | 2.8 | | 20.4 x13.7 | 2.50 | Kodak VR1000 | 1000/ | N | T | 8/C | 1 | Priester,D.C | |
| 9.064 | 850703 | 1.583 | 8 | 0.203 | 1.3 x 0.9 | 30.00 | Kodak 2415 | | Y | S | 19/P | 1 | Minton,R.B | D |
| 9.101 | 850704 | 0.610 | 4 | 0.152 | 3.4 x 2.3 | 2.00 | Kodak Tri-X | 400/ | N | X | 3/N | 1 | Lazerson,H | E |
| 9.105 | 850705 | 0.610 | 4 | 0.152 | 3.4 x 2.3 | 3.00 | Kodak Tri-X | 400/ | N | X | 4/N | 1 | Lazerson,H | E |
| 9.150 | 850706 | 0.200 | 8 | | 10.3 x 6.9 | 32.00 | Kodak 2415 | | Y | X | 96/P | 2 | Snyder,L.F | |
| 9.385 | 850707 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 10.00 | Kodak 2415 | | Y | | 10/P | 1 | Niijima,T | F |
| 9.695 | 850708 | 0.300 | 4 | | 6.9 x 4.6 | 1.00 | Fotopan HL | 400/27 | N | O | 8/P | 1 | Slusarczyk,J | |
| 9.736 | 850709 | 0.225 | 1.6 | 0.140 | 9.1 x 6.1 | 5.00 | Kodak 2415 | | Y | O | 001/T | 1 | Belli,V | G |
| 9.760 | 850710 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | O | 11/T | 2 | Genebriera,J | |
| 9.806 | 850711 | 1.905 | 5.4 | 0.350 | 1.1 x 0.7 | 30.00 | Kodak 2415 | | Y | O | 12/T | 2 | Genebriera,J | |
| 9.823 | 850712 | 0.803 | 2.1 | 0.350 | 2.6 x 1.7 | 1.00 | Kodak 103a-F | | N | M | 33/P | 1 | Guarro,J | |

NOTE A Photograph made by J. Kamichitis and J.D. Sabia.
NOTE B City lights interfered with the observation. Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE C Interference from car lights.
NOTE D The print shows a bright tail ray starting 25 arc min. from the nucleus with a fuzzy spot (or perhaps a star) at the end. (Print submitted by observer is a composite of six 5 min. exposures. The first and second, third and fourth, and fifth and sixth exposures were separated by 5 min.; the second and third and the fourth and fifth exposures were contiguous. Ed.)
NOTE E 40-50 mph gusting winds! Santa Ana without inversion layer. Coyotes hunting and baying in area - wild!
NOTE F (Observer's image identifier is 860109-4. Ed.) Large format (70 mm) film used. City lights interfered with the observation.

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NOTE G Instrument is Schmidt camera.

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NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.000 | 815721 | 4.8 | B | 4A | | | 3.0 | 60 | 0.050 | B | | 10 | 5 | Y | 2 | Robinson,R.L | |
| 10.007 | 815722 | 5.0 | B | 4A | 10 | 6 | 1 | 45 | 0.15 | N | 8 | 60 | 5.5 | Y | 4 | Gilchrist,D.K | A |
| 10.007 | 815723 | | | 4A | 43 | 6 | 0.20 | 300 | 0.200 | SC | 10 | 78 | 6.2 | Y | 2 | Saraceno,J | B |
| 10.007 | 815724 | 5.3 | B | 4A | | | | | 0.050 | B | | 7 | | | | Saraceno,J | |
| 10.017 | 815725 | 5.0 | B | 100 | 15 | 7 | 2 | 90 | 0.05 | B | | 7 | 4.7 | N | 1 | Fox,J.H | |
| 10.04 | 815726 | 4.9 | B | 4A | | | 0.33 | | 0.080 | B | | 20 | 5.0 | Y | | Kronk,G | C |
| 10.04 | 815727 | 5.6 | B | 4A | 6.4 | | 0.50 | | 0.335 | N | 4.5 | 56 | 5.0 | Y | | Kronk,G | D |
| 10.10 | 815728 | 4.5 | | 4A | | 9 | 6 | 60 | | EY | | | 6.0 | Y | 16 | Morris,C.S | |
| 10.1028 | 815729 | 4.8 | S | DCS | 5 | 8 | 0.18 | 75 | 0.152 | N | 8.0 | 76 | 4.3 | | 3 | Machholz,D | |
| 10.104 | 815730 | 5.7 | S | 4A | 36 | 7 | 1 | 80 | 0.203 | SC | 10 | 80 | 4.5C | Y | 1 | Gronek,J.D | E |
| 10.11 | 815731 | 4.5 | M | 4A | 5.5 | 8 | 6.0 | 60 | 0.080 | B | | 20 | 6.0 | Y | 16 | Morris,C.S | F |
| 10.1181 | 815732 | 4.5 | M | 4A | 6 | 7 | 6.37 | 62 | 0.05 | B | | 7 | 6.0 | Y | 2 | Cook,A.J | |
| 10.1181 | 815733 | 4.5 | S | 4A | | | 5 | 62 | | EY | | | 6.0 | Y | | Cook,A.J | |
| 10.13 | 815734 | 4.7 | M | 4A | | | | | 0.05 | B | | 10 | 4 C | Y | 21 | Hale,A | G |
| 10.13 | 815735 | 4.6 | M | 4A | | | | | 0.015 | B | | 6 | 6.0 | Y | 16 | Morris,C.S | |
| 10.13 | 815736 | 4.5 | M | 4A | | | | | 0.050 | B | | 12 | 6.0 | Y | 16 | Morris,C.S | |
| 10.135 | 815737 | 4.6: | M | 4A | 4.5 | 8 | 2.5 | 45 | 0.203 | N | 4 | 35 | 5.0 | Y | 1 | Poulos,D | H |
| 10.375 | 815738 | 5.3 | S | 4A | 2.5 | 8 | 0.12 | 58 | 0.15 | N | 6 | 32 | 4.0T | N | 3 | Wakatsuki,M | |
| 10.375 | 815739 | 4.8 | M | 4A | 20 | 6 | 0.50 | 60 | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,H | |
| 10.378 | 815740 | 4.8 | M | 4A | 20 | 6 | 0.83 | 60 | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 10.382 | 815741 | 4.6 | B | 4A | | | | | 0.035 | B | | 7 | | N | 1 | Okada,M | |
| 10.383 | 815742 | 4.5 | M | 100 | 5 | 8 | 0.33 | 60 | 0.030 | B | | 8 | 4.5C | Y | 1 | Kato,T | |
| 10.385 | 815743 | 4.8 | M | 4A | 4.0 | 8 | 1.5 | 60 | 0.08 | B | | 11 | 4.5 | Y | 1 | Mitsuma,S | I |
| 10.390 | 815744 | 4.7 | M | 100 | 3 | 7 | 0.5 | 60 | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | |
| 10.396 | 815745 | 5.3 | B | 4A | | 5 | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hasegawa,T | |
| 10.398 | 815746 | 4.4 | | 100 | | | | | | EY | | 8 | 4.5C | Y | 1 | Kato,T | |
| 10.40 | 815747 | 3.5 | | | 8 | 7 | 3 | | 0.12 | B | | 11 | 5.8 | Y | 1 | Washi,S | J |
| 10.406 | 815748 | 5.1 | B | 100 | | | | | 0.07 | B | | 10 | 4.7 | Y | 1 | Date,M | |
| 10.41 | 815749 | 4.7 | M | SAO | 8 | 5 | 0.83 | 65 | 0.06 | R | 12 | 22 | 4.0 | Y | 4 | Nakamura,A | |
| 10.430 | 815750 | 3.9 | S | 100 | 7 | 6 | 1 | 80 | 0.07 | B | | 10 | 2.5 | Y | 1 | Kobayashi,J | |
| 10.438 | 815751 | 5.1 | B | 100, 4A | 6.3 | 7 | 0.47 | 55 | 0.08 | R | 12.5 | 40 | 5.5C | Y | 1 | Feisheng,J | |
| 10.54 | 815752 | 4.5 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 10.60 | 815753 | 5.0 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 10.635 | 815754 | 5.4 | M | 4A | 20 | 7 | 0.08 | 300 | 0.150 | N | 5.3 | 45 | 5.5 | Y | 1 | Wikholm,L | |
| 10.68 | 815755 | 5.8 | B | M | 4 | 6 | 0.2 | 80 | 0.07 | N | 8 | 33 | | | | Rudenko,S | |
| 10.691 | 815756 | 5.1 | B | 100 | | | | | 0.05 | B | | 7 | 5.0C | Y | 1 | Kukkonen,I.T | |
| 10.694 | 815757 | 5.1 | M | CZ | | 2 | | | 0.05 | B | | 7 | 4.0 | | 2 | Pravec,P | |
| 10.694 | 815758 | 4.7 | M | 4A | | 6 | | | 0.06 | B | | 12 | 5.0C | N | 2 | Rapavy,P | K |
| 10.698 | 815759 | 4.5 | M | 4A | | 6 | | | 0.10 | B | | 25 | 5.5C | N | 2 | Rapavy,P | K |
| 10.70 | 815760 | 5.5 | B | 100 | 7.5 7 | 9 | 0.5 | 65 | 0.203 | SC | 10 | 44 | 5.7C | Y | 2 | Maraziti,A | L |
| 10.70 | 815761 | | | | | 6 | 1.5 | | 0.080 | B | | 15 | 3.5C | N | 2 | Kroon,B | |
| 10.701 | 815762 | | | CZ | 6.5 4.5 | 5 | 1 | 75 | 0.10 | N | 6 | 38 | 4.1 | | 2 | Pravec,P | |
| 10.701 | 815763 | 5.2 | M | CZ | 10 | 6 | 0.6 | 35 | 0.05 | B | | 7 | 5 T | Y | 1 | Silhan,J | |
| 10.701 | 815764 | 4.3 | M | CZ | | | | | 0.10 | B | | 25 | 4.5C | Y | 1 | Valasek,V | M |
| 10.705 | 815765 | 4.8 | B | CZ | 15 | 5 | | | 0.04 | B | | 7 | 5.0 | Y | 1 | Brancik,K | |
| 10.707 | 815766 | 5.2 | M | CZ | 50.0 | 3 | | | 0.060 | B | | 12 | 5.1 | Y | 1 | Barak,R | |
| 10.708 | 815767 | 4.7 | M | CZ | 10 | 7 | | | 0.080 | B | | 10 | 4.7 | Y | 1 | Bilek,V | |
| 10.708 | 815768 | | | | 1.9 | 5 | 0.1 | 90 | 0.076 | R | 16 | 139 | 5.0C | Y | 1 | Kukkonen,I.T | N |
| 10.71 | 815769 | 5.3 | M | AA | 6 | 7 | 0.5 | 105 | 0.08 | R | 8.3 | 26 | | | | Keszthelyi,S | O |
| 10.71 | 815770 | 4.9 | B | 100 | 10 | 8 | 0.5 | 65 | 0.05 | B | | 7 | 5.7C | Y | 2 | Maraziti,A | |
| 10.720 | 815771 | 4.4 | S | 4A | 7 | 8 | 1.15 | 60 | 0.080 | B | | 20 | 5.7 | Y | 1 | Meozzi,D | |
| 10.72 | 815772 | 5.6 | S | 4A | 12 | 7 | 0.5 | 54 | 0.05 | B | | 10 | 5.5 | Y | 2 | Zanut,S | |
| 10.726 | 815773 | 4.8 | M | 100 | 12 | 6 | | | 0.07 | B | | 20 | | Y | 1 | Tanti,T | P |
| 10.736 | 815774 | 5.3 | M | CZ | 25 | 4 | | | 0.10 | B | | 25 | 5.7 | Y | 1 | Hajek,P | |
| 10.74 | 815775 | 5.0 | S | 4A | | | | | 0.08 | B | | 20 | 4.5 | | 1 | Shanklin,J.D | |
| 10.74 | 815776 | 5.1 | S | 99, 100 | 9 8 | 7 | 0.5 | 50 | 0.065 | B | | 12 | 5.0 | N | 1 | Foulkes,M | Q |
| 10.740 | 815777 | 5.1 | M | 100 | 4.5 | 4 | 0.25 | 60 | 0.07 | B | | 16 | 5.0C | Y | 1 | Taylor,M.D | R |
| 10.740 | 815778 | 4.9 | B | CZ | 20 16 | 6 | | | 0.10 | O | | 25 | 3.5C | Y | 1 | Micek,I | |
| 10.743 | 815779 | | | 100 | | 6 | | 72 | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | S |
| 10.750 | 815780 | 4.9 | M | 100 | 7 | 6 | 0.58 | 45 | 0.05 | B | | 10 | 5 C | Y | 1 | Menichetti,R | |
| 10.750 | 815781 | 4.9 | S | 100 | 13 | 6 | 1 | | 0.05 | B | | 10 | 3.0 | N | 1 | Hurst,G.M | T |
| 10.750 | 815782 | 5.2 | S | 100 | 5.5 | 5 | 0.20 | 60 | 0.04 | B | | 8 | 5.0C | Y | 1 | Taylor,M.D | U |
| 10.750 | 815783 | 4.8 | S | 4A | 9 | 6 | 1.5 | 75 | 0.050 | B | | 7 | 4.9C | Y | 5 | Piccinini,M | |
| 10.751 | 815784 | 4.5 | S | 100 | | 6 | 1.00 | 77 | 0.08 | B | | 11 | 4.2 | Y | 4 | Gainsford,M.J | |
| 10.755 | 815785 | 4.0 | S | 100 | | | 0.3 | 60 | | EY | | | 6.1Z | Y | 6 | Haver,R | |
| 10.757 | 815786 | 5.0 | B | 4A | 3.5 | 7 | 0.83 | 70 | 0.080 | B | | 20 | 5.5C | Y | 2 | Dionisi,M | V |
| 10.760 | 815787 | 5.7 | B | 100 | | 3 | | | 0.08 | B | | 20 | 3.5C | N | 1 | Scardella,M | W |
| 10.76 | 815788 | 5.1 | S | 4A | | | | | 0.20 | R | 12 | 40 | 4.5 | | 1 | Shanklin,J.D | X |
| 10.760 | 815789 > | 4.2 | | 100 | | | | | | EY | | | 4.2 | Y | 4 | Gainsford,M.J | Y |
| 10.760 | 815790 | 4.2 | S | 100 | 6.5 | 6 | 3.67 | 60 | 0.05 | B | | 7 | 6.1Z | Y | 6 | Haver,R | Z |
| 10.760 | 815791 | 5.1 | B | 100 | 5.6 3.9 | 8 | 0.27 | 82 | 0.050 | B | | 10 | 4.8T | Y | 3 | Abbott,J | a |
| 10.767 | 815792 | 4.9 | S | 4A | | 8 | | | 0.05 | B | | 10 | 4.5ZC | Y | 5 | Melandri,F | b |
| 10.788 | 815793 | 4.9 | S | 100 | 3.2 | 7 | | 80 | 0.25 | N | 6 | 60 | 3.5 | Y | 1 | Gainsford,M.J | c |
| 10.8009 | 815794 | 4.7 | S | | 20 | 8 | 1 | 41 | 0.08 | B | | 10 | 5.0 | Y | 1 | Znasik,M | |
| 10.94 | 815795 | 4.5 | S | AA | 7 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | d |
| 10.972 | 815796 | 4.8 | B | 99 | 6 | 3 | 0.53 | 43 | 0.05 | B | | 7 | 4.5 | | | Lairet,R | |
| 10.976 | 815797 | 4.8: | M | 4A | 6 | 7 | 0.7 | 65 | 0.05 | B | | 7 | 4.3 | Y | 1 | DeYoung,J.A | e |
| 10.989 | 815798 | 4.8 | S | 100 | 6 | 7 | 0.37 | 60 | 0.035 | B | | 7 | 5.4C | Y | 3 | Morrison,W | |

NOTE A Coma diameter, tail length and position angle are rough estimations.
NOTE B (PA value may have been incorrectly determined. Ed.) Heavy ground fog.
NOTE C Exceptionally clear.
NOTE D 3 rays in tail. Tail PA 46 deg. to 67 deg.
NOTE E Exc. see. Faint hint of fan shaped tail. Tail length less than 1 deg. Tail length and PA uncertain.
NOTE F Comet's dust tail visible as a bulge on the southern edge of gas tail. At its end gas tail was no more than 10' wide.
NOTE G Observed from within Los Angeles city limits. Probably considerable interference from light pollution (sky glow).
NOTE H (Observer gives coma magnitude as 4.7 and total magnitude as 4.5. Ed.)
NOTE I 7.8.
NOTE J Type I. Type II. Clear. (Observer indicated "Y" method. Translated by IHW staff. Ed.)
NOTE K Coma ellipt.
NOTE L Elliptical coma.
NOTE M Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE N Coma diameter determined as an average of five transit time observation.
NOTE O 10x50 B and 7 mag. nucleus. [sic]
NOTE P Clouds. Wind.
NOTE Q Some cloud.
NOTE R Seeing Antoniadi II.
NOTE S PA tail (I) 72 deg. Clouds.
NOTE T Clouded soon after observation started. Coma diameter and tail length approximate.
NOTE U Tail suspected to 0.5 deg. length.
NOTE V Coma diameter accuracy +/-0.6. Tail length accuracy +/-0.01.

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NOTE W Tail spanned PA 305 to 310.
NOTE X No features in tail or coma.
NOTE Y Negative observation.
NOTE Z Tail fan-shaped.
NOTE a Comparison stars 4.7, 5.3.
NOTE b Veiled sky.
NOTE c Haze. Tail length uncertain.
NOTE d Coma diameter approximate.
NOTE e High thin overcast.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.005 | 830754 | | 0.105 | N | 4.2 | 55, 30 | 15 | 6.0 | | Williams,D.J | A |
| 10.012 | 830755 | 0.6 | 0.203 | R | 13 | 85,150,225 | 5 | 4.7 | 1 | Fox,J.H | B |
| 10.122 | 830756 | 3 | 0.050 | B | | 7 | 10 | 6.0 | 2 | Cook,A.J | C |
| 10.708 | 830757 | 0.08 | 0.100 | B | | 25 | 20 | 3.8 | 1 | Gojdic,S | D |
| 10.717 | 830758 | 1 | 0.080 | R | 8.3 | 26 | 26 | 5.0 | 1 | Keszthelyi,S | E |
| 10.719 | 830759 | 0.40 | 0.203 | SC | 10 | 44, 77 | 30 | 5.7 | 2 | Maraziti,A | F |
| 10.727 | 830760 | 0.23 | 0.205 | N | 5 | 66,150,300 | 16 | 4.9 | 5 | Piccinini,M | G |
| 10.736 | 830761 | 0.26 | 0.254 | N | 6.4 | 41, 65 | 30 | 4.8 | 3 | Abbott,J | H |
| 10.744 | 830762 | 0.12 | 0.298 | N | 5 | 65,269 | 14 | 5.5 | 1 | Stott,D | I |
| 10.757 | 830763 | 0.48 | 0.080 | B | | 20 | 40 | 5.5 | 2 | Dionisi,M | J |
| 10.761 | 830764 | 1.4 | 0.05 | B | 8 | 10 | 4 | 4.5 | 1 | Menichetti,R | K |

NOTE A Halley is still very easy to spot with the Astroscan. Halley doesn't appear as star-like in the center. I used the 4" with powers of 30 and 55. (Separate drawings at 55x and 30x submitted. Ed.)
NOTE B Nucleus appears almost stellar inside an inner coma. Outer coma fans out broadly to E into tail. Bright, linear streak just N of tail center line. W edge of coma slightly brighter than the rest.
NOTE C Tail contained a central bright streak.
NOTE D Atlas Eclipticalis - A. Becvar.
NOTE E Tail 0.5 at PA 105.
NOTE F Tail at PA 65 deg.
NOTE G City lights interfered with the observation. Tail at PA 75 deg. Vertex distance = 4.05', semi latus rectum P1 = 4.5', P2 = 4.5'.
NOTE H Twilight interfered with the observation. Central condensation approximatley 32 arc sec. Principal tail at PA 84 deg., approximately 19.7 arc min. by 2.1 arc min. at root tapering to 1.1 arc min. Faint "brush" at PA 122 deg. (centre), approximately 2.7 arc min. by 1.6 arc min. tapering to 0.8 arc min. Northernmost ray at PA 73 deg., approximately 6.1x0.8 arc min. Southernmost ray at PA 101 deg. approximately 5.6x0.8 arc min. Vertex distance 1.7'. Semi latus rectum (northward) 1.8'. Semi latus rectum (southward) 1.9'. Observation made over 30 minutes with limit figures above referring to end of observation. Bright sky conditions at start of observation rendered faint detail invisible and the hard-edged central condensation appeared distinctly "planetary". As the sky darkened, the inner coma appeared elliptical in shape, fading into the main long tail (traced to 19.7'). Various features were seen 'downstream' and away from the coma including a "brush" to the south.
NOTE I Hood at PA 280-20. Tail at PA 58. Coma spur at PA 120. Hood is vague but surrounds nuclear condensation for some 100 deg. Coma still shows an irregular spur to southeast.
NOTE J Jet at PA 43 deg. Spot at PA 153-232 deg. Corona at PA 21-122 deg. Protuberance at PA 50-113 deg. with vertex at PA 70 deg. There is a tail zone more bright than ones stated. This zone was a length of about 10' and it is large in variable mode by 6' to 8'. [sic] City lights interfered with the observation.
NOTE K Tail at PA 45 deg. Vertex distance = 3.5', semi latus rectum P1 = 3.5', P2 = 3.5'.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.004 | 850713 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 1.50 | Kodak 2415 | | Y | X | 251/P | 1 | Sabia,J.D | A |
| 10.024 | 850714 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 2.25 | Kodak 2415 | | Y | X | 250/P | 1 | Sabia,J.D | A |
| 10.026 | 850715 | 0.400 | | | 5.2 x 3.4 | 4.00 | Fujichrome | 400/ | N | X | 374/S | 2 | Woidyla,B | B |
| 10.046 | 850716 | 0.400 | | 0.200 | 5.2 x 3.4 | 7.00 | 3M 1000 | 1000/ | N | X | 411/S | 2 | Woidyla,B | B |
| 10.052 | 850717 | 0.400 | | 0.200 | 5.2 x 3.4 | 7.00 | 3M 1000 | 1000/ | N | X | 412/S | 2 | Woidyla,B | B |
| 10.058 | 850718 | 0.400 | | | 5.2 x 3.4 | 7.00 | Fujichrome | 400/ | N | X | 384/S | 2 | Woidyla,B | B |
| 10.062 | 850719 | 1.583 | 8 | 0.203 | 1.3 x 0.9 | 15.00 | Kodak 2415 | | Y | S | 29/P | 1 | Minton,R.B | C |
| 10.062 | 850720 | 0.400 | | | 5.2 x 3.4 | 4.00 | Fujichrome | 400/ | N | X | 379/S | 2 | Woidyla,B | B |
| 10.066 | 850721 | 0.400 | | | 5.2 x 3.4 | 5.00 | Fujichrome | 400/ | N | X | 378/S | 2 | Woidyla,B | B |
| 10.094 | 850722 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 0.50 | Kodacolor | 1000/ | N | S | 7/N | 1 | Gronek,J.D | |
| 10.103 | 850723 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 18.00 | Kodak Tri-X | | N | M | 16/S | 1 | Webb,R | D |
| 10.105 | 850724 | 0.610 | 4 | 0.152 | 3.4 x 2.3 | 3.00 | Kodak Tri-X | | N | X | 1/N | 1 | Lazerson,H | E |
| 10.109 | 850725 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.50 | 3M 1000 | 1000/ | N | O | 13/N | 7 | Edberg,S.J | |
| 10.117 | 850726 | 2.31 | | 0.45 | 0.9 x 0.6 | 8.00 | Kodak Tri-X | | N | S | 15/S | 1 | Webb,R | F |
| 10.118 | 850727 | 0.400 | 8 | | 5.2 x 3.4 | 60.00 | Kodak 2415 | | Y | X | 97/P | 2 | Snyder,L.F | |
| 10.119 | 850728 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 20.00 | 3M 1000 | 1000/ | N | O | 14/N | 7 | Edberg,S.J | |
| 10.119 | 850729 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 20.00 | Ilford HP 5 | 500/ | N | O | 52/C | 7 | Edberg,S.J | |
| 10.124 | 850730 | 3.200 | 7 | 0.457 | 0.6 x 0.4 | 28.00 | Kodak IIa-O | | N | | 01/P | | Padilla,S | |
| 10.126 | 850731 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | S | 7/P | 2 | Yen,B | G |
| 10.135 | 850732 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 20.00 | 3M 1000 | 1000/ | N | O | 15/N | 7 | Edberg,S.J | |
| 10.143 | 850733 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | 3M 1000 | 1000/ | N | O | 16/N | 7 | Edberg,S.J | |
| 10.144 | 850734 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | 3M 1000 | 1000/ | N | O | 17/N | 7 | Edberg,S.J | |
| 10.148 | 850735 | 0.050 | 1.4 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 18/N | 7 | Edberg,S.J | |
| 10.151 | 850736 | 0.050 | 1.4 | | 39.6 x27.0 | 5.00 | 3M 1000 | 1000/ | N | O | 19/N | 7 | Edberg,S.J | |
| 10.163 | 850737 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 12.00 | Kodak 098 | | N | | 001/P | 5 | Royer,R | |
| 10.166 | 850738 | 0.180 | 2.8 | | 11.4 x 7.6 | 3.00 | 3M 1000 | 1000/ | N | S | 10/P | 2 | Cook,A.J | |
| 10.388 | 850739 | 0.850 | 3.4 | 0.25 | 2.4 x 1.6 | 10.00 | Kodak 6415 | | Y | C | 8/P | 1 | Kojima,T | H |
| 10.391 | 850740 | 1.760 | 5.8 | 0.300 | 1.2 x 0.8 | 10.00 | Kodak 2415 | | Y | | 104/P | 1 | Niijima,T | I |
| 10.399 | 850741 | 1.760 | 5.8 | 0.300 | 1.2 x 0.8 | 10.00 | Kodak 2415 | | Y | | 105/P | 1 | Niijima,T | I |
| 10.427 | 850742 | 0.500 | 2.5 | | 4.1 x 2.7 | 14.97 | Kodak 2415 | | Y | | 2/T | 1 | Sakai,Y | J |
| 10.439 | 850743 | 0.500 | 2.5 | | 4.1 x 2.7 | 10.00 | Kodak 2415 | | Y | | 1/T | 1 | Sakai,Y | K |
| 10.530 | 850744 | 0.300 | 5.6 | | 6.9 x 4.6 | 6.00 | Fujichrome | 400/ | N | X | 383/S | 2 | Woidyla,B | B |
| 10.704 | 850745 | 0.500 | | | 4.1 x 2.7 | 38.33 | Fomapan F27 | 400/27 | N | O | 7/N | 1 | Maturkanic,M | L |
| 10.710 | 850746 | 1.000 | 5.6 | | 2.1 x 1.4 | 60.00 | Kodak Tri-X | 320/26 | N | O | 13/N | 1 | Skvarka,J | M |
| 10.713 | 850747 | 0.135 | 1.8 | | 15.2 x10.2 | 3.00 | Fujichr. Pro | 100/ | Y | | 12/P | 2 | Conrad,R | N |
| 10.733 | 850748 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | O | 1/P | | Jager,M | O |
| 10.736 | 850749 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | O | 201/P | | Jager,M | P |
| 10.741 | 850750 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 13.00 | 3M 1000 | 1000/ | N | X | 6/S | 1 | Vanin,G | |
| 10.748 | 850751 | 1.780 | 5 | 0.356 | 1.2 x 0.8 | 30.00 | 3M 1000 | 1000/ | N | M | 2/P | 1 | Mobberley,M | Q |
| 10.751 | 850752 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 20.00 | Ilford FP4 | 125/22 | N | O | 5/C | 1 | Paolinetti,R | R |
| 10.757 | 850753 | 0.600 | 6 | | 3.4 x 2.3 | 35.00 | Ilford HP4 | 400/27 | N | O | 0/C | | Paolinetti,R | S |
| 10.763 | 850754 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 10.00 | Ilford FP4 | 125/22 | N | O | 6/C | 1 | Paolinetti,R | R |
| 10.788 | 850755 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 1.00 | Ilford FP4 | 125/22 | N | O | 7/C | 1 | Paolinetti,R | R |
| 10.801 | 850756 | 0.300 | 4 | | 6.9 x 4.6 | 20.00 | Kodak 2415 | | Y | S | 10/P | 4 | Portela,A | T |

NOTE A Photograph made by J. Kamichitis and J.D. Sabia.
NOTE B (Observer's image identifier is preceded by prefix 1. Ed.)
NOTE C (Print submitted by observer is a composite of three 5 min. exposures; the first and second were separated by 5 min. and the second and third were separated by 10 min. Ed.)
NOTE D Slight zodiacal light interference. Limited to 18 min. Inner coma and starlike central condensation visible on all original negatives. Film push processed slightly. (Observer indicated C-type guiding as well as M. Ed.)

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NOTE E Tail 1/2 of neg. "Push" processed to 800 ASA.
NOTE F Film push processed slightly.
NOTE G Start time approximate. (Observer's image identifier is 31. Ed.) Instrument is Schmidt camera.
NOTE H Instrument is Wright-Schmidt. Large format (120 size) film used.
NOTE I (Observer's image identifier is preceded by prefix Nj. Ed.)
NOTE J Fuji: SC-54 filter used; cuts off <540 nm. Seeing 2/5. KF 2550 meniscus camera used; 9 deg. field. Large format film used. Hypersensitized in N2 for 12 hours and N2/H2 for 24 hours at 50 C.
NOTE K Seeing 4/5. KF 2550 meniscus camera used; 9 deg. field. Large format film used. Hypersensitized in N2 for 12 hours and N2/H2 for 24 hours at 50 C.
NOTE L Twilight and city lights interfered with the observation.
NOTE M 120 size film used.
NOTE N Twilight interfered with the observation. UV filter used. (This probably means a UV blocking, clear glass filter. Ed.)
NOTE O Coma 10 arc min.; plasma tail greater than 4 deg.; dust tail about 3 deg. Instrument is Schmidt camera.
NOTE P Magnitude 4.0; coma 20 arc min.; tails 7 deg. at PA 55, 65 arc min. at PA 64. (Print submitted is composite of two 4 min. exposures separated by 4 min.; the image made on 860110 at 1734 is one part of the composite. Ed.) Instrument is Schmidt camera.
NOTE Q Double star images caused by tree occulting guide star and gale force winds. Considerable cloud at start and finish of exposure. Also, possible elongation of star images by atmospheric refraction.
NOTE R (Observer's image identifier is followed by suffix A. Ed.)
NOTE S Large format film (4x5 inch) used. Instrument is astrograph.
NOTE T (Time supplied by observer may have been start time or mid-exposure time. Ed.)

DATE: 11 JAN 1986 DATE: 11 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.002 | 815799 | 5.2 | B | 4A | | 7 | | | 0.08 | B | | 11 | 4.0 | Y | 1 | Gorski,L | |
| 11.01 | 815800 | 4.9 | B | 4A | 7 | | 0.75 | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 11.01 | 815801 | 5.5 | B | 4A | 5.2 | 8 | 0.50 | | 0.335 | N | 4.5 | 56 | | Y | | Kronk,G | A |
| 11.014 | 815802 | | B | 99 | 6 | 2 | 0.53 | 47 | 0.05 | B | | 7 | 5.0 | | | Lairet,R | |
| 11.014 | 815803 | 5.0 | B | 99 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | |
| 11.031 | 815804 | 4.8 | M | 100 | 24 | 8 | 2 | 57 | 0.080 | B | | 20 | 6.7 | Y | 2 | Ariail,R.B | |
| 11.035 | 815805 | 4.3 | B | 4A | 35 | 8 | 1.5 | 64 | 0.20 | SC | 10 | 77 | 5.5 | Y | 1 | Hodonsky,K | |
| 11.035 | 815806 | | | 4A | 24 | 7 | | | 0.200 | SC | 10 | 78 | 6.2 | N | 1 | Saraceno,J | |
| 11.035 | 815807 | 5.2 | B | 4A | | | | | 0.050 | B | | 7 | | | | Saraceno,J | |
| 11.052 | 815808 | 4.5 | S | 4A | 4 | 3 | | | 0.152 | N | 8 | 135 | 5 | Y | 1 | Lewis,D.E | |
| 11.06 | 815809 | 4.6 | V | 4A | | | 2.0 | 60 | | EY | | | 5.5 | Y | 1 | Keen,R | |
| 11.08 | 815810 | 4.7 | | 4A | | | 3.0 | 60 | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | B |
| 11.083 | 815811 | 5.6 | S | 4A | 36 | 7 | 1 | 80 | 0.203 | SC | 10 | 125 | 4.5C | Y | 1 | Gronek,J.D | C |
| 11.10 | 815812 | 4.6 | M | 4A | | | 7.0 | 64 | 0.080 | B | | 20 | 5.0 | Y | 17 | Morris,C.S | |
| 11.11 | 815813 | 4.6 | M | 4A | | | | | 0.050 | B | | 12 | 5.0 | Y | 17 | Morris,C.S | |
| 11.115 | 815814 | 4.9 | M | 100 | | | | | 0.050 | B | | 7 | | N | 3 | Jeffrey,J | |
| 11.115 | 815815 | 4.9 | M | 100 | | | | | 0.050 | B | | 7 | | N | 3 | Jeffrey,J | |
| 11.125 | 815816 | 4.9 | B | 4A | 15 | 8 | 1 | | 0.05 | B | | 10 | 5.3 | Y | 1 | Saxon,V.P | |
| 11.125 | 815817 | 4.9 | B | 100, 4A | 10 | 7 | 2.75 | 300 | 0.050 | B | | 10 | 6.0Z | Y | 3 | Stapleton,J | D |
| 11.13 | 815818 | 4.5 | B | 4A | | | 2.5 | 65 | | EY | | | 6.5 | Y | 5 | Hale,A | |
| 11.13 | 815819 | 4.7 | M | 4A | | | 5 | 65 | 0.05 | B | | 10 | 6.5 | Y | 5 | Hale,A | |
| 11.13 | 815820 | 4.6 | | 4A | | | | | | EY | | | 5.0 | Y | 17 | Morris,C.S | |
| 11.208 | 815821 | 4.7 | M | 4A | 22 | 7 | 1.67 | 295 | 0.05 | B | | 10 | 6.0 | Y | 2 | Fabre,R | E |
| 11.250 | 815822 | 5 : | | | | 6 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Krisciunas,K | F |
| 11.368 | 815823 | 4.7 | M | 4A | 15 | 6 | 1 | 60 | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 11.368 | 815824 | 4.7 | M | 4A | 20 | 6 | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,H | |
| 11.38 | 815825 | 4.7 | B | 4A | 3.4 | 7 | 1.5 | 60 | 0.05 | B | | 7 | 4.0T | N | 1 | Kanai,K | |
| 11.386 | 815826 | 4.5 | M | 100 | 5 | 8 | 0.6 | 60 | 0.030 | B | | 8 | 5.0C | Y | 1 | Kato,T | |
| 11.39 | 815827 | 4.9 | S | AAVSO | 3 | 7 | 1 | 65 | 0.07 | B | | 10 | 5.5 | Y | 1 | Hayashi,A | |
| 11.39 | 815828 | 4.8 | M | 4A | 4.1 | 8 | 2 | 60 | 0.08 | B | | 11 | 5.5 | Y | 3 | Mitsuma,S | G |
| 11.39 | 815829 | 4.8 | M | 4A | | | 0.6 | | 0.05 | B | | 7 | 4.0 | Y | 2 | Suzuki,K | |
| 11.396 | 815830 | 4.1 | M | 4A | 4.3 | 7 | 1.2 | | 0.1 | N | 10 | 40 | 4.5 | Y | 1 | Ichikawa,K | H |
| 11.396 | 815831 | 5.3 | B | 4A | | 5 | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hasegawa,T | |
| 11.40 | 815832 | 4.8 | B | | 9 | 6 | 1.7 | 65 | 0.16 | N | 4.8 | 24 | | Y | 1 | Maeda,S | |
| 11.40 | 815833 | 4.9 | M | SAO | 8 | 7 | 0.67 | 65 | 0.06 | R | 12 | 22 | 4.0 | Y | 3 | Nakamura,A | |
| 11.410 | 815834 | 3.9 | S | 100 | 7 | 6 | 4 | 80 | 0.07 | B | | 10 | 3.5 | Y | 1 | Kobayashi,J | |
| 11.41 | 815835 | 4.3 | S | 4A | | | | | 0.08 | B | | 15 | 4.7T | | 1 | Lovejoy,T | I |
| 11.410 | 815836 | 4.7 | B | 4A | | | 1 | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 11.41 | 815837 | | | SAO | 8 | 8 | 1 | 80 | 0.15 | N | 6 | 23 | 5 | Y | 3 | Tanikawa,M | J |
| 11.41 | 815838 | 4.7 | B | SAO | | | | | 0.05 | B | | 7 | 5 | Y | 3 | Tanikawa,M | |
| 11.443 | 815839 | 4.5 | B | 100 | 10 | 6 | 1.5 | | 0.065 | R | 7.7 | 28 | 6.0 | Y | 4 | Hayashi,H | |
| 11.451 | 815840 | 5.1 | B | 4A | 8.8 4.8 | 7 | 0.47 | 60 | 0.08 | R | 12.5 | 40 | 6.0 | Y | 1 | Feisheng,J | |
| 11.60 | 815841 | 5.0 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 11.62 | 815842 | 5.0 | B | 4A | 4 | 7 | 0.3 | | 0.045 | B | | 7 | 4.0T | Y | 1 | Speil,J | K |
| 11.69 | 815843 | 4.5 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 11.70 | 815844 | 3.6 | | DCS 7 | | 6 | | | | EY | | | 4 C | N | 2 | Kroon,B | L |
| 11.708 | 815845 | | | | 8 | 7 | 2 | 90 | 0.20 | SC | 10 | 111 | 5.5 | Y | 1 | Bremseth,P.-J | M |
| 11.708 | 815846 | 4.7 | S | | | | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Bremseth,P.-J | |
| 11.708 | 815847 | 4.8 | | 4A | 12 | 7 | 2 | 45 | 0.050 | B | | 10 | 5.0 | Y | 1 | Marekfia,G | N |
| 11.71 | 815848 | 4.8 | B | 100 | | 8 | 0.5 | 65 | 0.05 | B | | 7 | 5.9C | Y | 2 | Maraziti,A | |
| 11.72 | 815849 | 4.7 | M | 100 | 9 | 6 | 0.8 | 52 | 0.06 | R | 4 | 10 | 5.0 | Y | 4 | Granslo,B.H | O |
| 11.72 | 815850 | 5.5 | B | 100 | 10 | 8 | 0.5 | 65 | 0.203 | SC | 10 | 44 | 5.9C | Y | 2 | Maraziti,A | |
| 11.72 | 815851 | 3.9 | S | DCS 7 | 10 | 7 | 2.0 | 68 | 0.060 | B | | 12 | 5 T | Y | 3 | van de Weg,R.L.W | P |
| 11.726 | 815852 | 4.8: | S | 100 | 7 | 6 | | | 0.056 | B | | 8 | 4.2C | N | 1 | Fischer,D | Q |
| 11.73 | 815853 | 4.9 | B | AA | 9 | 6 | 0.7 | 65 | 0.080 | B | | 20 | 5.0 | N | 1 | Schmeer,P | R |
| 11.73 | 815854 | 4.7 | | 100 | | | | | | EY | | | 5.9C | Y | 2 | Maraziti,A | S |
| 11.730 | 815855 | 4.9 | M | 4A | 4.5 | 6 | 0.7 | 60 | 0.089 | R | 5.5 | 18 | 5.5 | N | 1 | Ventura,F | T |
| 11.733 | 815856 | 4.8 | M | 100 | 10.5 | 7 | 1.0 | 52 | 0.07 | B | | 20 | 5.5 | Y | 1 | Tanti,T | U |
| 11.74 | 815857 | 4.1 | S | 100 | | 7 | 3.5 | 59 | 0.05 | B | | 10 | 5.5 | Y | 1 | Bouma,R.J | |
| 11.743 | 815858 | 4.8 | B | IHW | 5 | 2 | 1.5 | | 0.080 | B | | 20 | 4.0 | Y | 1 | Guthier,O | |
| 11.744 | 815859 | 4.9 | S | 100 | | 6 | 1.00 | 80 | 0.08 | B | | 11 | 4 | Y | 1 | Gainsford,M.J | V |
| 11.75 | 815860 | 4.9 | S | 4A | | | | | 0.08 | B | | 20 | 5.3 | | 1 | Shanklin,J.D | |
| 11.750 | 815861 | 5.2 | S | 99 | 7 6 | 8 | 0.67 | 55 | 0.065 | B | | 12 | 5.5 | Y | 1 | Foulkes,M | W |
| 11.750 | 815862 | 4.8 | | | | | | | | EY | | | 5.5 | Y | 1 | Rogers,J.E | |
| 11.750 | 815863 | 4.9 | B | 4A | | 8 | 0.38 | 63 | 0.080 | B | | 10 | 5.5 | Y | 1 | Rogers,J.E | X |
| 11.750 | 815864 | | | | 4 | 6 | 0.67 | | 0.200 | R | 14 | | 5.5 | Y | 1 | Rogers,J.E | Y |
| 11.750 | 815865 | 4.7 | B | 4A | 20 | 9 | 1.5 | 85 | 0.06 | R | | 25 | 5 | Y | 1 | Ward,A | Z |
| 11.75 | 815866 | 4.3 | B | 4A | 10 | 7 | 1.00 | 60 | 0.050 | B | | 7 | 5.5 | Y | 2 | Merlin,J.-C | |
| 11.756 | 815867 | 4.6 | S | 4A | 6.5 | 8 | 0.73 | 61 | 0.05 | B | | 10 | 4.7 | Y | 1 | Hurst,G.M | |
| 11.760 | 815868 | 5.0 | S | 100 | 3.2 | 7 | | 75 | 0.25 | N | 6 | 60 | 4 | Y | 1 | Gainsford,M.J | a |
| 11.76 | 815869 | 4.6 | B | 4A | 8 | 5 | | | 0.150 | N | 5 | 25 | 5.5 | Y | 2 | Merlin,J.-C | |
| 11.762 | 815870 | 4.5 | S | 4A | 5.3 | 8 | 0.87 | | 0.08 | B | | 15 | 4.7 | Y | 1 | Hurst,G.M | b |
| 11.763 | 815871 | 4.8 | B | 4A | 15 | 8 | 1.5 | 85 | 0.050 | B | | 10 | 5 | Y | 1 | Ward,A | |
| 11.771 | 815872 | 4.7 | B | 4A | 6 | 8 | 1.0 | | 0.06 | R | 11.7 | 25 C | | N | 4 | Gallego,J | c |
| 11.771 | 815873 | 5.0: | B | 4A | 1.9 | | | | 0.150 | N | 5 | 42 | 5.5 | Y | 1 | Llabres,J | d |
| 11.779 | 815874 | 4.7 | B | 4A | 10 | 7 | 1 | | 0.206 | SC | 10 | 65 | 5.3 | Y | 1 | Gomez,A | e |
| 11.785 | 815875 | 5.0 | B | 4A | 9 | 6 | 1 | 45 | 0.114 | N | 3.7 | 13 | 5.0 | Y | 4 | Gomez,T.L | f |
| 11.79 | 815876 | 4.8 | | | 4 | | 0.6 | 65 | 0.034 | B | | 9 | | | 2 | Pereira,A | g |
| 11.792 | 815877 | 5.0 | B | 4A | 20 | | 1.5 | | 0.08 | B | | 15 T | | N | 3 | Losada,R | |
| 11.93 | 815878 | 4.3 | S | 4A | 30 | 7 | 2 | 70 | 0.05 | B | | 7 | 6.0 | Y | 1 | Harrington,P | |
| 11.95 | 815879 | 4.8 | B | AA | 10 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | h |
| 11.95 | 815880 | 4.5 | M | AA | 10 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | h |
| 11.95 | 815881 | 4.6 | S | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 11.97 | 815882 | 4.6 | B | AAVSO | 5 | 8 | 1.5 | 67 | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 11.97 | 815883 | 4.5 | V | AAVSO | 18 | | | | | EY | | | | | | Bortle,J.E | h |
| 11.97 | 815884 | | | | | | | | 0.500 | N | 5 | 90 | | | | Bortle,J.E | i |
| 11.98 | 815885 | 4.6 | B | AA | | | | | | EY | | | | | | Green,D.W.E | |
| 11.98 | 815886 | 4.4 | S | AA | | | | | | EY | | | | | | Green,D.W.E | |
| 11.990 | 815887 | 4.9 | S | 4A | | | | | 0.035 | B | | 70 | 4.1C | Y | 1 | Hudak,D.M | |

NOTE A Tail PA 290 deg. to 60 deg.
NOTE B Modified Sidgwick method used.
NOTE C Exc. see. Faint hint of fan shaped tail. Tail length less than 1 deg. Tail length and PA uncertain.
NOTE D Perfect see with eye. [sic] (PA approximate and may have been measured incorrectly. Ed.)
NOTE E (PA value appears to be measured incorrectly. Ed.)
NOTE F Strong zodiacal light.
NOTE G m2 = 7.8.
NOTE H PA = E.
NOTE I Tail length = short.
NOTE J m2 (observer's symbol believed to mean "approximately equal to", Ed.) 9.
NOTE K Comet low above horizon, aurora.

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NOTE L Tail length determined in 15x80 binoculars: 1.8 deg.
NOTE M Coma diameter uncertain.
NOTE N Tail small, curved. (Translated by IHW staff. Observer indicated "A" method [Argelander?]. Ed.)
NOTE O Indications of a double tail.
NOTE P Chart 100 also used. Tail length is lower limit.
NOTE Q Coma diameter and DC approximate.
NOTE R Omicron Aqr: 4.7 mag., 32 Aqr: 5.3 mag.
NOTE S Clearly seen.
NOTE T Tail length (I) greater than 0.7 deg; (II) 0.2 deg. Some tail structure including a short (10') spike at PA 67 could be observed. A photograph taken on this date at 1800 UT shows a narrow tail 92' long at PA 62 deg.
NOTE U Seeing good, transparency excellent. Low. Type I tail 1.0 deg. at PA 52, type II tail 0.5 deg. at PA 75.
NOTE V Low.
NOTE W Clear.
NOTE X Coma small. Tail PA approximate.
NOTE Y Magnification >/=40 used. Tail 3' across at base, approximately 12' across at end. Inner part brighter than ever, now clearly visible at last with edge sharper on S side; outer part very faint and diffuse; no 'horns'. PA 50 to 55.
NOTE Z Faint blue.
NOTE a Low. Tail length uncertain.
NOTE b Fan tail, PA 58 to 73.
NOTE c Tail length approximate.
NOTE d Thin clouds.
NOTE e Drawing 2.
NOTE f Clouds. Tail length approximate.
NOTE g (Observer gave limit as 8.6. Ed.)
NOTE h Coma diameter approximate.
NOTE i Perfectly stellar nuc., 9.2 mag.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.003 | 830765 | | 0.152 | N | 4 | 30 | 20 | 5 | 2 | Robinson,R.L | A |
| 11.021 | 830766 | 0.2 | 0.125 | N | 8 | 40 | 30 | 4.0 | 2 | Bailey,G | |
| 11.055 | 830767 | | 0.203 | SC | 10 | 81 | | | 2 | Lohvinenko,T.W | B |
| 11.42 | 830768 | 1.38 | 0.15 | N | 6 | 23 | 14 | 5 | 3 | Tanikawa,M | C |
| 11.693 | 830769 | 0.23 | 0.20 | SC | 10 | 111 | 45 | 5.5 | 3 | Bremseth,P.-J | D |
| 11.715 | 830770 | 2 | 0.05 | R | 7 | 15, 40 | 20 | 5.0 | 4 | Kopp,M | E |
| 11.746 | 830771 | | 0.254 | N | 6 | 150 | | | 1 | Guthier,O | F |
| 11.75 | 830772 | 2 | 0.065 | B | | 12 | 10 | 5.6 | 1 | Foulkes,M | G |
| 11.750 | 830773 | 0.20 | 0.298 | N | 5 | 40, 65,269 | 20 | 6.2 | 1 | Stott,D | H |
| 11.764 | 830774 | 0.35 | 0.15 | N | 5 | 25, 75 | 20 | 5.5 | 2 | Merlin,J.-C | I |
| 11.771 | 830775 | | 0.060 | R | 11.7 | 25 | | | 4 | Gallego,J | J |
| 11.771 | 830776 | 0.25 | 0.356 | SC | 11 | 200 | 120 | | 1 | Verdenet,M | K |
| 11.773 | 830777 | 0.21 | 0.203 | SC | 10 | 80,220 | 16 | 5.5 | 1 | Foulkes,M | L |
| 11.779 | 830778 | | 0.206 | SC | 10 | 65 | | 5.3 | 8 | Gomez,A | M |
| 11.785 | 830779 | | 0.114 | N | 3.7 | 13 | | 5.0 | 4 | Gomez,T.L | N |
| 11.786 | 830780 | 1.7 | 0.08 | B | | 15 | 84 | 4.7 | 1 | Hurst,G.M | O |
| 11.788 | 830781 | | 0.15 | N | 5 | 42, 84 | 34 | 5.5 | 1 | Llabres,J | P |
| 11.792 | 830782 | | 0.080 | B | | 15 | | | 3 | Losada,R | Q |
| 11.979 | 830783 | 0.65 | 0.050 | B | | 7 | 61 | 5.3 | 4 | Will,M | R |

NOTE A Central condensation bright. Most notable feature was nearly complete absence of tail on south side, about 3 coma diameters behind the head.
NOTE B Comet Halley is observed on this date to have an integrated magnitude of 5.0 (check stars: HR 739, HR 740) and a nuclear magnitude of 6.8 (check stars: HR 72, SAO 76017). The nuclear size is measured to be 81.21" and has a coma size of 294.37". There is a spike at PA 86, but the blue tail takes up nearly all the view as it passes past the field of view. The long spike mentioned earlier is a darker blue than the tail. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C DC = 8/10. Dia. and two features at PA 80 (observer's symbol believed to mean "approximately equal to", Ed.) 8', 30' long, and 1 deg. long, respectively.
NOTE D A big and bright central condensation, which seemed oval, about 1-2 arc min. long. The coma was "half" to north, as it stopped there, over the condensation. A bright spine was visible straight east. Two tails was observed, with the northern as the brightest. The spine was situated in the southern part of the north tail. The southern tail was weak and a little broad. In the 10x50 binocular, I could see the bright comet's head formed like a drop or oval. A 2 deg. long tail could be seen. The brightest part of the tail was 2-3 coma diameters behind the head. The outer part of the tail was very weak. In the telescope, it seemed as the "spine" began south of the central condensation, as it was curved there. [sic]
NOTE E Coma bright(!) + definite intensity peak at centre. Tail: less irregular, bright and long(!). Vertex distance: V = 13.5'. Semi latus rectum: P1 = 11.0', P2 = 10.5'. Tail PA = 56 deg.
NOTE F Coma very diffuse, without distinct structure. (Duration not indicated. Time of observation is assumed to be start time. Translated by IHW staff. Ed.)
NOTE G Coma diameter 7'x6', DC = 8. Coma centre bright. Coma slightly elliptical. Tail visible, length 40' at PA 55. No other detail seen.
NOTE H Hood 1 at PA 180-250. Hood 2 at PA 310-10. Tail at PA 54. Structure in nuclear condensation, forming almost a triangular shape around the centre.
NOTE I Tail streamer at PA 28; tail at PA 60, then curved toward PA 36 at 9' from nucleus, taking initial direction at 25' from nucleus, becomes larger and diffuse; tail streamer at PA 70; jet at PA 330, nearly sunward.
NOTE J Field 1 deg. 32'. High DC (approximately 8). (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE K (Additional drawing submitted made using 11x80 binoculars (2.02'/mm). Ed.)
NOTE L Tail at PA 50, length 20'. Spike at PA 0, length 4'. Coma diameter 4'x3' (elliptical extension of 8') DC = 7. Coma elliptical. Nucleus almost star-like offset from centre of coma in direction of 230 deg. Tail visible. Faded rapidly from coma. Faint spike feature seen. Star visible through tail.
NOTE M (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE N Tail longitude about 1 deg. [sic] The beginning of the plasma tail is brighter than the rest. It's difficult to size up the total longitude, because I'm not be able to see where the tail finish. [sic] (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE O Very bright intense central condensation offset PA 245 deg. from coma centre. Tail broadens with length to a total 52' fanned PA 58 deg. to 73 deg. Beyond 30' from coma tail very faint. Very impressive in 15x80 binoculars.
NOTE P At 42x, coma 1.9 arc min.; vertex distance 0.86 arc min.; tail 29.2 arc min. Coma diameter obtained with 13 timings. Average value: 7.2 sec.
NOTE Q The astronomical twilight hasn't finished yet. Tail 1.5 deg. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE R The coma appears slightly drop-shaped. First extension of the tail has the same intensity and luminescence as the outer coma. The second extension of the tail is noticeably fainter and more diffuse and finally disperses into invisibility about a degree away from the coma. Distinguishing features in the tail seem to be absent. Both extensions are of a uniform texture. Tail, 1st extension 9.69' long; 2nd extension 48.45' long, both at PA 303. Total tail length 58.15'. Coma, inner coma diameter 2.26'; outer coma diameter major axis 5.85', minor axis 5.65'. Vertex = 2.58'; semi latus = P1 = P2 = 2.83'.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.006 | 850757 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 8.00 | Kodak 2415 | | Y | O | 9/P | 1 | Crist,M | A |
| 11.013 | 850758 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 8.00 | Kodak 2415 | | Y | O | 10/P | 1 | Crist,M | B |
| 11.026 | 850759 | 0.229 | 1.7 | 0.140 | 9.0 x 6.0 | 15.00 | Kodak 2415 | | N | X | 009/P | 1 | Allen,M.T | C |
| 11.027 | 850760 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 16.00 | Kodak 2415 | | Y | O | 11/P | 1 | Crist,M | D |
| 11.114 | 850761 | 0.050 | 2.8 | | 39.6 x27.0 | 20.00 | 3M 1000 | 1000/ | N | O | 3/N | 7 | Edberg,S.J | |

DATE: 11 JAN 1986 DATE: 11 JAN 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.121 | 850762 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 41.00 | Kodachrome | 64/ | N | O | 15/N | 7 | Edberg,S.J | |
| 11.121 | 850763 | 2.000 | 10 | 0.203 | 1.0 x 0.7 | 1.00 | Kodak VR1000 | 1000/ | N | | 35/N | 1 | Persell,D | |
| 11.126 | 850764 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | S | 8/P | 2 | Yen,B | E |
| 11.127 | 850765 | 0.610 | 4 | 0.152 | 3.4 x 2.3 | 3.00 | Kodak Tri-X | | N | X | 2/N | 1 | Lazerson,H | F |
| 11.127 | 850766 | 2.000 | 10 | 0.203 | 1.0 x 0.7 | 1.00 | Kodak VR1000 | 1000/ | N | | 37/N | 1 | Persell,D | |
| 11.129 | 850767 | 0.050 | 1.4 | | 39.6 x27.0 | 20.00 | 3M 1000 | 1000/ | N | O | 4/N | 7 | Edberg,S.J | |
| 11.144 | 850768 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/ | N | O | 5/N | 7 | Edberg,S.J | |
| 11.150 | 850769 | 0.050 | 1.4 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 6/N | 7 | Edberg,S.J | |
| 11.380 | 850770 | 0.850 | 3.4 | 0.25 | 2.4 x 1.6 | 10.00 | Kodak 6415 | | Y | C | 9/P | 1 | Kojima,T | G |
| 11.401 | 850771 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 9.00 | Kodak 2415 | | Y | | 11/P | 1 | Niijima,T | H |
| 11.707 | 850772 | 7.417 | 7.3 | 1.016 | 0.3 x 0.2 | 41.00 | Kodak 103a-D | | N | | 2/P | 1 | Gruengard,E | I |
| 11.743 | 850773 | 1.780 | 5 | 0.356 | 1.2 x 0.8 | 36.40 | 3M 1000 | 1000/ | N | M | 3/P | 1 | Mobberley,M | J |
| 11.762 | 850774 | 0.500 | 5.6 | | 4.1 x 2.7 | 10.00 | Kodak Tri-X | 400/ | N | X | 1/P | 1 | Ward,A | K |
| 11.763 | 850775 | 0.500 | 8 | | 4.1 x 2.7 | 10.00 | Fujichrome | 400/27 | N | O | 7/S | 1 | Townsend,R | |
| 11.767 | 850776 | 0.500 | 5.6 | | 4.1 x 2.7 | 3.25 | Kodak Tri-X | 400/ | N | X | 2/P | 1 | Ward,A | K |
| 11.778 | 850777 | 0.700 | 5 | 0.14 | 2.9 x 2.0 | 32.00 | Kodak IIa-F | | N | M | 50/P | 1 | Ridley,H.B | L |
| 11.789 | 850778 | 1.270 | 5 | 0.254 | 1.6 x 1.1 | 18.50 | Kodak 2415 | | Y | O | 49/P | 1 | Johnstone,G.F | |
| 11.816 | 850779 | 0.135 | 2.8 | | 15.2 x10.2 | 19.00 | Kodak 2415 | | Y | S | 1/P | | Izquierdo,J | M |
| 11.961 | 850780 | 0.050 | 4.0 | | 39.6 x27.0 | 7.00 | Kodak Tri-X | | N | | 191/P | | Gianforte,J.S | N |
| 11.997 | 850781 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 2.50 | Kodak 2415 | | Y | X | 254/P | 1 | Sabia,J.D | O |

NOTE A (Observer's image identifier is 9A. Ed.) City lights interfered with the observation. Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE B (Observer's image identifier is 10A. Ed.) City lights interfered with the observation. Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE C Start time is approximate.
NOTE D (Observer's image identifier is 11A. Ed.) City lights interfered with the observation. Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE E Start time approximate. (Observer's image identifier is 35. Ed.) Instrument is Schmidt camera.
NOTE F Plane lights. "Push" processed to 800 ASA.
NOTE G Instrument is Wright-Schmidt. Large format (120 size) film used.
NOTE H (Observer's image identifier is 860111-1. Ed.) Large format (70 mm) film used. City lights interfered with the observation.
NOTE I Instrument is Ritchey-Chretien design. Observer assisted by N. Arav.
NOTE J Elongated (apart from offset direction) star images presumably due to atmos. refraction. Comet (especially tail) not as prominent photographically as on 10th - probably due to twilight fogging.
NOTE K UV filter used.
NOTE L (Observer's image identifier is preceded by prefix ZA. Ed.) Instrument uses photographic plates.
NOTE M Too much twilight and strong zodiacal light. These probably affect the observation.
NOTE N (Observer's image identifier is 109-1. Observer listed emulsion speed as ASA 800. Ed.)
NOTE O Photographs made by J. Kamichitis and J.D. Sabia. Clouds near horizon appear.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.984 | 870117 | 42P-O | CL | 0.400 | 6.3 | | 10.00 | Kodak 2415 | | N | C | 14/P | 1 | Grieser,D | A |
| 11.992 | 870118 | 42P-O | CL | 0.400 | 6.3 | | 10.00 | Kodak 2415 | | N | C | 15/P | 1 | Grieser,D | A |

NOTE A Prism glass type uncertain. Film emulsion at ambient temperature of 0 C.

DATE: 12 JAN 1986

DATE: 12 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.000 | 815888 | 4.8 | B | 4A | | | 3.0 | 60 | 0.050 | B | | 10 | 5 | Y | 2 | Robinson,R.L | |
| 12.000 | 815889 | 5.3 | B | 4A | 5.8 5.7 | 7 | 0.97 | 303 | 0.050 | B | | 7 | 5.3TZ | Y | 4 | Will,M | A |
| 12.000 | 815890 | | | 4A | | 6 | 2 | | 0.050 | B | | 10 | 5.0 | Y | 1 | Williams,D.J | B |
| 12.007 | 815891 | 4.8 | M | 4A | 1.7 | 7 | 3 | | 0.05 | B | | 20 | 4.7 | Y | 4 | Diaz P.,E | |
| 12.008 | 815892 | 4.8 | M | 4A | 7 | 6 | 3.0 | 56 | 0.05 | B | | 7 | 5.3 | Y | 5 | DeYoung,J.A | C |
| 12.008 | 815893 | 4.3 | S | 4A | | | | | | EY | | | 5.3 | Y | 5 | DeYoung,J.A | D |
| 12.010 | 815894 | 4.1 | S | 100 | 8.6 | 8 | 0.5 | 62 | 0.108 | N | 4 | 24 | 5.0 | Y | 1 | Franch,J | E |
| 12.010 | 815895 | 4.9 | B | 99 | | | | | 0.080 | B | | 20 | 4.8 | Y | | Smith,D | |
| 12.012 | 815896 | 5.5 | M | 4A | | | 1.0 | 90 | 0.050 | B | | 10 | 5.5 | Y | 1 | Smith,A | F |
| 12.017 | 815897 | 5.9 | B | 4A | 30 15 | 6 | 1.5 | 80 | 0.152 | R | 5 | 24 | 4.7 | N | 1 | Fox,J.H | G |
| 12.02 | 815898 | 5.8 | B | 100 | 7 | 1 | | | 0.035 | B | | 7 | 4.8 | Y | 1 | Jacobson,E | |
| 12.02 | 815899 | | | | 34 | 1 | | | | EY | | | 4.8 | Y | 1 | Jacobson,E | |
| 12.03 | 815900 | 4.8 | B | 4A | | 8 | 0.67 | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 12.03 | 815901 | 5.4 | B | 4A | 3.7 | 8 | | | 0.335 | N | 4.5 | 56 | | Y | | Kronk,G | H |
| 12.035 | 815902 | 4.8 | M | 100 | 25 | 8 | 2.25 | 62 | 0.080 | B | | 20 | 6.5 | Y | 2 | Ariail,R.B | |
| 12.10 | 815903 | 4.3 | | 4A | | | 7 | 62 | | EY | | | 5.0 | Y | 7 | Morris,C.S | |
| 12.10 | 815904 | 4.3 | S | 4A | 10 | 7 | 2 | 60 | 0.080 | B | | 11 | 5.5 | Y | 2 | Spratt,C.E | I |
| 12.10 | 815905 | 4.3 | S | 4A | 10 | 7 | 1.5 | 60 | 0.080 | R | 3.7 | 19 | 5.5 | Y | 2 | Spratt,C.E | J |
| 12.101 | 815906 | 4.9 | M | 100 | | | | | 0.050 | B | | 7 | | N | 3 | Jeffrey,J | |
| 12.108 | 815907 | 4.9 | B | 100, 4A | 10 | 7 | 1.50 | 300 | 0.050 | B | | 10 | 5.5C | Y | 1 | Stapleton,J | K |
| 12.1354 | 815908 | 4.3 | M | 4A | 6 | 6 | 6.00 | 60 | 0.05 | B | | 7 | 6.0 | Y | 2 | Cook,A.J | |
| 12.229 | 815909 | 4.7 | M | 4A | 22 | 7 | 1.75 | 295 | 0.05 | B | | 10 | 6.5 | Y | 2 | Fabre,R | L |
| 12.361 | 815910 | 4.6 | M | 4A | 10 | 6 | | | 0.035 | B | | 7 | 4 | Y | 1 | Watanabe,H | |
| 12.368 | 815911 | 4.6 | M | 4A | 10 | 6 | | | 0.035 | B | | 7 | 4 | Y | 1 | Watanabe,A | |
| 12.37 | 815912 | 4.0 | S | 4A | | 8 | | | 0.08 | B | | 11 | 3.0 | N | 1 | Momose,M | |
| 12.38 | 815913 | 4.6 | B | 4A | 2.7 | 7 | 1.1 | 60 | 0.05 | B | | 7 | 4.0T | N | 1 | Kanai,K | |
| 12.385 | 815914 | 4.6 | M | 4A | 3.2 | 8 | 2 | 60 | 0.08 | B | | 11 | 5 | N | 1 | Mitsuma,S | M |
| 12.385 | 815915 | 5.2 | S | 4A | 3.0 | 9 | 0.14 | 56 | 0.15 | N | 6 | 32 | 4.0T | N | 3 | Wakatsuki,M | |
| 12.386 | 815916 | 4.2 | M | 100 | 6 | 7 | 0.6 | 60 | 0.030 | B | | 8 | 5.0C | Y | 1 | Kato,T | |
| 12.389 | 815917 | 4.0 | | 100 | | | | | | EY | | | 5.0C | Y | 1 | Kato,T | |
| 12.39 | 815918 | 4.7 | M | 4A | | | 0.6 | | 0.05 | B | | 7 | 5.0 | Y | 2 | Suzuki,K | |
| 12.394 | 815919 | | | | 4 | 7 | 0.6 | 60 | 0.10 | N | 10 | 55 | 5.0C | Y | 1 | Kato,T | |
| 12.396 | 815920 | 4.5 | B | 4A | | | | | 0.35 | B | | 7 | | Y | 2 | Okada,M | |
| 12.399 | 815921 | 4.6 | B | 4A | 3.5 | 7 | 2.8 | | 0.070 | B | | 10 | 5.0 | Y | 2 | Nakamura,Y | |
| 12.40278 | 815922 | 4.8 | B | 4A | 5 | 7 | 0.42 | 60 | 0.25 | N | 8 | 80 | 5 | Y | 2 | Okumura,S | |
| 12.403 | 815923 | 4.2 | M | 4A | 4 | 7 | 1.5 | | 0.1 | N | 10 | 40 | 5.0 | Y | 1 | Ichikawa,K | N |
| 12.41 | 815924 | 5.1 | M | | 4 | 8 | 1.5 | 60 | 0.05 | B | | 7 | 4.3 | Y | 2 | Hiraga,M | |
| 12.41 | 815925 | 4.7 | M | SAO | 8 | 7 | 1.2 | 65 | 0.06 | R | 12 | 22 | 4.0 | Y | 1 | Nakamura,A | |
| 12.41 | 815926 | 4.5 | S | 100 | 5 | 7 | | | 0.07 | B | | 10 | 4.0C | Y | 1 | Yasuki,M | |
| 12.412 | 815927 | 3.9 | S | 100 | 7 | 6 | 2.5 | 75 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |
| 12.42 | 815928 | 4.5 | S | 4A | | | | | 0.08 | | | | 4.0T | N | 1 | Lovejoy,T | O |
| 12.438 | 815929 | 5.0 | B | 4A | 7.9 | 7 | 0.5 | 60 | 0.08 | R | 12.5 | 40 | 5.5C | Y | 1 | Feisheng,J | |
| 12.61 | 815930 | 5.5 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 12.63 | 815931 | 4.8 | B | 4A | 3.5 | 7 | 0.2 | | 0.045 | B | | 7 | 4.0T | Y | 1 | Speil,J | P |
| 12.64 | 815932 | 4.7 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 12.69 | 815933 | 3.3 | | DCS 7 | | 6 | | | | EY | | | 3.5C | N | 2 | Kroon,B | Q |
| 12.705 | 815934 | 4.5 | B | 100 | | 8 | 0.2 | | 0.050 | B | | 10 | | Y | 1 | Pfitzner,E | |
| 12.722 | 815935 | 4.4 | M | 4A | 7 | 7 | 0.7 | 56 | 0.07 | B | | 20 | 5.5 | Y | 1 | Tanti,T | R |
| 12.726 | 815936 | 4.4 | B | 4A | 5.5 | 8 | 0.5 | 65 | 0.063 | B | | 9 | 4.5C | Y | 1 | Kammerer,A | S |
| 12.7270 | 815937 | 4.7 | B | AAVSO | | 3 | | | 0.05 | B | | 7 | 6.0 | Y | 1 | Sicoli,P | |
| 12.729 | 815938 | 5.5 | B | | 6.5 | 5 | 0.2 | | 0.200 | N | 7.2 | 36 | 3.5C | Y | 1 | Lipski,P | |
| 12.729 | 815939 | 4.8 | | 4A | 5 | 7 | | | 0.050 | B | | 10 | 4.0 | Y | 1 | Marekfia,G | T |
| 12.736 | 815940 | | | 4A | 6 | 7 | 0.67 | 55 | 0.114 | N | 7.9 | 26 | 4.5C | N | 1 | Bernardis,A | U |
| 12.736 | 815941 | 5.1 | M | 124 | 4.7 | 7 | | | 0.114 | N | 8 | 36 | 5.5 | N | 1 | Pennelli,G | |
| 12.740 | 815942 | 4.7 | M | 4A | 5 | 8 | 0.4 | 51 | 0.05 | B | | 10 | 5.0Z | Y | 8 | Melandri,F | V |
| 12.74 | 815943 | 4.9 | B | AA | 7 | 7 | 0.5 | 54 | 0.080 | B | | 20 | 5.0 | N | 1 | Schmeer,P | W |
| 12.740 | 815944 | 4.5 | B | 4A | 15 | 9 | 3 | 85 | 0.06 | R | | 15 | 5.5 | Y | 1 | Ward,A | X |
| 12.740 | 815945 | | | | | | | 60 | 0.080 | B | | 20 | 6.2 | | 2 | Zanotta,M.V | Y |
| 12.740 | 815946 | 4.8 | M | 4A | | 7 | 0.7 | 60 | 0.089 | R | 5.5 | 18 | 5.2 | N | 1 | Ventura,F | Z |
| 12.743 | 815947 | 4.5 | S | 4A | 2.0 | 6 | 0.1 | 70 | 0.08 | B | | 20 | 3.0 | N | 2 | Storey,D | a |
| 12.745 | 815948 | 4.6 | B | 4A | 15 | 8 | 2 | 85 | 0.050 | B | | 10 | 5.5 | Y | 1 | Ward,A | b |
| 12.746 | 815949 | 4.8 | B | 4A | 4.5 | 7 | 0.38 | 55 | 0.330 | N | 4.5 | 59 | 6.0 | Y | 1 | Castino,R | |
| 12.750 | 815950 | 5.0 | M | 100 | 7 | 8 | 0.65 | 45 | 0.13 | N | 5.5 | 36 | 5 C | Y | 1 | Menichetti,R | |
| 12.75 | 815951 | 4.0 | B | 100 | | 8 | | | 0.05 | B | | 10 | 3.0 | Y | 1 | Bottger,B | |
| 12.7500 | 815952 | 5.3 | B | 4A | 5 | 7 | 0.52 | 60 | 0.05 | B | | 10 | 5.5CM | Y | 2 | Franciosi,C | |
| 12.75 | 815953 | 5.2 | B | DCS 8 | | 6 | 1.0 | | 0.080 | B | | 15 | 4 MT | N | 1 | Keijmel,P.C | |
| 12.750 | 815954 | 4.3 | S | 4A | 7 | 7 | | 59 | 0.15 | B | | 25 | 6.0 | Y | 4 | Parisio,R | |
| 12.750 | 815955 | 4.7 | B | 4A | 6 | 7 | 1.3 | 62 | 0.05 | B | | 10 | 5.5z | Y | 1 | Vanin,G | |
| 12.753 | 815956 | | | 4A | | 6 | 0.08 | | 0.076 | N | 9.2 | 140 | | Y | 1 | Li Causi,G | c |
| 12.753 | 815957 | 4.8 | B | 4A | 10 | 7 | 0.5 | 60 | 0.060 | B | | 10 | 3.0MT | Y | 1 | Moriya,M | d |
| 12.763 | 815958 | 4.4 | S | 4A | 9 | 8 | 0.53 | 54 | 0.05 | B | | 10 | 4.7 | Y | 1 | Hurst,G.M | |
| 12.764 | 815959 | 4.9 | B | 4A | 5 3.5 | 7 | 0.10 | 77 | 0.080 | B | | 20 | 3.5C | Y | 1 | Dionisi,M | |
| 12.765 | 815960 | 4.0 | S | 100 | 6.0 | 6 | 3.80 | 60 | 0.05 | B | | 7 | 5.9Z | Y | 6 | Haver,R | e |
| 12.767 | 815961 | 4.6 | M | 4A | 2 | 8 | | | 0.06 | R | 5.7 | 20 | 4.5CM | Y | 3 | Cardiel,N | f |
| 12.770 | 815962 | 4.6 | M | 100 | 7 | 7 | 0.65 | 45 | 0.05 | B | | 10 | 5 C | Y | 1 | Menichetti,R | g |
| 12.771 | 815963 | 4.6 | B | 4A | 8 | 8 | 1.0 | | 0.06 | R | 11.7 | 25 | C | N | 4 | Gallego,J | |
| 12.774 | 815964 | 4.3 | S | 4A | 6.6 | 9 | 1 | 54 | 0.08 | B | | 15 | 4.7 | Y | 1 | Hurst,G.M | h |
| 12.79 | 815965 | 4.5 | | | | | 0.5 | 60 | 0.034 | B | | 9 | | | 2 | Pereira,A | i |
| 12.95 | 815966 | 4.6 | B | AA | 9 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | j |
| 12.95 | 815967 | 4.7 | B | AA | 8 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | j |
| 12.95 | 815968 | 4.4 | M | AA | 9 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | j |
| 12.95 | 815969 | 4.5 | M | AA | 8 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | j |
| 12.95 | 815970 | 4.5 | S | AA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 12.95 | 815971 | 4.6 | S | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 12.97 | 815972 | 4.2 | B | AAVSO | 5 | 7 | 1.6 | 59 | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 12.97 | 815973 | 4.3 | V | AAVSO | 18 | | | | | EY | | | | | | Bortle,J.E | j |
| 12.97 | 815974 | 4.3 | M | AA | 8 | 7 | 2.5 | | 0.080 | B | | 20 | | | | Green,D.W.E | k |
| 12.97 | 815975 | | | | 2.9 | | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | l |
| 12.97 | 815976 | | | | 2.9 | | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | m |
| 12.985 | 815977 | 4.5 | M | 4A | 6 | 7 | 2.0 | 64 | 0.05 | B | | 7 | 4.7 | Y | 1 | DeYoung,J.A | |
| 12.990 | 815978 | 4.6 | B | 4A | | | 2.0 | | 0.050 | B | | 10 | 5 C | Y | 1 | Robinson,R.L | |

NOTE A (PA value may have been incorrectly determined. Ed.)
NOTE B Noticed tail.
NOTE C Comet is in zodiacal light.
NOTE D Comet in zodiacal light.
NOTE E Dust tail.
NOTE F Visible to naked eye.
NOTE G Twilight. SAO 145731 comparison star.
NOTE H Tail PA 53 deg. to 69 deg.
NOTE I Dust tail lies on plasma tail.

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NOTE J Wide dust tail, also plasma tail.
NOTE K Clear tail. (PA approximate and may have been measured incorrectly. Ed.)
NOTE L (PA value appears to be measured incorrectly. Ed.)
NOTE M 7.2.
NOTE N PA = E.
NOTE O Tail length = short.
NOTE P Comet low above horizon, aurora.
NOTE Q Tail length determined in 15x80 binoculars: 1.4 deg.
NOTE R Seeing excellent, transparency good. Low. Wind. Type I tail 0.7 deg. at PA 56, type II tail 0.6 deg. at PA 70.
NOTE S Tail length is lower limit; PA is approximate.
NOTE T (Observer indicated "A" method [Argelander?]. Ed.)
NOTE U Tail length uncertain.
NOTE V See the tail.
NOTE W Omicron Aqr: 4.7 mag., 32 Aqr: 5.3 mag.
NOTE X Positive blue.
NOTE Y Coma extension PA 98.
NOTE Z Tail length (I) 0.7 deg.
NOTE a Small coma estimated from comparing with Jupiter's disk. Note that the sky was slightly in twilight and is the cause for small diameter being estimated. Seeing IV. Transparency = very good. Sky still slightly light.
NOTE b Faint blue.
NOTE c Comet was low above the horizon.
NOTE d Seeing 3/5.
NOTE e Coma diameter accuracy +/-0.6. Tail length accuracy +/-0.01.
NOTE f Tail fan-shaped.
NOTE g Moon 2 days.
NOTE h Tail longer than 1 deg. ml with binoc., 4.4.
NOTE i (Observer gave limit as 8.6. Ed.)
NOTE j Coma diameter approximate.
NOTE k Coma diameter and tail length approximate.
NOTE l Perfectly stellar nuc., 9.2 mag.
NOTE m A 15" nuc. of mag. 8.5.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.009 | 830784 | | 0.050 | B | | 10 | 25 | 6.0 | | Williams,D.J | A |
| 12.010 | 830785 | | 0.108 | N | 4 | 24 | 30 | 5.0 | 1 | Franch,J | B |
| 12.031 | 830786 | | 0.203 | N | 6 | 32 | 16 | 6.5 | 1 | Troiani,D.M | C |
| 12.045 | 830787 | | 0.152 | N | 4.5 | 21 | 19 | 6.5 | 1 | Troiani,D.M | D |
| 12.141 | 830788 | 3 | 0.050 | B | | 7 | 15 | 6.0 | 2 | Cook,A.J | |
| 12.705 | 830789 | 0.02 | 0.360 | R | 14.7 | 240 | 50 | 5.0 | 3 | Sarocchi,D | |
| 12.719 | 830790 | 0.04 | 0.37 | R | 14.3 | 140 | 30 | 4.8 | 2 | Falorni,M | |
| 12.753 | 830791 | 0.4 | 0.076 | N | 9.2 | 35,140 | | | 1 | Li Causi,G | E |
| 12.757 | 830792 | 1 | 0.13 | N | 5.5 | 36 | 19 | 5 | 1 | Menichetti,R | F |
| 12.767 | 830793 | 1.2 | 0.06 | R | 5.7 | 20 | 20 | 4.5 | 3 | Cardiel,N | |
| 12.767 | 830794 | 1.4 | 0.08 | B | | 15 | 30 | 4.7 | 1 | Hurst,G.M | G |
| 12.771 | 830795 | | 0.060 | R | 11.7 | 25 | | | 4 | Gallego,J | H |
| 12.931 | 830796 | 0.01 | 0.23 | R | 12 | 122,250,600 | | | 1 | O'Meara,S.J | I |

NOTE A Halley was readily visible using the 10x50 binoculars. Also, for the first time I could see the tail plainly with the binoculars.
NOTE B The comet, now at 4.1 magnitude, displayed a quite prominent dust tail extending in PA 62 for fully 0.5 deg. The coma had greatly shrunk in size to about 8.6'. The nucleus was not quite starlike and about 5.5 in magnitude. A remnant of the gas tail was seen extending from the nucleus to the northeast, totally immersed in the dust tail at PA 62. Scale = 10.0'/mm.
NOTE C Seeing (1-3): 3. Sky darkness (1-5): 5. Gas tail at PA 45 deg. Streamer at PA 50 deg. Fan at PA 50 deg. DC = 6.
NOTE D Seeing (1-3): 3. Sky darkness (1-5): 5. Tail was 2 deg. long, with a thin gas tail. [sic]
NOTE E Comet was very low above the horizon and there was light pollution. The north side of the tail was brighter than the other part. Yellow Wratten no. 4 filter used.
NOTE F Tail at PA 45 deg. Vertex distance = 2.5', semi latus rectum P1 = 2.5', P2 = 2.5'.
NOTE G Very bright tail apparently forking into two components about 40' from coma, PA 54 and PA 61. Bright condensation offset in coma PA 250 deg.
NOTE H Field 1 deg. 32'. Stellar nucleus. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE I (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.003 | 850782 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 8.00 | Kodak 2415 | | Y | O | 16/P | 1 | Crist,M | A |
| 12.008 | 850783 | 4.180 | 16.5 | 0.254 | 0.5 x 0.3 | 10.00 | Kodak 2415 | | Y | O | 22/S | 1 | Lund,L | B |
| 12.011 | 850784 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 2.50 | Kodak 2415 | | Y | X | 255/P | 1 | Sabia,J.D | C |
| 12.013 | 850785 | 1.970 | 5.5 | 0.355 | 1.0 x 0.7 | 16.00 | Kodak 2415 | | Y | O | 17/P | 1 | Crist,M | A |
| 12.026 | 850786 | 4.180 | 16.5 | 0.254 | 0.5 x 0.3 | 2.50 | Kodak 2415 | | Y | O | 24/S | 1 | Lund,L | B |
| 12.026 | 850787 | 0.100 | 2.8 | | 20.4 x13.7 | 5.00 | Kodak VR1000 | 1000/ | N | T | 9/C | 1 | Priester,D.C | |
| 12.028 | 850788 | 1.000 | 5 | 0.203 | 2.1 x 1.4 | 20.00 | Kodak Tri-X | 400/27 | N | X | 042/P | 1 | Bro,M | D |
| 12.036 | 850789 | 1.530 | 6.0 | 0.254 | 1.3 x 0.9 | 2.83 | Kodak 2415 | | Y | O | 26/S | 1 | Lund,L | |
| 12.041 | 850790 | 1.000 | 5 | 0.203 | 2.1 x 1.4 | 10.00 | Kodak Tri-X | 400/27 | N | X | 043/P | 1 | Bro,M | D |
| 12.044 | 850791 | 0.200 | 3.5 | | 10.3 x 6.9 | 5.50 | Fujichrome | 400/ | N | X | 394/S | 2 | Woidyla,B | E |
| 12.049 | 850792 | 0.200 | 3.5 | | 10.3 x 6.9 | 5.50 | Fujichrome | 400/ | N | X | 390/S | 2 | Woidyla,B | E |
| 12.054 | 850793 | 0.200 | 3.5 | | 10.3 x 6.9 | 5.00 | Fujichrome | 400/ | N | X | 397/S | 2 | Woidyla,B | E |
| 12.054 | 850794 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 5.50 | 3M 1000 | 1000/ | N | X | 422/S | 2 | Woidyla,B | E |
| 12.059 | 850795 | 0.200 | 3.5 | | 10.3 x 6.9 | 4.00 | Fujichrome | 400/ | N | X | 398/S | 2 | Woidyla,B | E |
| 12.064 | 850796 | 0.200 | 3.5 | | 10.3 x 6.9 | 3.00 | Fujichrome | 400/ | N | X | 392/S | 2 | Woidyla,B | E |
| 12.073 | 850797 | 0.200 | 3.5 | | 10.3 x 6.9 | 3.00 | Fujichrome | 400/ | N | X | 391/S | 2 | Woidyla,B | E |
| 12.082 | 850798 | 0.400 | 6.3 | | 5.2 x 3.4 | 1.00 | Kodak VR1000 | 1000/ | N | | 18/N | 1 | Persell,D | |
| 12.085 | 850799 | 0.400 | 6.3 | | 5.2 x 3.4 | 2.00 | Kodak VR1000 | 1000/ | N | | 19/N | 1 | Persell,D | |
| 12.087 | 850800 | 0.400 | 6.3 | | 5.2 x 3.4 | 3.00 | Kodak VR1000 | 1000/ | N | | 20/N | 1 | Persell,D | |
| 12.093 | 850801 | 0.400 | 6.3 | | 5.2 x 3.4 | 1.00 | Kodak VR1000 | 1000/ | N | | 22/N | 1 | Persell,D | |
| 12.094 | 850802 | 0.400 | 6.3 | | 5.2 x 3.4 | 2.00 | Kodak VR1000 | 1000/ | N | | 23/N | 1 | Persell,D | |
| 12.095 | 850803 | 0.040 | 1.7 | | 48.5 x33.4 | 1.00 | Ektachrome | 400/ | N | O | 18/N | 5 | Edberg,S.J | |
| 12.096 | 850804 | 2.000 | 10 | 0.203 | 1.0 x 0.7 | 1.00 | Kodak VR1000 | 1000/ | N | | 11/N | 1 | Persell,D | |
| 12.096 | 850805 | 0.400 | 6.3 | | 5.2 x 3.4 | 1.00 | Kodak VR1000 | 1000/ | N | | 24/N | 1 | Persell,D | |
| 12.097 | 850806 | 0.400 | 6.3 | | 5.2 x 3.4 | 1.00 | Kodak VR1000 | 1000/ | N | | 25/N | 1 | Persell,D | |
| 12.098 | 850807 | 0.040 | 1.7 | | 48.5 x33.4 | 5.00 | Ektachrome | 400/ | N | O | 19/N | 1 | Edberg,S.J | |
| 12.099 | 850808 | 0.610 | 4 | 0.152 | 3.4 x 2.3 | 3.00 | Kodak Tri-X | | N | X | 3/N | 1 | Lazerson,H | F |
| 12.099 | 850809 | 0.135 | 2.8 | | 15.2 x10.2 | 5.00 | Ektachrome | 400/ | N | | 7/S | | Pryal,J | |
| 12.103 | 850810 | 0.305 | 4 | | 6.8 x 4.5 | 30.00 | Kodak IIa-F | | N | | 4/P | 1 | Mitchell,R.C | |
| 12.103 | 850811 | 0.30 | 4 | 0.075 | 6.9 x 4.6 | 30.00 | IIa-F | | N | X | 4/P | 1 | Mitchell,R.C | |
| 12.104 | 850812 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 10.00 | Kodak VR1000 | 1000/ | N | O | 1/P | 2 | Ashley,J.B | G |
| 12.113 | 850813 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 5.00 | Kodak VR1000 | 1000/ | N | O | 2/P | 2 | Ashley,J.B | G |
| 12.120 | 850814 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 5.00 | Kodak VR1000 | 1000/ | N | O | 3/P | 2 | Ashley,J.B | G |
| 12.125 | 850815 | 0.050 | 2 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 8/N | 5 | Edberg,S.J | |
| 12.126 | 850816 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | S | 9/P | 2 | Yen,B | H |
| 12.143 | 850817 | 1.000 | 5 | 0.203 | 2.1 x 1.4 | 10.00 | Kodak Tri-X | 400/27 | N | O | 041/P | 1 | Bro,M | I |
| 12.381 | 850818 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 8.00 | Kodak 2415 | | Y | | 1/P | 1 | Niijima,T | J |

DATE: 12 JAN 1986 DATE: 12 JAN 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.383 | 850819 | 0.850 | 3.4 | 0.25 | 2.4 x 1.6 | 10.00 | Kodak 6415 | | Y | C | 10/P | 1 | Kojima,T | K |
| 12.724 | 850820 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | Kodak 2415 | | Y | O | 3/P | 4 | Uberti,M | |
| 12.734 | 850821 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 15.00 | 3M 1000 | 1000/ | N | X | 7/S | 1 | Vanin,G | L |
| 12.736 | 850822 | 1.000 | 5 | 0.20 | 2.1 x 1.4 | 20.00 | Fujichrome | 400/27 | N | O | 20/T | 1 | Mikuz,H | M |
| 12.743 | 850823 | 0.500 | 5.6 | | 4.1 x 2.7 | 4.75 | Kodak Tri-X | 400/ | N | X | 3/P | 1 | Ward,A | N |
| 12.800 | 850824 | 0.135 | 2.8 | | 15.2 xl0.2 | 25.00 | Kodak 2415 | | Y | S | 2/P | | Izquierdo,J | O |
| 12.998 | 850825 | 0.100 | 2.8 | | 20.4 xl3.7 | 5.00 | Kodak VR1000 | 1000/ | N | T | 14/C | 1 | Priester,D.C | P |

NOTE A City lights interfered with the observation. Auxiliary lens used. Original instrument characteristics are FL = 3.720, f/10.5.
NOTE B Auxiliary lens used. Original instrument characteristics are FL = 1.530, f/6.
NOTE C Photograph made by J. Kamichitis and J.D. Sabia.
NOTE D Auxiliary lens used. Original instrument characteristics are FL = 2.000, f/10. (The guiding method indicated and the commercial guiding head used are contradictory; this off-axis guider does not permit guiding on the target. Observer's image identifier is followed by suffix a. Ed.)
NOTE E (Observer's image identifier is preceded by prefix 1. Ed.)
NOTE F "Push" processed to 800 ASA.
NOTE G Auxiliary lens used. Original intrument characteristics are FL = 2.000, f/10. Photographs taken just at end of evening twilight. Very thin crescent moon present. Some wind gusts during exposures.
NOTE H Start time approximate. Instrument is Schmidt camera.
NOTE I Auxiliary lens used. Original instrument characteristics are FL = 2.000, f/10. (Observer's image identifier is followed by suffix a. Ed.)
NOTE J (Observer's image identifier is 860112-1. Ed.) Large format (70 mm) film used. City lights interfered with the observation.
NOTE K Instrument is Wright-Schmidt. Large format (120 size) film used.
NOTE L Zodiacal light interfered with the observation.
NOTE M Auxiliary lens used. Original instrument characteristics are FL = 2.000, f/10, a C8. Image copied 2x on technical film.
NOTE N UV filter used.
NOTE O Too much twilight and strong zodiacal light. These probably affect the observation.
NOTE P Auxiliary Soligor lens used. Original instrument characteristics are FL = 0.050 m, f/1.4.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.005 | 870119 | 600G-O | CL | 0.135 | 1.9 | | 15.00 | Kodak 2415 | | Y | C | 721/S | 2 | Buchanan,W.T | AB |
| 12.016 | 870120 | 600G-O | CL | 0.135 | 1.9 | | 15.00 | Kodak 2415 | | Y | C | 722/S | 2 | Buchanan,W.T | BC |
| 12.030 | 870121 | 600G-O | CL | 0.135 | 1.9 | | 22.00 | Kodak 2415 | | Y | C | 723/S | 2 | Buchanan,W.T | BD |

NOTE A Twilight interfered with the observation. Focused at R. Note faint tail spectrum. (Observer's image identifier is E-117-21. Ed.)
NOTE B Zodiacal light interfered with the observation. Halley barely visible to naked eye. All spectra lie along a meridian from south to north with wavelength increasing.
NOTE C Focused at infinity. Note faint tail spectrum. (Observer's image identifier is E-117-22. Ed.)
NOTE D Focused between R and infinity. Note faint tail spectrum. Airplane crossed frame. (Observer's image identifier is E-117-23. Ed.)

DATE: 13 JAN 1986

DATE: 13 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.014 | 815979 | | | 4A | 29 | 8 | | | 0.200 | SC | 10 | 78 | 5.3 | N | 1 | Saraceno,J | A |
| 13.014 | 815980 | 4.9 | B | 4A | | | | | 0.050 | B | | 7 | | | | Saraceno,J | |
| 13.017 | 815981 | 5.5 | B | 4A | 30 15 | 6 | 1.5 | 80 | 0.152 | R | 5 | 24 | 4.7 | N | 1 | Fox,J.H | B |
| 13.03 | 815982 | 4.7 | B | 4A | | | 1 | | 0.080 | B | | 20 | | Y | | Kronk,G | C |
| 13.03 | 815983 | 5.4 | B | 4A | 5.6 | 8 | | | 0.335 | N | 4.5 | 56 | | Y | | Kronk,G | D |
| 13.052 | 815984 | 5.1 | S | 4A | 7.5 | 6 | 0.38 | 82 | 0.080 | B | | 11 | 4.5C | Y | 1 | Bailey,G | E |
| 13.07 | 815985 | 4.4 | V | 4A | | | 1.5 | 60 | | EY | | | 6.5 | Y | 1 | Keen,R | |
| 13.08 | 815986 | 4.5 | | 4A | 5 | 8 | 2.5 | 60 | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | F |
| 13.10 | 815987 | 4.1 | | 4A | | | | | | EY | | | 5.0 | Y | 17 | Morris,C.S | |
| 13.108 | 815988 | 4.9 | B | 100, 4A | 10 | 7 | 1.50 | 300 | 0.050 | B | | 10 | 5.5C | Y | 1 | Stapleton,J | G |
| 13.11 | 815989 | 4.1 | M | 4A | 5.5 | 8 | 6.0 | 60 | 0.080 | B | | 20 | 5.0 | Y | 17 | Morris,C.S | |
| 13.135 | 815990 | 4.9 | M | 4A | | 5 | | | 0.050 | B | | 7 | 4.7 | Y | 1 | Robertson,T | |
| 13.1354 | 815991 | 4.0 | M | 4A | 6 | 6 | 6.15 | 62 | 0.05 | B | | 7 | 6.0 | Y | 2 | Cook,A.J | |
| 13.38 | 815992 | 4.5 | B | 4A | 2.0 | 8 | 0.7 | 65 | 0.05 | B | | 7 | 3.0T | N | 1 | Kanai,K | |
| 13.38 | 815993 | 4.5 | M | 4A | 3.4 | 8 | 1.5 | 60 | 0.08 | B | | 11 | 4 M | N | 1 | Mitsuma,S | H |
| 13.39 | 815994 | 4.8 | S | AAVSO | 4 | 7 | 0.67 | 60 | 0.13 | N | 6.3 | 24 | 5.0M | Y | 1 | Hayashi,A | |
| 13.39 | 815995 | 5 | B | M | 3 | 5 | 0.2 | | 0.12 | N | | 40 | | | | Knyazyuk,N | |
| 13.396 | 815996 | 4.5 | M | 100 | 3 | 8 | | | 0.030 | B | | 8 | 3.5CM | Y | 1 | Kato,T | I |
| 13.402 | 815997 | 4.0 | M | 4A | 12 | 6 | 1.4 | | 0.05 | B | | 7 | 3.5 | Y | 4 | Ichikawa,K | |
| 13.41 | 815998 | 4.8 | M | | 4 | 7 | 1.2 | 60 | 0.05 | B | | 7 | 5 | Y | 1 | Hiraga,M | |
| 13.410 | 815999 | 3.9 | S | 100 | 6.5 | 6 | 4 | 75 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |
| 13.41 | 816000 | 4.3 | S | 4A | | | | | 0.08 | | | | 4.0T | N | 1 | Lovejoy,T | J |
| 13.41 | 816001 | | | SAO | 8 | 7 | 0.33 | 85 | 0.15 | N | 6 | 23 | 4 | Y | 2 | Tanikawa,M | K |
| 13.41 | 816002 | 4.9 | B | SAO | | | | | 0.05 | B | | 7 | 4 | Y | 2 | Tanikawa,M | |
| 13.433 | 816003 | 4.5 | B | 100 | | | | | 0.05 | B | | 7 | 4.0CT | Y | 1 | Hayashi,H | |
| 13.433 | 816004 | | | | 8 | 6 | 1 | | 0.12 | N | 6 | 40 | | | | Hayashi,H | |
| 13.438 | 816005 | 5.0 | B | 4A | 8.5 | 7 | 0.55 | 60 | 0.08 | R | 12.5 | 40 | 6.0 | Y | 1 | Peisheng,J | |
| 13.55 | 816006 | 5.1 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 13.59 | 816007 | 5.5 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 13.688 | 816008 | 5.0 | | | | | | | 0.050 | B | | 10 | TM | | 1 | Kauschke,A | L |
| 13.69 | 816009 | 3.5 | | DCS 8 | | 6 | | | | EY | | | 3.5C | N | 3 | Kroon,B | M |
| 13.722 | 816010 | 4.7 | M | 4A | | | | | 0.030 | B | | 8 | 5.0M | Y | 1 | Villa,M | |
| 13.729 | 816011 | 4.8 | B | 4A | 3.5 | 7 | 0.38 | 55 | 0.330 | N | 4.5 | 59 | 5.8 | Y | 1 | Castino,R | N |
| 13.7291 | 816012 | 5.3 | B | 4A | 5 | 7 | 0.95 | 70 | 0.05 | B | | 10 | 5.7CMT | Y | 2 | Franciosi,C | O |
| 13.731 | 816013 | | | 4A | | | 1.0 | | 0.030 | B | | 8 | 5.0M | Y | 1 | Villa,M | |
| 13.736 | 816014 | 4.3 | S | 4A | 7 | 7 | 1.05 | 57 | 0.080 | B | | 20 | 5.9 | Y | 1 | Meozzi,D | |
| 13.736 | 816015 | 4.7 | S | 4A | 8 | 6 | 0.5 | 75 | 0.050 | B | | 7 | 4.5CM | N | 1 | Piccinini,M | |
| 13.739 | 816016 | 4.8 | B | 4A | 3.5 | 7 | 0.38 | 55 | 0.050 | B | | 16 | 5.8 | Y | 1 | Castino,R | N |
| 13.743 | 816017 | 4.7 | M | 4A | | 8 | | | 0.03 | B | | 8 | 5.0MZ | Y | 1 | Melandri,F | |
| 13.743 | 816018 | 4.8 | B | 4A | 6 | 7 | 1.7 | 61 | 0.05 | B | | 10 | 5.0M | Y | 1 | Vanin,G | |
| 13.748 | 816019 | 4.1 | S | 4A | 8 | 7 | 1.95 | 63 | 0.050 | B | | 7 | 5.9 | Y | 1 | Meozzi,D | |
| 13.750 | 816020 | 4.6 | M | 100 | 7 | 7 | 0.55 | 40 | 0.05 | B | | 10 | 5 MC | Y | 1 | Menichetti,R | |
| 13.750 | 816021 | 4.1 | S | 100 | 4.0 | 7 | 2.50 | 60 | 0.08 | B | | 15 | 5.5M | Y | 3 | Haver,R | |
| 13.750 | 816022 | 3.8 | S | 100 | | | | 60 | | EY | | | 5.5M | Y | 3 | Haver,R | P |
| 13.755 | 816023 | 4.7 | M | 4A | 6 | 7 | 0.9 | | 0.089 | R | 5.5 | 18 | 5.2 | N | 1 | Ventura,F | Q |
| 13.760 | 816024 | 4.6 | B | 4A | 5 | | | | 0.05 | B | | 8 | 5 | Y | 1 | Cano,M | R |
| 13.760 | 816025 | 4.4 | M | 4A | 10 | 7 | 1.5 | 70 | 0.05 | B | | 20 | 5.5 | Y | 4 | Cardiel,N | S |
| 13.760 | 816026 | 3.9 | S | 100 | 4.5 | 6 | 2.87 | 60 | 0.05 | B | | 7 | 5.5M | Y | 3 | Haver,R | |
| 13.760 | 816027 | 4.7 | M | 4A | 30 | 6 | | | 0.050 | B | | 10 | 3.0MC | Y | 1 | Lozano,L | T |
| 13.764 | 816028 | 5.1 | M | 4A | 5.5 | 5 | 0.25 | 60 | 0.07 | B | | 16 | 4.5CM | N | 1 | Taylor,M.D | U |
| 13.771 | 816029 | 4.5 | M | 4A | 8 | 8 | 1 | 70 | 0.06 | R | 5.7 | 20 | 5.5M | Y | 4 | Cardiel,N | S |
| 13.773 | 816030 | 4.6 | M | 4A | 3.9 | 8 | 0.67 | 40 | 0.153 | N | 8.5 | 65 | | Y | 2 | Torres,E | V |
| 13.781 | 816031 | 4.9 | B | 4A | 10 6.5 | 7 | 0.47 | 74 | 0.080 | B | | 20 | 5.0M | Y | 2 | Dionisi,M | W |
| 13.79 | 816032 | 4.8 | | | | | 0.6 | 55 | 0.034 | B | | 9 | | | 2 | Pereira,A | X |
| 13.792 | 816033 | 4.3 | B | 4A | 10 | 8 | 1.33 | | 0.05 | B | | 20 | | Y | 2 | Gallego,J | N |
| 13.938 | 816034 | 4.9 | M | AAVSO | | | | | 0.050 | B | | 10 | | | | O'Meara,S.J | Y |
| 13.94 | 816035 | 4.4 | M | AA | 7.5 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | Z |
| 13.94 | 816036 | 4.5 | M | AA | 7.5 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | Z |
| 13.94 | 816037 | 4.5 | S | AA | 7.5 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | Z |
| 13.94 | 816038 | 4.6 | S | AA | 7.5 | 7 | | | 0.050 | B | | 7 | | | | Green,D.W.E | Z |
| 13.972 | 816039 | 4.9 | S | 4A | 4.0 | 7 | 0.50 | 70 | 0.152 | N | 5.5 | 69 | 4.5 | Y | 1 | Hudak,D.M | a |
| 13.983 | 816040 | 4.8 | S | 4A | 6 | 7 | 0.80 | 50 | 0.035 | B | | 7 | 5.4C | Y | 3 | Morrison,W | b |

NOTE A The observations of Nov. 28 and Dec. 4 used the stars marked "12.9" and "12.3" on the V Hydrae d chart. These values appear to be about one magnitude too faint.
NOTE B Twilight.
NOTE C Tail length approximate.
NOTE D Inner coma diameter 3.8 arc min. Tail PA 49 deg. to 67 deg.
NOTE E Nice sight with moon and Jupiter.
NOTE F Modified Sidgwick method used.
NOTE G Clear tail. (PA approximate and may have been measured incorrectly. Ed.)
NOTE H 7.2.
NOTE I Diffuse cloud.
NOTE J Tail length = short.
NOTE K m2 (observer's symbol believed to mean "approximately equal to", Ed.) 9.
NOTE L Tail length = y.
NOTE M Tail length determined in 15x80 binoculars: 2.5 deg.
NOTE N Moon.
NOTE O No nucleus.
NOTE P Tail length 0.3 deg.-0.5 deg.
NOTE Q Tail length (I) 0.9 deg., PA 52-60 deg. The northern edge of the tail appeared to be particularly sharp. A dark lane is suspected in it.
NOTE R See draw. D.4. Moon 3 days.
NOTE S Moon 3 days.
NOTE T Tail not visible.
NOTE U Haze. Seeing Antoniadi III. Tail to 0.35 deg.?
NOTE V PA 35-40. (Observer gave limit as 10.0. Ed.)
NOTE W Coma diameter accuracy +/-0.6. Tail length accuracy +/-0.01. PA by drawing; PA 74 at distance 0 deg., PA 64 at distance 0.3 deg., PA 57 at distance 0.59 deg.
NOTE X (Observer gave limit as 8.5. Ed.)
NOTE Y Cambridge.
NOTE Z Coma diameter approximate.
NOTE a Tail length and PA approximate.
NOTE b Moon 17 deg. away.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.007 | 830797 | 0.6 | 0.203 | R | 13 | 85,150 | 10 | 4.7 | 1 | Fox,J.H | A |
| 13.010 | 830798 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | B |

DATE: 13 JAN 1986



| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.019 | 830799 | | 0.203 | SC | 10 | 169 | | | 1 | Lohvinenko,T.W | C |
| 13.032 | 830800 | 0.32 | 0.203 | N | 6 | 61,116 | 10 | 5 | 1 | Williams,J | D |
| 13.104 | 830801 | 3 | 0.050 | B | | 7 | 10 | 6.0 | 2 | Cook,A.J | |
| 13.729 | 830802 | 0.05 | 0.37 | R | 14.3 | 140 | 60 | 5.0 | 2 | Falorni,M | |
| 13.733 | 830803 | 0.07 | 0.125 | N | 5.8 | 28, 40, 60 | 30 | 5 | 1 | Riccabone,G | E |
| 13.760 | 830804 | | 0.050 | B | | 8 | | 5 | 1 | Cano,M | F |
| 13.767 | 830805 | 2.4 | 0.05 | B | | 20 | 10 | 5.5 | 4 | Cardiel,N | G |
| 13.776 | 830806 | 0.7 | 0.153 | N | 8.5 | 65 | 45 | | 2 | Cifuentes,E | H |
| 13.778 | 830807 | 0.59 | 0.080 | B | | 20 | 50 | 5.0 | 2 | Dionisi,M | I |
| 13.792 | 830808 | | 0.050 | B | | 20 | | | 2 | Gallego,J | J |
| 13.993 | 830809 | | 0.15 | N | 8 | 64,160 | 50 | 5.5 | 1 | Robotham,R | K |

NOTE A Fan-shaped, brighter inner coma extending W from nucleus. Streaking in tail seen only at 85x. Tear-shaped coma very apparent at both powers.
NOTE B The comet is seen with a nuclear magnitude of 6.6 (check stars: HR 69, HR 72) and an integrated magnitude of 4.8 (check stars: HR 707, HR 739, HR 740). (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C A closer look at the comet gives a sharp blue spike coming directly from the 'nucleus' of the comet. The PA of this spike is 67 and the coma size is 294.07" and seems not to of change much even with the moon. [sic] The nuclear diameter is 81.21". (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D The central condensation seemed much brighter than usual. The coma was about 5' or 6' across. The tail was an additional 20' or so long. The tail is brighter but still relatively faint. I don't see any other detail but the central condensation appears "lumpy". Perhaps "not quite round" is more accurate. Tail at PA 90. Moonlight, twilight, city lights interfered with the observation.
NOTE E Luminous nebular region at PA 80. Dark region at PA 85. Nucleus diameter 77 arc sec. Magnifications of 80 and 144 also used. Two drawings included. Moonlight and intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE F Field 9 deg. Limiting mag. through binoc.: 7.5. Crescent moon, 3 days; cirrus. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE G Tail long: 1 deg. 30' at PA 70.
NOTE H Gas tail long and toward Ne [sic]. Dust tail less visible (very small in comparison with gas tail) and toward ENe. (Observer gave limit as 10.0. Translated by IHW staff. Ed.)
NOTE I Moonlight interfered with the observation. Cone at PA 70 (vertex) delimits coma on the major axis and it's vertex is 7.7' distant by nucleus. Stream at PA 64 (vertex) seems to be lightly more bright than the coma. [sic] It has a total length of 13.2' by nucleus.
NOTE J Field 3 deg. Ion tail easily visible. High DC 4 days moon [sic]. Coma seems a "bullet head". (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE K Tail well seen. Nucleus was difficult to see if visible at all.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.002 | 850826 | 0.100 | 2.8 | | 20.4 x13.7 | 2.50 | Kodak VR1000 | 1000/ | N | T | 15/C | 1 | Priester,D.C | A |
| 13.019 | 850827 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 1.50 | Kodak 2415 | | Y | X | 259/P | 1 | Sabia,J.D | B |
| 13.071 | 850828 | 0.305 | 2.5 | 0.122 | 6.8 x 4.5 | 15.00 | Kodak 2415 | | Y | S | 181/P | 2 | Minton,R.B | C |
| 13.087 | 850829 | 0.205 | 3.8 | | 10.0 x 6.7 | 15.00 | Kodak VR 200 | 200/ | N | T | 22/P | 1 | Cunningham,J | D |
| 13.090 | 850830 | 0.400 | 6.3 | | 5.2 x 3.4 | 5.00 | Kodak VR1000 | 1000/ | N | | 31/N | 1 | Persell,D | |
| 13.094 | 850831 | 0.400 | 6.3 | | 5.2 x 3.4 | 4.00 | Kodak VR1000 | 1000/ | N | | 32/N | 1 | Persell,D | |
| 13.098 | 850832 | 0.400 | 6.3 | | 5.2 x 3.4 | 3.00 | Kodak VR1000 | 1000/ | N | | 33/N | 1 | Persell,D | |
| 13.100 | 850833 | 0.400 | 6.3 | | 5.2 x 3.4 | 2.00 | Kodak VR1000 | 1000/ | N | | 34/N | 1 | Persell,D | |
| 13.101 | 850834 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 5.00 | Kodak VR 200 | 200/ | N | T | 24/P | 1 | Cunningham,J | |
| 13.102 | 850835 | 0.400 | 6.3 | | 5.2 x 3.4 | 1.00 | Kodak VR1000 | 1000/ | N | | 35/N | 1 | Persell,D | |
| 13.105 | 850836 | 0.400 | 6.3 | | 5.2 x 3.4 | 5.00 | Kodak VR1000 | 1000/ | N | | 36/N | 1 | Persell,D | |
| 13.106 | 850837 | 0.610 | 4 | 0.152 | 3.4 x 2.3 | 3.00 | Kodak Tri-X | | N | X | 4/N | 1 | Lazerson,H | E |
| 13.109 | 850838 | 0.400 | 6.3 | | 5.2 x 3.4 | 2.50 | Kodak VR1000 | 1000/ | N | | 37/N | 1 | Persell,D | |
| 13.115 | 850839 | 0.400 | 6.3 | | 5.2 x 3.4 | 2.50 | Kodak VR1000 | 1000/ | N | | 2/N | 1 | Persell,D | |
| 13.117 | 850840 | 0.400 | 6.3 | | 5.2 x 3.4 | 2.00 | Kodak VR | 1000/ | N | X | 3/N | 1 | Persell,D | |
| 13.121 | 850841 | 0.400 | 6.3 | | 5.2 x 3.4 | 2.50 | Kodak VR | 1000/ | N | X | 4/N | 1 | Persell,D | |
| 13.123 | 850842 | 0.400 | 6.3 | | 5.2 x 3.4 | 1.00 | Kodak VR | 1000/ | N | X | 5/N | 1 | Persell,D | |
| 13.126 | 850843 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | S | 10/P | 2 | Yen,B | F |
| 13.387 | 850844 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 8.00 | Kodak 2415 | | Y | | 2/P | 1 | Niijima,T | G |
| 13.726 | 850845 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 13.00 | 3M 1000 | 1000/ | N | X | 8/S | 1 | Vanin,G | H |
| 13.773 | 850846 | 2.10 | 3.5 | 0.60 | 1.0 x 0.7 | 15.00 | Kodak 2415 | | Y | | 801/P | 4 | Soc. Astro. de France | I |

NOTE A Auxiliary Soligor lens used. Original instrument characteristics are FL = 0.050 m, f/1.4.
NOTE B A cloud is encroaching on the comet and a fault on the negative is superimposed on the comet's coma. Photograph made by J. Kamichitis and J.D. Sabia.
NOTE C (Print submitted by observer is a composite of three contiguous 5 minute exposures. Ed.) Instrument is Aero-Ektar aerial camera lens.
NOTE D Meteor.
NOTE E Tail split. "Push" processed to 800 ASA.
NOTE F Start time approximate. (Observer's image identifier is 5. Ed.) Instrument is Schmidt camera.
NOTE G (Observer's image identifier is 860113-2. Ed.) Large format (70 mm) film used. City lights interfered with the observation.
NOTE H Moonlight and twilight interfered with the observation.
NOTE I Exposures of 2 seconds and 15 minutes together, made by offsetting the telescope. Photograph made by R. Bibault and J. Sylvain.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.010 | 870122 | 600G-O | CL | 0.135 | 1.9 | | 20.00 | Kodak 2481IR | | N | C | 800/S | 2 | Buchanan,W.T | AB |
| 13.027 | 870123 | 600G-O | CL | 0.135 | 1.9 | | 26.00 | Kodak 2481IR | | N | C | 801/S | 2 | Buchanan,W.T | BC |
| 13.986 | 870124 | 42P-O | CL | 0.400 | 6.3 | | 10.00 | Kodak 2415 | | N | C | 20/P | 1 | Grieser,D | D |
| 13.994 | 870125 | 42P-O | CL | 0.400 | 6.3 | | 10.00 | Kodak 2415 | | N | C | 21/P | 1 | Grieser,D | D |

NOTE A Frame had #12 Wratten filter; showed no spectral lines on Halley but showed infrared on star to the west. (Observer's image identifier is E-118-00. Ed.)
NOTE B Zodiacal light interfered with the observation. Frame set for 6700-10500 Angstroms first order and 3350-5250 Angstroms second order.
NOTE C Frame showed second order of complex at 3883 Angstroms, same field as frame 800. (Observer's image identifier is E-118-01. Ed.)
NOTE D Prism glass type uncertain. Film emulsion at ambient temperature of 0 C.

DATE: 14 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.024 | 816041 | | | 4A | 17.2 | 6 | | | 0.200 | SC | 10 | 78 | 4.3 | N | 1 | Saraceno,J | A |
| 14.024 | 816042 | 5.3 | B | 4A | | | | | 0.050 | B | | 7 | | | | Saraceno,J | |
| 14.030 | 816043 | 4.7 | B | 4A | 4 | 1 | 0.4 | | 0.05 | B | | 7 | 4.5 | Y | 2 | House,R.R | |
| 14.06 | 816044 | 4.5 | V | 4A | | | | | | EY | | | 5.0 | Y | 1 | Keen,R | |
| 14.06 | 816045 | 4.5 | | 4A | 8 | 8 | 2.8 | 60 | 0.040 | B | | 8 | 5.0 | Y | 1 | Keen,R | B |
| 14.10 | 816046 | 4.0 | S | 4A | 8 | 7 | 2 | 60 | 0.080 | B | | 11 | 5.0 | Y | 1 | Spratt,C.E | C |
| 14.115 | 816047 | 5.5 | S | 4A | 6 | 7 | 0.5 | 285 | 0.203 | SC | 10 | 50 | 8 | Y | 6 | Pryal,J | D |
| 14.375 | 816048 | 4.7 | B | 4A | | 8 | | | 0.05 | B | | 7 | 4.0C | Y | 1 | Hasegawa,T | |
| 14.38 | 816049 | 4.7 | M | 4A | | | 1.2 | | 0.05 | B | | 7 | 5.0M | Y | 1 | Suzuki,K | |
| 14.38 | 816050 | | | 4A | 2.0 | 5 | | | 0.21 | N | 5.0 | 88 | 5.0M | Y | 1 | Suzuki,K | E |
| 14.381 | 816051 | 4.6 | M | 100 | 2 | | | | 0.030 | B | | 8 | 3.0CMT | N | 1 | Kato,T | F |
| 14.39 | 816052 | 4.9 | S | AAVSO | 3.5 | 7 | 2 | 65 | 0.13 | N | 6.3 | 24 | 5.0M | Y | 1 | Hayashi,A | |
| 14.39 | 816053 | 4.7 | M | 4A | 3.0 | 8 | 2 | 60 | 0.08 | B | | 11 | 4.5M | Y | 1 | Mitsuma,S | G |
| 14.39 | 816054 | 4.4 | B | | 12 | 7 | 0.83 | 300 | 0.05 | B | | 10 | 4.0 | N | 1 | Uda,K | H |
| 14.40 | 816055 | 4.8 | B | | 9 | 6 | 1.3 | 70 | 0.16 | N | 4.8 | 24 | 5.0M | Y | 1 | Maeda,S | |
| 14.41 | 816056 | 4.8 | M | | 4 | 7 | 1.8 | 60 | 0.05 | B | | 7 | 4.5 | Y | 2 | Hiraga,M | |
| 14.411 | 816057 | 3.9 | S | 100 | 6 | 6 | 1.5 | 75 | 0.07 | B | | 10 | 3.5 | Y | 1 | Kobayashi,J | |
| 14.57 | 816058 | 4.7 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 14.57 | 816059 | 4.9 | B | M | 7 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 14.59 | 816060 | 5.0 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 14.64 | 816061 | 5.0 | B | M | 14 | 6 | | | 0.07 | N | 8 | 33 | | | | Yurchenko,Yu | |
| 14.69 | 816062 | 4.5 | M | 4A | 9 | 5 | 0.8 | 63 | 0.05 | B | | 7 | 4.5 | Y | 3 | Granslo,B.H | |
| 14.69 | 816063 | 3.7: | S | DCS 8 | | 6 | 1.9 | | 0.080 | B | | 15 | 3.5CM | N | 2 | Kroon,B | |
| 14.707 | 816064 | 5.1 | B | 4A | | 2 | | | 0.030 | B | | 8 | 5.0MC | N | 2 | Richert,M | |
| 14.710 | 816065 | | | 4A | | 4 | 0.2 | | 0.080 | R | 6.2 | 20 | 5.0MC | N | 2 | Richert,M | |
| 14.712 | 816066 | 4.4 | B | 100 | 4.0 | 8 | 2 | | 0.050 | B | | 7 | 5.5 | Y | 1 | Lunde,R | |
| 14.719 | 816067 | 4.8 | M | 100 | | 5 | | | 0.07 | B | | 20 | | Y | 1 | Tanti,T | I |
| 14.722 | 816068 | 4.3 | B | 4A | | | | | 0.08 | B | | 10 | 4 | Y | | Cappellari,M | J |
| 14.7240 | 816069 | 4.9 | B | AAVSO | | 3 | | | 0.05 | B | | 7 | 4.5 | N | 1 | Sicoli,P | |
| 14.7291 | 816070 | 5.3 | B | 4A | 4 | 7 | 0.42 | 60 | 0.05 | B | | 10 | 4.7CM | Y | 2 | Franciosi,C | K |
| 14.73 | 816071 | 4.8 | S | DCS 7 | 15 | 8 | 1.0 | | 0.050 | B | | 10 | 4 MC | N | 1 | Aerts,L | L |
| 14.73 | 816072 | | | | | | 2.0 | | 0.150 | R | 8 | 34 | 4 MC | N | 1 | Aerts,L | |
| 14.73 | 816073 | 4.5 | S | DCS 7 | 4.5 | 9 | 0.33 | 55 | 0.050 | B | | 10 | 4.5M | Y | 1 | van Loo,F.R | |
| 14.73 | 816074 | 4.7 | B | DCS 7 | 5 | 8 | 1.0 | 55 | 0.115 | N | 8 | 45 | 4 MC | Y | 1 | van Munster,T | |
| 14.73 | 816075 | 4.4 | B | 4A | 10 | 7 | | | 0.050 | B | | 7 | 4.5 | Y | 2 | Merlin,J.-C | |
| 14.736 | 816076 | 4.7 | M | 4A | | 8 | | | 0.05 | B | | 10 | 5.0MZ | Y | 9 | Melandri,F | |
| 14.736 | 816077 | 4.7 | M | 4A | | | 1.1 | | 0.030 | B | | 8 | 5.0M | Y | 7 | Villa,M | |
| 14.740 | 816078 | 4.9 | M | 4A | 4.0 | 7 | 0.7 | 65 | 0.08 | B | | 11 | 4.6M | Y | 1 | Fleet,R.W | |
| 14.740 | 816079 | 5.2 | S | 99 | 5 | 7 | | | 0.065 | B | | 12 | 4 | N | 1 | Foulkes,M | M |
| 14.74 | 816080 | 4.2 | S | DCS 8 | 6 | 7 | 0.5 | 75 | 0.080 | B | | 15 | 4 CM | Y | 1 | Wils,P | |
| 14.747 | 816081 | 4.6: | B | 4A | | 8 | | | 0.050 | B | | 10 | 4.5 | N | 1 | Rogers,J.H | N |
| 14.75 | 816082 | 4.8 | S | 4A | | | | | 0.08 | B | | 10 | 3.0 | | 1 | Shanklin,J.D | |
| 14.750 | 816083 | 5.1 | M | 4A | | | | | 0.04 | B | | 12 | | N | 1 | Henshaw,C | O |
| 14.769 | 816084 | 4.5 | S | 4A | 6.8 | 8 | 1.2 | | 0.05 | B | | 10 | 4.7 | Y | 1 | Hurst,G.M | P |
| 14.781 | 816085 | | | 4A | | 5 | 0.25 | | 0.07 | B | | 10 | 5.0 | Y | 1 | Deconinck,M | |
| 14.79 | 816086 | 4.8 | | | | | 0.8 | 55 | 0.034 | B | | 9 | 8 | | 2 | Pereira,A | Q |
| 14.969 | 816087 | 4.3 | B | 99 | 6 | 3 | 0.67 | 51 | 0.05 | B | | 7 | 5.4 | | | Lairet,R | |
| 14.97 | 816088 | 4.2 | B | AAVSO | 5 | 6 | 1.5 | 60 | 0.050 | B | | 10 | | | | Bortle,J.E | R |
| 14.97 | 816089 | | | | 2.8 | | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | S |
| 14.986 | 816090 | 4.2 | B | 99 | | 6 | 1.42 | 70 | 0.05 | B | | 7 | 4.5 | N | 4 | Benavides,A | T |

NOTE A Light pollution.
NOTE B Modified Sidgwick method used.
NOTE C DC approximate.
NOTE D Too near western horizon.
NOTE E Meter: coma diameter is P1 + P2.
NOTE F Poor condition.
NOTE G 7.7.
NOTE H (PA value may have been incorrectly determined. Ed.)
NOTE I Moon. Clouds. Low.
NOTE J Moon.
NOTE K PA approximate.
NOTE L Tail length is lower limit.
NOTE M Moon up.
NOTE N Coma small. Short tail stub suspected. Very imprecise.
NOTE O Moon, twilight.
NOTE P Curved tails. 1.2 deg. tail PA 58-52; 0.8 deg. tail PA 48-40.
NOTE Q Moonlight.
NOTE R Straight, narrow tail.
NOTE S Broad, straight tail (type II).
NOTE T The first measure is of tail II and the second is of tail I? [sic] (Translated by IHW staff. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.058 | 830810 | | 0.445 | N | 4.5 | 72 | | | 2 | Lohvinenko,T.W | A |
| 14.748 | 830811 | 0.15 | 0.298 | N | 5 | 40, 65,269 | 13 | 6.0 | 1 | Stott,D | B |
| 14.773 | 830812 | 1.3 | 0.05 | B | | 10 | 35 | 4.7 | 1 | Hurst,G.M | C |
| 14.979 | 830813 | | 0.080 | B | | 20 | 20 | 4 | 2 | Arpin,P | D |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Hood at PA 250-170. Tail at PA 62. Central condensation shows little detail only a vague hood. Tail shows some structure near coma.
NOTE C Tail at PA 58 deg. curving to 52 deg., 1.2 deg. length. Tail at PA 48 deg. curving to 40 deg., 0.8 deg. length. Nucleus region offset PA 230 deg. approximately.
NOTE D Comet coma not visible to the naked eye even I observed in countryside. [sic] Estimated length of tail 0.5 deg. Very disapointing object it's reminds me Comet Kohoutek. [sic]

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.015 | 850847 | 0.100 | 2.8 | | 20.4 x13.7 | 6.00 | Kodak VR1000 | 1000/ | N | T | 16/C | 1 | Priester,D.C | A |
| 14.052 | 850848 | 1.583 | 8 | 0.203 | 1.3 x 0.9 | 10.00 | Kodak 2415 | | Y | S | 37/P | 1 | Minton,R.B | B |
| 14.073 | 850849 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 5.00 | Kodak VR 200 | 200/ | N | T | 25/P | 1 | Cunningham,J | |
| 14.100 | 850850 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 3.00 | Fuji HR 400 | | N | T | 0/P | 1 | Cunningham,J | C |
| 14.389 | 850851 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 10.17 | Kodak 2415 | | Y | | 3/P | 1 | Niijima,T | D |
| 14.758 | 850852 | 0.600 | 1.7 | 0.355 | 3.4 x 2.3 | 23.00 | Kodak 6415 | | N | O | 001/T | 1 | Battipede,F | E |

NOTE A Auxiliary Soligor lens used. Original instrument characteristics are FL = 0.050 m, f/1.4.

DATE: 14 JAN 1986

DATE: 14 JAN 1986

NOTE B (Print submitted by observer is a composite of two contiguous 5 min. exposures. Ed.)
NOTE C Film "push" processed from ISO 400 to 1000.
NOTE D (Observer's image identifier is 860114-2. Ed.) Large format (70 mm) film used. City lights interfered with the observation.
NOTE E Instrument is Schmidt camera. 120 size film used.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.003 | 816091 | 4.7 | S | 4A | 6 | 7 | 0.42 | 55 | 0.035 | B | | 7 | 4.7CM | Y | 3 | Morrison,W | |
| 15.003 | 816092 | 4.3 | B | 4A | | | 1 | 60 | 0.035 | B | | 7 | 4.5 | Y | 1 | Stephan,C | A |
| 15.005 | 816093 | 4.7 | S | 4A | | 1 | 0.7 | 65 | 0.05 | B | | 7 | 5 | Y | 2 | House,R.R | B |
| 15.006 | 816094 | 4.6 | B | 4A | | | | | 0.08 | B | | 11 | 3.0 | Y | 1 | Gorski,L | C |
| 15.010 | 816095 | 4.0 | S | 100 | 10.1 | 8 | 1.5 | 54 | 0.108 | N | 4 | 17 | 5.0 | Y | 1 | Franch,J | D |
| 15.014 | 816096 | 4.9 | B | 99 | | | | | 0.080 | B | | 20 | 4.8M | Y | | Smith,D | |
| 15.028 | 816097 | | | 4A | 25 | 7 | | | 0.200 | SC | 10 | 78 | 4.2 | N | 1 | Saraceno,J | E |
| 15.028 | 816098 | 4.7 | B | 4A | | | | | 0.050 | B | | 7 | | | | Saraceno,J | |
| 15.375 | 816099 | 4.7 | B | 4A | | 6 | | | 0.05 | B | | 7 | 3.0CM | Y | 1 | Hasegawa,T | |
| 15.380 | 816100 | 3.9 | M | 100 | 2 | | | | 0.030 | B | | 8 | 4.0CMT | Y | 1 | Kato,T | |
| 15.389 | 816101 | 3.8 | M | 4A, 100 | 3.8 | | 0.83 | | 0.1 | N | 10 | 83 | 4.0 | Y | 1 | Ichikawa,K | |
| 15.39 | 816102 | 3 : | | | 5 | 7 | | | 0.08 | B | | 11 | 3.5 | Y | 2 | Washi,S | F |
| 15.40 | 816103 | 4.0: | S | 4A | | | | | 0.08 | | | | 3.0T | N | 1 | Lovejoy,T | G |
| 15.49 | 816104 | 4.7 | B | M | 3 | 6 | 0.1 | 55 | 0.05 | B | | 7 | | | | Guryanov,S | |
| 15.58 | 816105 | 4.7 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 15.62 | 816106 | 5.4 | S | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 15.694 | 816107 | 5.0 | M | 4A | 6 | 3 | 0.2 | 53 | 0.09 | M | 11 | 56 | 4.5TM | Y | 3 | Westlund,M | H |
| 15.72 | 816108 | 4.8 | S | DCS 7 | | | | | 0.050 | B | | 10 | 4 MC | N | 1 | Aerts,L | |
| 15.722 | 816109 | 4.4 | | AAVSO | 4 | 6 | 3.3 | 70 | 0.080 | B | | 11 | | | | Stomeo,E | I |
| 15.729 | 816110 | 4.5 | M | 4A | | 7 | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | J |
| 15.729 | 816111 | 4.6 | M | 4A | | 7 | | | 0.089 | R | 5.5 | 18 | 4.5M | N | 1 | Ventura,F | |
| 15.7291 | 816112 | 5.4 | B | 4A | 4 | 7 | 0.67 | 60 | 0.05 | B | | 10 | 5.3CMT | Y | 2 | Franciosi,C | |
| 15.730 | 816113 | 4.7 | S | | | | | | 0.06 | B | | 10 | | | | Giampaolo,G | |
| 15.73 | 816114 | 3.8 | B | DCS 8 | 4 | 7 | 0.12 | | 0.050 | B | | 10 | 3.5CM | N | 1 | Roos,M.C | |
| 15.735 | 816115 | 4.8 | M | 4A | | 8 | | | 0.04 | B | | 12 | | N | 1 | Henshaw,C | K |
| 15.736 | 816116 | 4.6 | M | 4A | | | 0.9 | | 0.030 | B | | 8 | 5.5M | Y | 1 | Villa,M | |
| 15.737 | 816117 | 4.2 | S | 100 | | 6 | 0.5 | 60 | 0.08 | B | | 11 | 4 M | Y | 4 | Gainsford,M.J | L |
| 15.739 | 816118 | 4.8 | B | 4A | 3.9 | 8 | 0.33 | 50 | 0.330 | N | 4.5 | 59 | 5.5 | Y | 1 | Castino,R | L |
| 15.739 | 816119 | 4.7 | B | IHW | | | | | 0.080 | B | | 20 | 4.0 | Y | 1 | Guthier,O | |
| 15.740 | 816120 | 4.8 | M | 4A | 4.0 | 7 | 0.6 | 68 | 0.08 | B | | 11 | 4.0MT | N | 1 | Fleet,R.W | |
| 15.740 | 816121 | 4.0 | S | 4A | | | | | | EY | | | 5.2 | Y | 2 | Milani,G | M |
| 15.740 | 816122 | 4.5 | B | 4A | 4 | 8 | 1.9 | 66 | 0.05 | B | | 10 | 5.0M | Y | 1 | Vanin,G | |
| 15.741 | 816123 | | S | | 5 | 6 | 1.17 | 59 | 0.08 | B | | 20 | 5.2 | Y | 2 | Milani,G | N |
| 15.741 | 816124 | | | | 5 | 6 | 1.17 | 55 | 0.08 | B | | 20 | 5.2 | Y | 2 | Milani,G | O |
| 15.743 | 816125 | 4.4 | S | 4A | | | | | 0.05 | B | | 10 | 2.5 | Y | 1 | Hurst,G.M | |
| 15.746 | 816126 | 4.8 | B | 4A | 4 | 8 | 0.33 | 50 | 0.050 | B | | 16 | 5.5 | Y | 1 | Castino,R | L |
| 15.747 | 816127 | 4.7 | S | 4A | 4.6 | 5 | 0.15 | 46 | 0.07 | B | | 16 | 4.5CM | N | 1 | Taylor,M.D | P |
| 15.75 | 816128 | | | | 3.8 | 6 | 0.28 | 70 | 0.20 | N | 4.7 | 104 | 3.5 | Y | 1 | Cappellari,M | L |
| 15.75 | 816129 | 4.7 | B | DCS 8 | | 4 | | | 0.063 | B | | 8 | 4 CM | N | 1 | Geenen,J.J | |
| 15.75 | 816130 | 4.7 | B | 4A | 10 | 7 | | | 0.050 | B | | 7 | CM | Y | 1 | Jannink,D.W | Q |
| 15.756 | 816131 | 4.5 | M | 100 | 5 | 6 | 0.38 | 50 | 0.05 | B | | 10 | 4.5MC | Y | 1 | Menichetti,R | |
| 15.764 | 816132 | 4.9 | B | 4A | 4.7 | 7 | 0.17 | 74 | 0.080 | B | | 20 | 4.5M | Y | 2 | Dionisi,M | R |
| 15.765 | 816133 | 4.9 | M | 4A | | | | | 0.050 | B | | 7 | 5.8 | Y | 1 | Stott,D | L |
| 15.769 | 816134 | 4.3 | B | 4A | | 5 | 1.3 | 63 | 0.06 | B | | 15 | 4.8 | Y | 2 | Vincent,J | S |
| 15.772 | 816135 | | S | 100 | | 7 | | | 0.25 | N | 6 | 60 | | Y | 1 | Gainsford,M.J | T |
| 15.795 | 816136 | 4.5 | S | 4A | 6 | 8 | 1.0 | 67 | 0.05 | B | | 10 | 2.5 | Y | 1 | Hurst,G.M | |
| 15.799 | 816137 | 4.5 | S | 4A | 5.4 | 8 | | | 0.08 | B | | 15 | | | 1 | Hurst,G.M | U |
| 15.94 | 816138 | 4.7 | B | AA | 5 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | V |
| 15.94 | 816139 | 4.6 | S | AA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 15.95 | 816140 | 4.7 | B | AA | 5 | 8 | | | 0.050 | B | | 7 | | | | Green,D.W.E | V |
| 15.95 | 816141 | 4.6 | S | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 15.96 | 816142 | 4.1 | B | AAVSO | 4.5 | 7 | 1.0 | 62 | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 15.96 | 816143 | 4.7 | B | AA | 7.8 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | V |
| 15.96 | 816144 | 4.3 | M | AA | 7.8 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | V |
| 15.96 | 816145 | 4.5 | S | AA | 7.8 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | V |
| 15.96 | 816146 | | | | | | 1.4 | 62 | 0.050 | B | | 7 | | | | Bortle,J.E | |
| 15.96 | 816147 | | | | 2.3 | | | | 0.500 | N | 5 | 78 | | | | Bortle,J.E | W |
| 15.979 | 816148 | 4.7 | S | 4A | 3.8 | 7 | 0.67 | 55 | 0.203 | N | 6 | 101 | 4.5 | Y | 1 | Hudak,D.M | X |
| 15.979 | 816149 | 4.0 | B | 99 | 6 | 4 | 0.60 | 50 | 0.05 | B | | 7 | 4.5 | | | Lairet,R | |
| 15.986 | 816150 | 3.9 | B | 99 | | 5 | 0.74 | 65 | 0.05 | B | | 7 | 4.5 | | 1 | Benavides,A | |
| 15.994 | 816151 | 4.4: | M | 4A | 6 | 7 | | | 0.063 | B | | 9 | 2.9 | Y | 1 | DeYoung,J.A | Y |

NOTE A Moonlight in the area.
NOTE B Naked eye coma only.
NOTE C Appears stellar.
NOTE D Dust tail.
NOTE E Light pollution.
NOTE F Coma diameter uncertain. (Observer indicated "Y" method. Ed.)
NOTE G Tail length = trace. (80x200 reflector: coma dia. = 3.0', DC = 7. Ed.)
NOTE H (Twilight, moon).
NOTE I Type I tail was 3.3 deg. long at PA 70 deg. Type II tail was 2.5 deg. long with PA spanning 48 to 90 deg.
NOTE J Moon. Wind.
NOTE K Moon, twilight.
NOTE L Moon.
NOTE M Moonlight, clear sky.
NOTE N Ion tail.
NOTE O Parabolic tail axis.
NOTE P Haze. Antoniadi II.
NOTE Q Telescopic limit is 7.
NOTE R Coma diameter accuracy +/-0.5. Tail length accuracy +/-0.01. PA by drawing; PA 74 at distance 0 deg., PA 68 at distance 0.09 deg., PA 66 at distance 0.21 deg.
NOTE S Tail split 8 to 10 arc min. Centre PA given. Coma fuzzy.
NOTE T Low.
NOTE U Very low.
NOTE V Coma diameter approximate.
NOTE W Broad 15" jet in PA 130 deg.
NOTE X Tail length and PA approximate.
NOTE Y High thin overcast.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.691 | 830814 | 1.6 | 0.090 | M | 11 | 56 | 10 | 4.5 | 3 | Westlund,M | A |
| 15.724 | 830815 | | 0.25 | N | 6 | 40, 80 | 25 | 4 | 2 | Adamoli,G | B |
| 15.736 | 830816 | 0.10 | 0.125 | N | 5.8 | 28, 40, 60 | 42 | 5.0 | 1 | Riccabone,G | C |
| 15.774 | 830817 | 1.4 | 0.05 | B | | 10 | 90 | 2.5 | 1 | Hurst,G.M | D |
| 15.792 | 830818 | | 0.203 | SC | 10 | 60 | | | 1 | Verdenet,M | E |

NOTE A Disturbing lights: twilight, moon.
NOTE B Tail at PA 80. Major axis central condensation at PA 350. Central condensation elongated, irregular and very compact and

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bright, while the coma is soft and round.

NOTE C "Mustache" of greater luminosity at PA 47. Dimensions of the comet determined indirectly and therefore not completely reliable. Magnifications of 80 and 144 also used. Two drawings included. Moonlight, twilight, and intense city lights interfered with the observation. (Translated by IHW staff. Ed.)

NOTE D Very cold. Moon 1/2. Tail at PA 67 deg., length 1 deg. Tail at PA 55 deg., length 0.8 deg. Nuclear condensation offset PA 250 approximately.

NOTE E (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.003 | 850853 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | Kodak Tri-X | | N | T | 17/C | 1 | Priester,D.C | A |
| 15.007 | 850854 | 0.200 | 4.5 | | 10.3 x 6.9 | 6.00 | Kodak Tri-X | | N | T | 18/C | 1 | Priester,D.C | A |
| 15.013 | 850855 | 1.260 | 6.2 | 0.203 | 1.6 x 1.1 | 6.00 | Kodak VR1000 | 1000/ | N | T | 17/C | 1 | Priester,D.C | |
| 15.013 | 850856 | 0.200 | 4.5 | | 10.3 x 6.9 | 6.00 | Kodak Tri-X | | N | T | 19/C | 1 | Priester,D.C | A |
| 15.017 | 850857 | 1.260 | 6.2 | 0.203 | 1.6 x 1.1 | 3.00 | Kodak VR1000 | 1000/ | N | T | 18/C | 1 | Priester,D.C | |
| 15.017 | 850858 | 0.200 | 4.5 | | 10.3 x 6.9 | 3.00 | Kodak Tri-X | | N | T | 20/C | 1 | Priester,D.C | A |
| 15.393 | 850859 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 5.00 | Kodak 2415 | | Y | | 4/P | 1 | Niijima,T | B |
| 15.722 | 850860 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 6.00 | Fujichrome | 400/27 | N | O | 3/T | 1 | Mikuz,H | C |
| 15.722 | 850861 | 0.250 | 4 | | 8.2 x 5.5 | 6.00 | Ilford HP5 | 400/27 | N | O | 6/T | 1 | Mikuz,H | D |
| 15.722 | 850862 | 1.000 | 5 | 0.200 | 2.1 x 1.4 | 7.00 | 3M 1000 | 1000/ | N | X | 9/S | 1 | Vanin,G | E |
| 15.732 | 850863 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 8.00 | Fujichrome | 400/27 | N | O | 414/T | 1 | Mikuz,H | F |
| 15.732 | 850864 | 0.250 | 4 | | 8.2 x 5.5 | 8.00 | Ilford HP5 | 400/27 | N | O | 7/T | 1 | Mikuz,H | D |
| 15.739 | 850865 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 3.00 | Ilford HP5 | 400/27 | N | O | 34/T | 1 | Mikuz,H | |
| 15.740 | 850866 | 0.200 | 4.5 | | 10.3 x 6.9 | 5.00 | 3M Slide | 1000/ | N | X | 3/P | 1 | Villa,M | G |
| 15.743 | 850867 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 8.00 | Ilford HP5 | 400/27 | N | O | 35/T | 1 | Mikuz,H | |
| 15.749 | 850868 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 10.00 | Ilford FP4 | 125/22 | N | O | 17/C | 1 | Paolinetti,R | H |
| 15.756 | 850869 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 10.00 | Ilford HP5 | 400/27 | N | O | 39/T | 1 | Mikuz,H | |
| 15.758 | 850870 | 0.225 | 1.5 | 0.140 | 9.1 x 6.1 | 1.50 | Kodak 2415 | | Y | O | 1/S | 1 | Valisa,P | I |
| 15.759 | 850871 | 0.700 | 5 | 0.14 | 2.9 x 2.0 | 8.00 | Kodak IIa-F | | N | M | 54/P | 1 | Ridley,H.B | J |
| 15.763 | 850872 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 23.00 | Ilford FP4 | 125/22 | N | O | 19/C | 1 | Paolinetti,R | H |
| 15.780 | 850873 | 0.225 | 1.5 | 0.140 | 9.1 x 6.1 | 2.50 | Kodak 2415 | | Y | O | 2/S | 1 | Valisa,P | I |

NOTE A Push processed to 800 ASA.

NOTE B (Observer's image identifier is 860115-1. Ed.) Large format (70 mm) film used. City lights interfered with the observation.

NOTE C Exposure taken in moonlight. Image copied 2x. 120 size film. (Observer's image identifier is followed by suffix A. Ed.)

NOTE D 120 size film (6x7 cm).

NOTE E Moonlight and twilight interfered with the observation.

NOTE F Exposure taken in moonlight. Image copied 2x. 120 size film. (Observer's image identifier is preceded by prefix RH. Ed.)

NOTE G Enlargement of the print 2x.

NOTE H (Observer's image identifier is followed by suffix A. Ed.)

NOTE I Instrument is Schmidt camera.

NOTE J Moonlight. (Observer's image identifier is preceded by prefix ZA. Ed.) Instrument uses photographic plates.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.031 | 816152 | 5.0 | B | 99 | | | | | 0.080 | B | | 20 | 4.5M | Y | | Smith,D | |
| 16.11 | 816153 | 4.5 | M | 4A | | | | | 0.05 | B | | 10 | 5 M | Y | 3 | Hale,A | A |
| 16.396 | 816154 | 3.9 | M | 4A | 3.8 | 5 | | | 0.1 | N | 10 | 25 | 4.5 | Y | 1 | Ichikawa,K | |
| 16.412 | 816155 | 3.8 | S | 100 | 6 | 6 | 0.50 | 75 | 0.07 | B | | 10 | 3.0 | N | 1 | Kobayashi,J | |
| 16.681 | 816156 | 4.5: | B | IHW | | | | | 0.080 | B | | 20 | 4.0 | N | 1 | Guthier,O | |
| 16.684 | 816157 | 5.0 | M | 4A | 5 | 3 | 0.2 | 88 | 0.09 | M | 11 | 56 | 3.5TM | Y | 3 | Westlund,M | B |
| 16.691 | 816158 | 3.5 | S | 4A | 12 | 8 | 1.2 | 60 | 0.152 | N | 5 | 44 | 3.5 | N | 2 | Moeller,M | C |
| 16.70 | 816159 | 4.4 | B | 4A | 4.0 3.0 | 7 | 0.13 | 60 | 0.050 | R | 10 | 13 | 4.2T | N | 2 | Jahn,J | D |
| 16.70 | 816160 | 3.8 | S | DCS 8 | | 6 | 2.0 | | 0.080 | B | | 15 | 3 CM | N | 2 | Kroon,B | |
| 16.708 | 816161 | 4.8 | B | | 16.0 | 2 | 0.1 | | 0.063 | R | 13 | 44 | 5.0 | Y | 1 | Bartnik,M | |
| 16.715 | 816162 | 4.6 | B | 4A | | | | | 0.030 | B | | 8 | 2.5CMT | N | 2 | Adamoli,G | |
| 16.719 | 816163 | 4.5 | M | 4A | | 6 | | | 0.08 | B | | 10 | 4.0CM | Y | 1 | Rapavy,P | E |
| 16.72 | 816164 | 4.9 | S | DCS 7 | | 8 | | | 0.040 | B | | 12 | 4 MC | N | 1 | Feijth,H | |
| 16.724 | 816165 | | | 4A | | 8 | 0.3 | | 0.114 | N | 8.7 | 50 | 4.0MC | Y | 1 | Villa,M | |
| 16.729 | 816166 | 4.6 | M | 4A | | 8 | | | 0.05 | B | | 10 | 5.0MTZ | Y | 8 | Melandri,F | |
| 16.729 | 816167 | 4.7 | S | 4A | 7.5 | 7 | 0.6 | 75 | 0.050 | B | | 7 | 4.5CM | N | 1 | Piccinini,M | |
| 16.7291 | 816168 | 5.3 | B | 4A | 3 | 7 | 0.67 | 68 | 0.05 | B | | 10 | 5.0CMT | Y | 2 | Franciosi,C | |
| 16.73 | 816169 | 4.2 | B | 100 | | | | | 0.05 | B | | | 4.5MT | Y | 10 | Bouma,R.J | |
| 16.73 | 816170 | 4.0 | S | 100 | 4 | 7 | 2.5 | 58 | 0.05 | B | | 10 | 4.5MT | Y | 10 | Bouma,R.J | |
| 16.736 | 816171 | 4.8 | M | 4A | 3.5 | 7 | 0.7 | 63 | 0.08 | B | | 11 | 4.0MT | N | 1 | Fleet,R.W | |
| 16.74 | 816172 | 4.0 | B | DCS 7 | | | | | 0.040 | B | | 7 | 5.5MT | Y | 7 | Bus,E.P | |
| 16.74 | 816173 | 3.8 | S | DCS 7 | 6 | 6 | 2.5 | 65 | 0.040 | B | | 7 | 5.5MT | Y | 7 | Bus,E.P | F |
| 16.74 | 816174 | 4.7 | B | DCS 7 | 6 | 6 | | | 0.040 | B | | 8 | 4.5MT | Y | 2 | Scholten,A | G |
| 16.74 | 816175 | 4.3 | S | DCS 7 | 10 | 8 | 1.5 | 66 | 0.050 | B | | 10 | 4.5CM | N | 1 | van der Laan,T.A | |
| 16.74 | 816176 | 4.0 | S | DCS 8 | 6 | 7 | 0.75 | 60 | 0.080 | B | | 15 | 4 CM | Y | 1 | Wils,P | |
| 16.742 | 816177 | 4.6 | M | 4A | | | | | 0.030 | B | | 8 | 4.0MC | Y | 1 | Villa,M | |
| 16.743 | 816178 | 4.8 | S | 100 | 5 | 5 | | | 0.05 | B | | 10 | 4.5MC | Y | 1 | Menichetti,R | |
| 16.750 | 816179 | 4.1 | S | 4A | 4 | 8 | | | 0.080 | B | | 20 | 4.0C | N | 5 | Meozzi,D | |
| 16.75 | 816180 | 4.5 | S | DCS 7 | 4 | 8 | | | 0.050 | B | | 10 | 4 MC | N | 1 | van Loo,F.R | |
| 16.756 | 816181 | | | | 5 | 7 | | | 0.13 | N | 5.5 | 36 | 4.0MC | Y | 1 | Menichetti,R | |
| 16.76 | 816182 | 4.3 | B | 4A | 6 | 7 | 0.65 | 65 | 0.050 | B | | 7 | 4.0 | Y | 2 | Merlin,J.-C | H |
| 16.94 | 816183 | 4.0 | S | 4A | 30 | 7 | 2 | 70 | 0.05 | B | | 7 | 4.5 | Y | 1 | Harrington,P | I |
| 16.95 | 816184 | 4.6 | B | AA | 4 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | J |
| 16.95 | 816185 | 4.7 | B | AA | 4 | 8 | | | 0.050 | B | | 7 | | | | Green,D.W.E | J |
| 16.95 | 816186 | 4.5 | S | AA | 4 | 8 | | | 0.050 | B | | 7 | | | | Green,D.W.E | J |
| 16.95 | 816187 | 4.6 | S | AA | 4 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | J |
| 16.96 | 816188 | | | | 2.5 | 7 | 0.5 | | 0.500 | N | 5 | 96 | | | | Bortle,J.E | K |
| 16.96 | 816189 | 4.2 | B | AAVSO | 5 | | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 16.96 | 816190 | 4.8 | B | AA | 5.5 | 7 | 2 | | 0.080 | B | | 20 | | | | Green,D.W.E | L |
| 16.96 | 816191 | 4.5 | M | AA | | | | | 0.080 | B | | 20 | | | | Green,D.W.E | |
| 16.96 | 816192 | 4.6 | S | AA | | | | | 0.080 | B | | 20 | | | | Green,D.W.E | |
| 16.968 | 816193 | 4.0 | B | 99 | 6 | 3 | 0.75 | 46 | 0.05 | B | | 7 | 4.0 | | 1 | Lairet,R | |
| 16.972 | 816194 | 3.8 | B | 99 | | 5 | 0.80 | 64 | 0.05 | B | | 7 | 4.5 | | 1 | Benavides,A | |
| 16.983 | 816195 | 4.5 | M | 4A | 6 | 7 | 1 | 58 | 0.063 | B | | 9 | 2.9 | Y | | DeYoung,J.A | M |

NOTE A Observation affected by moonlight and intermittent clouds.
NOTE B (Twilight, moon).
NOTE C Twilight.
NOTE D PA approximate.
NOTE E Coma ellipt.
NOTE F Very transparent sky, comet easily visible to naked eye.
NOTE G Tail length and PA determined in 15x80 binoculars: 0.50 deg. long at PA 55.
NOTE H Moon.
NOTE I Low in sky.
NOTE J Coma diameter approximate.
NOTE K Tail length is lower limit. Nuc. mag. 8.8, moonlight.
NOTE L Coma diameter approximate. Tail length is lower limit.
NOTE M High thin overcast/haze.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.033 | 830819 | 0.43 | 0.203 | N | 6 | 61,116 | 6 | 4.5 | 1 | Williams,J | A |
| 16.682 | 830820 | 1.6 | 0.090 | M | 11 | 56 | 5 | 3.5 | 3 | Westlund,M | B |
| 16.733 | 830821 | | 0.12 | R | 15 | 53, 74,131 | | 5.0 | 2 | Franciosi,C | C |
| 16.735 | 830822 | 0.13 | 0.125 | N | 5.8 | 28, 40, 60 | 33 | 5.0 | 1 | Riccabone,G | D |
| 16.748 | 830823 | 0.10 | 0.40 | N | 5 | 81,254 | 15 | 4.0 | 2 | Merlin,J.-C | E |
| 16.991 | 830824 | 1.1 | 0.356 | SC | 11 | 70 | 16 | 5.8 | 1 | Cuthill,D.D | F |

NOTE A Bright, out of round, central condensation. The tail appeared "washed out". Tail at PA 90. Moonlight, twilight, city lights interfered with the observation.
NOTE B Disturbing lights: twilight, moon.
NOTE C Pseudo nucleus diameter 1'. Plasma jet PA 85, length approximately 1'. Tail PA 68, length approximately 40'. Coma approximately 2.5'. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Diffuse luminous regions at PA 156 and at PA 31. Magnifications of 80 and 144 also used. Two drawings included. Moonlight, twilight, and intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE E Tail at PA 33, dust tail? then curved to PA 55; tail at PA 65, PA given = axis of fan shaped tail, jet at PA 223, very condensed, jet at PA 268, very condensed, jet at PA 355, straight and narrow.
NOTE F This drawing is a composite made from a visual observation and a photo taken with the 5" f/10 Schmidt-Cassegrain on Plus-X film for 16 min. (no filters). Fainter field stars were drawn near the inner tail region only. The sharp "spike" (3') at PA 83 is the brightest feature of the tail.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.001 | 850874 | 1.260 | 6.2 | 0.203 | 1.6 x 1.1 | 2.00 | Kodak VR1000 | 1000/ | N | T | 20/C | 1 | Priester,D.C | A |
| 16.002 | 850875 | 0.200 | 4.5 | | 10.3 x 6.9 | 5.05 | Kodak Tri-X | | N | T | 21/C | 1 | Priester,D.C | B |
| 16.006 | 850876 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | Kodak Tri-X | | N | T | 22/C | 1 | Priester,D.C | B |
| 16.008 | 850877 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.25 | Kodak Tri-X | | N | T | 23/C | 1 | Priester,D.C | B |
| 16.099 | 850878 | 0.610 | 4 | 0.152 | 3.4 x 2.3 | 3.00 | Kodak Tri-X | 400/ | N | X | 1/N | 1 | Lazerson,H | C |
| 16.704 | 850879 | 0.500 | 5 | 0.100 | 4.1 x 2.7 | 12.00 | ORWO NP 27 | 400/27 | N | C | 3/N | 1 | Rapavy,P | D |
| 16.722 | 850880 | 0.050 | 1.8 | | 39.6 x27.0 | 0.17 | Ektachrome | 400/ | N | X | 6/P | 8 | Melandri,F | E |
| 16.738 | 850881 | 0.225 | 1.6 | 0.136 | 9.1 x 6.1 | 1.50 | Kodak 2415 | | Y | O | 001/T | 1 | Belli,V | F |
| 16.741 | 850882 | 1.400 | 5.6 | 0.260 | 1.5 x 1.0 | 17.00 | Kodak Tri-X | 400/27 | N | O | 2/C | 1 | Paolinetti,R | |
| 16.743 | 850883 | 2.400 | 4 | 0.600 | 0.9 x 0.6 | 8.00 | Kodak 2415 | | Y | O | 002/T | 1 | Belli,V | G |
| 16.751 | 850884 | 2.400 | 4 | 0.600 | 0.9 x 0.6 | 4.00 | Kodak 2415 | | Y | O | 003/T | 1 | Belli,V | G |

NOTE A Start time uncertain.
NOTE B Push processed to 800 ASA.

DATE: 16 JAN 1986

DATE: 16 JAN 1986

NOTE C "Push" processed to 800 ASA.
NOTE D City lights and moonlight interfered with the observation. Large format (68x87 mm) film used.
NOTE E The white streak below in the print is caused by an airplane. Moonlight, twilight, and zodiacal light interfered with the observation.
NOTE F Instrument is Schmidt camera.
NOTE G Instrument is Newtonian telescope.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.368 | 816196 | 4.5 | M | 4A | | | | | 0.035 | B | | 7 | 5 | Y | 1 | Watanabe,A | |
| 17.38 | 816197 | 4.5 | B | 4A | 2.3 | 7 | 0.7 | 65 | 0.05 | B | | 7 | 2.5T | N | 1 | Kanai,K | |
| 17.385 | 816198 | 4.4 | M | 4A | 3.3 | 8 | 1.5 | 60 | 0.08 | B | | 11 | 4 MC | N | 1 | Mitsuma,S | A |
| 17.39 | 816199 | 4.8 | S | AAVSO | 3 | 7 | 1 | 65 | 0.13 | N | 6.3 | 24 | 4.5M | Y | 1 | Hayashi,A | |
| 17.39 | 816200 | 4.5 | M | 4A | | | 0.3 | | 0.05 | B | | 7 | 3.0TM | Y | 2 | Suzuki,K | B |
| 17.394 | 816201 | 4.0 | S | 4A | | | | | 0.030 | B | | 8 | CM | Y | 1 | Kato,T | C |
| 17.40 | 816202 | 3.7 | B | 4A | 5 | 7 | 0.5 | 60 | 0.08 | B | | 20 | 3.0CT | N | 1 | Oka,A | |
| 17.684 | 816203 | 4.8 | B | 4A | | | | | 0.04 | B | | 8 | 3.0C | N | 1 | Czerniewski,W | D |
| 17.688 | 816204 | 4.8 | M | CZ | 30 | 3 | 2 | 320 | 0.03 | B | | 6 | 5.0 | Y | 1 | Hajek,P | |
| 17.694 | 816205 | 4.4 | B | 4A | 3 | 7 | 0.33 | | 0.063 | R | 13.3 | 21 | 3 T | Y | 1 | Pilski,A | |
| 17.698 | 816206 | 5.0 | | | | | | | 0.050 | B | | 10 | TCM | | 1 | Kauschke,A | E |
| 17.707 | 816207 | 3.6 | S | 4A | 15 | 8 | | | 0.080 | R | 12 | 16 | 4.0 | Y | 1 | Moeller,M | F |
| 17.71 | 816208 | 4.5 | B | 4A | 3.0 | 7 | 0.06 | 100 | 0.050 | R | 10 | 13 | 3.0T | N | 2 | Jahn,J | G |
| 17.712 | 816209 | 5.0 | B | 4A | | 1 | | | 0.030 | B | | 8 | 3.0MC | N | 2 | Richert,M | |
| 17.715 | 816210 | 4.6 | M | CZ | 5 | 9 | | | 0.080 | B | | 10 | 3.5 | N | 1 | Bilek,V | H |
| 17.715 | 816211 | 4.5 | B | 4A | 8 | 7 | 0.3 | | 0.080 | R | 6.2 | 50 | M | Y | 1 | Pfitzner,E | |
| 17.718 | 816212 | 5.2 | B | 4A | 8 | 5 | | | 0.150 | R | 15 | 56 | 4.0C | Y | 1 | Bauer,H.-P | I |
| 17.719 | 816213 | 4.8 | | 4A | | | | | 0.030 | B | | 8 | M | | 1 | Ratz,M | |
| 17.719 | 816214 | 3.9 | M | CZ | | | | | 0.10 | B | | 25 | 3 MTC | Y | 1 | Valasek,V | J |
| 17.719 | 816215 | 4.3 | B | | 8.4 4.4 | 6 | 3.5 | | 0.030 | B | | 8 | 5.7C | Y | 1 | Winkler,R | |
| 17.72 | 816216 | | | 4A | 5 | 7 | 2.00 | | 0.10 | B | | 14 | 2.9 | Y | 1 | Kraling,W | |
| 17.72 | 816217 | 4.2 | B | 4A | | | 2.00 | | 0.056 | B | | 8 | 2.9 | Y | 1 | Kraling,W | K |
| 17.720 | 816218 | 4.8 | B | 4A | | 6 | | | 0.050 | B | | 10 | 3.0 | N | 1 | Lehmann,T | |
| 17.726 | 816219 | 4.2 | B | IHW | | 5 | 2.0 | | 0.080 | B | | 20 | 4.0 | Y | 1 | Guthier,O | L |
| 17.729 | 816220 | 4.5 | S | 4A | | | | | 0.050 | B | | 7 | 4.4CM | Y | 5 | Piccinini,M | |
| 17.729 | 816221 | 4.5 | | 4A | | | | | 0.030 | B | | 8 | M | | 1 | Ratz,K | |
| 17.7291 | 816222 | 5.1 | B | 4A | 3 | 7 | 0.58 | 60 | 0.05 | B | | 10 | 4.7CMTZY | | 2 | Franciosi,C | |
| 17.732 | 816223 | 5.0 | B | 4A | 3 | 8 | 0.25 | 50 | 0.330 | N | 4.5 | 59 | 4.8 | Y | 1 | Castino,R | M |
| 17.733 | 816224 | 3.9: | S | 4A | | | | | | EY | | | 4.8 | Y | 2 | Milani,G | N |
| 17.735 | 816225 | | | | 5 | 5 | 1.17 | 60 | 0.08 | B | | 20 | 4.8 | Y | 2 | Milani,G | N |
| 17.736 | 816226 | 4.6 | M | 4A | | 8 | 0.6 | | 0.05 | B | | 10 | 5.5MTZ | Y | 1 | Melandri,F | O |
| 17.736 | 816227 | | | | 4 | 6 | 1.0 | 75 | 0.200 | N | 5 | 60 | 4.4CM | Y | 5 | Piccinini,M | |
| 17.737 | 816228 | 4.7 | S | | | | | | 0.05 | B | | 7 | | | | Giampaolo,G | |
| 17.738 | 816229 | 4.5 | M | 4A | | | 0.8 | | 0.030 | B | | 8 | 4.5M | Y | 1 | Villa,M | |
| 17.739 | 816230 | 5.2 | S | 4A | 5 | 7 | 1 | 50 | 0.05 | B | | 10 | 3.5MC | N | 1 | Giuntoli,M | P |
| 17.743 | 816231 | 5.0 | B | 4A | 3 | 8 | 0.33 | 50 | 0.050 | B | | 16 | 5.0 | Y | 1 | Castino,R | Q |
| 17.743 | 816232 | 4.8 | B | 4A | 4.4 | 7 | 0.55 | 74 | 0.080 | B | | 20 | 4.5M | Y | 2 | Dionisi,M | R |
| 17.750 | 816233 | 4.8 | S | 100 | 5 | 8 | 0.42 | 40 | 0.05 | B | | 10 | 4.5MC | Y | 1 | Menichetti,R | |
| 17.757 | 816234 | 4.4 | M | 4A | 35 | | | | 0.050 | B | | 10 | 2.5MC | N | 1 | Lozano,L | D |
| 17.764 | 816235 | 3.4 | | 4A | 2 | 5 | 0.05 | 90 | 0.08 | B | | 15 | 3.5 | Y | 1 | Dietrich,M | S |
| 17.972 | 816236 | 3.7 | B | 99 | | 5 | 0.74 | 56 | 0.05 | B | | 7 | 4 | N | 4 | Benavides,A | |
| 17.979 | 816237 | 4.7 | S | 4A | 5.5 | | 0.32 | 60 | 0.035 | B | | 7 | 3.5CM | Y | 3 | Morrison,W | |

NOTE A 7.4.
NOTE B Cloud.
NOTE C Faintest star by 8x30 binoculars = 4.5.
NOTE D Clouds.
NOTE E Tail length = y.
NOTE F Twilight.
NOTE G PAs approximate.
NOTE H Coma diameter uncertain. Fog.
NOTE I Instrument is Coude refractor.
NOTE J Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE K Tail length approximate.
NOTE L Coma diameter 4 to 5 arc min.
NOTE M Moon and twilight.
NOTE N Cirri at the horizon, moonlight.
NOTE O Veiled sky.
NOTE P Tail length and PA uncertain.
NOTE Q Moon.
NOTE R Coma diameter accuracy +/-0.6. Tail length accuracy +/-0.01. PA by drawing; PA 74 at distance 0 deg., PA 65 deg. at distance 0.32 deg., PA 63 at distance 0.58 deg.
NOTE S Haze. (Translated by IHW staff. Observer indicated "A" method [Argelander?]. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.687 | 830825 | 0.07 | 0.100 | B | | 25 | 28 | 2.9 | 1 | Gojdic,S | |
| 17.705 | 830826 | | 0.203 | SC | 10 | 340 | | | 2 | Freydank,H | A |
| 17.727 | 830827 | 0.5 | 0.25 | N | 6 | 80 | 15 | 4.0 | 2 | Adamoli,G | B |
| 17.741 | 830828 | 0.07 | 0.100 | B | | 25 | 25 | 2.9 | 1 | Havrilak,M | |
| 17.760 | 830829 | 1.6 | 0.05 | B | 8 | 10 | 10 | 4.5 | 1 | Menichetti,R | C |

NOTE A Brightness 3.9 mag.; dia. about 1' 15".
NOTE B City lights and moonlight interfered with the observation. Tail at PA 60.
NOTE C Tail at PA 60 deg. Vertex distance = 2.4', semi latus rectum P1 = 2.4', P2 = 2.4'.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.726 | 850885 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 2.00 | Ilford HP5 | 400/27 | N | O | 51/T | 1 | Mikuz,H | A |
| 17.730 | 850886 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 3.00 | Ilford HP5 | 400/27 | N | O | 52/T | 1 | Mikuz,H | A |
| 17.732 | 850887 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 3.00 | Ilford HP5 | 400/27 | N | O | 53/T | 1 | Mikuz,H | A |
| 17.734 | 850888 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 3.00 | Ilford HP5 | 400/27 | N | O | 54/T | 1 | Mikuz,H | A |
| 17.736 | 850889 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 3.00 | Ilford HP5 | 400/27 | N | O | 55/T | 1 | Mikuz,H | A |
| 17.741 | 850890 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 3.00 | Ilford HP5 | 400/27 | N | O | 57/T | 1 | Mikuz,H | A |

NOTE A Exposures taken in moonlight.

DATE: 18 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.017 | 816238 | | | 4A | 24 | 7 | | | 0.200 | SC | 10 | 78 | 4.2 | N | 1 | Saraceno,J | A |
| 18.017 | 816239 | 5.3 | B | 4A | | | | | 0.050 | B | | 7 | | | | Saraceno,J | |
| 18.06 | 816240 | 4.6 | V | 4A | | | | | | EY | | | 5.5 | Y | 1 | Keen,R | |
| 18.06 | 816241 | 4.7 | | 4A | 5 | 8 | 2.5 | 60 | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | B |
| 18.10 | 816242 | 4.4 | M | 4A | | | 4.5 | 65 | 0.05 | B | | 10 | 5.5M | Y | 3 | Hale,A | C |
| 18.10 | 816243 | 4.1 | M | 4A | | 9 | | | 0.050 | B | | 12 | 4.5M | Y | 17 | Morris,C.S | |
| 18.10 | 816244 | 4.1 | M | 4A | 3 | 8 | 1.0 | 62 | 0.080 | B | | 20 | 4.5M | Y | 17 | Morris,C.S | D |
| 18.10 | 816245 | 4.1 | | 4A | | 9 | | | | EY | | | 4.5M | Y | 17 | Morris,C.S | |
| 18.104 | 816246 | 4.5: | | 100, 4A | | | 1 | | 0.050 | B | 4 | 7 | 5.3 | Y | | Underhay,E | E |
| 18.11 | 816247 | 4.3 | B | 4A | | | | | | EY | | | 5.5M | Y | 3 | Hale,A | C |
| 18.38 | 816248 | 4.5 | B | 4A | | 8 | | | 0.05 | B | | 7 | 3.0T | N | 1 | Kanai,K | |
| 18.38 | 816249 | 4.5 | M | 4A | | | | | 0.08 | B | | 11 | 3.5MT | N | 1 | Mitsuma,S | F |
| 18.39 | 816250 | 5.0 | S | AAVSO | 2.5 | 7 | 1 | 65 | 0.13 | N | 6.3 | 24 | 4.0M | Y | 1 | Hayashi,A | |
| 18.49 | 816251 | 4.6 | B | M | 3 | 4 | 0.1 | | 0.05 | B | | 7 | | | | Guryanov,S | |
| 18.55 | 816252 | 4.7 | B | AAVSO | | | | | 0.10 | R | | | | | | Churyumov,K | |
| 18.57 | 816253 | 4.1 | B | M | | 7 | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 18.63 | 816254 | 7 : | B | M | | 5 | | | 0.03 | B | | 8 | | | | Zinvyev,V.A | G |
| 18.64 | 816255 | 3.8 | B | E | 8 | 5 | 2.5 | 69 | 0.05 | B | | 7 | | | | Mormil,V | |
| 18.65 | 816256 | 4.2 | B | M | 4 | | | | 0.08 | R | | 29 | | | | Nesterov,Yu | |
| 18.65 | 816257 | 4.9 | B | M | | | | | 0.07 | N | 8 | 33 | | | | Yurchenko,Yu | |
| 18.66 | 816258 | 3.8 | B | E | 8 | 5 | 2.5 | 69 | 0.05 | B | | 7 | | | | Mormil,V | |
| 18.68 | 816259 | 3.8 | B | E | | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 18.69 | 816260 | 4.1 | S | DCS 8 | | 6 | 2.3 | | 0.080 | B | | 15 | 3 CM | N | 2 | Kroon,B | |
| 18.718 | 816261 | 5.0 | B | 4A | 3 | 8 | 0.22 | 50 | 0.050 | B | | 16 | 4.8 | Y | 1 | Castino,R | H |
| 18.7291 | 816262 | 4.7 | B | 4A | 4 | 7 | 1 | 55 | 0.05 | B | | 10 | 4.7MTZ | Y | 1 | Franciosi,C | |
| 18.760 | 816263 | 4.4 | M | 4A | 40 | 7 | 1.5 | 286 | 0.050 | B | | 10 | 3.0MC | Y | 1 | Lozano,L | |
| 18.766 | 816264 | 4.4 | M | 4A | 3.3 | 8 | 0.58 | 40 | 0.153 | N | 8.5 | 65 | | Y | 6 | Torres,E | I |
| 18.771 | 816265 | 3.9 | B | 4A | 3 | 8 | | | 0.05 | B | | 20 | C | N | 4 | Gallego,J | J |
| 18.95 | 816266 | 4.4 | B | AA | 4 | 8 | | | 0.050 | B | | 7 | | | | Green,D.W.E | G |
| 18.96 | 816267 | 4.3 | B | AA | 5 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | G |
| 18.96 | 816268 | 4.2 | S | AA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 18.96 | 816269 | 4.2 | S | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 18.968 | 816270 | 3.6 | B | 99 | | 5 | 0.74 | 58 | 0.05 | B | | 7 | 3.7 | | 3 | Benavides,A | K |
| 18.97 | 816271 | 4.3 | B | AA | 4.5 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | G |
| 18.976 | 816272 | 3.6 | B | 99 | 6 | 3 | 0.67 | 54 | 0.05 | B | | 7 | 4.8 | | | Lairet,R | |
| 18.98 | 816273 | 4.0 | S | AA | 4.5 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | G |

NOTE A Light pollution.
NOTE B Modified Sidgwick method used.
NOTE C First quarter moon may have slightly affected magnitude and tail length estimates.
NOTE D Broad dust tail adjacent to southern edge of gas tail. Total angular extent of combined tails was from PA 55 to 75.
NOTE E Visible naked eye as 0.5 deg. streak.
NOTE F 7.1.
NOTE G Coma diameter approximate.
NOTE H Moon and twilight.
NOTE I (Observer gave limit as 7.5. Ed.)
NOTE J Moon & horizon.
NOTE K With zodiacal light.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.734 | 830830 | 0.10 | 0.125 | N | 8 | 28, 40, 60 | 24 | 5.0 | 2 | Riccabone,G | A |
| 18.769 | 830831 | 0.7 | 0.153 | N | 8.5 | 65 | 35 | 7.5 | 1 | Cifuentes,E | B |

NOTE A Nucleus diameter 68 arc sec. Moonlight, twilight, and city lights interfered with the observation. Magnifications of 80 and 144 also used. Two drawings included. (Translated by IHW staff. Ed.)
NOTE B Bright nucleus. Long gas tail, estimate 35 arc min. First third of tail brighter and more visible. (Translated by IHW staff. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.098 | 850891 | 0.610 | 4 | 0.152 | 3.4 x 2.3 | 3.00 | Kodak Tri-X | 400/ | N | X | 2/N | 1 | Lazerson,H | A |

NOTE A "Push" processed to 800 ASA.

DATE: 19 JAN 1986 DATE: 19 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.06 | 816274 | 4.5 | V | 4A | | | | | | EY | | | 5.5 | Y | 1 | Keen,R | |
| 19.06 | 816275 | 4.6 | | 4A | 4 | 8 | 2.0 | 60 | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | A |
| 19.09 | 816276 | 4.1 | M | 4A | 3 | 8 | 2.0 | 56 | 0.080 | B | | 20 | 4.5M | Y | 17 | Morris,C.S | B |
| 19.10 | 816277 | 4.1 | | 4A | | 9 | | | | EY | | | 4.5M | Y | 17 | Morris,C.S | |
| 19.101 | 816278 | 4.9 | B | 100, 4A | 10 | 7 | 1.0 | 300 | 0.050 | B | | 10 | 5.0MZ | Y | 1 | Stapleton,J | C |
| 19.102 | 816279 | 4.6 | | 4A | | 8 | | | | EY | | | 5 M | Y | 6 | Edberg,S.J | D |
| 19.11 | 816280 | 4.4 | M | 4A | | | 2 | 65 | 0.05 | B | | 10 | 4.5C | Y | 21 | Hale,A | E |
| 19.37 | 816281 | 3.6 | S | 4A | | 8 | | | 0.08 | B | | 11 | 2.0 | N | 1 | Momose,M | F |
| 19.38 | 816282 | 4.3 | M | 4A | | 8 | | | 0.08 | B | | 11 | 3 MT | N | 1 | Mitsuma,S | G |
| 19.38194 | 816283 | 4 | B | 4A | | 9 | | | 0.15 | N | 6 | 28 | 4.5 | | 1 | Okumura,S | |
| 19.382 | 816284 | 4.2 | M | 4A | 1 | | 0.6 | 60 | 0.030 | B | | 8 | 4.0CMT | Y | 2 | Kato,T | |
| 19.386 | 816285 | 3.8 | M | 4A | | | | | 0.07 | B | | 10 | 3.0 | N | 8 | Ichikawa,K | |
| 19.39 | 816286 | 4.5 | B | 4A | 2.3 | 8 | 0.3 | | 0.05 | B | | 7 | 2.5TC | N | 2 | Kanai,K | |
| 19.39 | 816287 | 5.1 | S | AAVSO | 2 | 8 | 0.5 | 65 | 0.13 | N | 6.3 | 24 | 3.0M | Y | 1 | Hayashi,A | |
| 19.39 | 816288 | 4.4 | S | 4A, 100 | 4.5 | 8 | | | 0.07 | B | | 10 | 3.5M | Y | 1 | Yasuki,M | |
| 19.40 | 816289 | 4.4 | M | SAO | 6 | 7 | 0.67 | 65 | 0.06 | R | 12 | 22 | 3.0M | Y | 1 | Nakamura,A | |
| 19.40 | 816290 | 4.5 | M | 4A | | | | | 0.05 | B | | 7 | 3.0TM | Y | 2 | Suzuki,K | |
| 19.41 | 816291 | 4.5 | M | | | | 2.3 | 55 | 0.05 | B | | 7 | 4 | Y | 2 | Hiraga,M | |
| 19.55 | 816292 | 4.7 | B | AAVSO | | | | | 0.10 | R | | | | | | Churyumov,K | |
| 19.56 | 816293 | 4.7 | B | AAVSO | | | | | 0.10 | R | | | | | | Churyumov,K | |
| 19.60 | 816294 | 3.8 | V | M | | | | | | EY | | | | | | Poroshin,A | H |
| 19.64 | 816295 | 7 : | B | M | | | | | 0.03 | B | | 8 | | | | Zinvyev,V.A | |
| 19.719 | 816296 | 4.5 | M | 4A | | 7 | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | I |
| 19.743 | 816297 | 4.5 | S | 4A | | 7 | 0.1 | 60 | 0.08 | B | | 20 | 2.9 | N | 2 | Storey,D | J |
| 19.75 | 816298 | 4.7 | S | 99 | 5 | 7 | 0.5 | 60 | 0.065 | B | | 12 | 4.5 | N | 1 | Foulkes,M | K |
| 19.750 | 816299 | 4.5 | S | 4A | | 7 | 0.18 | 70 | 0.08 | B | | 20 | 2.9 | Y | 2 | Storey,D | J |
| 19.752 | 816300 | 4.9 | M | 4A | | | | | 0.050 | B | | 7 | 5.8 | Y | 1 | Stott,D | L |
| 19.758 | 816301 | 3.4 | S | 4A | | | 0.7 | 65 | 0.08 | B | | 11 | 3 | Y | 1 | Gainsford,M.J | M |
| 19.760 | 816302 | 3.2 | S | 4A | 3.4 | 6 | | 60 | 0.25 | N | 6 | 60 | 3 | Y | 1 | Gainsford,M.J | N |
| 19.767 | 816303 | 4.1 | B | 99 | 4.8 | 9 | 0.40 | 80 | 0.050 | B | | 10 | 4.2MT | Y | 3 | Abbott,J | O |
| 19.767 | 816304 | 4.2 | S | 4A | 6.3 | 9 | 1.0 | 62 | 0.05 | B | | 10 | 2.9 | Y | 1 | Hurst,G.M | |
| 19.771 | 816305 | 3.9 | B | 4A | 3 | 8 | | | 0.05 | B | | 20 | C | N | 4 | Gallego,J | P |
| 19.771 | 816306 | 4.3 | M | 4A | 40 | 7 | 1.5 | 290 | 0.050 | B | | 10 | 3.0MC | Y | 1 | Lozano,L | |
| 19.774 | 816307 | 4.2 | S | 4A | 5.4 | 9 | 1.0 | 62 | 0.08 | B | | 15 | 2.9 | Y | 1 | Hurst,G.M | |
| 19.972 | 816308 | 3.6 | B | 99 | 4 | 4 | 0.73 | 55 | 0.05 | B | | 7 | 4.0 | | | Lairet,R | |

NOTE A Modified Sidgwick method used.
NOTE B Total angular extent of combined tails was from PA 50 to 70.
NOTE C See with eye, clear tail. (PA approximate and may have been measured incorrectly. Ed.)
NOTE D Comparison star Omicron Aqr 5.5 deg. above comet in angular altitude. No extinction correction.
NOTE E Observed from within Los Angeles city limits. Probably considerable interference from light pollution. Despite this, the comet could be briefly glimpsed with the naked eye.
NOTE F Bright moon. (Translated by IHW staff. Ed.)
NOTE G 6.8.
NOTE H Faint central condensation.
NOTE I Moon. Clouds. Twilight.
NOTE J III seeing. Transparency v. good. Twilight present.
NOTE K Moon up.
NOTE L Moon.
NOTE M Low.
NOTE N Low. Tail length uncertain.
NOTE O Comparison stars 2.9, 4.7, 5.1. Hint of a tail structure.
NOTE P Moon & horizon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.769 | 830832 | 2.4 | 0.05 | B | | 10 | 25 | 2.9 | 1 | Hurst,G.M | A |

NOTE A Tail at PA 62 deg., length 1 deg.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.038 | 850892 | 0.600 | 4 | 0.150 | 3.4 x 2.3 | 10.00 | Fujichrome | 400/ | N | T | 1/S | 1 | Levy,A | |
| 19.053 | 850893 | 0.600 | 4 | 0.150 | 3.4 x 2.3 | 12.00 | Fujichrome | 400/ | N | T | 2/S | 1 | Levy,A | |
| 19.071 | 850894 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 5.00 | Fuji HR 400 | | N | T | 6/P | 1 | Cunningham,J | A |
| 19.075 | 850895 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 3.00 | Fuji HR 400 | | N | T | 7/P | 1 | Cunningham,J | B |
| 19.100 | 850896 | 2.000 | 10 | 0.203 | 1.0 x 0.7 | 0.17 | 3M 1000 | 1000/ | N | O | 22/N | 6 | Edberg,S.J | |
| 19.104 | 850897 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 0.17 | Ilford HP 5 | 500/ | N | O | 63/C | 6 | Edberg,S.J | |
| 19.105 | 850898 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 0.33 | Ilford HP 5 | 500/ | N | O | 64/C | 6 | Edberg,S.J | |
| 19.106 | 850899 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 0.50 | Ilford HP 5 | 500/ | N | O | 65/C | 6 | Edberg,S.J | |
| 19.108 | 850900 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 0.67 | Ilford HP 5 | 500/ | N | O | 66/C | 6 | Edberg,S.J | |
| 19.109 | 850281 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 0.27 | Ilford HP 5 | 500/ | N | O | 67/C | 7 | Edberg,S.J | C |
| 19.111 | 850901 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 1.00 | Ilford HP 5 | 500/ | N | O | 68/C | 6 | Edberg,S.J | |

NOTE A Film "push" processed from ISO 400 to 1000.
NOTE B Cloud? Film "push" processed from ISO 400 to 1000.
NOTE C Exposure time approximate.

DATE: 20 JAN 1986

DATE: 20 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.06 | 816309 | 4.6 | V | 4A | | | | | | EY | | | 5.0 | Y | 1 | Keen,R | |
| 20.06 | 816310 | 4.6 | | 4A | 5 | 8 | 1.8 | 60 | 0.040 | B | | 8 | 5.0 | Y | 1 | Keen,R | A |
| 20.09 | 816311 | 4.1 | M | 4A | | 8 | 1.0 | | 0.080 | B | | 20 | 3.5M | Y | 14 | Morris,C.S | |
| 20.09 | 816312 | 4.1 | M | 4A | | | | | 0.050 | B | | 12 | 3.5M | Y | 14 | Morris,C.S | |
| 20.1007 | 816313 | 4.1 | S | DCS | 6 | 9 | 0.35 | 67 | 0.080 | B | | 20 | 4.5 | | 3 | Machholz,D | B |
| 20.1042 | 816314 | 4.3 | S | DCS | 7 | 9 | 0.45 | 67 | 0.152 | N | 8.0 | 76 | 4.5 | | 3 | Machholz,D | B |
| 20.1049 | 816315 | 6.7 | S | SAO | 1 | 9 | | | 0.152 | N | 8.0 | 76 | 4.5 | | 3 | Machholz,D | C |
| 20.208 | 816316 | 4.6 | M | 4A | 23 | 8 | 1.83 | 300 | 0.05 | B | | 10 | 5.0 | Y | 1 | Fabre,R | D |
| 20.374 | 816317 | 4.5 | S | | 1 | 7 | 0.03 | 60 | 0.10 | N | 10 | 55 | 3.0T | Y | 1 | Kato,T | |
| 20.38 | 816318 | 4 | | 4A | | | 0.3 | | 0.05 | B | | 7 | 4.0TM | Y | 2 | Suzuki,K | |
| 20.381 | 816319 | 4.0 | M | 4A | 2 | | | | 0.030 | B | | 8 | 4.0CT | Y | 1 | Kato,T | |
| 20.385 | 816320 | 4.0 | B | 4A | | | | | 0.070 | B | | 10 | | Y | 3 | Nakamura,Y | |
| 20.39 | 816321 | 3.5 | | | 6 | 7 | | | 0.12 | B | | 20 | 5.5 | Y | 1 | Washi,S | E |
| 20.40 | 816322 | 3.5 | B | 4A | 4 | 8 | 0.3 | 60 | 0.08 | B | | 20 | 2.5CT | N | 1 | Oka,A | |
| 20.410 | 816323 | 3.8 | S | 4A | 5 | 7 | 0.50 | 70 | 0.07 | B | | 10 | 3.0 | N | 1 | Kobayashi,J | |
| 20.50 | 816324 | 4.5 | B | M | 2 | 4 | 0.1 | | 0.05 | B | | 7 | | | | Guryanov,S | |
| 20.66 | 816325 | 4.7 | B | AAVSO | | | | | 0.10 | R | | | | | | Churyumov,K | |
| 20.667 | 816326 | 5.0 | M | 4A | 18 | 7 | 0.12 | 310 | 0.150 | N | 5.3 | 45 | 4.8 | Y | 1 | Wikholm,L | |
| 20.698 | 816327 | 4.3 | M | CZ | 5 | 8 | | | 0.080 | B | | 10 | 4.0T | Y | 1 | Bilek,V | |
| 20.698 | 816328 | 3.7 | | CZ | | | | | 0.10 | B | | 25 | MTC | Y | 1 | Valasek,V | F |
| 20.70 | 816329 | 4.8 | M | AA | 5 | 8 | 0.6 | 100 | 0.08 | R | 8.3 | 26 | | | | Keszthelyi,S | G |
| 20.701 | 816330 | 4.4 | B | 4A | 6 | 7 | 0.1 | | 0.080 | R | 6.2 | 50 | M | Y | 1 | Pfitzner,E | |
| 20.703 | 816331 | 4.2 | M | AAVSO | | 9 | 1 | | 0.063 | R | 13.3 | 52 | | | | Kosa-Kiss,A | H |
| 20.705 | 816332 | 4.2 | M | CZ | | 6 | 0.5 | | 0.05 | B | | 7 | 2.9M | | 2 | Pravec,P | I |
| 20.705 | 816333 | 4.5 | M | CZ | 3 | 6 | | | 0.055 | R | 6 | 12 | 2 TM | N | 1 | Silhan,J | |
| 20.708 | 816334 | 4.3 | B | CZ | 20 | 5 | | | 0.04 | B | | 7 | 5.0 | Y | 1 | Brancik,K | |
| 20.71 | 816335 | 3.6 | M | 4A | 5 | 6 | 0.8 | 63 | 0.05 | B | | 7 | 4.0 | Y | 4 | Granslo,B.H | |
| 20.71 | 816336 | 4.5 | S | DCS 7 | 2 | 9 | | | 0.100 | B | | 14 | 2.5MCT | N | 1 | van Loo,F.R | |
| 20.715 | 816337 | 3.3 | S | | | | | | 0.06 | B | | 10 | | | | Giampaolo,G | |
| 20.7187 | 816338 | 4.5 | B | 4A | 3 | 7 | 0.33 | 53 | 0.05 | B | | 10 | 4.7MTZ | Y | 2 | Franciosi,C | |
| 20.719 | 816339 | 4.2 | V | 4A | | | | | | EY | | | 4.5M | Y | 1 | Hasubick,W | J |
| 20.719 | 816340 | 4.0 | B | 4A | 5.4 | 7 | 2.07 | | 0.10 | B | | 14 | 4.5M | Y | 1 | Hasubick,W | K |
| 20.719 | 816341 | 4.2 | M | CZ | 3 | 7 | | | 0.055 | R | 6 | 12 | 2.5M | N | 1 | Silhan,J | |
| 20.722 | 816342 | 5.0 | B | 4A | | 8 | | | 0.050 | B | | 16 | 4.5 | Y | 1 | Castino,R | L |
| 20.722 | 816343 | 4.5 | B | 4A | 5.4 | 6 | 0.4 | | 0.080 | B | | 20 | 4.5M | Y | 1 | Koch,V | |
| 20.722 | 816344 | 4.7 | | XI AQR | 4 | 7 | 0.50 | 40 | 0.350 | SC | 11 | 120 | 4.0TM | N | 1 | Marx,H | M |
| 20.722 | 816345 | 3.8 | M | 4A | | 6 | | | 0.08 | B | | 10 | 3.0CM | N | 1 | Rapavy,P | N |
| 20.726 | 816346 | 4.3 | M | 4A | | 8 | 0.7 | 60 | 0.05 | B | | 10 | 4.0M | Y | 1 | Vanin,G | |
| 20.729 | 816347 | 4.4 | M | 4A | | 8 | | | 0.05 | B | | 10 | 4.0MTZ | Y | 8 | Melandri,F | |
| 20.729 | 816348 | 4.0 | B | 4A | 8.0 | 8 | 0.5 | 60 | 0.070 | B | | 20 | 4.5T | N | 1 | Koschny,D | O |
| 20.729 | 816349 | 4.0 | S | 4A | 5 | 7 | 1.5 | 55 | 0.080 | B | | 15 | 4.5C | Y | 1 | Korth,S | P |
| 20.729 | 816350 | 3.6 | B | IHW | 4 | 7 | 2.7 | 61 | 0.080 | B | | 20 | 3.5 | Y | 1 | Guthier,O | |
| 20.729 | 816351 | 4.3 | M | 4A | | 8 | | | 0.030 | B | | 8 | 3.5M | Y | 1 | Villa,M | |
| 20.73 | 816352 | 4.2 | B | AA | 5 | 7 | 0.7 | 53 | 0.080 | B | | 20 | 4.0T | N | 1 | Schmeer,P | Q |
| 20.73 | 816353 | 3.6 | B | 4A | 1 | 8 | 0.3 | 70 | 0.08 | B | | 15 | MCT | Y | 1 | Glowinski,C | R |
| 20.733 | 816354 | 4.3 | B | 4A | 4 | 6 | 0.33 | | 0.080 | B | | 20 | 4.5M | Y | 1 | Koch,B.O | |
| 20.733 | 816355 | 4.4 | B | 4A | | 6 | | | 0.06 | R | 8 | 15 | 4.0M | Y | 1 | Schambeck,C.M | |
| 20.736 | 816356 | 4.0 | M | 4A | | 7 | | | 0.07 | B | | 20 | | Y | 1 | Tanti,T | S |
| 20.740 | 816357 | 3.8: | M | 4A | 12 11 | 9 | 1.83 | 72 | 0.08 | B | | 11 | 4.0M | Y | 1 | Gubo,H | |
| 20.740 | 816358 | 4.0 | B | 4A | | 9 | 1.3 | 60 | 0.063 | B | | 9 | 3.0 | Y | 2 | Kammerer,A | T |
| 20.74 | 816359 | 3.8 | B | 4A | 5 | 7 | | | 0.080 | R | 5 | 22 | CM | Y | 1 | Jannink,D.W | U |
| 20.74 | 816360 | 3.7 | S | DCS 7,8 | | 7 | 0.17 | 55 | 0.080 | B | | 15 | 3 MT | Y | 1 | Scholten,A | |
| 20.740 | 816361 | | | | | | | 60 | 0.080 | B | | 20 | 5.0 | | 4 | Zanotta,M.V | |
| 20.743 | 816362 | 3.6 | B | 4A | | 9 | 0.92 | 58 | 0.050 | B | | 7 | 3 M | | | Linder,J | |
| 20.743 | 816363 | 4.0: | S | 4A | | 8 | | | 0.089 | R | 5.5 | 18 | 4.5 | N | 1 | Ventura,F | V |
| 20.750 | 816364 | | | | 2 | | | | 0.203 | SC | 10 | 81 | 3.0 | Y | 2 | Kammerer,A | W |
| 20.75 | 816365 | 4.3 | B | 4A | 6 | 7 | 1.00 | 55 | 0.050 | B | | 7 | 4.0 | Y | 2 | Merlin,J.-C | X |
| 20.792 | 816366 | 3.5 | S | 4A | 5 | 7 | 0.5 | | 0.050 | B | | 16 | 3.5M | Y | 1 | Nolle,M | |
| 20.971 | 816367 | 3.6 | B | 99 | 4 | 4 | 0.70 | 55 | 0.05 | B | | 7 | 3.8 | | | Lairet,R | |

NOTE A Modified Sidgwick method used.
NOTE B 70% moon 88 degrees away.
NOTE C 70% moon 88 degrees away. Observation of inner coma only.
NOTE D (PA value appears to be measured incorrectly. Ed.)
NOTE E Tail length 2 deg. <. [sic] (Observer indicated "Y" method. Ed.)
NOTE F Adapted to the actual (rather bad, street lights visible) observing conditions.
NOTE G + 10x50 B and 6 mag. nucleus + naked eye. [sic]
NOTE H Naked eye. Clouds interfered with coma diameter and tail PA measurements.
NOTE I Through clouds.
NOTE J In focus.
NOTE K PA 53-62.
NOTE L Moon and twilight.
NOTE M (Observer indicated "A" method [Argelander?]. Ed.)
NOTE N Coma ellipt.
NOTE O Drawing.
NOTE P Condensation very brilliant and striking. Coma diameter is upper limit.
NOTE Q Beta Aqr: 2.9 mag., Xi Aqr: 4.7 mag. Coma diameter approximate.
NOTE R Coma diameter, tail length, and PA approximate.
NOTE S Seeing good, transparency excellent. Moon. Low. Twilight.
NOTE T Tail length and PA are approximate.
NOTE U Telescopic limit is 4.5.
NOTE V V. bright moon.; low. The first part of the tail must be particularly bright since its first 12' could be made out in spite of the bright moonlight.
NOTE W Coma diameter approximate.
NOTE X Moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.708 | 830833 | 1 | 0.080 | R | 8.3 | 41 | 29 | 5.0 | 1 | Keszthelyi,S | A |
| 20.710 | 830834 | | 0.063 | R | 13.3 | 52 | | | 1 | Csukas,M | B |
| 20.729 | 830835 | | 0.254 | N | 6 | 150 | | | 1 | Guthier,O | C |
| 20.730 | 830836 | 0.08 | 0.125 | N | 5.8 | 28, 40, 60 | 9 | 3.0 | 1 | Riccabone,G | D |
| 20.740 | 830837 | 0.3 | 0.112 | N | 8 | 56,113 | 30 | 4.5 | 1 | Koschny,D | E |
| 20.750 | 830838 | 0.25 | 0.356 | SC | 11 | 200 | 30 | | 1 | Verdenet,M | F |
| 20.757 | 830839 | 0.38 | 0.15 | N | 5 | 25, 75 | 20 | 4.3 | 2 | Merlin,J.-C | G |

NOTE A Tail (great) 0.6 at PA 100; tail (little) 0.2 at PA 70.
NOTE B Total magn. 4.2; coma diameter = 9'x6'; DC 9; halo diameter = 30'; tail at PA 62, 24' length; tail at PA 108, 27' length. (Duration not indicated. Time of observation is end time. Ed.) Schematic drawing.

DATE: 20 JAN 1986

NOTE C (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Owing to the horrible observing conditions and atmospheric transmission it's not possible to supply a celestial orientation. Magnification of 80 also used. Two drawings included. Twilight and intense city lights interfered with the observation. (Translated by IHW staff. Ed.)
NOTE E Only 1 tail at PA 60. Twilight interfered with the observation.
NOTE F (Drawing submitted includes inset of coma at 400x. Additional drawing submitted made using 11x80 binoculars (2.02'/mm). Ed.)
NOTE G Tail at PA 55; jet at PA 196, then curved to PA 161; jet at PA 196, then curved to PA 230; jet at PA 201, curved to PA 230; jet at PA 254, short and condensed; jet at PA 316, narrow, straight.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.068 | 850902 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 3.00 | Fuji HR 400 | | N | T | 11/P | 1 | Cunningham,J | A |
| 20.072 | 850903 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 5.00 | Fuji HR 400 | | N | T | 12/P | 1 | Cunningham,J | A |
| 20.098 | 850904 | 0.610 | 4 | 0.152 | 3.4 x 2.3 | 3.00 | Kodak Tri-X | 400/ | N | X | 3/N | 1 | Lazerson,H | B |
| 20.697 | 850905 | 0.500 | 5 | 0.100 | 4.1 x 2.7 | 8.00 | ORWO NP 27 | 400/27 | N | C | 4/N | 1 | Rapavy,P | C |
| 20.709 | 850906 | 0.500 | 5 | 0.100 | 4.1 x 2.7 | 10.00 | ORWO NP 27 | 400/27 | N | C | 5/N | 1 | Rapavy,P | C |

NOTE A Film "push" processed from ISO 400 to 1000.
NOTE B "Push" processed to 800 ASA.
NOTE C City lights, moonlight, and twilight interfered with the observation. Large format (68x87 mm) film used.

DATE: 21 JAN 1986

DATE: 21 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.01 | 816368 | 4.2 | B | 4A | | 7 | 0.50 | | 0.080 | B | | 20 | | Y | | Kronk,G | A |
| 21.017 | 816369 | | | 4A | 17.5 | 7 | | | 0.200 | SC | 10 | 78 | 4.3 | N | 1 | Saraceno,J | B |
| 21.017 | 816370 | 4.8 | B | 4A | | | | | 0.050 | B | | 7 | | | | Saraceno,J | |
| 21.031 | 816371 | | M | 4A | 3 | 6 | 2 | 63 | 0.279 | SC | 10 | 167 | 4 MT | Y | 1 | Kemble,L.J | C |
| 21.10 | 816372 | 4.2 | M | 4A | | | 2.5 | 65 | 0.05 | B | | 10 | 4.5M | Y | 20 | Hale,A | D |
| 21.10 | 816373 | 3.7 | M | 4A | | 8 | 1.0 | | 0.080 | B | | 20 | 3.0M | Y | 18 | Morris,C.S | |
| 21.10 | 816374 | 3.7 | M | 4A | | | | | 0.050 | B | | 12 | 3.0M | Y | 18 | Morris,C.S | |
| 21.10 | 816375 | 4.3 | S | 4A | 5 | 7 | 2 | 55 | 0.080 | B | | 11 | 4.5 | Y | 1 | Spratt,C.E | |
| 21.212 | 816376 | 4.6 | M | 4A | 23 | 8 | 2.00 | 300 | 0.05 | B | | 10 | 5.0 | Y | 1 | Fabre,R | E |
| 21.38 | 816377 | 4.5 | B | 4A | | 9 | | | 0.07 | R | 8.6 | 19 | 3.0T | N | 5 | Makino,J | |
| 21.64 | 816378 | 5.3 | B | M | | 4 | | | 0.03 | R | 3 | 10 | | | | Gerasimov,A | |
| 21.64 | 816379 | 3.5 | S | E | 8 | 4 | 1 | 60 | 0.05 | B | | 7 | | | | Mormil,V | |
| 21.65 | 816380 | 4.6 | B | M | 21 | 7 | | | 0.07 | N | 8 | 33 | | | | Yurchenko,Yu | |
| 21.66 | 816381 | 3.5 | B | E | 8 | 5 | 1 | 60 | 0.05 | B | | 7 | | | | Mormil,V | |
| 21.66 | 816382 | 4.6 | B | E | | 7 | | | 0.07 | N | 8 | 33 | | | | Yurchenko,Yu | |
| 21.67 | 816383 | 3.5 | B | M | 7 | 5 | 1 | 60 | 0.05 | B | | 7 | | | | Mormil,V | |
| 21.67 | 816384 | 4.7 | B | M | | | | | 0.03 | B | | 8 | | | | Tsygankov,D | |
| 21.67 | 816385 | 4.4 | B | M | | | | | 0.05 | B | | 7 | | | | Pishnenko,V | |
| 21.691 | 816386 | 3.2 | M | 4A | 20 | 6 | | | 0.15 | N | 4 | 37 | 3.0TMC | N | 1 | Posa,O | F |
| 21.694 | 816387 | 4.7 | B | 4A | | 6 | | | 0.064 | R | 6.3 | 20 | 2.5MTC | N | 1 | Maciejewski,W | G |
| 21.698 | 816388 | 4.4 | M | CZ | 30 | 2 | 3 | 300 | 0.10 | B | | 25 | 3.5M | Y | 1 | Hajek,P | |
| 21.701 | 816389 | 4.5 | M | CZ | | 5 | | | 0.05 | B | | 7 | 2.7 | | 2 | Pravec,P | |
| 21.707 | 816390 | 4.0 | B | 4A | | 7 | 0.5 | | 0.07 | B | | 20 | MT | N | 1 | Filimon,E | |
| 21.7144 | 816391 | 4.3 | S | | 18 | 8 | 2 | 42 | 0.08 | B | | 10 | 4.6 | N | 1 | Znasik,M | |
| 21.717 | 816392 | 3.6: | B | IHW | | | | | 0.080 | B | | 20 | | N | 1 | Guthier,O | |
| 21.73 | 816393 | 4.1 | S | 4A | | | | | 0.08 | B | | 20 | 3.0 | | 1 | Shanklin,J.D | |
| 21.745 | 816394 | 4.1 | S | 4A | 5 | 8 | 0.5 | 62 | 0.08 | B | | 15 | 2.0 | Y | 1 | Hurst,G.M | H |
| 21.747 | 816395 | 4.2: | B | 4A | | | | | 0.050 | B | | 10 | | N | 1 | Rogers,J.H | I |
| 21.750 | 816396 | 4.7 | M | 4A | | | | | 0.050 | B | | 7 | 5.7 | Y | 1 | Stott,D | J |
| 21.760 | 816397 | 3.8 | B | 4A | 2 | 8 | | | 0.05 | B | | 20 | C | N | 4 | Gallego,J | K |
| 21.774 | 816398 | 4.1 | M | 4A | 40 | 7 | 1.9 | 280 | 0.050 | B | | 10 | 4.0MC | Y | 1 | Lozano,L | L |
| 21.938 | 816399 | 4.3 | M | AAVSO | | | | | 0.050 | B | | 10 | | | | O'Meara,S.J | |
| 21.94 | 816400 | 4.3 | B | AA | | | | | 0.080 | B | | 20 | | | | Green,D.W.E | |
| 21.94 | 816401 | 3.8: | M | AA | | | | | 0.080 | B | | 20 | | | | Green,D.W.E | |
| 21.94 | 816402 | 4.0 | S | AA | 4.5 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | M |
| 21.96 | 816403 | | | | 1.9 | 7 | 1.5 | 55 | 0.120 | B | | 20 | | | | Bortle,J.E | |
| 21.96 | 816404 | 4.2 | B | AA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 21.96 | 816405 | 4.2 | B | IHW | 4 | 8 | 1.0 | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 21.96 | 816406 | 4.4 | B | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 21.96 | 816407 | 4.0 | S | AA | 5 | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | M |
| 21.96 | 816408 | 4.1 | S | AA | 5 | 8 | | | 0.050 | B | | 7 | | | | Green,D.W.E | M |
| 21.96 | 816409 | 4.3 | S | IHW | | | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 21.969 | 816410 | 3.7 | B | 99 | 4 | 4 | 0.67 | 60 | 0.05 | B | | 7 | 3.8 | | | Lairet,R | |
| 21.977 | 816411 | 4.4 | M | 4A | 6 | 6 | | | 0.063 | B | | 9 | 2.9 | Y | | DeYoung,J.A | |

NOTE A In twilight.
NOTE B Light pollution.
NOTE C The best ever; remarkable change observed for the first time, in dark patch to E, near core of comet; seen at time of bright twilight; at first suspected as due to unequal telescope temp., but scope was at ambient temp., dark offset not seen on stars; dark offset persisted till comet set at my site at 0155 UT. Two very faint, thin streamers to E from bright streak near core; fan-shaped diffuse tail to NE; tail visible in binocs. at 0120, still in bright twilight and moonlight; coma appears blue in twilight; tail length difficult to estimate due to gradual fading. (Drawing made.) Magnitude estimate: 4.5. Observation period ended at Jan. 21.079.
NOTE D Observation affected by moonlight and scattered cirrus.
NOTE E (PA value appears to be measured incorrectly. Ed.)
NOTE F Coma ellipt.
NOTE G (Observer precedes magnitude estimate with "min.". Ed.)
NOTE H Twilight and cloud. Coma diameter, tail length, and PA approximate.
NOTE I Very imprecise.
NOTE J Moon.
NOTE K Stellar.
NOTE L Low in the horizon. [sic]
NOTE M Coma diameter approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.056 | 830840 | 3.3 | 0.280 | SC | 10 | 167 | 70 | | 1 | Kemble,L.J | A |

NOTE A First seen in bright twilight; gibbous moon to SE. Best ever; comet bright in bright twilight; bluish coma; dark patch seen throughout observing period in coma E of core; brightening of coma from core to 95 deg.; tail fan-shaped to 63 deg.; two very fine streamers from bright edge of inner core to about 95 deg.; comet and tail visible in binocs. at 0120, while still in some twilight; in this, my 51st observation, first notice of evident change in coma.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.006 | 850907 | 4.180 | 16.5 | 0.254 | 0.5 x 0.3 | 2.50 | Kodak 2415 | | Y | O | 31/S | 1 | Lund,L | A |
| 21.049 | 850908 | 1.583 | 8 | 0.203 | 1.3 x 0.9 | 0.17 | Kodak 2415 | | Y | S | 60/P | 1 | Minton,R.B | B |
| 21.053 | 850909 | 1.583 | 8 | 0.203 | 1.3 x 0.9 | 10.00 | Kodak 2415 | | Y | S | 61/P | 1 | Minton,R.B | C |

NOTE A Auxiliary lens used. Original instrument characteristics are FL = 1.530, f/6.
NOTE B The prints show an envelope or jet looping about halfway around the nuclear region. The bright nuclear region measures 15 by 30 arc sec. on the 10 sec. exposures. (My 10, 30, and 60 second exposures have pinpoint star images, so I am confindent [sic] of the size.) (The observer supplied no information on the other exposures referred to here. Observer's image identifier is preceded by prefix CNF. Ed.)
NOTE C (Print submitted by observer is a composite of two contiguous 5 min. exposures. Ed.)

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.014 | 870126 | -O | CL | 0.135 | 1.9 | | 3.00 | Kodak 2415 | | Y | C | 906/S | 4 | Buchanan,W.T | A |

NOTE A Moonlight interfered with the observation. Beta Aquarii and Halley invisible to naked eye. Spectrum lies along a meridian from south to north with wavelength increasing. (Observer's image identifier is E-119-06. Ed.)

DATE: 22 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MN | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.05 | 816412 | 4.5 | | 4A | | | 1.2 | 60 | 0.040 | B | | 8 | 4.5 | Y | 1 | Keen,R | A |
| 22.361 | 816413 | 4.0 | M | 4A | 5 | 5 | 0.67 | | 0.05 | B | | 7 | 3.5 | N | 8 | Ichikawa,K | B |
| 22.38 | 816414 | 4.6 | B | 4A | 2.9 | 7 | 0.8 | | 0.05 | B | | 7 | 2.5T | N | 1 | Kanai,K | |
| 22.38 | 816415 | 4.1 | M | 4A | 2.7 | 8 | | 60 | 0.08 | B | | 11 | 4 MT | N | 1 | Mitsuma,S | C |
| 22.38 | 816416 | 3.8 | S | 4A | | | | | 0.08 | B | | 11 | 2.0 | N | 1 | Momose,M | D |
| 22.381 | 816417 | 3.7 | S | 4A | 2 | 7 | 0.17 | 55 | 0.030 | B | | 8 | 4.0T | Y | 1 | Kato,T | |
| 22.396 | 816418 | 3.5 | B | 4A | | | | | 0.035 | B | | 7 | | N | 1 | Okada,M | |
| 22.406 | 816419 | 4.4 | S | 4A | 4 | 6 | 0.75 | 85 | 0.07 | B | | 10 | 4.0 | N | 1 | Kobayashi,J | |
| 22.49 | 816420 | 4.7 | B | E | 2 | 4 | | | 0.05 | B | | 7 | | | | Guryanov,S | |
| 22.63 | 816421 | 3.4 | B | E | 8 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 22.65 | 816422 | 3.5 | B | E | 8 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 22.66 | 816423 | 3.6 | B | E | 6 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 22.684 | 816424 | 3.3: | S | 4A | 10 | 8 | | | 0.060 | R | 8 | 13 | 2.0 | N | 2 | Moeller,M | E |
| 22.691 | 816425 | 4.7 | B | 4A | | 7 | | | 0.064 | R | 6.3 | 20 | 2.5MTC | N | 1 | Maciejewski,W | F |
| 22.70 | 816426 | 4.4 | S | 4A | 4 | 6 | | | 0.050 | R | 10 | 13 | 3.0T | N | 2 | Jahn,J | G |
| 22.708 | 816427 | | | 4A | 0.8 | 7 | 0.05 | 100 | 0.08 | B | | 15 | | | 1 | Dietrich,M | H |
| 22.708 | 816428 | 4.7: | | XI AQR | 4 | 8 | | | 0.350 | SC | 11 | 120 | T | N | 1 | Marx,H | I |
| 22.708 | 816429 | 4.2 | B | 4A | 6 | 7 | 0.5 | | 0.080 | R | 6.2 | 50 | M | Y | 1 | Pfitzner,E | |
| 22.712 | 816430 | 5.0 | B | 4A | 8 | 5 | 0.2 | 30 | 0.150 | R | 15 | 56 | 4.0C | Y | 1 | Bauer,H.-P | J |
| 22.712 | 816431 | 4.8 | B | 4A | 5 | 1 | | | 0.030 | B | | 8 | 3.0MC | N | 2 | Richert,M | |
| 22.715 | 816432 | 4.0 | B | | | 3 | | | 0.080 | R | 6.2 | 12 | 3.0MT | | 1 | Lieder,F | |
| 22.715 | 816433 | 3.6 | B | | 8.7 4.8 | 6 | 4.0 | | 0.030 | B | | 8 | 5.8M | Y | 1 | Winkler,R | |
| 22.717 | 816434 | 4.0 | B | 4A | | 7 | 0.5 | | 0.07 | B | | 20 | MT | N | 2 | Filimon,E | |
| 22.719 | 816435 | 4.5 | B | 4A | | 7 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Bohme,D | |
| 22.719 | 816436 | 3.8 | B | CZ | | 6 | 0.6 | 60 | 0.08 | B | | 10 | 5.4 | Y | 1 | Janecek,V | |
| 22.722 | 816437 | 3.7: | M | 4A | 12 | 9 | 1.33 | 62 | 0.08 | B | | 11 | 3.0 | N | 1 | Gubo,H | |
| 22.726 | 816438 | 4.5 | B | | 16.0 | 3 | 0.1 | | 0.063 | R | 13 | 44 | 5.0 | Y | 1 | Bartnik,M | |
| 22.967 | 816439 | 3.4 | B | 99 | 4 | 4 | 0.67 | 58 | 0.05 | B | | 7 | 4.0 | | | Lairet,R | |

NOTE A Twilight. Modified Sidgwick method used.
NOTE B PA = E.
NOTE C 6.7. Tail length 1 deg. to 1.5 deg.
NOTE D Bright moon. (Translated by IHW staff. Ed.)
NOTE E Twilight.
NOTE F (Observer precedes magnitude estimate with "min.". Ed.)
NOTE G Coma diameter approximate.
NOTE H Twilight. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE I Coma diameter approximate. Gap in clouds. (Translated by IHW staff. Observer indicated "A" method [Argelander?]. Ed.)
NOTE J Instrument is Coude refractor.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.377 | 850910 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 1.00 | Kodak 2415 | | Y | | 5/P | 1 | Niijima,T | A |

NOTE A (Observer's image identifier is 860122-2. Ed.) Large format (70 mm) film used. City lights interfered with the observation.

DATE: 23 JAN 1986

DATE: 23 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.006 | 816440 | 4.4 | B | 4A | | | 1 | 60 | 0.035 | B | | 7 | 3.0 | Y | 1 | Stephan,C | A |
| 23.06 | 816441 | 4.4 | | 4A | | | 0.3 | 60 | 0.040 | B | | 8 | 5.0 | Y | 1 | Keen,R | B |
| 23.201 | 816442 | 4.3 | B | 4A | | 6 | | | 0.050 | B | | 7 | 3 | N | 3 | Krisciunas,K | C |
| 23.208 | 816443 | 4.6 | M | 4A | 23 | 8 | 2.17 | 300 | 0.05 | B | | 10 | 5.0 | Y | 1 | Fabre,R | D |
| 23.38 | 816444 | 3.8 | S | 4A | | 7 | | | 0.08 | B | | 11 | 2.0 | N | 1 | Momose,M | E |
| 23.49 | 816445 | 4.6 | B | M | 2 | 6 | | | 0.05 | B | | 7 | | | | Guryanov,S | |
| 23.72 | 816446 | 3.7 | S | DCS 7,8 | | 7 | | | 0.080 | B | | 15 | 3.5MT | N | 1 | Scholten,A | |
| 23.733 | 816447 | 3.2: | B | IHW | | | | | 0.080 | B | | 20 | | N | 1 | Guthier,O | |
| 23.74 | 816448 | 4.1 | S | 4A | | | | | 0.08 | B | | 20 | 3.5 | | 1 | Shanklin,J.D | |
| 23.74 | 816449 | 3.8 | S | 99 | 4 3 | 8 | 0.5 | 65 | 0.065 | B | | 12 | 4.0 | N | 1 | Foulkes,M | F |
| 23.74 | 816450 | 3.6 | B | 4A | 4 | 7 | | | 0.050 | B | | 7 | CM | Y | 1 | Jannink,D.W | G |
| 23.760 | 816451 | 3.5 | B | 4A | 1 | 9 | | | 0.05 | B | | 20 | MC | N | 4 | Gallego,J | H |
| 23.764 | 816452 | 3.4 | S | 4A | | | 0.72 | 60 | 0.08 | B | | 11 | | N | 5 | Gainsford,M.J | I |
| 23.958 | 816453 | 4.3 | M | 4A | | 7 | | | 0.05 | B | | 12 | 4.0M | Y | 1 | Knight,S | J |
| 23.96 | 816454 | 3.5 | B | AA | 5 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | K |
| 23.96 | 816455 | 3.3 | S | AA | | | | | 0.080 | B | | 20 | | | | Green,D.W.E | |
| 23.96 | 816456 | 4.1 | B | IHW | 3 | 8 | 1 | 51 | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 23.965 | 816457 | 3.6 | B | 99 | 4 | 4 | 0.80 | 55 | 0.05 | B | | 7 | 4.8 | | | Lairet,R | |
| 23.977 | 816458 | 4.0 | M | 4A | 5 | 6 | 1.5 | 60 | 0.05 | B | | 7 | 2.9 | Y | | DeYoung,J.A | L |
| 23.978 | 816459 | 4.1 | S | 4A | 4 | 7 | 0.37 | 50 | 0.035 | B | | 7 | 3.2MT | Y | 3 | Morrison,W | |

NOTE A 90% sunlit moon high in eastern sky - entire sky lit up.
NOTE B Twilight. Modified Sidgwick method used.
NOTE C Moonlight, twilight.
NOTE D (PA value appears to be measured incorrectly. Ed.)
NOTE E Bright moon. (Translated by IHW staff. Ed.)
NOTE F Moon, twilight.
NOTE G Telescopic limit is 5.
NOTE H Stellar.
NOTE I Low, moon, twilight.
NOTE J Bright moon.
NOTE K Coma diameter approximate.
NOTE L Moon, twilight, altitude problems.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.212 | 830841 | | 0.44 | N | 4.5 | 90,222 | 10 | 5.0 | 1 | Fabre,R | A |
| 23.738 | 830842 | 0.2 | 0.254 | N | 6.4 | 41, 65 | 6 | 2.5 | 3 | Abbott,J | B |
| 23.74 | 830843 | 2 | 0.065 | B | | 12 | 14 | 4.0 | 1 | Foulkes,M | C |
| 23.976 | 830844 | 0.5 | 0.305 | R | 15 | 114 | 5 | 2.9 | 2 | DeYoung,J.A | D |

NOTE A Unable to detect any detail in semi latus rectums although hints of streamers seen. There is a bright hot spot in front of the nucleus at PA 40. The streamer (300 deg.) is not attached to the bright extension on PA at the bottom (300 deg.) of the nucleus. Hotspot at PA 40; hotspot (ext.) at PA 300; streamer at PA 300; spikes at PA 320 and PA 260. Scale = 10'/mm.
NOTE B Central condensation approximately 36 arc sec. Inner coma "disk" approximately 1.4 arc min. through EW, 1.9 arc min. through NS. Northernmost envelope arc at PA 53 deg. approximately 4.2 arc min. Southernmost envelope arc at PA 112 deg., approximately 3.2 arc min. Vertex distance approximately 1.2 arc min. Semi latus rectum (northward) approximately 1.8 arc min. Semi latus rectum (southward) approximately 1.8 arc min. No field stars. Drawing orientation and field scale established by drift timing along EW axis. Tail totally lost to the bright sky (moonlight and twilight). Central condensation small, intense and "planetary" in appearance. The inner coma appeared rather hard-edged and approximately elliptical in shape. The envelope-arcs were of similar brightness to the outer-coma but any long tail present was east in the bright sky background.
NOTE C Coma diameter 4'x3', DC = 8. The comet was picked up in very strong twilight. Elliptical coma with a bright condensation just off centre almost as large as coma itself. Faint tail glimpsed, very suprised to see it under these conditions. Tail narrow, 0.5 deg. long at PA 65. Appearence probably modified by twilight conditions.
NOTE D Lumino [sic] at PA 60. Coma jets at PA 145 and PA 332.

DATE: 24 JAN 1986 DATE: 24 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.083 | 816460 | 4.0 | M | 4A | | | | | 0.050 | B | | 7 | | Y | 2 | Jeffrey,J | A |
| 24.09 | 816461 | 4.1 | M | 4A | | 8 | 1.0 | | 0.080 | B | | 20 | 3.0M | Y | 18 | Morris,C.S | |
| 24.09 | 816462 | 4.6 | S | 4A | 5 | 6 | 1 | 50 | 0.080 | B | | 11 | 4.5 | Y | 1 | Spratt,C.E | B |
| 24.0958 | 816463 | 4.4 | S | DCS | 4 | 8 | 0.38 | 62 | 0.080 | B | | 20 | 4.2 | | 3 | Machholz,D | C |
| 24.0958 | 816464 | 4.6 | B | DCS | 4 | 8 | 0.38 | 62 | 0.080 | B | | 20 | 4.2 | | 3 | Machholz,D | C |
| 24.368 | 816465 | 4.0 | S | | 2 | 7 | 0.03 | 60 | 0.10 | N | 10 | 55 | 3.0T | N | 1 | Kato,T | |
| 24.375 | 816466 | 4.2 | S | 4A | | | | | 0.030 | B | | 8 | 3.0T | N | 1 | Kato,T | |
| 24.384 | 816467 | 4.2 | | 4A | 3 | 7 | 0.5 | 80 | 0.080 | B | | 11 | 5 TC | N | 3 | Okuda,M | D |
| 24.386 | 816468 | 4.0 | S | 4A | 2 | | 0.2 | 60 | 0.030 | B | | 8 | 3.0T | N | 1 | Kato,T | |
| 24.400 | 816469 | 4.5 | S | 4A | 4 | 7 | 0.25 | 60 | 0.07 | B | | 10 | 4.5 | N | 1 | Kobayashi,J | |
| 24.650 | 816470 | 3.3 | S | 4A | | | 0.5 | 60 | 0.08 | B | | 11 | | Y | 6 | Gainsford,M.J | E |
| 24.68 | 816471 | 4.6 | B | M | | | | | 0.03 | B | | 8 | | | | Tsygankov,D | |
| 24.715 | 816472 | 3.6 | B | 4A | 6 | 5 | 0.2 | | 0.035 | B | | 7 | 5.5C | Y | 1 | Sciezor,T | F |
| 24.715 | 816473 | 4.7 | B | 4A | | | | | 0.030 | B | | 8 | 3.0MC | N | 2 | Richert,M | |
| 24.726 | 816474 | 3.8 | B | IHW | | 8 | 2.5 | | 0.080 | B | | 20 | 3.0 | N | 2 | Guthier,O | |
| 24.73 | 816475 | 4.1 | S | 4A | | | | | 0.08 | B | | 20 | 3.5 | | 1 | Shanklin,J.D | |
| 24.73 | 816476 | 4.0: | B | AA | 5 | 7 | | | 0.080 | B | | 20 | 3.5T | N | 1 | Schmeer,P | G |
| 24.740 | 816477 | 4.3 | M | 4A | 3.9 | 7 | 0.15 | 50 | 0.07 | B | | 16 | 4.5CM | Y | 1 | Taylor,M.D | H |
| 24.743 | 816478 | 3.9: | S | 4A | 6 | 8 | 0.5 | 61 | 0.08 | B | | 15 | 2.0 | Y | 1 | Hurst,G.M | I |
| 24.747 | 816479 | 4.1 | S | 99 | 4 | 8 | | | 0.065 | B | | 12 | 4.0 | N | 1 | Foulkes,M | J |
| 24.750 | 816480 | 5.1 | S | 4A | 4 | 5 | 0.1 | 50 | 0.04 | B | | 8 | 4.5CM | Y | 1 | Taylor,M.D | K |
| 24.758 | 816481 | 3.5 | B | 4A | 1 | 9 | | | 0.05 | B | | 20 | MC | N | 4 | Gallego,J | L |
| 24.765 | 816482 | 3.6: | S | 4A | 6 | 8 | 0.5 | 61 | 0.05 | B | | 10 | 2.0 | Y | 1 | Hurst,G.M | I |
| 24.771 | 816483 | 3.9 | M | 4A | 40 | 8 | 2.0 | 290 | 0.050 | B | | 16 | 2.5MC | N | 1 | Lozano,L | |
| 24.93 | 816484 | 3.8 | S | 4A | 10 | 6 | 0.5 | 60 | 0.05 | B | | 7 | 3.0 | N | 1 | Harrington,P | M |
| 24.938 | 816485 | 4.2 | M | AAVSO | | | | | 0.050 | B | | 10 | | | | O'Meara,S.J | |
| 24.96 | 816486 | 3.9 | B | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | N |
| 24.96 | 816487 | 4.0 | B | IHW | 3 | 7 | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 24.96 | 816488 | 4.2 | B | AA | | | | | 0.080 | B | | 20 | | | | Green,D.W.E | |
| 24.96 | 816489 | 3.6 | S | AA | 5 | 7 | | | 0.080 | B | | 20 | | | | Green,D.W.E | N |
| 24.96 | 816490 | 4.0 | S | IHW | | | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 24.979 | 816491 | 4.1 | B | 4A | | | | | 0.050 | B | | 10 | 3 C | N | 1 | Robinson,R.L | |

NOTE A Strong moonlight.
NOTE B Moon.
NOTE C 96% moon 136 degrees away.
NOTE D (Observer indicated "Y" method. Ed.)
NOTE E Low, moon, twilight. PA uncertain.
NOTE F Tail length uncertain. Thin fog above horizon.
NOTE G Beta Aqr: 2.9 mag., Xi Aqr: 4.7 mag. Coma diameter approximate.
NOTE H Twilight.
NOTE I Very low. Coma diameter, tail length, and PA approximate.
NOTE J Moon, twilight.
NOTE K Antoniadi II.
NOTE L Stellar.
NOTE M Heavy twilight.
NOTE N Coma diameter approximate.

DATE: 25 JAN 1986

DATE: 25 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.10 | 816492 | 4.0 | M | 4A | | 8 | 2.0 | | 0.080 | B | | 20 | 2.5M | Y | 17 | Morris,C.S | |
| 25.373 | 816493 | 4.0 | M | | 1.5 | 7 | 0.03 | 60 | 0.10 | N | 10 | 55 | 3.5T | N | 1 | Kato,T | |
| 25.38 | 816494 | 4.6 | B | 4A | 2.3 | 8 | 0.3 | | 0.05 | B | | 7 | 2.0T | N | 1 | Kanai,K | |
| 25.38 | 816495 | 4.0 | M | 4A | | 8 | 1 | 55 | 0.08 | B | | 11 | 3 MT | N | 1 | Mitsuma,S | A |
| 25.382 | 816496 | 4.1 | M | 4A | 1.5 | | 0.2 | 60 | 0.030 | B | | 8 | 4.0T | N | 1 | Kato,T | |
| 25.388 | 816497 | | | | 2 | 7 | 0.13 | 60 | 0.10 | N | 10 | 55 | 4.0T | N | 1 | Kato,T | |
| 25.429 | 816498 | 4.2 | S | 100 | 3 | 3 | | | 0.05 | B | | 10 | 2 MTC | N | 1 | Menichetti,R | |
| 25.71 | 816499 | 4.3 | S | 4A | 3 | 7 | 0.08 | 40 | 0.050 | R | 10 | 13 | 2.5T | N | 2 | Jahn,J | B |
| 25.7187 | 816500 | 4.2 | B | 4A | 2.5 | 5 | | | 0.05 | B | | 10 | 3.5MT | Y | 1 | Franciosi,C | |
| 25.722 | 816501 | 3.4 | S | 4A | 5 | 7 | | 55 | 0.15 | B | | 25 | 5.0 | N | 4 | Parisio,R | |
| 25.725 | 816502 | 4.6 | S | 4A | 3 | 7 | | | 0.05 | B | | 10 T | | N | 1 | Giuntoli,M | C |
| 25.7291 | 816503 | 4.2 | B | 4A | 2.5 | 5 | | | 0.20 | SC | 10 | 57 | 3.5MT | Y | 1 | Franciosi,C | D |
| 25.73 | 816504 | 3.6 | S | DCS 8 | 10 | 7 | 1.0 | 50 | 0.060 | B | | 12 | 3 T | Y | 1 | van de Weg,R.L.W | E |
| 25.73 | 816505 | 4.1 | B | 4A | 5 | 6 | | | 0.050 | B | | 7 | 4.0 | Y | 2 | Merlin,J.-C | F |
| 25.736 | 816506 | 3.8 | S | 99 | 2 | 7 | | | 0.065 | B | | 12 | 3.5 | N | 1 | Foulkes,M | G |
| 25.74 | 816507 | 4.0 | S | 4A | | | | | 0.08 | B | | 20 | 3.0 | | 1 | Shanklin,J.D | |
| 25.740 | 816508 | 3.9 | S | 4A | | 6 | | | 0.25 | N | 6 | 60 | 2.9 | Y | 1 | Gainsford,M.J | H |
| 25.742 | 816509 | 3.5 | S | 4A | 6 | 8 | 0.5 | | 0.08 | B | | 15 | 1.5 | Y | 1 | Hurst,G.M | I |
| 25.746 | 816510 | 3.4 | S | 4A | | | | | 0.08 | B | | 11 | 2.9 | Y | 1 | Gainsford,M.J | H |
| 25.750 | 816511 | | | | 3 | 8 | | | 0.090 | M | 11 | 40 | 3.5 | N | 1 | Foulkes,M | J |
| 25.753 | 816512 | 4.3 | M | 4A | | | | | 0.050 | B | | 7 | 5.5 | Y | 1 | Stott,D | K |
| 25.757 | 816513 | 3.5: | S | 4A | 6 | 7 | 0.5 | 67 | 0.05 | B | | 10 | 1.5 | Y | 1 | Hurst,G.M | L |
| 25.757 | 816514 | 4.6 | S | 4A | 4 | 5 | | | 0.04 | B | | 8 | 4.5M | Y | 2 | Taylor,M.D | M |

NOTE A 6.5. Coma diameter 2-3'.
NOTE B Central mag. 5.8. Coma diameter, DC, tail length, and PA approximate.
NOTE C Coma diameter uncertain.
NOTE D No nucleus.
NOTE E Comet in reality may be 0.5-1 magnitude brighter.
NOTE F Very low.
NOTE G Twilight.
NOTE H Low, moon, twilight.
NOTE I Very low. Coma diameter and tail length approximate.
NOTE J Twilight, very low.
NOTE K Full moon.
NOTE L Very low. Coma diameter and tail lengths approximate. Tail PA of 54 deg. approximate.
NOTE M Antoniadi III. Moonlight. Good conditions v. near horizon. Temp. -6 to -7 C.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.75 | 830845 | 0.43 | 0.090 | M | 11 | 40 | 4 | 3.5 | 1 | Foulkes,M | A |

NOTE A Diameter 3', DC = 8. Very low. Image slightly elliptical. Bright centre. Comet set shortly after observation. Twilight very strong.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.370 | 850911 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 0.17 | Sakuracolor | 1600/ | N | | 01/P | 1 | Niijima,T | A |

NOTE A City lights interfered with the observation. 70 mm format used. (Observer's image identifier is 860125-2. Ed.)

DATE: 26 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.06 | 816515 | 4.1 | B | 4A | 2 | 8 | 1.0 | 60 | 0.040 | B | | 8 | 4.0 | Y | 1 | Keen,R | A |
| 26.0896 | 816516 | 4.0 | M | 4A | | | | | 0.05 | B | | 7 | 3.0 | N | 6 | Cook,A.J | |
| 26.09 | 816517 | 4.7 | S | 4A | 4.5 | 6 | 1 | 50 | 0.080 | B | | 11 | 4.0 | Y | 1 | Spratt,C.E | |
| 26.10 | 816518 | 4.2: | M | 4A | | | 1.5 | 65 | 0.05 | B | | 10 | 4 M | Y | 20 | Hale,A | B |
| 26.10 | 816519 | 3.9: | M | 4A | | 8 | 2.0 | 50 | 0.080 | B | | 20 | 2.0M | Y | 17 | Morris,C.S | C |
| 26.1042 | 816520 | 4.6 | S | DCS | 4 | 8 | 0.43 | 62 | 0.080 | B | | 20 | 4.8 | | 1 | Machholz,D | D |
| 26.361 | 816521 | 4.3 | M | 4A | 2.5 | 4 | 0.50 | | 0.1 | N | 10 | 25 | 3.5 | N | 1 | Ichikawa,K | E |
| 26.369 | 816522 | 4.0 | S | | 1 | 7 | | | 0.10 | N | 10 | 55 | 3.0T | N | 1 | Kato,T | |
| 26.37 | 816523 | 4.5 | S | 4A | | 7 | | | 0.05 | B | | 7 | 1.0T | N | 1 | Kanai,K | |
| 26.376 | 816524 | 3.6 | M | 4A | 1 | 7 | 0.10 | 50 | 0.10 | N | 10 | 55 | 3.0T | N | 1 | Kato,T | |
| 26.38 | 816525 | 4 | | 4A | | 8 | | | 0.08 | B | | 11 | 3 MT | N | 1 | Mitsuma,S | |
| 26.385 | 816526 | 3.9 | M | 4A | 1.5 | | | | 0.030 | B | | 8 | 3.0T | N | 1 | Kato,T | |
| 26.70 | 816527 | 3.5: | B | 4A | 4 | 7 | | | 0.05 | B | | 7 | 3.0 | Y | 4 | Granslo,B.H | |
| 26.7083 | 816528 | 4.3 | B | 4A | 2.5 | 6 | 0.07 | 30 | 0.05 | B | | 10 | 3.0MT | | 2 | Franciosi,C | F |
| 26.715 | 816529 | 4.3 | B | 4A | | | | | 0.05 | B | | 7 | 2.5T | Y | 1 | Dal Santo,M | G |
| 26.72 | 816530 | 3.4 | S | DCS 8 | 10 | 7 | | | 0.060 | B | | 12 | 3 T | Y | 1 | van de Weg,R.L.W | H |
| 26.72 | 816531 | 4.2 | S | DCS 8 | 6 | 9 | 0.10 | 45 | 0.050 | B | | 10 | 1 MT | N | 1 | van Loo,F.R | |
| 26.725 | 816532 | 3.7 | S | 99 | 3.0 | 8 | 0.87 | 55 | 0.08 | B | | 15 | 3.0T | Y | 3 | Haver,R | |
| 26.725 | 816533 | 3.7 | S | 4A | 4 | 7 | 0.40 | 50 | 0.080 | B | | 20 | 3.2 | Y | 1 | Meozzi,D | |
| 26.73 | 816534 | 3.5 | B | 4A | 3 | 7 | | | 0.080 | R | 5 | 22 | CMT | Y | 1 | Jannink,D.W | I |
| 26.736 | 816535 | 3.8 | S | 99 | 2 | 8 | | | 0.065 | B | | 12 | 3.5 | N | 1 | Foulkes,M | J |
| 26.737 | 816536 | | | | | | | 60 | 0.080 | B | | 20 | | | 5 | Zanotta,M.V | |

NOTE A Twilight and full moon. Extinction correction applied.
NOTE B Observation affected by moonlight (full moon), twilight, and low altitude. The comet could not be seen with the naked eye. No extinction corrections have been applied to the magnitude estimate.
NOTE C Differential extinction correction = -0.8 mag. was applied.
NOTE D 100% moon 160 degrees away.
NOTE E PA = E.
NOTE F Tail length approximate.
NOTE G Comet near horizon.
NOTE H Comet in reality may be 0.5-1 magnitude brighter.
NOTE I Telescopic limit is 4.5.
NOTE J Twilight.

DATE: 27 JAN 1986

DATE: 27 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.06 | 816537 | 3.8 | B | 4A | 2 | 8 | 0.7 | 60 | 0.040 | B | | 8 | 4.0 | Y | 1 | Keen,R | A |
| 27.0833 | 816538 | 4.0 | S | 4A | | 7 | | | 0.08 | B | | 11 | 2 | N | 1 | Cook,A.J | B |
| 27.09 | 816539 | 3.8: | M | 4A | | 9 | | | 0.080 | B | | 20 | 2.0T | Y | 9 | Morris,C.S | C |
| 27.0903 | 816540 | | | | 1 | 7 | | | 0.30 | R | 16.4 | 179 | 3 | N | 1 | Cook,A.J | B |
| 27.0903 | 816541 | | | | 1 | 7 | | | 0.024 | R | 15.8 | 95 | 3 | N | 1 | Cook,A.J | B |
| 27.372 | 816542 | 4.0 | S | | 1 | 8 | | | 0.10 | N | 10 | 55 | 3.0T | N | 1 | Kato,T | |
| 27.375 | 816543 | 4 | | 4A | | 8 | | | 0.08 | B | | 11 | 3 T | N | 1 | Mitsuma,S | D |
| 27.377 | 816544 | 4.0 | S | | 2 | 8 | 0.05 | 45 | 0.10 | N | 10 | 111 | 3.5T | N | 1 | Kato,T | |
| 27.38 | 816545 > | 4.7 | S | AAVSO | 2 | 8 | | | 0.13 | N | 6.3 | 24 | 2.0T | Y | 1 | Hayashi,A | |
| 27.381 | 816546 | 3.7 | M | 4A | | | | | 0.030 | B | | 8 | 3.5T | N | 1 | Kato,T | |
| 27.401 | 816547 | 4.5 | | 4A | 2 | 8 | | | 0.07 | B | | 10 | 4.5 | N | 1 | Kobayashi,J | E |
| 27.707 | 816548 | 4.0: | B | 4A | | | 0.17 | | 0.07 | B | | 20 | T | N | 2 | Filimon,E | F |
| 27.714 | 816549 | 4.0 | B | 4A | | | | | 0.080 | B | | 20 | 2.5 | Y | 1 | Koch,B.O | |
| 27.715 | 816550 | 3.5: | B | 4A | | 7 | | | 0.10 | B | | 14 | 2.5 | Y | 1 | Hasubick,W | |
| 27.7208 | 816551 | 4.3 | B | 4A | | 6 | | | 0.05 | B | | 10 | 3.0T | | 2 | Franciosi,C | |
| 27.722 | 816552 | 3.5 | M | 4A | 12 | 8 | 1.67 | 72 | 0.08 | B | | 11 | 0.5 | N | 1 | Gubo,H | |
| 27.722 | 816553 | 4.0 | B | 4A | | 6 | | | 0.080 | B | | 20 | 2.0 | Y | 1 | Koch,V | |
| 27.722 | 816554 | 5 : | | 4A | | | | | 0.080 | B | | 10 | | | 1 | Mikuz,H | |
| 27.724 | 816555 | | | | | | | 60 | 0.080 | B | | 20 | | | 5 | Zanotta,M.V | |
| 27.725 | 816556 | 3.5 | B | IHW | | 7 | | | 0.125 | R | 6 | 17 | | N | 2 | Guthier,O | |
| 27.7291 | 816557 | | | 4A | 2 | 6 | | | 0.12 | R | 15 | 53 | 3.0T | | 2 | Franciosi,C | |
| 27.770 | 816558 | 3.4 | S | 4A | 2.5 | 4 | | | 0.08 | B | | 20 | 2.5 | Y | 2 | Milani,G | G |
| 27.938 | 816559 | 4.3 | M | AAVSO | | | | | 0.050 | B | | 10 | | | | O'Meara,S.J | |

NOTE A Twilight. Extinction correction applied.
NOTE B Bright twilight.
NOTE C Differential extinction correction = -0.9 mag. was applied.
NOTE D 5.5. Coma diameter 1-2'. Tail not seen.
NOTE E Magnitude estimation method = F.
NOTE F Able to observe comet for only 15 minutes. Tail length approximate. (Translated by IHW staff. Ed.)
NOTE G Twilight haze.

DATE: 28 JAN 1986

DATE: 28 JAN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.05 | 816560 | 3.5 | B | 4A | 2 | 8 | 0.5 | 60 | 0.040 | B | | 8 | 3.5 | Y | 1 | Keen,R | A |
| 28.09 | 816561 | 3.8: | M | 4A | | 9 | | | 0.080 | B | | 20 | 1.5T | Y | 9 | Morris,C.S | B |
| 28.09 | 816562 | 4.7: | S | 4A | 4.0 | 6 | 0.5 | 50 | 0.080 | B | | 11 | 4.0 | Y | 1 | Spratt,C.E | C |
| 28.10 | 816563 | 3.8 | M | 4A | | | | | 0.05 | B | | 10 | 3.5T | Y | 20 | Hale,A | D |
| 28.368 | 816564 | 5.5 | M | 4A | 1.1 | | | | 0.1 | N | 10 | 83 | 3.5 | N | 1 | Ichikawa,K | |
| 28.701 | 816565 | 3.7: | | CZ | | | | | 0.10 | B | | 25 | TM | N | 1 | Silhan,J | E |
| 28.720 | 816566 | 3.6 | S | 4A | 4 | 7 | | | 0.080 | B | | 20 | 2.5T | Y | 1 | Meozzi,D | |
| 28.96 | 816567 | 4.2: | S | AA | 1.5 | 7 | | | 0.120 | B | | 20 | | | | Bortle,J.E | F |

NOTE A Twilight. Extinction correction applied.
NOTE B Differential extinction correction was applied.
NOTE C In very strong twilight. DC and PA approximate.
NOTE D Comet very low, observation affected by low altitude and bright twilight. No extinction corrections have been applied to the magnitude estimate. No tail was visible in either the 10x50 binoculars or 20 cm reflector.
NOTE E Both the star Beta Aqr and the comet looked like small nebulae. Horizon in the field of veiw.
NOTE F Coma diameter approximate.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.708 | 850912 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 0.17 | Kodak 2415 | | N | | 105/P | | Jager,M | A |

NOTE A Magnitude 3.5; elongated sun - comet 15 deg.

DATE: 6 FEB 1986

DATE: 6 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.5 | 816568 | | | | | | | | | | | | | | | O'Meara,S.J | A |

NOTE A Unsuccessful attempt to find Halley in daylight. (Time unspecified by observer; roughly estimated by the Editor.)

DATE: 8 FEB 1986

DATE: 8 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.5 | 816569 | | | | | | | | | | | | | | | O'Meara,S.J | A |

NOTE A Unsuccessful attempt to find Halley in daylight. (Time unspecified by observer; roughly estimated by the Editor.)

DATE: 9 FEB 1986

DATE: 9 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.5 | 816570 | | | | | | | | | | | | | | | O'Meara,S.J | A |

NOTE A Unsuccessful attempt to find Halley in daylight. (Time unspecified by observer, roughly estimated by the Editor.)

DATE: 10 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.5 | 816571 | | | | | | | | | | | | | | | O'Meara,S.J | A |

NOTE A Unsuccessful attempt to find Halley in daylight. (Time unspecified by observer; roughly estimated by the Editor.)

DATE: 11 FEB 1986

DATE: 11 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.5 | 816572 | | | | | | | | | | | | | | | O'Meara,S.J | A |

NOTE A Unsuccessful attempt to find Halley in daylight. (Time unspecified by observer; roughly estimated by the Editor.)

DATE: 15 FEB 1986

DATE: 15 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.128 | 816573 | 3.8 | M | 4B | 4.5 2.5 | 7 | | | 0.08 | B | | 11 | 6 T | Y | 1 | Fleet,R.W | A |
| 15.437 | 816574 | 4.3 | B | 122 | | | | | 0.12 | B | | 20 | 4 | Y | 3 | Ferrin,I | B |
| 15.784 | 816575 | 3.0: | S | 4B | 2 | 8 | 0.08 | | 0.08 | B | | 15 | 1.0T | N | 1 | Lovejoy,T | C |
| 15.8403 | 816576 | | | | 4 | 4 | | | 0.14 | SN | 3.6 | 20 | 3 | Y | 7 | Cook,A.J | D |
| 15.8472 | 816577 | 3.3 | M | 4B | 4 | 4 | | | 0.05 | B | | 7 | 3 | Y | 7 | Cook,A.J | D |
| 15.864 | 816578 | 4.5 | S | 4B | 1.6 | 7 | | 300 | 0.08 | B | | 15 | 1 T | N | 1 | Kanai,K | |
| 15.868 | 816579 | | | | | 9 | | | 0.08 | B | | 11 | T | N | 1 | Mitsuma,S | E |
| 15.884 | 816580 | 4 | S | 4B | 5 | 8 | | | 0.10 | R | 8 | 25 | 4.5 | Y | 1 | Kobayashi,J | F |

NOTE A Comparison star Epsilon Aquarii.
NOTE B Magnitude by method of Bo. approx. = 4.3. Correction for twilight about -2.4 mag. gives mag. approximately 1.9.
NOTE C Coma diameter approximate.
NOTE D In twilight.
NOTE E m2 = 4.
NOTE F Telescope is fluorite refractor. Zenith limit mag. 5.5.

DATE: 16 FEB 1986

DATE: 16 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.125 | 816581 | 3.6 | M | 4B | 8.0 | 2.5 | 7 | | 280 | 0.08 | B | | 11 | 6 T | Y | 1 | Fleet,R.W | |
| 16.130 | 816582 | 3.8 | M | 4B | | | | | | 0.075 | R | 16 | 50 | 6 T | Y | 1 | Fleet,R.W | A |
| 16.437 | 816583 | 4.3 | B | 122 | | | | | | 0.12 | B | | 20 | 3.5 | Y | 3 | Ferrin,I | B |
| 16.78 | 816584 | 3.0 | S | 4B | 3.0 | | 8 | | | 0.08 | B | | 15 | 2.5T | N | 1 | Lovejoy,T | C |
| 16.78 | 816585 | 3.0 | S | 4B | | | 8 | | | 0.08 | B | | 15 | | N | 1 | Seargent,D | D |
| 16.859 | 816586 | 4.2 | S | 4B | 3.2 | | 6 | | | 0.05 | B | | 7 | T | N | 1 | Kanai,K | E |
| 16.86 | 816587 > | 4.5 | S | AAVSO | 2 | | 7 | 0.17 | | 0.08 | B | | 15 | 2.0T | Y | 1 | Hayashi,A | |
| 16.861 | 816588 | | | | | | 8 | | | 0.08 | B | | 11 | T | N | 1 | Mitsuma,S | F |
| 16.865 | 816589 | 4.7 | S | 4B | 1.9 | | 6 | 0.2 | 315 | 0.08 | B | | 15 | T | N | 1 | Kanai,K | |
| 16.868 | 816590 | 4 | M | | | | 7 | | | 0.16 | N | 6.3 | 31 | T | N | 1 | Mitsuma,S | G |

NOTE A Coma fan from PA 250-310. Comparison star Epsilon Aquarii.
NOTE B Comparison star Epsilon Aquarii.
NOTE C Magnitude by method of Bo. approx. = 4.3. Correction for twilight about -2.4 mag. gives mag. approximately 1.9.
NOTE D Tail length = trace.
NOTE E V. bright twilight.
NOTE F ml 3.5 to 4, coma diameter 1 to 2 arc min. m2 = 4.5.
NOTE G Coma diameter 2 to 3 arc min. m2 = 6.5.

DATE: 17 FEB 1986

DATE: 17 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.77 | 816591 | 2.4 | S | 4B | 3 | | 0.3 | | 0.03 | R | 6 | 8 | 3.0T | N | 1 | Lovejoy,T |

DATE: 18 FEB 1986

NETWORK: AMATEUR OBSERVATION

DATE: 18 FEB 1986

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.120 | 816592 | 3.5 | B | 4B | 30 | 7 | 0.50 | 280 | 0.065 | B | | 20 | 3.1 | Y | 1 | McBain,J | |
| 18.129 | 816593 | 3.9 | M | 4B | | 8 | | | 0.04 | B | | 12 | | N | 1 | Henshaw,C | A |
| 18.413 | 816594 | 2.9 | B | 122 | 4 | 4 | 0.50 | 270 | 0.05 | B | | 7 | 5.0 | Y | 1 | Lairet,R | B |
| 18.78 | 816595 | 2.5 | S | 4B | | | 1.0 | | | EY | | | 3.0T | N | 1 | Lovejoy,T | |
| 18.78 | 816596 | 3.6 | S | 4B | | 9 | | | 0.08 | B | | 15 | | N | 1 | Seargent,D | C |
| 18.881 | 816597 | 4.5 | S | 4B | 5 | 8 | | | 0.08 | B | | 11 | 4.5 | N | 1 | Kobayashi,J | D |

NOTE A In twilight.
NOTE B Twilight.
NOTE C Tail naked eye.
NOTE D Estimate mainly cent. condensation.

DATE: 19 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.112 | 816598 | 4.5 | M | 4B | | | | | | 0.08 | B | | 11 | 6 | Y | 1 | Fleet,R.W | A |
| 19.113 | 816599 | 3.1 | M | 4B | 4.8 | | | 0.5 | 287 | 0.08 | B | | 11 | 6 | Y | 1 | Fleet,R.W | B |
| 19.121 | 816600 | | | | | | | 0.7 | 285 | 0.08 | B | | 11 | 6 | Y | 1 | Fleet,R.W | C |
| 19.125 | 816601 | 3.5 | B | 4B | 15 | 10 | 5 | 1 | 280 | 0.04 | B | | 8 | | Y | 1 | Morrisby,A | D |
| 19.127 | 816602 | 3.7 | M | 4B | | | 8 | 0.23 | | 0.04 | B | | 12 | | N | 1 | Henshaw,C | E |
| 19.129 | 816603 | 3.9 | M | 4B | | | 7 | | | | EY | | | 6 | Y | 1 | Fleet,R.W | F |
| 19.132 | 816604 | 2.8 | M | 4B | | | | | | 0.08 | B | | 11 | 6 T | Y | 1 | Fleet,R.W | B |
| 19.135 | 816605 | 3.3 | M | 4B | | | | | | 0.08 | B | | 11 | 6 T | Y | 1 | Fleet,R.W | B |
| 19.417 | 816606 | | | 122 | | | | 0.8 | | 0.12 | B | | 20 | 4.0 | Y | 3 | Ferrin,I | |
| 19.420 | 816607 | 3.5 | B | 122 | | | | 1.0 | | 0.12 | B | | 20 | 4.5 | Y | 3 | Ferrin,I | |
| 19.6944 | 816608 | 2.7 | S | 4B | 30 | | 6 | 5.00 | 280 | | EY | | | 5 | Y | 8 | Cook,A.J | G |
| 19.76 | 816609 | 2.5 | S | 4B | | | | 2.0 | | 0.08 | B | | 15 | 4.5T | Y | 1 | Lovejoy,T | |
| 19.77 | 816610 | 2.7 | | 4B | | | 9 | 0.25 | | | EY | | | | N | 1 | Seargent,D | H |
| 19.77 | 816611 | | | | | | | 0.25 | | 0.08 | B | | 15 | | | | Seargent,D | H |
| 19.770 | 816612 | 3.8 | S | 122 | 6 | | 9 | 0.4 | | 0.05 | B | | 10 | 4.0 | Y | 1 | Williams,P.F | |
| 19.851 | 816613 | 3.8 | M | 4B | 4.8 | 3.5 | | 0.5 | | 0.1 | N | 10 | 25 | 4.8 | Y | 1 | Ichikawa,K | I |
| 19.856 | 816614 | 4.2 | S | 4B | 1.3 | | 7 | | | 0.08 | B | | 15 | T | N | 1 | Kanai,K | |
| 19.858 | 816615 | 3.5 | | 4B | | | 8 | | | 0.08 | B | | 11 | T | N | | Mitsuma,S | J |
| 19.86 | 816616 | 3.7 | S | | 3 | | 6 | 0.25 | 270 | 0.08 | B | | 11 | 5.7 | Y | 1 | Akita,I | |
| 19.86 | 816617 | 4.1 | S | AAVSO | 2 | | 7 | 0.17 | 270 | 0.08 | B | | 15 | 2.5T | Y | 1 | Hayashi,A | |
| 19.86 | 816618 | 4.0 | M | SAO | 4 | | 7 | | | 0.06 | R | 12 | 22 | 2.5T | Y | 7 | Nakamura,A | K |
| 19.86 | 816619 | 4 | : | | 5 | | 7 | 0.5 | | 0.08 | B | | 11 | 5.0 | Y | 2 | Washi,S | |
| 19.861 | 816620 | 3.4 | S | 4B | 3.2 | | 7 | | | 0.05 | B | | 7 | T | N | 1 | Kanai,K | |
| 19.87 | 816621 | 4.5 | M | 4B | 1.0 | | 7 | | | 0.21 | N | 5.0 | 33 | 4.0T | Y | 1 | Suzuki,K | |
| 19.873 | 816622 | 3.0 | S | | 1.5 | | 8 | | | 0.10 | N | 10 | 55 | 3.0T | Y | 1 | Kato,T | |
| 19.875 | 816623 | 3.9 | S | 4B | 7 | | 7 | 0.25 | 260 | 0.10 | R | 8 | 25 | 5.0 | Y | 1 | Kobayashi,J | L |

NOTE A Comparison star Rho Capricorni.
NOTE B Comparison star Epsilon Aquarii.
NOTE C Tail 8' wide.
NOTE D Thin, high cirrus.
NOTE E Twilight.
NOTE F Comparison star Alpha 2 Capricorni.
NOTE G On airliner.
NOTE H Tail length approximate.
NOTE I Tail length is lower limit.
NOTE J m2 = 4.5. Coma diameter 1 to 2 arc min. Tail length = 1 deg. >. [sic]
NOTE K Tail length = yes.
NOTE L Telescope is fluorite refractor.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.121 | 830846 | 4 | 0.08 | B | | 11 | | | 1 | Fleet,R.W | A |
| 19.772 | 830847 | 0.05 | 0.20 | N | 6.3 | 250 | | | 5 | Lovejoy,T | B |

NOTE A Leading edge at PA 250. Main tail at PA 285. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.417 | 850913 | 0.05 | 2.8 | | 39.6 x27.0 | 2.00 | Kodak Tri-X | 400/ | N | | 17/P | 4 | Ferrin,I |

DATE: 20 FEB 1986

DATE: 20 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.103 | 816624 | 3.4 | B | 48 | | | | | 0.050 | B | | 7 | 5.3 | N | 1 | Lavarack,N | A |
| 20.104 | 816625 | 3.0 | S | 4B | 7.0 3.0 | 7 | 0.5 | 280 | 0.13 | R | 4 | 21 | 5.8 | Y | 2 | Campos,J | B |
| 20.110 | 816626 | 3.9 | M | 4B | 5.0 | 7 | 0.5 | 281 | 0.08 | B | | 11 | 4.8 | Y | 1 | Fleet,R.W | C |
| 20.111 | 816627 | 3.4 | B | 4B | | 5 | 0.8 | | 0.06 | B | | 15 | 5.8 | Y | 2 | Vincent,J | D |
| 20.113 | 816628 | 3.0 | M | 4B | | | | | 0.035 | B | | 9 | 5.0T | Y | 1 | Begbie,M.J.R | |
| 20.113 | 816629 | 4.1 | M | 4B | | 7 | | | | EY | | | 4.8 | Y | 1 | Fleet,R.W | E |
| 20.115 | 816630 | 3.0 | | 4B | | 8 | | | | EY | | | 5.8 | Y | 2 | Campos,J | |
| 20.118 | 816631 | | | | 4.5 | 8 | | 268 | 0.30 | N | 8.5 | 102 | 5.0T | Y | 1 | Begbie,M.J.R | F |
| 20.118 | 816632 | 2.6 | M | 4B | | | | | 0.08 | B | | 11 | 4.8 | Y | 1 | Fleet,R.W | G |
| 20.118 | 816633 | 3.0 | B | 4B | 30 | 7 | 1.5 | 285 | 0.065 | B | | 20 | 3.3 | Y | 1 | McBain,J | H |
| 20.124 | 816634 | 3.6 | M | 4B | 3 | 8 | | | 0.04 | B | | 12 | | N | 1 | Henshaw,C | I |
| 20.125 | 816635 | 3.5 | B | 4B | 15 | 5 | 1.5 | 280 | 0.04 | B | | 8 | | Y | 1 | Morrisby,A | |
| 20.135 | 816636 | 3.0 | M | 4B | | | | | 0.08 | B | | 11 | 6 T | Y | 1 | Fleet,R.W | G |
| 20.37 | 816637 | 3.0 | B | AAVSO | | | 1 | | 0.04 | B | | 7 | | | | Kiselev,N | |
| 20.412 | 816638 | 2.9 | B | 122 | 6 | 4 | 0.60 | 265 | 0.05 | B | | 7 | 5.3 | Y | 1 | Lairet,R | |
| 20.56 | 816639 | 2.3: | M | 4B | | 8 | 1.5 | | 0.080 | B | | 20 | 2.0TC | Y | 6 | Morris,C.S | J |
| 20.57 | 816640 | 3.0: | M | 4B | | | 0.3 | 275 | 0.05 | B | | 10 | 4 T | Y | 2 | Hale,A | K |
| 20.77 | 816641 | 2.3 | S | 4B | | | 1.0 | | | EY | | | 3.0T | | 1 | Lovejoy,T | L |
| 20.77 | 816642 | 2.8 | | 4B | | | | | | EY | | | | N | 1 | Seargent,D | |
| 20.77 | 816643 | | | | | | 0.5 | | 0.08 | B | | 15 | | | | Seargent,D | M |
| 20.847 | 816644 | 4.0 | M | 4B | 5.0 | | 0.5 | | 0.1 | N | 10 | 25 | 4.5 | Y | 1 | Ichikawa,K | N |
| 20.851 | 816645 | 3.8 | S | 4B | 1.9 | 8 | 0.2 | 285 | 0.05 | B | | 7 | 1 T | Y | 1 | Kanai,K | |
| 20.851 | 816646 | 3.8 | B | 4B | 1.9 | 8 | 0.2 | 285 | 0.05 | B | | 7 | 1 T | Y | 1 | Kanai,K | |
| 20.86 | 816647 | 4.0 | S | AAVSO | 2 | 8 | 0.25 | 275 | 0.08 | B | | 15 | 3.0T | Y | 1 | Hayashi,A | |
| 20.872 | 816648 | 3.0 | S | | 2 | 7 | 0.17 | 270 | 0.10 | N | 10 | 55 | 4.0T | Y | 1 | Kato,T | |
| 20.873 | 816649 | 2.7 | M | 4B | 6 | 6 | 0.5 | 270 | 0.030 | B | | 8 | 4.0T | Y | 1 | Kato,T | |

NOTE A Not fully dark adapted.
NOTE B Elongated coma; tail 10' at widest.
NOTE C Tail 11' wide at 0.3 deg. Comparison star Alpha 2 Capricorni.
NOTE D Coma fuzzy. Definite step in tail. 0.8 deg. tail 280/290; 0.6 deg. tail PA 290/320.
NOTE E Comparison star Alpha 2 Capricorni.
NOTE F Tail measurement refers to dust tail only.
NOTE G Comparison star Epsilon Aquarii.
NOTE H Central condensation seen easily in binoculars.
NOTE I Twilight. Comet seen naked eye.
NOTE J Differential extinction correction = -1.1 mag. was applied.
NOTE K Observation affected by low altitude, twilight, and cirrus. No extinction corrections have been applied to the magnitude estimate. The comet was not seen with the naked eye.
NOTE L Tail estimated with naked eye.
NOTE M Tail length approximate.
NOTE N Tail length is lower limit.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.110 | 830848 | 4 | 0.08 | B | | 11 | | 4.8 | 1 | Fleet,R.W | A |

NOTE A Leading edge at PA 255. Main tail at PA 281. Fan at PA 310. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 21 FEB 1986

DATE: 21 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.108 | 816650 | 3.5 | B | 4B | | 6 | 0.6 | | 0.06 | B | | 15 | 5.8 | Y | 2 | Vincent,J | A |
| 21.111 | 816651 | | | | 4.0 | 7 | 0.8 | 282 | 0.08 | B | | 11 | 4.8 | Y | 1 | Fleet,R.W | B |
| 21.115 | 816652 | 3.9 | M | 4B | | 7 | | | | EY | | | 4.8 | Y | 1 | Fleet,R.W | C |
| 21.115 | 816653 | 2.5 | B | 4B | 30 | 7 | 1.58 | 285 | 0.065 | B | | 20 | 6.2 | Y | 1 | McBain,J | D |
| 21.117 | 816654 | 2.7 | M | 4B | | | | | 0.08 | B | | 11 | 4.8 | Y | 1 | Fleet,R.W | E |
| 21.118 | 816655 | 3.7 | M | 4B | | | | | 0.08 | B | | 11 | 4.8 | Y | 1 | Fleet,R.W | C |
| 21.125 | 816656 | 3.3 | B | 4B | 8 | 5 | 2.5 | 270 | 0.04 | B | | 8 | | Y | 1 | Morrisby,A | F |
| 21.126 | 816657 | 3.6 | M | 4B | 4 | 8 | 0.40 | 280 | 0.04 | B | | 12 | 3.6 | N | 1 | Henshaw,C | G |
| 21.138 | 816658 | 3.4 | M | 4B | | | | | 0.08 | B | | 11 | T | Y | 1 | Fleet,R.W | E |
| 21.549 | 816659 | 3.6 | M | | 18 | 3 | 11 | 113 | 0.08 | B | | 11 | 4 | N | 1 | Glassett,W | H |
| 21.549 | 816660 | 3.6 | M | | 19 | 3 | 11 | 114 | 0.444 | N | 4.4 | 221 | 5 | N | 1 | Glassett,W | I |
| 21.56 | 816661 | 2.3: | M | 4B | 7 | 8 | 2 | 285 | 0.080 | B | | 20 | 3.0TC | Y | 6 | Morris,C.S | J |
| 21.56 | 816662 | 2.3: | M | 4B | 9 | 7 | | | 0.050 | B | | 10 | 3.0TC | Y | 6 | Morris,C.S | J |
| 21.561 | 816663 | 3.6 | | 4B | | 9 | | | | EY | | | | Y | 3 | Edberg,S.J | K |
| 21.564 | 816664 | 4.2 | S | 4B | | 6 | | | 0.05 | B | | 10 | | Y | 3 | Edberg,S.J | L |
| 21.77 | 816665 | 2.6 | S | 4B | 5 | | 4.5 | | 0.03 | R | 6 | 8 | 5.3T | Y | 1 | Lovejoy,T | M |
| 21.77 | 816666 | 2.8 | | 4B | | | | | | EY | | | | N | 1 | Seargent,D | N |
| 21.855 | 816667 | 3.5 | M | 4B | 2 | 8 | 1 | 285 | 0.08 | B | | 11 | 3.5T | N | 1 | Mitsuma,S | O |
| 21.860 | 816668 | 3.8 | S | 4B | 1.9 | 8 | | | 0.05 | B | | 7 | T | Y | 1 | Kanai,K | |
| 21.860 | 816669 | 3.8 | B | 4B | 1.9 | 8 | | | 0.05 | B | | 7 | 1 T | Y | 1 | Kanai,K | |
| 21.884 | 816670 | 3.3 | S | 4B | 10 | 6 | 2 | 270 | 0.08 | B | | 11 | 5.0 | Y | 1 | Kobayashi,J | |

NOTE A Coma fuzzy. Tail triangular. PA 275/300.
NOTE B Fan to 0.3 deg. in PA 320.
NOTE C Comparison star Alpha 2 Capricorni.
NOTE D Mag. 9 star seen in tail.
NOTE E Comparison star Epsilon Aquarii.
NOTE F Low mist near horizon.
NOTE G Twilight. PA uncertain.
NOTE H Broad tail. Comet still close to sun.
NOTE I Broad tail. Comet still close to sun. Visible almost to daylight!
NOTE J Differential extinction correction = -1.3 mag. was applied.
NOTE K Comet stellar with tail. No extinction correction.
NOTE L No extinction correction.
NOTE M Broad glow north tail.
NOTE N Haze.
NOTE O m2 = 5.5.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.111 | 830849 | 4 | 0.08 | B | | 11 | | 4.8 | 1 | Fleet,R.W | A |
| 21.77 | 830850 | 0.05 | 0.20 | N | 6.3 | 250 | | | 5 | Lovejoy,T | B |

NOTE A Leading edge at PA 265. Main tail at PA 282. Fan at PA 320. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.767 | 850914 | 0.180 | 2.8 | | 11.4 x 7.6 | 3.00 | Kodak 2415 | | Y | O | 3/S | 1 | Garradd,G |
| 21.771 | 850915 | 0.180 | 2.8 | | 11.4 x 7.6 | 2.50 | Kodak 2415 | | Y | O | 4/S | 1 | Garradd,G |

DATE: 22 FEB 1986

DATE: 22 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.108 | 816671 | 3.2 | B | 48 | | | 1.2 | 270 | 0.050 | B | | 7 | 5.3 | N | 1 | Lavarack,N | A |
| 22.130 | 816672 | 3.9 | M | 4B | | 7 | 0.5 | 277 | 0.08 | B | | 11 | | Y | 1 | Fleet,R.W | B |
| 22.136 | 816673 | 3.3 | M | 4B | | | | | 0.08 | B | | 11 | T | Y | 1 | Fleet,R.W | C |
| 22.464 | 816674 | 4 : | S | 4B | | | | | 0.035 | B | | 7 | 3 T | N | 3 | Morrison,W | D |
| 22.53 | 816675 | 3.0 | B | 4B | 4 | 6 | 1.2 | 280 | 0.040 | B | | 8 | 3.0 | Y | 1 | Keen,R | E |
| 22.545 | 816676 | 3.5 | M | | 19 | 3 | 11 | 114 | 0.444 | N | 4.4 | 221 | 5 | Y | 1 | Glassett,W | F |
| 22.56 | 816677 | 3.0: | M | 4B | | | 0.5 | 275 | 0.05 | B | | 10 | 4 T | Y | 2 | Hale,A | G |
| 22.56 | 816678 | 3.0: | B | 4B | | | | | | EY | | | 4 T | Y | 2 | Hale,A | G |
| 22.649 | 816679 | 3.4 | B | 4B | | 6 | 1.5 | 280 | 0.050 | B | | 7 | 5 | Y | 3 | Krisciunas,K | H |
| 22.771 | 816680 | 2.5 | S | 4B | | | 3 | | 0.05 | B | | 7 | 5.5T | Y | 10 | Garradd,G | |
| 22.774 | 816681 | | | | | 8 | | | 0.31 | N | 5.4 | 129 | 5.5T | Y | 10 | Garradd,G | |
| 22.85833 | 816682 | 4 | B | 4B | | 7 | 1.5 | 270 | 0.12 | B | | 20 | 3 | | 2 | Okumura,S | |
| 22.860 | 816683 | 3.8 | S | 4B | 1.6 | 8 | | | 0.05 | B | | 7 | 1 T | Y | 1 | Kanai,K | |
| 22.86 | 816684 | 3.8 | M | SAO | | 8 | | | 0.065 | R | 8 | 16 | 2.5T | Y | 8 | Nakamura,A | I |
| 22.86 | 816685 | 4.2 | M | 4B | 2.0 | 7 | 0.3 | | 0.21 | N | 5.0 | 33 | 4.0T | Y | 1 | Suzuki,K | |
| 22.863 | 816686 | | | | 4 | 7 | 0.17 | 290 | 0.10 | N | 10 | 55 | 3.5TM | Y | 1 | Kato,T | J |
| 22.864 | 816687 | 2.8 | M | 4B | 6 | 7 | 0.4 | 280 | 0.030 | B | | 8 | 3.5TM | Y | 1 | Kato,T | |

NOTE A Not fully dark adapted.
NOTE B Between clouds. Comparison star Alpha 2 Capricorni.
NOTE C Comparison star Epsilon Aquarii.
NOTE D 0.15 f/5 refr., 31x shows coma 2' dia., DC = 8, altitude 5 deg. in twilight.
NOTE E Twilight. Extinction correction applied.
NOTE F Broad tail.
NOTE G Observation affected by low altitude, twilight and cirrus. No extinction corrections have been applied to the magnitude estimate.
NOTE H Easy naked eye object.
NOTE I Tail length = yes.
NOTE J Haze.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.750 | 830851 | 0.18 | 0.20 | N | 7 | 155 | | | 1 | Thompson,G | A |

NOTE A Note the spine directly behind the nucleus. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.765 | 850916 | 0.180 | 2.8 | | 11.4 x 7.6 | 2.50 | Kodak 2415 | | Y | O | 5/S | 10 | Garradd,G | |
| 22.769 | 850917 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | Kodak 2415 | | Y | O | 6/S | 10 | Garradd,G | |
| 22.775 | 850918 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.25 | Kodak 2415 | | Y | O | 7/S | 10 | Garradd,G | |
| 22.781 | 850919 | 0.180 | 2.8 | | 11.4 x 7.6 | 2.17 | Kodak 2415 | | Y | O | 8/S | 10 | Garradd,G | A |
| 22.782 | 850920 | 0.180 | 2.8 | | 11.4 x 7.6 | 1.58 | Kodak 2415 | | Y | O | 9/S | 10 | Garradd,G | |
| 22.783 | 850921 | 0.180 | 2.8 | | 11.4 x 7.6 | 1.00 | Kodak 2415 | | Y | O | 10/S | 10 | Garradd,G | |

NOTE A Start time uncertain.

DATE: 23 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.113 | 816688 | 3.5 | M | 4B | 4.0 | 7 | 1.2 | 280 | 0.08 | B | | 11 | 4.8 | Y | 1 | Fleet,R.W | A |
| 23.117 | 816689 | 3.4 | M | 4B | | 7 | | | | EY | | | 4.8 | Y | 1 | Fleet,R.W | B |
| 23.128 | 816690 | 3.0 | M | 4B | | | | | 0.08 | B | | 11 | 4.8 | Y | 1 | Fleet,R.W | C |
| 23.131 | 816691 | 3.4 | M | 4B | | 9 | 0.5 | 280 | 0.04 | B | | 12 | 4.2 | N | 1 | Henshaw,C | D |
| 23.139 | 816692 | 3.3 | M | 4B | | | | | 0.08 | B | | 11 | T | Y | 1 | Fleet,R.W | C |
| 23.39 | 816693 | 2.6 | B | IHW BAA | | | | | | EY | | | | | | Green,D.W.E | |
| 23.40 | 816694 | 2.7 | B | IHW BAA | 6 | 8 | 3 | | 0.035 | B | | 7 | | | | Green,D.W.E | E |
| 23.56 | 816695 | 2.4 | M | 4B, BSC | 3.5 | 8 | 1 | | 0.080 | B | | 20 | 3.0MTC | Y | 6 | Morris,C.S | F |
| 23.5660 | 816696 | 2.7 | M | 4B | 6 | 6 | 1.00 | 260 | 0.032 | B | | 8 | 4.5 | Y | 9 | Cook,A.J | G |
| 23.57 | 816697 | 2.3 | M | 4B, BSC | | | | | 0.050 | B | | 10 | 3.0MTC | Y | 6 | Morris,C.S | H |
| 23.57 | 816698 | | | | | | | | 0.256 | N | 4.5 | 67 | 3.0MTC | Y | 6 | Morris,C.S | I |
| 23.5743 | 816699 | 3.0 | S | DCS | 3 | 7 | 0.67 | 260 | 0.080 | B | | 20 | 3.8 | | 1 | Machholz,D | J |
| 23.5778 | 816700 | 2.9 | S | DCS | 4 | 8 | 0.42 | 260 | 0.130 | R | 7.1 | 27 | 3.8 | | 1 | Machholz,D | K |
| 23.5792 | 816701 | 2.7 | S | DCS | 10 | 5 | | | | EY | | | 3.8 | | 1 | Machholz,D | L |
| 23.764 | 816702 | 4.0 | S | 4B | 4 | | 0.25 | 290 | 0.05 | B | | 7 | 4.2M | N | 1 | Bryant,K | M |
| 23.793 | 816703 | | B | 4B | 20 | | 1 | 260 | 0.05 | B | | 10 | | | 1 | Tregaskis,T.B | N |
| 23.85 | 816704 | 3.8 | M | 4B | | | | | 0.05 | B | | 7 | 4.0TM | Y | 1 | Suzuki,K | |
| 23.85 | 816705 | | | 4B | 1.6 | 6 | 0.2 | | 0.21 | N | 5.0 | 88 | 4.0TM | Y | 1 | Suzuki,K | O |
| 23.855 | 816706 | 3.3 | M | 4B | 3 | 8 | 1 | 285 | 0.08 | B | | 11 | 4 T | N | 1 | Mitsuma,S | P |
| 23.856 | 816707 | 3.6 | S | 4B | 2.2 | 8 | 0.7 | 285 | 0.05 | B | | 7 | 1.5T | Y | 1 | Kanai,K | |
| 23.856 | 816708 | 3.8 | B | 4B | 2.2 | 8 | 0.7 | 285 | 0.05 | B | | 7 | 1.5T | Y | 1 | Kanai,K | |
| 23.86 | 816709 | 3.5 | | 4B | | | | | | EY | | | 4.1 | N | | Clark,M.L | |
| 23.86 | 816710 | 3.6 | M | SAO | 4 | 8 | 0.4 | 270 | 0.065 | R | 8 | 16 | 2.5TM | Y | 7 | Nakamura,A | |
| 23.87 | 816711 | 3.6 | S | 4B | 2 | 8 | 2 | 287 | 0.125 | R | 5 | 32 | 4.1 | N | | Clark,M.L | |
| 23.875 | 816712 | 4.0 | S | 4B | 5 | 6 | 0.33 | 260 | 0.07 | B | | 10 | 4.0 | Y | 1 | Kobayashi,J | |

NOTE A Fan to 0.4 deg. in PA 323. Comparison star Alpha 2 Capricorni.
NOTE B Hint of tail. Comparison star Alpha 2 Capricorni.
NOTE C Comparison star Epsilon Aquarii.
NOTE D Twilight. PA uncertain.
NOTE E Coma diameter approximate. Tail length is lower limit.
NOTE F Differential extinction correction = -0.6 mag. was applied. Fan-shaped tail with material between PA 270-290. Northernmost tail slightly curved toward the north.
NOTE G In twilight.
NOTE H Differential extinction correction = -0.6 mag. was applied.
NOTE I Central condensation was elongated down the dust tail. Southern side of coma had a bulge of material hooking back into the tail.
NOTE J At the time of observation the comet's altitude was +6 deg. and the sun's altitude was -13 deg. 98% moon 164 degrees away. Last obs. when comet alt. = 11 deg., sun = -6 deg.
NOTE K At the time of observation the comet's altitude was +6 deg. and the sun's altitude was -12 deg. 98% moon 164 degrees away. Last obs. when comet alt. = 12 deg., sun = -5 deg.
NOTE L At the time of observation the comet's altitude was +7 deg. and the sun's altitude was -11 deg. 98% moon 164 degrees away. Last obs. when comet alt. = 9 deg., sun = -7 deg.
NOTE M DC = strong.
NOTE N Coma mag. approx. 4 or brighter. Coma diameter approximate; tail broad, length and PA approximate. Brief sighting. Not seen by naked eye. Low, clear, bright moon. (Observer gave limit as approximately 8. Ed.)
NOTE O Coma dia. use meter.
NOTE P m2 = 5.3.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.113 | 830852 | 4 | 0.08 | B | | 11 | | 4.8 | 1 | Fleet,R.W | A |
| 23.306 | 830853 | 2.4 | 0.03 | R | 10 | 30 | 240 | 5 | 1 | Vargas B.,A.G | B |
| 23.566 | 830854 | 3 | 0.032 | B | | 8 | 20 | 4.5 | 9 | Cook,A.J | C |

NOTE A Leading edge at PA 260. Main tail at PA 280. Fan tail at PA 323. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B The tail length is about 2.5 deg. approx. at about PA 300 approx.; DC 8 approx.; coma diameter: 3' approx. estimate magnitude: 4 approx. [sic]
NOTE C Drawn in twilight.

DATE: 24 FEB 1986

DATE: 24 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.118 | 816713 | | | | 4.0 | 8 | 0.8 | 278 | 0.08 | B | | 11 | 3.8M | Y | 1 | Fleet,R.W | |
| 24.120 | 816714 | 3.6 | M | 4B | | 7 | | | | EY | | | 3.8M | Y | 1 | Fleet,R.W | A |
| 24.141 | 816715 | 3.5 | M | 4B | | | | | 0.08 | B | | 11 | MT | Y | 1 | Fleet,R.W | B |
| 24.38 | 816716 | 2.5: | B | IHW BAA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 24.5750 | 816717 | 3.2 | S | DCS | 3 | 7 | 0.37 | 263 | 0.080 | B | | 20 | 3.0 | | 3 | Machholz,D | C |
| 24.79 | 816718 | 2.8 | S | 4B | | | 2.5 | | | EY | | | 4.5M | N | 1 | Lovejoy,T | D |
| 24.845 | 816719 | 3.5 | M | 4B | 2.7 | 8 | 1 | 275 | 0.08 | B | | 11 | 4 T | Y | 1 | Mitsuma,S | E |
| 24.847 | 816720 | 3.5 | B | 4B | 7 | 6 | 0.75 | | 0.05 | B | | 7 | 4.5 | Y | 1 | Hayashi,H | F |
| 24.85 | 816721 | 3.4 | | 4B | | | | | | EY | | | 4.0 | N | | Clark,M.L | |
| 24.852 | 816722 | 3.6 | B | 4B | 3.5 | 7 | 1.5 | 280 | 0.05 | B | | 7 | 1.5T | Y | 1 | Kanai,K | |
| 24.852 | 816723 | 3.5 | S | 4B | 3.5 | 7 | 1.5 | 280 | 0.05 | B | | 7 | 1.5T | Y | 1 | Kanai,K | |
| 24.86 | 816724 | 3.6 | S | 4B | 2.5 | 8 | 1.75 | 287 | 0.125 | R | 5 | 32 | 4.0 | N | | Clark,M.L | |
| 24.86 | 816725 | 3.6 | S | AAVSO | 3 | 7 | 0.33 | 270 | 0.07 | B | | 10 | 3.0TM | Y | 1 | Hayashi,A | |
| 24.868 | 816726 | 3.6 | S | 4B | 6 | 6 | 1.50 | 250 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |

NOTE A Comparison star Alpha 2 Capricorni.
NOTE B Comparison star Epsilon Aquarii.
NOTE C At the time of observation the comet's altitude was +7 deg. and the sun's altitude was -12 deg. 99% moon 153 degrees away.
NOTE D Moonlight.
NOTE E m2 = 5.8.
NOTE F Moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.79 | 830855 | 0.05 | 0.20 | N | 6.3 | 250 | | | 5 | Lovejoy,T | A |
| 24.790 | 830856 | | 0.120 | B | | 20 | | | 1 | McNaught,R.H | B |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Two drawings supplied. (Duration not indicated. Time of observations assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.355 | 850922 | 1.710 | 5.7 | | 1.2 x 0.8 | 2.00 | 3M 1000 | 1000/ | N | | 19/P | | Pizzi,R |
| 24.562 | 850923 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 0.75 | Fujichrome | 1600/ | N | | 002/P | 3 | Royer,R |

DATE: 25 FEB 1986

DATE: 25 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | m1 | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.112 | 816727 | 3.0 | S | 4B | 4.0 | | 8 | 1.25 | 278 | 0.13 | R | 4 | 21 | 5.5 | Y | 1 | Campos,J | A |
| 25.194 | 816728 | 3.6 | M | 4B | | | 8 | | | 0.07 | B | | 20 | | Y | 1 | Tanti,T | B |
| 25.30 | 816729 | 5.2 | S | 4B | | | | | | 0.08 | B | | 20 | 2.0 | | 5 | Shanklin,J.D | |
| 25.39 | 816730 | 2.9 | B | IHW BAA | 6 | | 8 | | | 0.035 | B | | 7 | | | | Green,D.W.E | C |
| 25.39 | 816731 | 3.0 | B | IHW BAA | 6 | | 8 | 2 | | 0.080 | B | | 20 | | | | Green,D.W.E | D |
| 25.40 | 816732 | 2.8 | B | IHW BAA | | | | | | | EY | | | | | | Green,D.W.E | |
| 25.408 | 816733 | 3.0 | B | 122 | 6 | 4 | 4 | 1.67 | 240 | 0.05 | B | | 7 | 5.3 | Y | 1 | Lairet,R | |
| 25.458 | 816734 | 3.2 | S | 4B | | | | | | 0.035 | B | | 7 | 3 MT | N | 3 | Morrison,W | E |
| 25.52 | 816735 | 3.0 | B | 4B | | | | 1.3 | 270 | 0.040 | B | | 8 | 3.5 | Y | 1 | Keen,R | F |
| 25.53 | 816736 | 3.0 | V | 4B | | | | | | | EY | | | 3.5 | Y | 1 | Keen,R | F |
| 25.56 | 816737 | 2.9: | B | 4B | | | | 0.5 | 275 | | EY | | | 4 TM | Y | 2 | Hale,A | G |
| 25.56 | 816738 | 3.0: | M | 4B | | | | 1 | 275 | 0.05 | B | | 10 | 4 TM | Y | 2 | Hale,A | G |
| 25.56 | 816739 | 2.6 | M | 4B, BSC | 4.7 | | 8 | 3 | 275 | 0.050 | B | | 10 | 3.5MTC | Y | 6 | Morris,C.S | H |
| 25.57 | 816740 | | | | | | | | | 0.200 | SC | 10.0 | 160 | 3.5MTC | Y | 6 | Morris,C.S | I |
| 25.70 | 816741 | 3.6 | S | 4B | | | | | | 0.023 | B | | 3 | 4 | Y | | Jones,A | J |
| 25.70 | 816742 | | | | | | | 0.5 | 280 | 0.080 | B | | 11 | | | | Jones,A | K |
| 25.70 | 816743 | | | | 2.5 | | 7 | | | 0.317 | N | 5 | 86 | | | | Jones,A | L |
| 25.760 | 816744 | 3.9 | S | 4B | 5 | | | 0.42 | 290 | 0.05 | B | | 7 | 4.2M | N | 1 | Bryant,K | M |
| 25.76 | 816745 | 2.9 | S | 4B | | | | 2.0 | | | EY | | | 4.5M | N | 1 | Lovejoy,T | |
| 25.782 | 816746 | 3.1 | B | 4B | 1 | | | 1.8 | 265 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | N |
| 25.787 | 816747 | | | 4B | 1.9 | | 6 | | | 0.152 | N | 8 | 120 | | Y | 1 | Tregaskis,T.B | O |
| 25.833 | 816748 | 3.4 | M | 4B | 5.8 | 3.3 | | 1.3 | | 0.1 | N | 10 | 25 | 5.0 | Y | 1 | Ichikawa,K | P |
| 25.844 | 816749 | 3.5 | M | 4B | 3 | | 8 | 1.5 | 275 | 0.08 | B | | 11 | 4 T | Y | 1 | Mitsuma,S | Q |
| 25.85 | 816750 | 3.5 | S | AAVSO | 3 | | 7 | 0.5 | 270 | 0.08 | B | | 15 | 2.5TM | Y | 1 | Hayashi,A | |
| 25.85 | 816751 | 3.6 | M | SAO | | | 8 | | | 0.065 | R | 8 | 16 | 3.0TM | Y | 7 | Nakamura,A | R |
| 25.851 | 816752 | 3.5 | S | 4B | 3.5 | | 8 | 1.5 | 285 | 0.05 | B | | 7 | 1.5T | Y | 1 | Kanai,K | |
| 25.851 | 816753 | 3.5 | B | 4B | 3.5 | | 8 | 1.5 | 285 | 0.05 | B | | 7 | 1.5T | Y | 1 | Kanai,K | |
| 25.851 | 816754 | 4.0 | B | 4B | | | | | | 0.035 | B | | 7 | | Y | 1 | Okada,M | |
| 25.86 | 816755 | 4.0 | S | | 3 | | 6 | 0.33 | 260 | 0.080 | B | | 11 | 4.0 | Y | 1 | Akita,I | S |

NOTE A Tail 12' at widest; central cond. coma approx. 1.0'.
NOTE B Moon. Clouds. Twilight.
NOTE C Coma diameter approximate.
NOTE D Coma diameter approximate. Tail length is lower limit.
NOTE E Comet altitude 5 deg., comparison stars' altitudes 10 deg., comet's uncorrected magnitude is 3.9.
NOTE F Twilight. Extinction correction applied.
NOTE G Observation affected by twilight and full moon. Despite this, comet was clearly visible to the naked eye.
NOTE H Differential extinction correction = -0.5 mag. was applied. Yale BSC also used. Dust tail in PA 290 was significantly curved toward the north about two degrees from the head. PA for the last two degrees was 310.
NOTE I Central condensation offset toward the north. There was a bulge of material on the south side of the coma wrapping into the tail. This feature was very faint.
NOTE J Fairly clear. Comet altitude 9 degree-10 degree.
NOTE K Striations in tail. Moon 16.7d.
NOTE L Comet visible to unaided eye.
NOTE M DC = strong.
NOTE N PA approximate. Just visible to naked eye but low and hazy cloud in dawn, bright moon. [sic] (Observer gave limit as approximately 7.5. Ed.)
NOTE O 15 arc sec. nucleus. Just visible to naked eye but low and hazy cloud in bright moon. [sic]
NOTE P PA = W.
NOTE Q m2 = 5.5.
NOTE R Tail length = yes.
NOTE S Moon age 16.7. (Translated by IHW staff. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.760 | 830857 | 0.2 | 0.20 | N | 6.3 | 50 | | | 5 | Lovejoy,T | A |
| 25.767 | 830858 | | | | | | | | | McNaught,R.H | B |
| 25.787 | 830859 | 0.09 | 0.152 | N | 8 | 120 | 1 | | 1 | Tregaskis,T.B | C |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Nucleus in center of envelope's latus rectum. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Central condensation approximately 15" diam. No tail. DC 6. Limit approximately mag. 11.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.559 | 850924 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 1.00 | Kodak 2415 | | Y | | 003/P | | Royer,R |
| 25.561 | 850925 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 2.00 | Kodak 2415 | | Y | | 004/P | | Royer,R |

DATE: 26 FEB 1986

DATE: 26 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.04 | 816756 | 4.3 | B | M | 2 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 26.115 | 816757 | 3.4 | B | 4B | 10 | 5 | 2 | 270 | 0.04 | B | | 8 | | Y | 1 | Morrisby,A | A |
| 26.188 | 816758 | 4.1 | M | 4B | 8 | 8 | | 275 | 0.089 | R | 5.5 | 18 | | N | 1 | Ventura,F | B |
| 26.198 | 816759 | 3.8 | M | 4B | | 8 | | | 0.07 | B | | 20 | | Y | 1 | Tanti,T | C |
| 26.205 | 816760 | 3.4 | S | 122 | 3.0 | 8 | 0.77 | 265 | 0.08 | B | | 15 | 2.5MT | Y | 2 | Haver,R | D |
| 26.333 | 816761 | 3.2 | B | 122 | | 8 | 0.8 | 262 | 0.05 | B | | 20 | 3.0 | Y | 8 | da Silva,L.A.L | E |
| 26.337 | 816762 | 3.3 | B | 122 | 3 | 4 | 0.33 | 255 | 0.05 | B | | 7 | 4.5C | Y | 2 | Martinez,C | F |
| 26.340 | 816763 | 3.6 | S | 122 | 3 | 4 | 0.33 | 255 | 0.05 | B | | 7 | 4.5C | Y | 2 | Martinez,C | G |
| 26.365 | 816764 | 3.3 | B | 122 | 3 | 4 | 0.50 | 260 | 0.05 | B | | 7 | 4.0TC | Y | 2 | Martinez,C | |
| 26.368 | 816765 | 3.6 | S | 122 | 3 | 4 | 0.50 | 260 | 0.05 | B | | 7 | 4.0TC | Y | 2 | Martinez,C | |
| 26.39 | 816766 | 2.5: | B | IHW BAA | | | 2 | | | EY | | | | | | Green,D.W.E | H |
| 26.40 | 816767 | 2.8 | B | IHW BAA | 6 | 8 | 3 | | 0.050 | B | | 7 | | | | Green,D.W.E | I |
| 26.40 | 816768 | 3.0 | B | IHW BAA | | 8 | 2 | | 0.080 | B | | 20 | | | | Green,D.W.E | J |
| 26.417 | 816769 | 3.4 | | AAVSO | | 5 | 1 | | 0.050 | B | | 10 | | | | O'Meara,S.J | |
| 26.44 | 816770 | 3.2 | B | 4B | 5 | 8 | 1.0 | 280 | 0.050 | B | | 10 | 5.5 | Y | 1 | Bortle,J.E | K |
| 26.44 | 816771 | | | | 3.5 | 8 | | | 0.120 | B | | 20 | | | | Bortle,J.E | L |
| 26.453 | 816772 | 3.2 | S | 4B | | | | | 0.035 | B | | 7 | 3.5MT | N | 3 | Morrison,W | M |
| 26.53 | 816773 | 3.2 | B | 4B | | | | | 0.040 | B | | 8 | 4.0 | Y | 1 | Keen,R | N |
| 26.53 | 816774 | 2.9 | V | 4B | | | | | | EY | | | 4.0 | Y | 1 | Keen,R | N |
| 26.5757 | 816775 | 3.1 | S | DCS | 3 | 7 | 0.33 | 256 | 0.080 | B | | 20 | 3.0 | | 3 | Machholz,D | O |
| 26.760 | 816776 | 3.0 | S | 4B | | | 1.2 | | 0.05 | B | | 7 | 5.0M | Y | 17 | Garradd,G | |
| 26.76 | 816777 | 2.7 | S | 4B | | | 3.0 | | | EY | | | 5.0M | Y | 1 | Lovejoy,T | |
| 26.76 | 816778 | 3.2 | | 4B | | | | | | EY | | | 4 | Y | 1 | Seargent,D | |
| 26.76 | 816779 | | | | | 8 | 1 | 280 | 0.08 | B | | 15 | | | | Seargent,D | P |
| 26.765 | 816780 | | B | 4B | | | | | 0.05 | B | | 10 | | N | 1 | Tregaskis,T.B | Q |
| 26.767 | 816781 | 3.9 | S | 4B | 5 | | 0.42 | 290 | 0.05 | B | | 7 | 4.2M | N | 1 | Bryant,K | R |
| 26.767 | 816782 | | | | | 8 | | | 0.31 | N | 5.4 | 129 | 5.0M | Y | 17 | Garradd,G | |
| 26.789 | 816783 | 3.1 | B | 4B | | | 1.5 | 265 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | S |

NOTE A Some low mist.
NOTE B Coma diameter approximate. Strong moonlight.
NOTE C Moon. Clouds. Twilight.
NOTE D 0.77 deg. tail type I (?). 0.15 deg. second tail fan-shaped.
NOTE E Full moon.
NOTE F Cirrus.
NOTE G Cloudy.
NOTE H Tail length approximate.
NOTE I Coma diameter approximate. Tail length is lower limit.
NOTE J Tail length is lower limit.
NOTE K Extinction correction applied.
NOTE L Brilliant, sharply condensed center surrounded by a very diffuse, faint outer envelope. Coma condenses steadily to a central, stellar point. At 1046 UT this stellar feature is estimated at about 6.2 magnitude. Comet is last glimpsed at 1107 UT with sunrise at 1135 UT (20x120 B).
NOTE M Comet altitude 4 deg., comparison stars' altitudes 9 deg., comet's uncorrected magnitude is 4.0.
NOTE N Twilight. Extinction correction applied.
NOTE O At the time of observation, the comet's altitude was +8 deg. and the sun's altitude was -12 deg. 95% moon 125 degrees away.
NOTE P Bright sector on sunward side of nucleus. Observation also made with 0.152 f/5 Newtonian at 76x. Moonlight.
NOTE Q Broad single tail of about 1 deg. Clear, bright moon. Occasionally glimpsed with naked eye.
NOTE R DC = strong.
NOTE S Single tail of about 1.5 deg., PA approximate. Clear, bright moon. Seen as definite faint streak in naked eye. (Observer gave limit as approximately 7. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.782 | 830860 | 0.2 | 0.20 | N | 6.3 | 140 | | | 5 | Lovejoy,T | A |
| 26.782 | 830861 | | | | | 76 | 43 | | | McNaught,R.H | B |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B (Drawings at 1825, 1835, and 1908 UT submitted. Durations not indicated. Time of observations are assumed to be start times. Ed.)

DATE: 27 FEB 1986 DATE: 27 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.125 | 816784 | 3.3 | B | 4B | 10 | | 5 | 3 | 270 | 0.04 | B | | 8 | | Y | 1 | Morrisby,A | A |
| 27.192 | 816785 | 2.5: | B | 4B | 15 | | 7 | | | 0.07 | B | | 20 | 6.5MT | N | 1 | Filimon,E | B |
| 27.351 | 816786 | 3.3 | B | 122 | 3 | | 4 | 0.50 | 265 | 0.05 | B | | 7 | 4.5C | Y | 2 | Martinez,C | C |
| 27.354 | 816787 | 3.3 | | 122 | | | | | | | EY | | | 4.5C | Y | 2 | Martinez,C | |
| 27.451 | 816788 | 3.3 | S | 4B | 3 | | | 0.30 | 270 | 0.035 | B | | 7 | 3.5MT | N | 3 | Morrison,W | D |
| 27.5701 | 816789 | 3.4 | S | DCS | 3 | | 8 | 0.33 | 267 | 0.080 | B | | 20 | 3.0 | | 3 | Machholz,D | E |
| 27.70 | 816790 | 3.5 | S | 4B | | | | | | 0.023 | B | | 3 | 4 | | | Jones,A | F |
| 27.70 | 816791 | | | | | | | 0.6 | 275 | 0.080 | B | | 11 | | | | Jones,A | G |
| 27.70 | 816792 | | | | | | 7 | | | 0.317 | N | 5 | 80 | | | | Jones,A | H |
| 27.76 | 816793 | 2.9 | S | 4B | 4.5 | | | 3.0 | | | EY | | | 5.0M | Y | 1 | Lovejoy,T | |
| 27.771 | 816794 | 2.8 | S | 4B | | | | 1 | | 0.05 | B | | 7 | 5.0M | Y | 8 | Garradd,G | |
| 27.774 | 816795 | | | | | | 8 | | | 0.31 | N | 5.4 | 129 | 5.0M | Y | 8 | Garradd,G | I |
| 27.847 | 816796 | 3.1 | M | 4B | 6 | | 6 | 1.2 | 260 | 0.030 | B | | 8 | 4.0M | Y | 1 | Kato,T | |
| 27.85 | 816797 | 3.5 | S | | 4 | | 6 | 2.0 | 260 | 0.080 | B | | 11 | 4.5 | Y | 1 | Akita,I | J |
| 27.851 | 816798 | | | | 7 | 6 | 6 | 0.5 | 260 | 0.10 | N | 10 | 8 | 4.0M | Y | 1 | Kato,T | |
| 27.86 | 816799 | 3.2 | | 4B | | | | | | | EY | | | 4.3 | N | | Clark,M.L | |
| 27.86 | 816800 | 3.4 | S | 4B | 3 | | 7 | 2 | 286 | 0.076 | N | 8 | 15 | 4.3 | N | | Clark,M.L | |
| 27.86 | 816801 | 3.0 | S | 4B | | | 8 | 1.7 | 270 | 0.030 | B | | 8 | 6.2 | Y | | Pearce,A | |
| 27.86 | 816802 | 2.8 | S | | | | 6 | | | | EY | | | 6.2 | Y | | Pearce,A | |
| 27.86 | 816803 | 3.4 | B | | 5 | | 8 | 0.33 | 260 | 0.05 | B | | 10 | 3.6 | Y | 1 | Uda,K | |

NOTE A The tail was a long thin spike (plasma tail) with pehaps 1 deg. or 2 deg. of a dust tail, possibly curving slightly towards the north.
NOTE B Extremely good horizon view. (Translated by IHW staff. Ed.)
NOTE C With refractor 6 cm aperture, F/D = 15 at 60x, DC = 7.
NOTE D Comet altitude 5 deg., comparison stars' altitudes 10 deg., comet's uncorrected magnitude is 4.0.
NOTE E At the time of observation, the comet's altitude was +8 deg. and the sun's altitude was -13 deg. 89% moon 110 degrees away.
NOTE F Moon 18.7 d.
NOTE G PA 275 brighter than rest of paraboloid coma/tail bounded by PAs given.
NOTE H Bright non-stellar nucleus in paraboloid coma/tail.
NOTE I Elongated central condensation 8"x6", 2 broad jets 5" long in PA 100 and PA 285.
NOTE J Moon age 18.7. (Translated by IHW staff. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.763 | 830862 | | 0.120 | B | | 20 | | | | McNaught,R.H | A |
| 27.788 | 830863 | | 0.20 | N | 6.3 | 50,250 | | | 5 | Lovejoy,T | B |

NOTE A No jets. At 1752 UT, 3/4 deg. tail in 20x120 B. (Two drawings submitted. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B (Duration not indicated. Time of observation is assumed to be start time. Two drawings supplied, one each at magnification of 50 and scale 0.2 arc min./mm and magnification of 250 and scale 0.05 arc min./mm. Ed.)

DATE: 28 FEB 1986

DATE: 28 FEB 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.03 | 816804 | 4.1 | B | M | 1 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 28.122 | 816805 | 3.0 | B | 4B | 30 | 7 | 2 | 275 | 0.065 | B | | 20 | 6.0M | Y | 1 | McBain,J | A |
| 28.427 | 816806 | 4.3 | M | 4B | | 7 | 0.5 | | 0.05 | B | | 12 | 4.5MT | Y | 3 | Knight,S | B |
| 28.427 | 816807 | 3.5 | | AAVSO | | | 5 | | 0.050 | B | | 10 | | | | O'Meara,S.J | |
| 28.434 | 816808 | 3.1 | B | 4B | | 7 | 2 | 230 | 0.035 | B | | 7 | 4.2 | Y | 1 | Stephan,C | C |
| 28.438 | 816809 | 2.9 | M | 4B | 4 | 6 | 2.0 | 280 | 0.063 | B | | 9 | 3.1MT | Y | | DeYoung,J.A | |
| 28.44 | 816810 | 2.8 | B | 4B | 3 | 8 | 1.5 | 273 | 0.050 | B | | 10 | 5.5 | Y | 1 | Bortle,J.E | D |
| 28.52 | 816811 | 2.8 | B | 4B | 5 | 8 | 1.8 | 270 | 0.040 | B | | 8 | 5.0 | Y | 1 | Keen,R | E |
| 28.52 | 816812 | 2.8 | V | 4B | | | | | | EY | | | 5.0 | Y | 1 | Keen,R | E |
| 28.70 | 816813 | | | | | | 1 | | 0.080 | B | | 11 | 4.8 | Y | | Jones,A | F |
| 28.70 | 816814 | 3.4 | S | 4B | | | | | 0.023 | B | | 3 | 4.8 | Y | | Jones,A | G |
| 28.70 | 816815 | | | | | 7 | | | 0.317 | N | 5 | 86 | | | | Jones,A | H |
| 28.76 | 816816 | 2.6 | | 4B | | | | | | EY | | | | Y | 1 | Seargent,D | |
| 28.77 | 816817 | 3.0 | S | 4B | 5.0 | | 3.5 | | | EY | | | 5.0M | Y | 1 | Lovejoy,T | |
| 28.771 | 816818 | 2.7 | S | 4B | | | 2.0 | | 0.05 | B | | 7 | 5.0M | Y | 8 | Garradd,G | |
| 28.774 | 816819 | | | | | 8 | | | 0.31 | N | 5.4 | 129 | 5.0M | Y | 8 | Garradd,G | |
| 28.844 | 816820 | 3.5 | B | 4B | 5 | 7 | 1.5 | | 0.05 | B | | 7 | 4.0 | Y | 1 | Hayashi,H | I |
| 28.85 | 816821 | 3.3 | S | | 5 | 6 | 2.0 | 260 | 0.080 | B | | 11 | 5.0 | Y | 1 | Akita,I | J |
| 28.85 | 816822 | 3.6 | M | SAO | 4 | 7 | | | 0.065 | R | 8 | 16 | 3.0TM | Y | 7 | Nakamura,A | K |
| 28.85 | 816823 | 3.5 | M | 4B | | 6 | 2.0 | | 0.05 | B | | 7 | 4.5TM | Y | 2 | Suzuki,K | |
| 28.854 | 816824 | 3.7 | B | 4B | | | 1 | | 0.035 | B | | 7 | | Y | 1 | Okada,M | |
| 28.856 | 816825 | 3.2 | M | 4B | 6 | 7 | 1.2 | 260 | 0.030 | B | | 8 | 4.0M | Y | 1 | Kato,T | |
| 28.875 | 816826 | 3.8 | S | 4B | 12 | 6 | 0.50 | 250 | 0.07 | B | | 10 | 3.0 | Y | 1 | Kobayashi,J | |

NOTE A Moonlight interfering; mag. 6 star in coma.
NOTE B Bright moon. Tail length approximate.
NOTE C Bright moon in west. Ground fog. Clouds approaching from west. The mag. is reduced for atmospheric extinction.
NOTE D Extinction correction applied. With 20x120 binoculars: very sharply condensed coma with diffuse edges; center almost stellar in appearence. Outline of coma parabolic. Coma's edges unusually vague for so bright an object. With 20 cm Schmidt-Cassegrain at 71x: dense central condensation occupies about 1/4 of coma's full diameter and is clearly separated from surrounding coma. As twilight advances condensation shrinks and becomes steadily more stellar. Comet last glimpsed with 20 cm S-C at 1105 UT, sunrise 1132 UT.
NOTE E Extinction correction applied.
NOTE F Broad tail bounded by PAs 260, 275.
NOTE G Moon 19.7 d.
NOTE H Bright nucleus paraboloid coma/tail.
NOTE I Moon, twilight.
NOTE J Moon age 19.7. (Translated by IHW staff. Ed.)
NOTE K Tail length = yes.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.424 | 830864 | 1 | 0.156 | N | 8 | 52 | 10 | 5 | 3 | Cuthill,D.D | A |
| 28.441 | 830865 | 0.83 | 0.152 | N | 8 | 38 | | 5 | 2 | Cuthill,L | B |
| 28.753 | 830866 | | 0.120 | B | | 20 | | | | McNaught,R.H | C |
| 28.770 | 830867 | | | | | | 27 | | | McNaught,R.H | D |
| 28.788 | 830868 | 0.2 | 0.20 | N | 6.3 | 140,250 | | | 5 | Lovejoy,T | C |

NOTE A A prominent bow-shock is brighter and longer on the N side of the coma. [sic] The leading edge of the bow is very well defined. A vertex distance was estimated to be 20" from the central condensation. Inner coma is large and round, >15". Fine streams in the wide tail were too difficult to draw accurately. Semi-latus rectums are about 2.5'.
NOTE B Tail at PA 250-290. Gas tail at PA 270. Coma DC = 9. Parabolic hood axis of hood PA 90 deg. A parabolic hood is clearly evident. The inner coma is large and stellar. Most of tail is visible between 250 deg. and 290 deg. PA. A prominent gas tail is at PA 270 deg. Semi latus rectum 2.5'. Vertex distance - 1.5'. Magnitude estimated to be 3.3 using 10x50 binoculars (Morris method).
NOTE C (Duration not indicated. Time of observation is assumed to be start time Ed.)
NOTE D 1836 UT, almost (illegible, Ed.) stellar. (Drawings at 26x and unspecified magnification submitted. Ed.)

DATE: 1 MAR 1986 DATE: 1 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.05 | 816827 | 3.9 | B | M | 2 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 1.083 | 816828 | 3.8 | M | 4B | 4.3 | 7 | 2.3 | 269 | 0.08 | B | | 11 | 3.8M | Y | 1 | Fleet,R.W | |
| 1.111 | 816829 | 3.4 | M | 4B | | 6 | 1.1 | 268 | | EY | | | 4.0M | Y | 1 | Fleet,R.W | |
| 1.118 | 816830 | 3.0 | B | 4B | 30 | 7 | 2.33 | 275 | 0.065 | B | | 20 | 4.8 | Y | 1 | McBain,J | A |
| 1.129 | 816831 | 3.6 | M | 4B | 2 | 8 | 2.33 | 270 | 0.04 | B | | 12 | 4.1 | N | 1 | Henshaw,C | B |
| 1.26 | 816832 | 3.9 | S | 4B | | | | | 0.08 | B | | 20 | 5.0 | | 5 | Shanklin,J.D | |
| 1.28 | 816833 | 3.7 | S | 4B | | | | | | EY | | | 5.0 | | 5 | Shanklin,J.D | |
| 1.35 | 816834 | 2.9 | M | 4B, BSC | 4.7 | 8 | 5 | 270 | 0.050 | B | | 10 | 4.5M | Y | 19 | Morris,C.S | C |
| 1.35 | 816835 | 2.9 | M | 4B, BSC | 4.7 | 8 | | | 0.070 | B | | 16 | 4.5M | Y | 19 | Morris,C.S | D |
| 1.352 | 816836 | 3.0 | B | 122 | | 6 | 1.0 | 269 | 0.05 | B | | 20 | 2.5 | Y | 8 | da Silva,L.A.L | E |
| 1.36 | 816837 | 2.8 | | 4B, BSC | | | 5 | 270 | | EY | | | 4.5M | Y | 19 | Morris,C.S | |
| 1.424 | 816838 | 3.3 | B | 122 | | 4 | 2.5 | 247 | 0.05 | B | | 10 | 3.1 | Y | 2 | Harris,L.A | F |
| 1.43 | 816839 | 2.9 | B | IHW BAA | 4 | 8 | | | 0.035 | B | | 7 | | | | Green,D.W.E | G |
| 1.43 | 816840 | 3.1: | B | IHW BAA | 4 | 8 | | | 0.080 | B | | 20 | | | | Green,D.W.E | G |
| 1.43 | 816841 | 3.2 | B | 4B | 4 | 7 | 1.7 | 270 | 0.050 | B | | 10 | 5.5 | Y | 1 | Bortle,J.E | H |
| 1.43 | 816842 | | | | 4.0 | 7 | | | 0.120 | B | | 20 | | | | Bortle,J.E | I |
| 1.435 | 816843 | 2.8 | M | 4B | 5 | 6 | 2.5 | 278 | 0.063 | B | | 9 | 3.1M | Y | | DeYoung,J.A | |
| 1.438 | 816844 | 4.2 | | | | | | | 0.050 | B | | 7 | | | | Minton,R.B | J |
| 1.469 | 816845 | 4.0 | B | 4B | 2.7 | 1 | 0.7 | 277 | 0.05 | B | | 7 | 3.1MTC | Y | 1 | Dodd,W.J | K |
| 1.542 | 816846 | 2.8 | S | 4B | 38 | 8 | 2 | 256 | 0.035 | B | | 7 | 3.5CTM | N | 1 | Gronek,J.D | L |
| 1.740 | 816847 | 3.3 | B | 4B | 3 | 8 | 1 | 275 | 0.05 | B | | 7 | 3.1 | Y | 3 | Bembrick,C | M |
| 1.76 | 816848 | 2.7 | | 4B | | | | | | EY | | | | | | Seargent,D | |
| 1.76 | 816849 | | | | | 8 | 3 | 280 | 0.08 | B | | 15 | | Y | 1 | Seargent,D | N |
| 1.761 | 816850 | 2.9 | S | 4B | | | 3.2 | | 0.05 | B | | 7 | 5.5M | Y | 8 | Garradd,G | |
| 1.77 | 816851 | 2.8 | S | 4B | | | 6.0 | | | EY | | | 5.3M | Y | 1 | Lovejoy,T | |
| 1.83 | 816852 | 4.2 | M | 4B | 3 | 8 | 0.17 | 315 | 0.080 | B | | 11 | 3 MT | N | 1 | Watanabe,N | O |
| 1.84 | 816853 | 3.6 | M | SAO | 5.5 | 8 | 1.0 | 275 | 0.065 | R | 8 | 16 | 4.0M | Y | 1 | Nakamura,A | |
| 1.84 | 816854 | 3.5 | M | 4B | | | 3.0 | | 0.05 | B | | 7 | 4.5M | Y | 1 | Suzuki,K | |
| 1.84 | 816855 | | | 4B | 2.6 | 6 | | | 0.21 | N | 5.0 | 88 | 4.5M | Y | 1 | Suzuki,K | P |
| 1.86 | 816856 | 3.0 | S | 4B | | 8 | 3.0 | 268 | 0.030 | B | | 8 | 5.8 | Y | | Pearce,A | |
| 1.86 | 816857 | 2.8 | B | 4B | | 6 | 2.8 | | | EY | | | 5.8 | Y | | Pearce,A | |
| 1.865 | 816858 | 3.4 | M | 4B | | | | | 0.10 | B | | 8 | 3.0TM | N | 1 | Kato,T | |

NOTE A Comet brighter than Beta Cap, moonlight.
NOTE B Moon, twilight. PA uncertain.
NOTE C Coma was parabolic and had a bright stellar condensation (m2 = 4.0).
NOTE D Coma was distinctly unsymmetrical with more coma on south side. A bright swath of material, perhaps 10' in length, came out of the north side of the condensation and was directed back into the tail. Comet was pearl white.
NOTE E Moonlight and twilight.
NOTE F Comparison stars: Beta Capricorni (3.1) and Rho Capricorni (3.8 [sic]). Estimate 3.1 (1) 3.27 (9) 4.8. Moon in (observer's notes difficult to translate, Ed.) and smooth clouds around the comet. (Translated by IHW staff. Ed.)
NOTE G Coma diameter approximate.
NOTE H Extinction correction applied.
NOTE I Parabolic coma consisting of a bright, dense condensation surrounded by a fairly faint, parabolic envelope which lacks well defined edges. As dawn advances coma's center begins to show a star-like nucleus at the center of the condensation. Condensation is at the focus of the parabolic envelope with little material sunward of it. Tail's southern side (edge) is probably a little brighter than the northern.
NOTE J Out-of-focus method. Comet was about 1 mag. fainter than Beta Cap (Beta Cap = 3.2).
NOTE K Only used 2 comparison stars for magnitude estimate. Tail length and PA measured from sketch on star chart.
NOTE L First naked eye sighting & obvious tail - exc. see.
NOTE M South edge of tail sharp and distinct, north edge diffuse and concave to north.
NOTE N m2 = 5. Tail length approximate.
NOTE O Tail length is lower limit.
NOTE P Meter. (Coma diameter. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.428 | 830869 | 0.8 | 0.152 | N | 8 | 52 | 30 | 5.5 | 3 | Cuthill,D.D | A |
| 1.448 | 830870 | 0.83 | 0.152 | N | 8 | 38 | | 5.5 | 2 | Cuthill,L | B |
| 1.766 | 830871 | | | | | | 25 | | | McNaught,R.H | C |
| 1.782 | 830872 | 0.15 | 0.20 | N | 6.3 | 140,250 | | | 5 | Lovejoy,T | D |

NOTE A The parabolic hood or bow shock is brightest on the NE side of the nucleus (PA 55). The bow also seems to have narrowed since Feb. 28.
NOTE B Tail at PA 250-290. Gas tail at PA 270. Coma DC = 9. Axis of parabolic hood at PA 90. The parabolic hood is considerably brighter on the north edge and is extending farther west as opposed to the south edge. Also the outer coma is brighter on the northern side. Magnitude estimated to be 3.3 using 10x50 binoculars (Morris method). Semi latus rectum = 2.5'. Vertex distance = 1.5'.
NOTE C Inner blue/green with "nucleus" quite sharp and similar color. Perhaps a trace of yellow. Previous night it was yellow.
NOTE D (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 2 MAR 1986

DATE: 2 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.04 | 816859 | 4.0 | B | M | 2 | | 0.2 | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 2.104 | 816860 | 3.8 | M | 4B | 4.0 | 7 | 2.7 | 267 | 0.08 | B | | 11 | 4.2M | Y | 1 | Fleet,R.W | |
| 2.108 | 816861 | 3.6 | M | 4B | 2 | 8 | 2.33 | 270 | 0.04 | B | | 12 | 4.1 | N | 1 | Henshaw,C | A |
| 2.110 | 816862 | 3.2 | M | 4B | | 6 | 1.9 | 273 | | EY | | | 4.2M | Y | 1 | Fleet,R.W | |
| 2.243 | 816863 | 4 : | | 4B | | | 1 | | 0.08 | B | | 11 | | | 3 | Kemble,L.J | B |
| 2.27 | 816864 | 4.1 | S | 4B | | | | | 0.08 | B | | 20 | 2.0 | | 5 | Shanklin,J.D | C |
| 2.319 | 816865 | 3.3 | B | 4B | 5 | 3 | 1 | 280 | 0.06 | R | 12 | 56 | 5.3 | Y | 1 | Onofre D.,D | |
| 2.37 | 816866 | 3.5 | B | M | | | 5 | | 0.04 | B | | 7 | | | | Kiselev,N | |
| 2.41 | 816867 | 3.5 | S | 4B | 30 | 7 | 2 | 250 | 0.108 | N | 4 | 17 | 4.0 | N | 1 | Harrington,P | D |
| 2.43 | 816868 | | | | 2.5 | 7 | | | 0.120 | B | | 20 | | | | Bortle,J.E | E |
| 2.43 | 816869 | 2.7 | B | IHW BAA | | 8 | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 2.43 | 816870 | 3.1 | B | 4B | 3 | 7 | 1.5 | 273 | 0.050 | B | | 10 | 5.5 | Y | 1 | Bortle,J.E | F |
| 2.442 | 816871 | 2.7 | M | 4B | 5 | 6 | 1.0 | 284 | 0.05 | B | | 7 | 3.1 | Y | | DeYoung,J.A | G |
| 2.458 | 816872 | 3.8 | M | 4B | | | 4.0 | 270 | 0.050 | B | | 10 | 3.1 | Y | 1 | Smith,A | H |
| 2.464 | 816873 | 3.4 | M | 4B | | 9 | | 270 | 0.076 | R | 15 | 63 | 3.1 | Y | 1 | Smith,A | H |
| 2.51 | 816874 | 2.8 | B | 4B | 5 | 8 | 1.8 | 270 | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | F |
| 2.51 | 816875 | 2.8 | V | 4B | | | 1.3 | 270 | | EY | | | 5.5 | Y | 1 | Keen,R | F |
| 2.55 | 816876 | 2.9 | B | 4B | | | 2 | 270 | | EY | | | 5.5M | Y | 2 | Hale,A | I |
| 2.56 | 816877 | 3.0 | M | 4B | | | 2 | 270 | 0.05 | B | | 10 | 5.5M | Y | 2 | Hale,A | I |
| 2.5743 | 816878 | 3.4 | S | DCS | 3 | 8 | 0.82 | 262 | 0.080 | B | | 20 | 3.2 | | 3 | Machholz,D | J |
| 2.5743 | 816879 | 3.8 | B | DCS | 3 | 8 | 0.82 | 262 | 0.080 | B | | 20 | 3.2 | | 3 | Machholz,D | J |
| 2.753 | 816880 | 2.8 | S | 4B | | | 4 | | 0.05 | B | | 7 | 5.5M | Y | 17 | Garradd,G | K |
| 2.757 | 816881 | | S | | | 8 | | | 0.31 | N | 5.4 | 129 | | | | Garradd,G | |
| 2.76 | 816882 | 2.7 | S | 4B | 5.0 | | 5.5 | | | EY | | | 5.3M | Y | 1 | Lovejoy,T | |
| 2.764 | 816883 | 3.9 | B | 4B | | | 2.5 | | | EY | | | | | | Parkinson,M | L |
| 2.771 | 816884 | 3.8 | S | 4B | 5 | | 1.3 | 270 | 0.05 | B | | 7 | 5.3M | N | 1 | Bryant,K | M |
| 2.781 | 816885 | 3.1 | B | 4B | | 8 | 2.5 | 265 | 0.05 | B | | 10 | | | 1 | Tregaskis,T.B | N |
| 2.83 | 816886 | 3.4 | S | 4B | | 7 | 1 | | 0.08 | B | | 11 | 2.0 | N | 1 | Momose,M | O |
| 2.837 | 816887 | 3.4 | M | 4B | 3.0 | 8 | 3 | 275 | 0.08 | B | | 11 | 4 T | Y | 1 | Mitsuma,S | P |
| 2.84 | 816888 | 3.6 | S | AAVSO | 3 | 7 | 1.5 | | 0.08 | B | | 15 | 4.0M | Y | 1 | Hayashi,A | Q |
| 2.840 | 816889 | 3.4 | B | 4B | 5 | 7 | 2 | | 0.05 | B | | 7 | 4.5 | Y | 1 | Hayashi,H | R |
| 2.844 | 816890 | 3.3 | B | 4B | 4.1 | 8 | 2.2 | 265 | 0.05 | B | | 7 | 2.5T | Y | 1 | Kanai,K | |
| 2.847 | 816891 | 3.3 | M | 4B | 10.2 | 6 | 1.5 | 188 | 0.1 | N | 10 | 40 | 4.5 | Y | 1 | Ichikawa,K | |
| 2.85 | 816892 | 3.1 | B | | 12 | 7 | 0.42 | 260 | 0.05 | B | | 10 | 3.1 | Y | 1 | Uda,K | |

NOTE A Moon.
NOTE B Comet seen one and one half hours and followed for half hour before sunrise; tail very faint and disappeared rapidly with twilight. My 54th observation, my first post-perihelion. My last pre-perihelion observation was with binocs. at sunset twilight, 26 Jan. 1986.
NOTE C Cloud.
NOTE D Heavy twilight.
NOTE E With 20x120 binoculars: parabolic coma with faint, diffuse edges, containing an intense, bright condensation. Condensation continues to be far more brilliant than surrounding coma. Tail has equally bright edges, center of tail slightly brighter than either but no distinct tail spine.
NOTE F Extinction correction applied.
NOTE G Haze interference.
NOTE H Moonlight low altitude.
NOTE I Probably some interference from 3rd quarter moon 50 deg. away. There was also some cirrus in the sky, which probably had a negligible effect on the observation. In 10x50 binoculars the tail split halfway down its length, with the southern fork being straighter and brighter.
NOTE J At the time of observation, the comet's altitude was +11 deg. and the sun's altitude was -11 deg. 63% moon 66 degrees away.
NOTE K 4 deg. tail is straight gas; 1.5 deg. tail is curved dust.
NOTE L Difficult to make magnitude estimate. Tail length approximate.
NOTE M DC = strong.
NOTE N PA approximate. Clear, third quarter moon. Tail slightly shorter to naked eye.
NOTE O Saw moon. (Translated by IHW staff. Ed.)
NOTE P m2 = 5.6.
NOTE Q PA 255 to 275.
NOTE R Moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.104 | 830873 | 4 | 0.08 | B | | 11 | | 4.2 | 1 | Fleet,R.W | A |
| 2.396 | 830874 | 1.1 | 0.127 | SC | 10 | | 10 | 6 | 1 | Cuthill,D.D | B |
| 2.485 | 830875 | | 0.050 | B | | 10 | | 4.0 | | Williams,D.J | C |
| 2.755 | 830876 | | | | | | 5 | | | McNaught,R.H | D |
| 2.767 | 830877 | 0.15 | 0.20 | N | 6.3 | 250 | | | 5 | Lovejoy,T | E |
| 2.778 | 830878 | | 0.120 | B | | 20 | 12 | | | McNaught,R.H | |

NOTE A Main tail at PA 267. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B This is a drawing of a photo taken on the 5" Schm.-Cass. for 8 min. (Fujichrome 1600) and a telecompressor giving overall f/5 and yielding a field of 100' at prime focus. The SE boundary of the outer hood is very clean and well defined.
NOTE C I recovered Halley! It was bright, even though it was hanging in the morning twilight. I couldn't see a tail because of the approaching sunrise. The nucleus is like a fuzzy star. I was suprised to find Halley this morning because I overslept. I figured the sky would be too bright. (Duration not indicated. Time of observation is start time. Ed.)
NOTE D Nucleus more diffuse.
NOTE E (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.777 | 850926 | 0.055 | 1.2 | | 36.2 x24.6 | 0.50 | Fujichrome | 400/ | N | X | 3/S | 1 | Tregaskis,T.B | |
| 2.843 | 850927 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 3.00 | Kodak 2415 | | Y | | 6/P | 1 | Niijima,T | A |

NOTE A (Observer's image identifier is 860302-11. Ed.) Large format (70 mm) film used. City lights interfered with the observation.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.451 | 870127 | 600G-O | CL | 0.135 | 2.8 | | 10.00 | Kodak 2415 | | Y | C | 915/S | 2 | Buchanan,W.T | AB |
| 2.457 | 870128 | 600G-O | CL | 0.135 | 2.8 | | 6.00 | Kodak 2415 | | Y | C | 916/S | 2 | Buchanan,W.T | BC |

NOTE A Moonlight interfered with the observation. Reference marks included. Halley and Alpha and Beta Capricorni barely visible to naked eye. (Observer's image identifier is E-119-15. Ed.)
NOTE B Window on front of instrument to correspond with aperture [sic]: for f/1.9, window is 75 mm; for f/2.8, window is 54 mm.
NOTE C Moonlight interfered with the observation. Reference marks not included. Halley and Alpha and Beta Capricorni barely visible to naked eye. (Observer's image identifier is E-119-16. Ed.)

DATE: 3 MAR 1986

DATE: 3 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.092 | 816893 | 3.4 | M | 4B | | 7 | 1.5 | 274 | | EY | | | 4.2M | Y | 1 | Fleet,R.W | |
| 3.099 | 816894 | 3.2 | M | 4B | | | | | 0.035 | B | | 9 | 5.0M | Y | 1 | Begbie,M.J.R | |
| 3.103 | 816895 | 3.7 | M | 4B | 4.3 | 7 | 3.3 | 261 | 0.08 | B | | 11 | 4.2M | Y | 1 | Fleet,R.W | A |
| 3.110 | 816896 | 3.3 | M | 4B | 1 | 8 | 2.57 | 265 | 0.04 | B | | 12 | 4.1 | N | 1 | Henshaw,C | B |
| 3.115 | 816897 | | | | 4.5 | 8 | | 268 | 0.30 | N | 8.5 | 102 | 5.0M | Y | 1 | Begbie,M.J.R | C |
| 3.253 | 816898 | 3.6 | S | 4B | | 7 | 2.5 | | 0.08 | B | | 20 | 5.0 | Y | 3 | Storey,D | D |
| 3.326 | 816899 | 2.9 | B | 122 | | 6 | 0.9 | 272 | 0.05 | B | | 20 | 4.5 | Y | 8 | da Silva,L.A.L | E |
| 3.330 | 816900 | 3.3 | B | 122 | 5 | 3 | 1 | 275 | 0.06 | R | 12 | 56 | 5.3 | Y | 1 | Onofre D.,D | |
| 3.34 | 816901 | 2.7 | M | 4B, BSC | 4.7 | 8 | 5 | | 0.050 | B | | 10 | 5.5M | Y | 20 | Morris,C.S | |
| 3.36 | 816902 | 2.8 | M | 4B, BSC | 4.4 | 8 | 5 | | 0.070 | B | | 16 | 5.5M | Y | 20 | Morris,C.S | |
| 3.42 | 816903 | 2.8 | B | IHW BAA | | 8 | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 3.43 | 816904 | 3.5 | B | 4B | 4 | 6 | 2.8 | 270 | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | F |
| 3.48 | 816905 | 3.6 | B | 4B | 6 | 5 | 0.67 | 270 | 0.080 | B | | 20 | | Y | | Kronk,G | G |
| 3.5674 | 816906 | 3.3 | S | DCS | 4 | 8 | 0.85 | 263 | 0.080 | B | | 20 | 3.0 | | 3 | Machholz,D | H |
| 3.670 | 816907 | 3.6 | S | 4B | 3 | 8 | 1 | 250 | 0.050 | B | | 12 | 8.0 | Y | 1 | Batza,H | I |
| 3.736 | 816908 | 2.8 | | 4B | | | 2 | | 0.05 | B | | 7 | 5.0M | Y | 8 | Garradd,G | J |
| 3.75 | 816909 | 2.8 | | 4B | | | | | | EY | | | | | | Seargent,D | |
| 3.75 | 816910 | | | | | | 2.5 | 280 | 0.025 | B | | 3 | | Y | 1 | Seargent,D | |
| 3.752 | 816911 | 2.7 | S | 4B | | | 6.5 | | | EY | | | 5.5M | Y | 1 | Lovejoy,T | |
| 3.803 | 816912 | 3.3 | S | 4B | 10 | 6 | 3.5 | 260 | 0.035 | B | | 8 | 5.5 | Y | 2 | Kobayashi,J | |
| 3.83 | 816913 | 3.6 | S | AAVSO | 3 | 7 | 2 | | 0.08 | B | | 15 | 4.5M | Y | 1 | Hayashi,A | K |
| 3.83 | 816914 | 3.7 | M | SAO | 5 | 8 | 0.7 | 270 | 0.065 | R | 8 | 16 | 3.5M | Y | 7 | Nakamura,A | |
| 3.837 | 816915 | 3.4 | M | 4B | 3.0 | 8 | 3.5 | 280 | 0.08 | B | | 11 | 4 T | Y | 1 | Mitsuma,S | L |
| 3.84 | 816916 | 3.5 | S | AAVSO | 3.5 | 6 | 1.5 | | 0.13 | N | 6.3 | 24 | 4.5M | Y | 1 | Hayashi,A | K |
| 3.84 | 816917 | 3.0 | M | 4B | | | 3.0 | | 0.05 | B | | 7 | 4.5M | Y | 1 | Suzuki,K | |
| 3.84 | 816918 | | | 4B | 3.3 1.3 | 6 | | | 0.21 | N | 5.0 | 88 | 4.5M | Y | 1 | Suzuki,K | M |
| 3.844 | 816919 | 3.2 | B | 4B | 4.4 | 8 | 2.6 | 260 | 0.05 | B | | 7 | 3.0T | Y | 1 | Kanai,K | |
| 3.85 | 816920 | 3.8 | S | 4B | 5 | 8 | 0.5 | 270 | 0.08 | B | | 20 | 2.0M | N | 1 | Oka,A | |

NOTE A 3.3 deg. tail is gas. 1.5 deg. tail is curved dust tail.
NOTE B Moon.
NOTE C Tail measurement refers to dust tail only.
NOTE D Tail PA 263-281, mean 270. [sic] Moonlight slight problem wind vibration also. Seeing III-IV. Transparency = very good.
NOTE E Moonlight.
NOTE F Extinction correction applied. With 20x120 binoculars: coma noticeably less sharply condensed than yesterday although still rather strongly condensed. Coma is comprised of a vague, faint, outer parabolic envelope containing a dense, very bright condensation at its focus.
NOTE G Some twilight and moonlight. Tail PA approximate.
NOTE H At the time of observation, the comet's altitude was +10 deg. and the sun's altitude was -13 deg. 51% moon 52 degrees away.
NOTE I Moonlight. (Binocular limit? Ed.)
NOTE J Tail is curved dust.
NOTE K PA 245 to 270.
NOTE L m2 = 5.7.
NOTE M Meter. (Coma diameter. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.103 | 830879 | 4 | 0.08 | B | | 11 | | 4.2 | 1 | Fleet,R.W | A |
| 3.59 | 830880 | 1.38 | 0.15 | N | 6 | 23 | 14 | 4 | 5 | Tanikawa,M | |
| 3.752 | 830881 | 0.15 | 0.20 | N | 6.3 | 50,250 | | | 5 | Lovejoy,T | B |
| 3.786 | 830882 | | | | | | 25 | | | McNaught,R.H | C |

NOTE A Gas tail at PA 261. Dust tail at PA 275. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C 1840 mag. 3.0. NE tail split into gas and dust. (Drawings at 76x and unspecified magnification submitted. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.552 | 850928 | 1.250 | 10 | 0.125 | 1.7 x 1.1 | 0.75 | Ilford HP 5 | 500/ | N | O | 70/C | 18 | Edberg,S.J |
| 3.553 | 850929 | 1.250 | 10 | 0.125 | 1.7 x 1.1 | 0.75 | Ilford HP 5 | 500/ | N | O | 71/C | 18 | Edberg,S.J |
| 3.554 | 850930 | 1.250 | 10 | 0.125 | 1.7 x 1.1 | 1.08 | Ilford HP 5 | 500/ | N | O | 72/C | 18 | Edberg,S.J |
| 3.555 | 850931 | 1.250 | 10 | 0.125 | 1.7 x 1.1 | 0.58 | Ilford HP 5 | 500/ | N | O | 73/C | 18 | Edberg,S.J |

DATE: 4 MAR 1986

DATE: 4 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.104 | 816921 | 3.3 | B | 4B | 10 | 5 | 3 | 270 | 0.04 | B | | 8 | | Y | 1 | Morrisby,A | A |
| 4.123 | 816922 | 3.6 | M | 4B | | | 2.0 | 269 | | EY | | | 4.2M | Y | 1 | Fleet,R.W | |
| 4.126 | 816923 | 3.8 | M | 4B | 4.0 | 7 | 2.3 | 258 | 0.08 | B | | 11 | 4.2M | Y | 1 | Fleet,R.W | B |
| 4.31 | 816924 | 2.7 | M | 4B, BSC | | | 2 | 270 | 0.050 | B | | 10 | 5.0M | Y | 21 | Morris,C.S | C |
| 4.32 | 816925 | 2.9 | B | 4B, BSC | | | | | 0.050 | B | | 10 | 5.0M | Y | 21 | Morris,C.S | |
| 4.411 | 816926 | 3.0 | B | 122 | 6 4 | 4 | 2.37 | 241 | 0.05 | B | | 7 | 3.6 | Y | 1 | Lairet,R | |
| 4.427 | 816927 | 3.4 | B | 122 | | 4 | 3 | 247 | 0.05 | B | | 10 | 3.1 | Y | 2 | Harris,L.A | D |
| 4.52 | 816928 | 2.9 | B | 4B | 5 | 8 | 1.5 | 270 | 0.040 | B | | 8 | 4.0 | Y | 1 | Keen,R | E |
| 4.552 | 816929 | 4.8 | M | USNO,AA | | | | | 0.05 | B | | 7 | | | 1 | Edberg,S.J | F |
| 4.5528 | 816930 | 3.1 | S | DCS | 5 | 8 | 1.08 | 278 | 0.130 | R | 7.1 | 27 | 4.0 | | 1 | Machholz,D | G |
| 4.5556 | 816931 | 2.8 | S | DCS | 10 | 5 | 1.47 | 278 | | EY | | | 4.0 | | 1 | Machholz,D | H |
| 4.5590 | 816932 | 3.1 | S | DCS | 5 | 8 | 1.37 | 278 | 0.080 | B | | 20 | 4.0 | | 1 | Machholz,D | I |
| 4.68 | 816933 | 4.3 | S | SAO | 10 | 7 | 3 | 270 | 0.05 | B | | 7 | 5.5 | Y | 2 | Ashdown,M | J |
| 4.70 | 816934 | 3.7 | | 4B | | | | | | EY | | | 4.8 | | | Jones,A | K |
| 4.70 | 816935 | | | | | | 1.2 | | 0.080 | B | | 11 | | | | Jones,A | L |
| 4.70 | 816936 | | | | 5 | 8 | | | 0.317 | N | 5 | 86 | | | | Jones,A | M |
| 4.70 | 816937 | 3.5 | S | 4B | | | | | 0.023 | B | | 3 | | | | Jones,A | |
| 4.70 | 816938 | 3.5 | S | 4B | | | | | 0.023 | B | | 3 | | | | Jones,A | |
| 4.760 | 816939 | 3.0 | S | 4B | | | 2 | | 0.05 | B | | 7 | 6.0M | Y | 8 | Garradd,G | N |
| 4.76 | 816940 | | | | | 8 | 3 | 280 | 0.08 | B | | 15 | 5 | Y | 1 | Seargent,D | O |
| 4.76 | 816941 | 3.0 | | 4B | | | | | | EY | | | | | | Seargent,D | |
| 4.764 | 816942 | 2.8 | S | 4B | 5.0 | | 4.0 | | | EY | | | 5.5M | Y | 1 | Lovejoy,T | |
| 4.770 | 816943 | 3.6 | S | 4B | 3 | 8 | 1.5 | 250 | 0.050 | B | | 12 | 8.0 | Y | 1 | Batza,E | P |
| 4.792 | 816944 | 3.0 | B | 4B | | 8 | 1.7 | 265 | 0.05 | B | | 10 | | | 1 | Tregaskis,T.B | Q |
| 4.82 | 816945 | 3.7 | S | 4B | | 5 | 2 | | 0.08 | B | | 11 | 3.5 | N | 3 | Momose,M | R |
| 4.83 | 816946 | 3.2 | | 4B | | | 2.2 | | | EY | | | 5.4 | Y | | Clark,M.L | |
| 4.837 | 816947 | 4.0 | B | 4B | | | 1 | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 4.84 | 816948 | 3.5 | S | 4B | 5 | 6 | 2.4 | 278 | 0.076 | N | 8 | 15 | 5.4 | Y | | Clark,M.L | |
| 4.84 | 816949 | 3.3 | S | | 5 | 5 | 2.5 | 260 | 0.080 | B | | 11 | 5.2 | Y | 1 | Akita,I | S |
| 4.84 | 816950 | 3.0 | | | 10 | 7 | 0.3 | | 0.12 | B | | 20 | 6.0 | Y | 1 | Washi,S | T |
| 4.85 | 816951 | 3.8 | S | 4B | 5 | 8 | 0.5 | 270 | 0.08 | B | | 20 | 2.5M | N | 1 | Oka,A | |
| 4.85 | 816952 | 3.3 | B | | 10 | 7 | 0.58 | 260 | 0.05 | B | | 10 | 3.1 | Y | 1 | Uda,K | |
| 4.85 | 816953 | 3.9 | S | 4B | 5 | 7 | | | 0.07 | B | | 10 | 3.5T | Y | 1 | Yasuki,M | |
| 4.858 | 816954 | | | | 5 | 6 | | | 0.10 | N | 10 | 55 | | Y | 1 | Kato,T | U |

NOTE A Quite clearly a long thin spike and a curved dust tail, curving towards the north. [sic]
NOTE B 2.3 deg. tail is gas. 1.7 deg. tail is curved dust tail.
NOTE C Dust tail in PA 280 was curved toward north. PA of end of tail = 300.
NOTE D Sky completely clear.
NOTE E Extinction correction applied. Twilight.
NOTE F No extinction correction. Estimate made through window.
NOTE G At the time of observation, the comet's altitude was +7 deg. and the sun's altitude was -16 deg. 39% moon 38 degrees away.
NOTE H At the time of observation, the comet's altitude was +8 deg. and the sun's altitude was -16 deg. 39% moon 38 degrees away.
NOTE I At the time of observation, the comet's altitude was +9 deg. and the sun's altitude was -15 deg. 39% moon 38 degrees away.
NOTE J Some moonlight.
NOTE K Clear moon 23.7 d.
NOTE L Paraboloid coma/tail. Tail PA 255-270.
NOTE M Coma stronger south side.
NOTE N 2 deg. tail is straight gas; 3 deg. tail is curved dust.
NOTE O Tail length approximate.
NOTE P Moonlight. (Binocular limit? Ed.)
NOTE Q PA approximate. Hazy cloud. Cresent moon. Doubtful in naked eye.
NOTE R Saw moon. (Translated by IHW staff. Ed.)
NOTE S Moon age 23.7. (Translated by IHW staff. Ed.)
NOTE T Type II. (Observer indicated "Y" method. Ed.)
NOTE U Thick cloud.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.126 | 830883 | 4 | 0.08 | B | | 11 | | 4.2 | 1 | Fleet,R.W | A |
| 4.759 | 830884 | | | | | | 5 | | | McNaught,R.H | B |
| 4.778 | 830885 | | 0.20 | N | 8 | 67 | | 6.2 | 1 | Thompson,G | C |

NOTE A Gas tail at PA 258. Dust tail at PA 274. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Sharp eastern edge to inner envelope. V. faint outer envelope at about 2x distance of inner. 2 jets? (Drawings at 2 unspecified magnifications included. Ed.)
NOTE C (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.521 | 850932 | 0.200 | 3.5 | | 10.3 x 6.9 | 20.00 | Kodak Tri-X | 400/ | N | O | 15/N | 1 | Haagh,N | |
| 4.543 | 850933 | 0.711 | 2.8 | 0.254 | 2.9 x 1.9 | 6.00 | Kodak Plus-X | 125/ | N | S | 37/P | 1 | Young,J.W | A |
| 4.760 | 850934 | 0.200 | 3.5 | | 10.3 x 6.9 | 10.00 | Kodak Tri-X | 400/ | N | O | 16/N | 1 | Haagh,N | |
| 4.768 | 850935 | 0.200 | 3.5 | | 10.3 x 6.9 | 5.00 | Kodak Tri-X | 400/ | N | O | 17/N | 1 | Haagh,N | |
| 4.775 | 850936 | 0.200 | 5.6 | | 10.3 x 6.9 | 5.00 | Kodak Tri-X | 400/ | N | O | 23/N | 1 | Haagh,N | |

NOTE A Instrument is Schmidt camera. (Observer's image identifier is followed suffix -HS. Ed.)

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.111 | 816955 | 3.0 | B | 4B | 30 | 7 | 2.42 | 275 | 0.065 | B | | 20 | 4.0 | Y | 1 | McBain,J | A |
| 5.185 | 816956 | 3.5 | S | 122 | 4.5 | 7 | 2.1 | 260 | 0.08 | B | | 15 | 4.2MT | Y | 2 | Haver,R | |
| 5.185 | 816957 | 3.2 | S | 122 | | | | | | EY | | | 4.2MT | Y | 2 | Haver,R | |
| 5.190 | 816958 | 3.4 | S | 122 | 4.5 | 7 | 1.9 | 260 | 0.05 | B | | 7 | 4.0MT | Y | 2 | Haver,R | |
| 5.2388 | 816959 | 5 : | | 4B | | | 0.75 | | 0.08 | B | | | | | 2 | Kemble,L.J | B |
| 5.33 | 816960 | 2.6 | M | 4B, BSC | | 8 | 5 | | 0.050 | B | | 10 | 5.0M | Y | 22 | Morris,C.S | |
| 5.33 | 816961 | 2.5 | | 4B, BSC | | | | | | EY | | | 5.0M | Y | 22 | Morris,C.S | |
| 5.458 | 816962 | 4.0 | B | 122 | | | | | 0.080 | B | | 20 | 4.5M | Y | | Smith,D | C |
| 5.465 | 816963 | 4.0 | B | 4B | | | | | 0.08 | B | | 11 | 3.1 | Y | 4 | Gorski,L | |
| 5.55 | 816964 | 2.9 | B | 4B | | | 1.5 | 270 | | EY | | | 5.5 | Y | 2 | Hale,A | |
| 5.55 | 816965 | | | | | | 3 | 270 | 0.05 | B | | 10 | 5.5 | Y | 2 | Hale,A | |
| 5.5528 | 816966 | 3.0 | S | DCS | 6 | 8 | 1.05 | 266 | 0.130 | R | 7.1 | 27 | 4.2 | | 1 | Machholz,D | D |
| 5.5576 | 816967 | 2.8 | S | DCS | 10 | 3 | 2.18 | 266 | | EY | | | 4.2 | | 1 | Machholz,D | E |
| 5.5590 | 816968 | 3.6 | M | 4B | 6 | 7 | 3.13 | 269 | 0.05 | B | | 7 | 5.5 | Y | 10 | Cook,A.J | F |
| 5.5590 | 816969 | 3.0 | S | DCS | 7 | 7 | 2.15 | 266 | 0.080 | B | | 20 | 4.2 | | 1 | Machholz,D | E |
| 5.70 | 816970 | 3.4 | S | 4B | | | | | 0.023 | B | | 3 | 4.8 | | | Jones,A | G |
| 5.70 | 816971 | | | | | | 1.5 | | 0.078 | R | 7.5 | 30 | | | | Jones,A | H |
| 5.70 | 816972 | | | | | 8 | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 5.72 | 816973 | 6.3 | S | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | I |
| 5.740 | 816974 | 2.8 | S | 4B | | | 3 | | 0.05 | B | | 7 | 6.0M | Y | 8 | Garradd,G | J |
| 5.75 | 816975 | 2.7 | S | 4B | | | 8 | | | EY | | | 5.3M | Y | 1 | Lovejoy,T | K |
| 5.76 | 816976 | 2.9 | | 4B | | | | | | EY | | | 5 | Y | 1 | Seargent,D | |
| 5.76 | 816977 | | | | 3.5 | 8 | 3.5 | 270 | 0.08 | B | | 15 | | | | Seargent,D | L |
| 5.771 | 816978 | 3.8 | S | 4B | 4 | | 1.7 | 270 | 0.05 | B | | 7 | 4.2M | N | 1 | Bryant,K | M |
| 5.792 | 816979 | 3.1 | B | 4B | 10 | | 1.7 | | 0.05 | B | | 10 | | N | 3 | Tregaskis,T.B | N |
| 5.82 | 816980 | 3.3 | M | 4B | | | 5.0 | | 0.05 | B | | 7 | 5.0M | Y | 1 | Suzuki,K | |
| 5.82 | 816981 | | | 4B | 3.6 1.3 | 6 | | | 0.21 | N | 5.0 | 88 | 5.0M | Y | 1 | Suzuki,K | O |
| 5.83 | 816982 | 4.0 | M | 4B | 2 | 7 | | | 0.080 | B | | 11 | 2 MT | Y | 1 | Watanabe,N | P |
| 5.831 | 816983 | 3.3 | B | 4B | 5 | 6 | 2 | | 0.05 | B | | 7 | 4.5 | Y | 1 | Hayashi,H | |
| 5.837 | 816984 | 3.3 | M | 4B | 3.5 | 8 | 3.5 | 270 | 0.08 | B | | 11 | 4 T | Y | 1 | Mitsuma,S | Q |
| 5.84 | 816985 | 3.4 | S | AAVSO | 3 | 7 | 0.7 | | 0.13 | N | 6.3 | 24 | 4.5M | Y | 1 | Hayashi,A | R |
| 5.84 | 816986 | 3.6 | M | SAO | 5 | 8 | | | 0.065 | R | 8 | 16 | 3.0M | Y | 7 | Nakamura,A | S |
| 5.843 | 816987 | 3.4 | B | 4B | 3.2 | 8 | 2.9 | 275 | 0.05 | B | | 7 | 2.5T | Y | 1 | Kanai,K | |
| 5.847 | 816988 | 3.8 | B | 4B | | | | | 0.07 | B | | 10 | 3.6M | Y | 1 | Date,M | |

NOTE A Moonlight.
NOTE B Comet seen one and one half hours before sunrise in dark sky. Comet was only 45' above horizon when first spotted and it disappeared in twilight half an hour later. 45' tail rapidly disappeared with twilight. Contrary to usual adverse predictions the comet appears well at my 51 deg. plus latitude and should improve in days ahead. Still not naked eye however.
NOTE C Comet elevation 15 deg.
NOTE D At the time of observation, the comet's altitude was +8 deg. and the sun's altitude was -16 deg. 28% moon 24 degrees away.
NOTE E At the time of observation, the comet's altitude was +9 deg. and the sun's altitude was -15 deg. 28% moon 24 degrees away.
NOTE F Point on southern tail boundary 3.08 deg. at PA 260. Greatest tail length (PA 269, 3.13 deg.). Point on northern tail boundary 2.75 deg. at PA 279.
NOTE G Clear moon 24.7 d.
NOTE H Paraboloid coma/tail. Tail PA 257-270.
NOTE I Nucleus (stars slightly defocused). Observed in twilight to reduce effect of light of condensation.
NOTE J First tail is straight gas; second tail is curved dust.
NOTE K Tail 5.0 deg. certain. Tail length = 8.0 deg. uncertain.
NOTE L Tail length approximate.
NOTE M DC = strong.
NOTE N Clear, cresent moon. Site 3 is about 45 km north of site 1 and is only about 12 km E of the centre of Melbourne, with bright lights and a bright sky in the area. The comet was nevertheless seen easily with naked eye on this occasion. (Observer gave limit as approximately 7. Ed.)
NOTE O Meter. (Coma diameter. Ed.)
NOTE P Coma diameter is upper limit.
NOTE Q m2 = 5.7.
NOTE R PA 240 to 280. °
NOTE S Tail length = yes.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.550 | 830886 | 3 | 0.050 | B | | 7 | 25 | 5.5 | 10 | Cook,A.J | |
| 5.780 | 830887 | | | | | | 13 | | | McNaught,R.H | A |
| 5.791 | 830888 | 0.10 | 0.20 | N | 6.3 | 250 | | | 5 | Lovejoy,T | B |

NOTE A Nucleus less stellar than several days ago. (Drawings at 76x and unspecified magnification included. Ed.)
NOTE B Scale is approximate. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.533 | 850937 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | Ektachrome | 400/ | N | O | 37/N | 8 | Edberg,S.J | |
| 5.533 | 850938 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | Kodak Tri-X | 400/ | N | | 18/C | 8 | Edberg,S.J | |
| 5.536 | 850939 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | Ektachrome | 400/ | N | O | 38/N | 8 | Edberg,S.J | |
| 5.538 | 850940 | 0.711 | 2.8 | 0.254 | 2.9 x 1.9 | 10.00 | Kodak Plus-X | 125/ | N | S | 38/P | 1 | Young,J.W | A |
| 5.539 | 850941 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | Kodak Tri-X | 400/ | N | | 19/C | 8 | Edberg,S.J | |
| 5.541 | 850942 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 2.12 | Kodak Tri-X | 400/ | N | | 20/C | 8 | Edberg,S.J | |
| 5.547 | 850943 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | Kodak Tri-X | 400/ | N | | 21/C | 8 | Edberg,S.J | |
| 5.557 | 850944 | 1.524 | 6 | 0.254 | 1.4 x 0.9 | 10.00 | Kodak 2415 | | Y | X | 99/P | 3 | Snyder,L.F | |
| 5.557 | 850945 | 0.200 | 8 | | 10.3 x 6.9 | 10.00 | Kodak 2415 | | Y | X | 100/P | 3 | Snyder,L.F | |
| 5.833 | 850946 | 1.760 | 5.8 | 0.303 | 1.2 x 0.8 | 6.42 | Kodak 2415 | | Y | | 7/P | 1 | Niijima,T | B |

NOTE A Instrument is Schmidt camera. (Observer's image identifier is followed suffix -HS. Ed.)
NOTE B (Observer's image identifier is 860305-3. Ed.) Large format (70 mm) film used. City lights interfered with the observation.

DATE: 6 MAR 1986 DATE: 6 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.03 | 816989 | 2.5 | B | AAVSO | 8 | 7 | 3 | 259 | 0.05 | R | 4 | 7 | | | | Chernis,K | |
| 6.090 | 816990 | 3.6 | M | 4B | | | | | 0.035 | B | | 9 | 5.5M | Y | 1 | Begbie,M.J.R | |
| 6.097 | 816991 | | | | 5.5 | 8 | | 265 | 0.30 | N | 8.5 | 102 | 5.5M | Y | 1 | Begbie,M.J.R | A |
| 6.115 | 816992 | 3.8 | M | 4B | 4.3 | 7 | 3.3 | 264 | 0.08 | B | | 11 | 4.8M | Y | 1 | Fleet,R.W | B |
| 6.118 | 816993 | 3.5 | M | 4B | | | 2.3 | 272 | | EY | | | 4.8M | Y | 1 | Fleet,R.W | |
| 6.198 | 816994 | 3.8 | S | 122 | | 7 | | | 0.050 | B | | 7 | T | | 1 | Mikuz,H | C |
| 6.33 | 816995 | 2.7 | M | 4B, BSC | 7 | 8 | 4 | 270 | 0.050 | B | | 10 | 5.0M | Y | 23 | Morris,C.S | |
| 6.33 | 816996 | 2.6 | | 4B, BSC | | 8 | 2 | | | EY | | | 5.0M | Y | 23 | Morris,C.S | |
| 6.333 | 816997 | 4.3 | B | 122 | 0.0 | 3 | 0.52 | | 0.050 | B | | 20 | 5.5 | Y | 1 | Castrillon,M.E | D |
| 6.368 | 816998 | 4.3 | B | 122 | 4.2 | 3 | 0.67 | | 0.050 | B | | 20 | 5.5 | Y | 1 | Siccardi,L | E |
| 6.396 | 816999 | | V | AAVSO | | | 1.7 | | | EY | | | 5.0 | Y | 2 | Ferrin,I | |
| 6.43 | 817000 | 3.6 | B | IHW BAA | | 8 | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 6.458 | 817001 | | | 4B | | 6 | 1.5 | | 0.050 | B | | 10 | 6.0 | Y | 1 | Williams,D.J | F |
| 6.535 | 817002 | 2.7 | S | 4B | 38 | 8 | 2 | 261 | 0.035 | B | | 7 | 3.5CTM | Y | 1 | Gronek,J.D | G |
| 6.5382 | 817003 | 3.0 | M | 4B | 6 | 7 | 3.00 | 270 | | EY | | | 6.0 | Y | 10 | Cook,A.J | H |
| 6.646 | 817004 | 3.2 | B | 4B | | 6 | 3.4 | 270 | 0.050 | B | | 7 | 5 | Y | 3 | Krisciunas,K | I |
| 6.70 | 817005 | 3.5 | S | 4B | | | | | 0.023 | B | | 3 | | | | Jones,A | J |
| 6.729 | 817006 | 3.0 | S | 4B | 6.0 | | 3.0 | | 0.03 | R | 6 | 8 | 5.5M | Y | 1 | Lovejoy,T | |
| 6.736 | 817007 | 2.8 | S | 4B | | | | | | EY | | | 6.0M | Y | 11 | Garradd,G | |
| 6.74 | 817008 | 2.9 | | 4B | | | 4 | | | EY | | | | | | Seargent,D | |
| 6.743 | 817009 | | | | | | 5 | | 0.05 | B | | 7 | | | | Garradd,G | K |
| 6.750 | 817010 | 3.2 | B | 4B | 4 | 9 | 1 | 275 | 0.05 | B | | 7 | 3.6 | Y | 3 | Bembrick,C | L |
| 6.750 | 817011 | | | | | 8 | | | 0.31 | N | 5.4 | 129 | | | | Garradd,G | |
| 6.764 | 817012 | 3.1 | B | 4B | | 8 | 2.5 | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | M |
| 6.766 | 817013 | | | 4B | 3.6 | | | | 0.152 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | N |
| 6.767 | 817014 | 3.8 | S | 4B | 4 | | 1.9 | 270 | 0.05 | B | | 7 | 4.2M | N | 1 | Bryant,K | O |
| 6.768 | 817015 | 2.8 | | 4B | | | | 270 | | EY | | | 5 | Y | 1 | Tregaskis,T.B | N |
| 6.795 | 817016 | 3.6 | S | 4B | 3 | 8 | 1.5 | 260 | 0.050 | B | | 12 | 8.0 | Y | 1 | Batza,H | P |
| 6.830 | 817017 | 3.9 | B | 4B | | | 1.5 | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 6.83 | 817018 | 3.4 | S | 4B | | | 3 | | 0.08 | B | | 11 | 3.5 | Y | 3 | Momose,M | Q |
| 6.837 | 817019 | 3.8 | B | 4B | | | | | 0.07 | B | | 10 | 3.1M | Y | 1 | Date,M | |
| 6.84 | 817020 | 3.0 | S | | 6 | 6 | 4 | 260 | 0.080 | B | | 11 | 6.0 | Y | 1 | Akita,I | R |
| 6.84 | 817021 | 3.6 | M | 4B | 5 | 7 | 2 | 270 | 0.08 | B | | 20 | 4.5 | Y | 1 | Oka,A | |
| 6.84 | 817022 | 3.2 | S | | 10 | 7 | 2 | 260 | 0.05 | B | | 10 | 5.0 | Y | 1 | Uda,K | |
| 6.84 | 817023 | 3.0 | | | 8 | 7 | | | 0.08 | B | | 11 | 5.0 | Y | 2 | Washi,S | S |
| 6.849 | 817024 | 3.3 | M | 4B | 6 | 6 | 2.5 | 275 | 0.030 | B | | 8 | 4.5M | Y | 1 | Kato,T | |
| 6.85 | 817025 | 3.5 | S | 4B | 4.5 | 8 | | | 0.07 | B | | 10 | 3.5T | Y | 1 | Yasuki,M | |

NOTE A Tail measurement refers to dust tail only.
NOTE B 3.3 deg. tail is gas. 1.8 deg. tail is dust, fan to 1.4 deg. PA 281.
NOTE C Excellent conditions. Estimated in strong twilight.
NOTE D Coma diameter 0.04. Light cloud. (Translated by IHW staff. Ed.)
NOTE E Coma diameter and tail length approximate.
NOTE F Very clear, moon.
NOTE G Good see. Waning moon.
NOTE H Crescent moon, scattered high clouds.
NOTE I Moon 8 deg. W.
NOTE J Brief gap in clouds.
NOTE K 5 deg. tail is straight gas; 4 deg. tail is curved dust.
NOTE L South edge of tail sharp and distinct; north edge diffuse and concave to north.
NOTE M Tail length is lower limit. Crescent moon, clear.
NOTE N Crescent moon, clear. Stellar-like nucleus.
NOTE O DC = strong
NOTE P Moonlight. (Binocular limit? Ed.)
NOTE Q Saw moon. (Translated by IHW staff. Ed.)
NOTE R Moon age 25.7. (Translated by IHW staff. Ed.)
NOTE S Type II. Tail length = 1 deg. <. [sic] (Observer indicated "Y" method. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.115 | 830889 | 4 | 0.08 | B | | 11 | | 4.8 | 1 | Fleet,R.W | A |
| 6.458 | 830890 | | 0.050 | B | | 10 | | 6.0 | | Williams,D.J | B |
| 6.768 | 830891 | | | | | | 1 | 5 | 1 | Tregaskis,T.B | C |
| 6.771 | 830892 | | | | | | 20 | | | McNaught,R.H | D |
| 6.771 | 830893 | 0.2 | 0.152 | N | 8 | 64 | 1 | | 1 | Tregaskis,T.B | E |

NOTE A Gas tail at PA 264. Dust tail at PA 269. Fan at PA 281. Moonlight (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B I could see a tail with the 10x50 binoculars, about 1 1/2 degrees in length. The center is compact and bright and fuzzy around it. (Duration not indicated. Time of observation is start time. Ed.)
NOTE C Naked eye observation.
NOTE D Gas tail 5 deg. in 9x63; dust tail 2 1/2 in 9x63. Almost circular coma, v. tenuous tails. Inner envelope blue/green 1830 UT. (Drawings at two unspecified magnifications included. Ed.)
NOTE E Scale approximate. Stellar like nucleus; tail at PA 270.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.538 | 850947 | 0.050 | 4 | | 39.6 x27.0 | 0.08 | Kodacolor VR | 1000/ | N | | 9/N | 1 | Gronek,J.D | A |
| 6.541 | 850948 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 2.00 | Kodak 2415 | | Y | | 006/P | 6 | Royer,R | |
| 6.545 | 850949 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 5.00 | Kodak 2415 | | Y | | 008/P | 6 | Royer,R | |
| 6.548 | 850950 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 3.00 | Kodak 2415 | | Y | | 007/P | 6 | Royer,R | |
| 6.550 | 850951 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 1.00 | Kodak 2415 | | Y | | 005/P | 6 | Royer,R | |
| 6.732 | 850952 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | Kodak 2415 | | Y | O | 11/S | 11 | Garradd,G | |
| 6.736 | 850953 | 0.200 | 3.5 | | 10.3 x 6.9 | 5.00 | Kodak Tri-X | 400/ | N | O | 18/N | 1 | Haagh,N | |
| 6.745 | 850954 | 0.200 | 3.5 | | 10.3 x 6.9 | 10.00 | Kodak Tri-X | 400/ | N | O | 19/N | 1 | Haagh,N | |
| 6.753 | 850955 | 0.200 | 5.6 | | 10.3 x 6.9 | 10.00 | Kodak Tri-X | 400/ | N | O | 24/N | 1 | Haagh,N | |
| 6.769 | 850956 | 0.300 | 4.5 | | 6.9 x 4.6 | 3.50 | Kodak 2415 | | Y | O | 12/S | 11 | Garradd,G | |
| 6.778 | 850957 | 0.055 | 1.2 | | 36.2 x24.6 | 0.17 | Fujichrome | 400/ | N | X | 5/S | 1 | Tregaskis,T.B | |
| 6.778 | 850958 | 0.055 | 1.2 | | 36.2 x24.6 | 0.50 | Fujichrome | 400/ | N | X | 6/S | 1 | Tregaskis,T.B | |
| 6.781 | 850959 | 0.180 | 2.8 | | 11.4 x 7.6 | 2.00 | Kodak 2415 | | Y | O | 13/S | 11 | Garradd,G | |

NOTE A City lights, twilight, and moonlight interfered with the observation.

DATE: 7 MAR 1986

DATE: 7 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.02 | 817026 | 2.7 | B | AAVSO | 8 | 7 | 4.5 | 260 | 0.05 | R | 4 | 7 | | | | Chernis,K | |
| 7.03 | 817027 | 3.9 | B | M | 2 | | 0.8 | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 7.120 | 817028 | 3.2 | S | 4B | 6.0 | 7 | 2.50 | 283 | 0.13 | R | 4 | 21 | 5.5 | Y | 1 | Campos,J | A |
| 7.122 | 817029 | 3.0 | | 4B | | | 1.50 | 280 | | EY | | | 5.5 | Y | 1 | Campos,J | |
| 7.124 | 817030 | 3.1 | S | 4B | 5.0 | 7 | 3.50 | 282 | 0.08 | B | | 30 | 5.5 | Y | 1 | Campos,J | |
| 7.28 | 817031 | 3.6 | S | 4B | | | | | 0.05 | B | | 7 | 3.5 | | 6 | Shanklin,J.D | B |
| 7.28 | 817032 | 3.6 | S | 4B | | | | | | EY | | | 3.5 | | 6 | Shanklin,J.D | B |
| 7.315 | 817033 | 4.2 | B | 122 | 0.0 | 3 | 0.70 | | 0.050 | B | | 20 | 6.4 | Y | 1 | Castrillon,M.E | C |
| 7.322 | 817034 | 4.2 | B | 13 | | 3 | | | 0.05 | B | | 20 | 6.4 | Y | 1 | Girardo,M.M | D |
| 7.322 | 817035 | 4.1 | B | 122 | | 3 | 0.35 | | 0.050 | B | | 20 | 6.4 | Y | 1 | Lovera,A | E |
| 7.324 | 817036 | 2.9 | B | 122 | | 5 | 0.9 | 264 | 0.05 | B | | 20 | 4.0 | Y | 8 | da Silva,L.A.L | F |
| 7.333 | 817037 | 3.4 | B | 122 | 5 | 3 | 1.5 | 270 | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 7.333 | 817038 | 4.2 | B | 122 | 5.2 | 3 | 1.4 | | 0.050 | B | | 20 | 6.2 | Y | 1 | Siccardi,L | G |
| 7.35 | 817039 | 3.5 | B | AAVSO | | | 5 | | 0.04 | B | | 7 | | | | Kiselev,N | |
| 7.38 | 817040 | 2.3 | B | 4B | 9 | 6 | 2.9 | 290 | 0.06 | R | 13.3 | 35 | 6.0 | Y | 2 | Jacobson,E | H |
| 7.38 | 817041 | | | | 52 | 6 | 8.1 | 290 | | EY | | | 6.0 | Y | 2 | Jacobson,E | I |
| 7.397 | 817042 | | V | AAVSO | | | 1.4 | | | EY | | | 6.0 | Y | 2 | Ferrin,I | |
| 7.397 | 817043 | | | AAVSO | | | 1.5 | | 0.12 | B | | 20 | 6.0 | Y | 2 | Ferrin,I | |
| 7.410 | 817044 | 3.0 | B | 122 | 6 4 | 4 | 2.90 | 256 | 0.05 | B | | 7 | 5.3 | Y | 1 | Lairet,R | |
| 7.451 | 817045 | 3.3 | B | 122 | | | | | 0.080 | B | | 20 | 5.2 | Y | | Smith,D | J |
| 7.459 | 817046 | 3.1 | B | 4B | 35 | 7 | 3 | 318 | 0.20 | SC | 10 | 77 | 5.0 | Y | 1 | Hodonsky,K | |
| 7.54 | 817047 | 2.8 | B | 4B | | | 4 | 270 | | EY | | | 5.5 | Y | 23 | Hale,A | |
| 7.542 | 817048 | 3.3 | M | 4B | | 3 | 16 | 130 | 0.080 | B | | 11 | 5.5 | Y | 1 | Glassett,W | K |
| 7.68 | 817049 | 3.6 | S | SAO | 10 | 7 | 3.5 | 270 | 0.05 | B | | 7 | 5.2 | Y | 2 | Ashdown,M | L |
| 7.694 | 817050 | 2.7 | S | 4B | | | 5.0 | | | EY | | | 5.8M | Y | 1 | Lovejoy,T | |
| 7.740 | 817051 | | | 4B | 6 | 5 | 3.5 | | 0.114 | N | 8 | 45 | 5.8C | Y | 1 | Parkinson,M | M |
| 7.74 | 817052 | | | | 5 | 8 | 3.5 | 270 | 0.08 | B | | 15 | | Y | 1 | Seargent,D | |
| 7.74 | 817053 | 2.8 | | 4B | | | | | | EY | | | | Y | 1 | Seargent,D | |
| 7.745 | 817054 | | | 122 | | 9 | 3.0 | 285 | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 7.750 | 817055 | 3.9 | S | 122 | | | | | | EY | | | 5.0 | Y | 1 | Williams,P.F | |
| 7.753 | 817056 | 2.6 | S | 4B | | | 7 | | 0.05 | B | | 7 | 6.0 | Y | 9 | Garradd,G | N |
| 7.82 | 817057 | 3.6 | S | AAVSO | 5 | 6 | 3 | | 0.08 | B | | 15 | 5.5 | Y | 1 | Hayashi,A | O |
| 7.82 | 817058 | 3.4 | M | SAO | 9 | 8 | 2.0 | 265 | 0.065 | R | 8 | 16 | 4.5 | Y | 5 | Nakamura,A | |
| 7.82 | 817059 | 3.5 | M | 4B | | | 5.0 | | 0.05 | B | | 7 | 5.0 | Y | 1 | Suzuki,K | |
| 7.82 | 817060 | | | 4B | 3.3 | 6 | | | 0.21 | N | 5.0 | 88 | 5.0 | Y | 1 | Suzuki,K | P |
| 7.830 | 817061 | 3.3 | M | 4B | 3.9 | 8 | | | 0.08 | B | | 11 | 4.5T | Y | 1 | Mitsuma,S | Q |
| 7.830 | 817062 | | | | | | | | 0.16 | N | 6.3 | 31 | 4.5T | Y | 1 | Mitsuma,S | R |
| 7.830 | 817063 | | | | | | 5 | 270 | 0.05 | B | | 7 | 4.5T | Y | 1 | Mitsuma,S | |
| 7.831 | 817064 | 3.5 | B | 4B | 3.8 | 7 | 3.7 | 270 | 0.05 | B | | 7 | 3.5T | Y | 1 | Kanai,K | |
| 7.836 | 817065 | 3.3 | M | 4B | 6 | 6 | 5 | 265 | 0.030 | B | | 8 | 5.0M | Y | 1 | Kato,T | |
| 7.837 | 817066 | 4.0 | B | 4B | | | | | 0.035 | B | | 7 | | N | 1 | Okada,M | |
| 7.84 | 817067 | 3.5 | S | AAVSO | 5 | 6 | 2 | | 0.13 | N | 6.3 | 24 | 5.0M | Y | 1 | Hayashi,A | S |
| 7.84 | 817068 | 3.6 | M | 4B | 5 | 8 | 3 | 270 | 0.08 | B | | 20 | 5.0 | Y | 1 | Oka,A | |
| 7.84 | 817069 | 3.5 | M | 4B | 4.5 | 6 | | | 0.080 | B | | 11 | 3 T | N | 6 | Watanabe,N | |
| 7.84 | 817070 | 3.5 | S | 4B | 4.5 | 8 | | | 0.07 | B | | 10 | 4.0 | Y | 1 | Yasuki,M | |
| 7.844 | 817071 | 3.4 | B | 4B | | | | | 0.07 | B | | 10 | 3.6 | Y | 1 | Date,M | |

NOTE A Tail 14' of arc at its widest point.
NOTE B Fog.
NOTE C Coma diameter 0.04. Partial covering of clouds. (Translated by IHW staff. Ed.)
NOTE D Partly cloudy. (Translated by IHW staff. Ed.)
NOTE E Light (swift? Ed.) clouds. (Translated by IHW staff. Ed.)
NOTE F Moon near to the comet.
NOTE G Coma diameter and tail length approximate.
NOTE H Condensation. 2.9 deg. tail is gas. 0.8 deg. tail is dust.
NOTE I 8.1 deg. tail is gas. 3.2 deg. tail is dust.
NOTE J Comet elevation 15 deg.
NOTE K Morning twilight. Spectacular nucleus, coma and tail clearly visible at this time from desert site, even with the naked eye. (PA value appears incorrect. Ed.)
NOTE L Crescent moon 16 deg. away.
NOTE M Assume coma diameter is for inner coma. Tail length approximate.
NOTE N 7 deg. tail is straight gas; 3.5 deg. tail is curved dust.
NOTE O PA 245 to 275.
NOTE P Meter. (Coma diameter. Ed.)
NOTE Q m2 = 5.6.
NOTE R m2 = 7.2.
NOTE S PA 240 to 275.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.792 | 830894 | | | | | | | | | McNaught,R.H | A |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.443 | 850960 | 0.050 | 1.4 | | 39.6 x27.0 | 0.50 | Kodak VR | 1000/ | N | T | 10/C | 2 | Priester,D.C | |
| 7.444 | 850961 | 0.050 | | | 39.6 x27.0 | 1.00 | Kodak VR | 1000/ | N | T | 11/C | 2 | Priester,D.C | |
| 7.447 | 850962 | 0.050 | 1.4 | | 39.6 x27.0 | 5.00 | Kodak VR | 1000/ | N | T | 12/C | 2 | Priester,D.C | |
| 7.453 | 850963 | 0.629 | 5.1 | 0.123 | 3.3 x 2.2 | 0.47 | Fujicolor HR | 1600/ | N | X | 6/P | 3 | Wallace,B.G | A |
| 7.544 | 850964 | 0.135 | 3.5 | | 15.2 x10.2 | 5.00 | 3M 1000 | 1000/ | N | O | 2/N | 8 | Edberg,S.J | |
| 7.738 | 850965 | 0.180 | 2.8 | | 11.4 x 7.6 | 7.00 | Kodak 2415 | | Y | O | 14/S | 9 | Garradd,G | |
| 7.747 | 850966 | 0.180 | 2.8 | | 11.4 x 7.6 | 4.00 | Kodak 2415 | | Y | O | 15/S | 9 | Garradd,G | |
| 7.750 | 850967 | 0.180 | 2.8 | | 11.4 x 7.6 | 3.00 | Kodak 2415 | | Y | O | 16/S | 9 | Garradd,G | |
| 7.759 | 850968 | 0.180 | 2.8 | | 11.4 x 7.6 | 13.33 | Kodak 2415 | | Y | O | 17/S | 9 | Garradd,G | |
| 7.772 | 850969 | 0.085 | 2 | | 23.9 x16.1 | 10.00 | Kodak 2415 | | Y | O | 18/S | 9 | Garradd,G | |

NOTE A (Observer's image identifier is I. Ed.)

DATE: 8 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.03 | 817072 | 3.8 | B | M | | | | 1.8 | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 8.03 | 817073 | 2.9 | B | AAVSO | 10 | | 7 | 4 | 260 | 0.11 | B | | 20 | | | | Chernis,K | |
| 8.087 | 817074 | 2.5 | B | 4B | 30 | 15 | 7 | 3 | 275 | 0.065 | B | | 20 | 5.3 | Y | 1 | McBain,J | |
| 8.093 | 817075 | 3.4 | M | 4B | | | | | | 0.035 | B | | 9 | 5.5M | Y | 1 | Begbie,M.J.R | |
| 8.099 | 817076 | 3.3 | M | 4B | | | 7 | 2.5 | 275 | | EY | | | 5.2 | Y | 1 | Fleet,R.W | |
| 8.101 | 817077 | | | | 5.5 | | 8 | | 275 | 0.30 | N | 8.5 | 102 | 5.5M | Y | 1 | Begbie,M.J.R | A |
| 8.111 | 817078 | 3.0 | S | 4B | 5.0 | | 7 | 4.00 | 270 | 0.08 | B | | 30 | 5.6 | Y | 1 | Campos,J | |
| 8.118 | 817079 | 3.0 | | 4B | | | 8 | 1.50 | | | EY | | | 5.6 | Y | 1 | Campos,J | |
| 8.119 | 817080 | 3.5 | M | 4B | 4.3 | | 7 | 3.8 | 261 | 0.08 | B | | 11 | 5.2 | Y | 1 | Fleet,R.W | B |
| 8.124 | 817081 | 3.6 | M | 4B | 2 | | 8 | 4.2 | 260 | 0.04 | B | | 12 | 5.3 | N | 1 | Henshaw,C | C |
| 8.26 | 817082 | 3.0 | S | 4B | | | | | | 0.05 | B | | 7 | 5.0 | | 7 | Shanklin,J.D | |
| 8.320 | 817083 | 4.2 | B | 122 | 0.0 | | 3 | 0.78 | | 0.050 | B | | 20 | 6.0 | Y | 1 | Castrillon,M.E | D |
| 8.320 | 817084 | 4 | B | 122 | | | 3 | 0.7 | | 0.05 | B | | 20 | 6.1 | Y | 1 | Carello,S | |
| 8.320 | 817085 | 4.0 | B | 122 | | | 3 | 0.7 | | 0.050 | B | | | 6.0 | Y | 1 | Lovera,A | |
| 8.336 | 817086 | 4.2 | B | 122 | 5.2 | | 3 | 1.57 | | 0.050 | B | | 20 | 6 | Y | 1 | Siccardi,L | E |
| 8.337 | 817087 | 3.4 | B | 122 | 5 | | 3 | 1.5 | 270 | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 8.365 | 817088 | 2.6 | M | 4B | | | 9 | 7 | | 0.05 | B | | 20 | 4.8 | Y | 1 | Diaz P.,E | |
| 8.39 | 817089 | 2.3 | B | 4B | 9 | | 6 | 2.5 | 290 | 0.06 | R | 13.3 | 35 | 6.0 | Y | 2 | Jacobson,E | F |
| 8.39 | 817090 | | | | 46 | | 6 | 7.6 | 290 | | EY | | | 6.0 | Y | 2 | Jacobson,E | G |
| 8.401 | 817091 | 3.1 | B | AAVSO | | | | | | 0.12 | B | | 20 | 6.0 | Y | 2 | Ferrin,I | |
| 8.408 | 817092 | 3.0 | B | 122 | 8 | 4 | 4 | 2.20 | 255 | 0.05 | B | | 7 | | Y | 1 | Lairet,R | |
| 8.425 | 817093 | 3.3 | M | 4B | 7 | | 6 | 6.0 | 259 | 0.05 | B | | 7 | 4.2 | Y | 1 | DeYoung,J.A | H |
| 8.43 | 817094 | 3.6: | B | IHW BAA | | | 8 | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 8.440 | 817095 | 3.5 | S | 4B | 5 | | | 2.4 | 265 | 0.05 | B | | 7 | 5 | Y | 2 | House,R.R | I |
| 8.448 | 817096 | 4.6 | M | 4B | | | | | | 0.050 | B | | 10 | 3.1 | Y | 1 | Smith,A | J |
| 8.451 | 817097 | 4.0 | B | 4B | | | | | | 0.08 | B | | 11 | 4.2 | Y | 4 | Gorski,L | |
| 8.458 | 817098 | 3.0 | S | 4B | 6 | | 6 | 5 | 330 | 0.035 | B | | 7 | 6 | N | 1 | Lewis,D.E | K |
| 8.461 | 817099 | 4.3 | B | 4B | 3.2 | | 5 | 1.0 | 284 | 0.05 | B | | 7 | 4.8TC | Y | 1 | Dodd,W.J | L |
| 8.688 | 817100 | 2.7 | S | 4B | | | | 11.0 | | | EY | | | 6.5Z | Y | 1 | Lovejoy,T | |
| 8.69 | 817101 | 3.4 | S | 4B | | | | | | 0.023 | B | | 3 | 5.3 | | | Jones,A | |
| 8.69 | 817102 | | | | | | | 2.4 | | 0.080 | B | | 11 | | | | Jones,A | M |
| 8.69 | 817103 | | | | 5 | | 8 | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 8.72 | 817104 | 8.2 | S | SAO | | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | N |
| 8.76 | 817105 | 3.1 | | 4B | | | 6 | | | 0.050 | B | | 7 | 4.8C | Y | 1 | Matchett,V | |
| 8.806 | 817106 | 3.0 | S | 4B | 13 | | 5 | 4 | 270 | 0.035 | B | | 8 | 3.5 | Y | 2 | Kobayashi,J | |
| 8.82 | 817107 | 3 : | | | | | | 1 | 250 | 0.05 | B | | 7 | 3 | Y | 6 | Tanikawa,M | O |
| 8.823 | 817108 | 4.0 | B | 4B | | | | 2.2 | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 8.83 | 817109 | 2.8 | S | | 10 | | 6 | 5 | 260 | 0.08 | B | | 11 | 5.7 | Y | 2 | Akita,I | |
| 8.83 | 817110 | 3.6 | M | SAO | 9 | | 8 | 1.5 | 265 | 0.065 | R | 8 | 16 | 4.5 | Y | 1 | Nakamura,A | |
| 8.83 | 817111 | 3.0 | | 4B | 8 | | 6 | 5 | | 0.080 | B | | 11 | T | Y | 1 | Okuda,M | P |
| 8.83 | 817112 | 3.5 | S | 4B | | | 5 | 5 | | 0.08 | B | | 11 | 4.0 | Y | 3 | Momose,M | Q |
| 8.83 | 817113 | 3.8 | M | 4B | 6 | | 6 | 3 | 270 | 0.080 | B | | 11 | 4 T | Y | 6 | Watanabe,N | R |
| 8.833 | 817114 | 3.4 | S | 4B | 20 | | 6 | 2 | | 0.153 | N | 8.6 | 33 | 3.0 | Y | 1 | Iwaki,Y | S |
| 8.833 | 817115 | 3.8 | B | 4B | | | | | | 0.07 | B | | 10 | 3.1 | Y | 1 | Date,M | |
| 8.838 | 817116 | 3.8 | S | 4B | 4.4 | | 7 | 1.1 | | 0.05 | B | | 7 | 1.5T | Y | 1 | Kanai,K | |
| 8.840 | 817117 | 3.6 | M | 4B | 4 | | 7 | | | 0.08 | B | | 11 | 3 T | Y | 1 | Mitsuma,S | |
| 8.844 | 817118 | 3.0 | M | 4B | | | | 1.0 | 190 | | EY | | | 3.0 | N | 6 | Ichikawa,K | |
| 8.844 | 817119 | 3.4 | M | 4B | 6 | | 6 | | | 0.030 | B | | 8 | 3.0C | Y | 1 | Kato,T | T |

NOTE A Tail measurement refers to dust tail only.
NOTE B Gas tail at PA 261. Curved dust tail at PA 266. 1.7 deg. tail is fan from main tail to PA 285.
NOTE C Moon.
NOTE D Coma diameter 0.04.
NOTE E Coma diameter and tail length approximate.
NOTE F Condensation. 2.5 deg. tail is gas. 0.5 deg. tail is dust.
NOTE G 7.6 deg. tail is gas. 3.1 deg. tail is dust.
NOTE H Ion tail at PA 259; center of dust tail at PA 267.
NOTE I Naked eye coma only.
NOTE J Low altitude.
NOTE K The best visual sighting.
NOTE L Only used 2 comparison stars for magnitude estimate. Tail length and PA measured from sketch on star chart.
NOTE M Paraboloid symmetrical coma/tail. 2.4 deg. tail PA 260-280. 1.3 deg. tail is shorter ray. Tail brightness at 0.5 degrees from head = Scutum cloud in Milky Way to naked eye.
NOTE N Nucleus (stars slighly defocused - twilight).
NOTE O Tail length approximate.
NOTE P (Observer indicated "Y" method. Ed.) PA I 260 deg., PA II 250-290 deg.
NOTE Q Saw moon with eye. 1 deg. [sic] (Translated by IHW staff. Ed.)
NOTE R Tail length is lower limit.
NOTE S Not real dark (dusk). (Translated by IHW staff. Ed.)
NOTE T Cloud.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.101 | 830895 | 0.17 | 0.30 | N | 8.5 | 102,212 | 20 | 5.5 | 1 | Begbie,M.J.R | A |
| 8.119 | 830896 | 4 | 0.08 | B | | 11 | | 5.2 | 1 | Fleet,R.W | B |
| 8.20 | 830897 | | 0.356 | SC | 11 | 200 | | | | Soc. Astro. de France | C |
| 8.797 | 830898 | | | | | 304 | | | | McNaught,R.H | D |
| 8.82 | 830899 | 4.28 | 0.050 | B | | 7 | 14 | 3 | 6 | Tanikawa,M | E |

NOTE A Fan centred at PA 55; gas tail centred at PA 260. Vertex distance 3 arc min.; semi latus rectums 2 arc min. and 3 arc min.; nuclear jet approx. 1 arc min. long. Near nuclear tail in PA 260 appeared distinctly bright than in the rest of the tail. Observation made in moonlight.
NOTE B Gas tail at PA 261. Dust tail at PA 266. Fan at PA 285. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Drawing made by M. Verdenet. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE D Details not certain due to speed and cloud. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Feature at PA 250.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.415 | 850970 | 0.210 | 3.5 | | 9.8 x 6.5 | 15.00 | Kodak 2415 | | Y | S | 29/C | 3 | Chester,G.R |
| 8.784 | 850971 | 0.200 | 3.5 | | 10.3 x 6.9 | 5.00 | Kodak Tri-X | 400/ | N | O | 20/N | 1 | Haagh,N |

DATE: 8 MAR 1986

DATE: 8 MAR 1986

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.443 | 870129 | 600G-O | CL | 0.135 | 1.9 | | 16.00 | Kodak 2415 | | Y | C | 920/S | 2 | Buchanan,W.T | AB |
| 8.459 | 870130 | 600G-O | CL | 0.135 | 2.8 | | 5.00 | Kodak 2415 | | Y | C | 922/S | 2 | Buchanan,W.T | BC |

NOTE A Some thin cirrus. (Observer's image identifier is E-119-20. Ed.)
NOTE B Window on front of instrument to correspond with aperture [sic]: for f/1.9, window is 75 mm; for f/2.8, window is 54 mm.
NOTE C Some thin cirrus. (Observer's image identifier is E-119-22. Ed.)

DATE: 9 MAR 1986

DATE: 9 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.101 | 817120 | 3.7 | M | 4B | 2 | 8 | 6.5 | 250 | 0.04 | B | | 12 | 5.3 | Y | 1 | Henshaw,C | A |
| 9.174 | 817121 | 4.3 | M | 4B | 11.5 | 7 | 3.3 | 263 | 0.07 | B | | 20 | 5.5 | Y | 1 | Tanti,T | B |
| 9.219 | 817122 | 2.5: | | 4B | 20 | 8 | 5 | 270 | 0.205 | N | 6.3 | 144 | 5.5 | Y | 1 | Gomez,T.L | C |
| 9.313 | 817123 | 3.5 | B | AAVSO | | 3 | 14.00 | 265 | 0.115 | N | 7.8 | 45 | 5 | Y | 1 | Alves,A.A | D |
| 9.324 | 817124 | 2.9 | B | 122 | | 4 | 0.9 | 264 | 0.05 | B | | 20 | 6.0 | Y | 8 | da Silva,L.A.L | |
| 9.406 | 817125 | 3.0 | B | 122 | 8 | 3 | 2.60 | 255 | 0.05 | B | | 7 | 3.5 | Y | 1 | Lairet,R | |
| 9.407 | 817126 | | | 122 | | 4 | 4 | 210 | 0.05 | B | | 7 | 6.2 | Y | 1 | Ludewig O.,F.L | E |
| 9.42 | 817127 | 2.6 | B | 4B | 8 | 4 | 0.9 | 290 | 0.06 | R | 13.3 | 35 | 6.0 | Y | 2 | Jacobson,E | F |
| 9.42 | 817128 | | | | 41 | 4 | 4.2 | 290 | | EY | | | 6.0 | Y | 2 | Jacobson,E | G |
| 9.4208 | 817129 | 3.5 | B | AAVSO | | | 2.75 | | 0.12 | B | | 20 | | | 2 | Ferrin,I | |
| 9.451 | 817130 | 4.2 | M | 4B | | | | | 0.050 | B | | 10 | 3.1 | Y | 1 | Smith,A | H |
| 9.455 | 817131 | | | 4B | | 6 | 3 | | 0.050 | B | | 10 | 6.0 | Y | 1 | Williams,D.J | I |
| 9.51 | 817132 | 3.2 | B | 4B | 5 | 8 | 3.3 | 265 | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | J |
| 9.51 | 817133 | 3.2 | V | 4B | | | | | | EY | | | 6.0 | Y | 1 | Keen,R | J |
| 9.5243 | 817134 | 2.5 | M | 4B | 10 | 6 | | | 0.05 | B | | 7 | 6.3 | Y | 11 | Cook,A.J | |
| 9.5243 | 817135 | 2.5 | M | 4B | 10 | 6 | 9.00 | 270 | | EY | | | 6.3 | Y | 11 | Cook,A.J | |
| 9.538 | 817136 | 3.2 | M | 4B | | 3 | 17 | 134 | 0.080 | B | | 11 | 5.8 | Y | 1 | Glassett,W | K |
| 9.55 | 817137 | 2.9 | B | 4B | | | | | | EY | | | 3.5C | Y | 21 | Hale,A | L |
| 9.5562 | 817138 | 3.5 | S | DCS | 10 | 8 | 1.50 | 251 | 0.080 | B | | 20 | 3.5 | | 3 | Machholz,D | M |
| 9.69 | 817139 | 3.2 | S | 4B | | | | | 0.023 | B | | 3 | 5.3 | Y | | Jones,A | N |
| 9.69 | 817140 | | | | | | 2.8 | | 0.080 | B | | 11 | | | | Jones,A | O |
| 9.69 | 817141 | | | | | 8 | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 9.73 | 817142 | 3.1 | B | 4B | | | | | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | |
| 9.743 | 817143 | 2.7 | S | 4B | | | | | | EY | | | 6.0 | Y | 4 | Garradd,G | |
| 9.75 | 817144 | 2.9 | S | 4B | | 8 | 6.5 | 270 | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | P |
| 9.750 | 817145 | | | | | | 7.5 | | 0.05 | B | | 7 | | | | Garradd,G | Q |
| 9.796 | 817146 | 3.0 | B | 4B | | 8 | 4.5 | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | R |
| 9.796 | 817147 | | | 4B | | | 3 | | | EY | | | | Y | | Tregaskis,T.B | S |
| 9.800 | 817148 | | | 4B | 2.8 | 9 | | 260 | 0.10 | N | 6 | 24 | | Y | | Tregaskis,T.B | T |
| 9.82 | 817149 | 2.8 | B | 4B | | | 5 | | | EY | | | 5.8 | Y | | Pearce,A | |
| 9.82 | 817150 | 3.1 | S | 4B | | | 7 | | 0.030 | B | | 8 | 5.8 | Y | | Pearce,A | |
| 9.85 | 817151 | 3.0 | S | 4B | | | 3.3 | | | EY | | | 6.0 | Y | | Clark,M.L | |
| 9.87 | 817152 | 3.4 | S | 4B | 5.5 | 7 | 3.75 | 261 | 0.25 | N | 5 | 62 | 6.0 | Y | | Clark,M.L | |

NOTE A Gas tail 6.5 deg. at PA 250; dust tail 2.5 deg. at PA 270.
NOTE B Artificial light. Haze. Clouds.
NOTE C Tail length exceeds 5 deg.
NOTE D Intermittent visibility did not permit coma diameter measurement.
NOTE E Sky clear, achieving a very good observation of the celestial arch. (Roughly translated by IHW staff. Ed.)
NOTE F Condensation/haze. 0.9 deg. tail is gas. 0.4 deg. tail is dust.
NOTE G 4.2 deg. tail is gas. 1.4 deg. tail is dust.
NOTE H Low altitude.
NOTE I Very clear.
NOTE J Extinction correction applied.
NOTE K Morning twilight. Spectacular nucleus, coma and tail clearly visible at this time from desert site, even with the naked eye. (PA value appears incorrect. Ed.)
NOTE L Observed from within Los Angeles city limits. Some interference from light pollution. The comet was visible with the naked eye without much difficulty, but the tail could not be positively seen. Observation hurried because of fast-moving clouds.
NOTE M At the time of observation, the comet's altitude was +12 deg. and the sun's altitude was -14 deg.
NOTE N Clear.
NOTE O Paraboloid symmetrical. Tail PA 255-273. Tail brightness at 0.5 degrees from head, midway in brightness between Sgr and Sct clouds.
NOTE P Gas tail at PA 270. Dust tail at PA approximately 276.
NOTE Q 7.5 deg. tail is straight gas; 4 deg. tail is curved dust.
NOTE R Clear, breaking dawn.
NOTE S Tail length approximate. Clear, breaking dawn.
NOTE T PA approximate. Almost stellar-like nucleus. No jets. Magnification of 68 also used.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.359 | 830900 | | 0.203 | SC | 5 | 32, 48 | 45 | | 4 | Arpin,P | A |
| 9.359 | 830901 | | 0.080 | B | | 20 | 45 | | 4 | Arpin,P | B |
| 9.455 | 830902 | | 0.050 | B | | | | 6.0 | | Williams,D.J | C |
| 9.790 | 830903 | | | | | | | | | McNaught,R.H | D |
| 9.796 | 830904 | 4.5 | 0.050 | B | | 10 | | | 1 | Tregaskis,T.B | E |

NOTE A Fountain, jet, coma, tail indicated. Auxilliary lens used to reduce focal length by 0.5.
NOTE B Tail, coma indicated.
NOTE C Halley was clearly visible. The tail is brighter this morning, about 2.5 to 3 degrees in length. The comet is about magnitude 2.0. (Duration not indicated. Time of observation is start time. Ed.)
NOTE D (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Dawn breaking - no moon. No jets or other features noticed in 4", 24x or 4", 68x Newtonian. Tail about 4.5 deg. long in binoculars. (3 deg. to naked eye.) Almost stellar-like nucleus. Tail at PA 260.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.367 | 850972 | 0.200 | 2.8 | | 10.3 x 6.9 | 4.50 | Kodak 2415 | | Y | S | 1/P | 4 | Dilsizian,R | A |
| 9.500 | 850973 | 0.050 | 2 | | 39.6 x27.0 | 0.25 | Konica 1600 | | N | | 1/P | 1 | Pacholka,W | B |
| 9.504 | 850974 | 0.210 | 4 | | 9.8 x 6.5 | 11.00 | Konica 1600 | | N | | 2/P | 1 | Pacholka,W | B |
| 9.521 | 850975 | 0.210 | 4 | | 9.8 x 6.5 | 11.00 | Konica | 1600/ | Y | S | 2/S | 1 | Pacholka,W | |
| 9.528 | 850976 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | 3M 1000 | 1000/ | N | O | 3/N | 9 | Edberg,S.J | C |
| 9.530 | 850977 | 0.050 | 1.8 | | 39.6 x27.0 | 2.00 | Agfachrome | 1000/ | N | | 11/P | 11 | Cook,A.J | |
| 9.531 | 850978 | 0.050 | 2 | | 39.6 x27.0 | 0.25 | Konica | 1600/ | Y | S | 10/S | 1 | Pacholka,W | |
| 9.532 | 850979 | 0.050 | 1.8 | | 39.6 x27.0 | 1.00 | Agfachrome | 1000/ | N | | 12/P | 11 | Cook,A.J | |
| 9.534 | 850980 | 0.050 | 1.8 | | 39.6 x27.0 | 3.00 | Agfachrome | 1000/ | N | | 13/P | 11 | Cook,A.J | D |
| 9.540 | 850981 | 0.085 | 3.8 | | 23.9 x16.1 | 10.00 | Ektachrome | 400/ | N | O | 1/N | 9 | Edberg,S.J | E |
| 9.544 | 850982 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 2.00 | Kodak 2415 | | Y | | 010/P | 3 | Royer,R | |
| 9.549 | 850983 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 5.00 | Kodak 2415 | | Y | | 011/P | 3 | Royer,R | |
| 9.553 | 850984 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 7.00 | Kodak 2415 | | Y | | 012/P | 3 | Royer,R | |
| 9.556 | 850985 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 1.00 | Kodak 2415 | | Y | | 009/P | 3 | Royer,R | |
| 9.717 | 850986 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | Kodak 2415 | | Y | O | 19/S | 4 | Garradd,G | |
| 9.736 | 850987 | 0.180 | 2.8 | | 11.4 x 7.6 | 3.50 | Kodak 2415 | | Y | O | 20/S | 4 | Garradd,G | |
| 9.736 | 850988 | 0.200 | 3.5 | | 10.3 x 6.9 | 20.00 | Kodak Tri-X | 400/ | N | O | 21/N | 1 | Haagh,N | |
| 9.742 | 850989 | 0.180 | 2.8 | | 11.4 x 7.6 | 7.83 | Kodak 2415 | | Y | O | 21/S | 4 | Garradd,G | |
| 9.752 | 850990 | 0.200 | 5.6 | | 10.3 x 6.9 | 20.00 | Kodak Tri-X | 400/ | N | O | 25/N | 1 | Haagh,N | |
| 9.764 | 850991 | 0.200 | 3.5 | | 10.3 x 6.9 | 5.00 | Kodak Tri-X | 400/ | N | O | 22/N | 1 | Haagh,N | |
| 9.771 | 850992 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Kodak Tri-X | 400/ | N | O | 26/N | 1 | Haagh,N | F |

DATE: 9 MAR 1986 DATE: 9 MAR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.778 | 850993 | 0.050 | 2.8 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 27/N | 1 | Haagh,N | F |
| 9.797 | 850994 | 0.055 | 1.2 | | 36.2 x24.6 | 0.08 | Ektachr.400 | | N | | 7/S | 1 | Tregaskis,T.B | G |
| 9.797 | 850995 | 0.055 | 1.2 | | 36.2 x24.6 | 0.17 | Ektachr.400 | | N | | 8/S | 1 | Tregaskis,T.B | G |
| 9.797 | 850996 | 0.055 | 1.2 | | 36.2 x24.6 | 0.33 | Ektachr.400 | | N | | 9/S | 1 | Tregaskis,T.B | G |

NOTE A Filter for 200 mm photo was a Minus Violet Filter (cutoff below approximately 440 nm) supplied by Lumicon. Some declination drift. Stellar guiding used because long focal lengths not used. Film was hypersensitized before leaving New York and remained frozen until used.
NOTE B Push processed to 4000 ASA. (Start time appears to be approximate. Ed.)
NOTE C Start time uncertain.
NOTE D Exposure duration uncertain.
NOTE E 120 size film used (6x6 cm). Start time and exposure uncertain.
NOTE F UV #1A filter used.
NOTE G Push processed to 800 ASA.

DATE: 10 MAR 1986

DATE: 10 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.122 | 817153 | 3.7 | M | 4B | 2 | 8 | 6 | 250 | 0.04 | B | | 12 | 5.3 | Y | 1 | Henshaw,C | |
| 10.31 | 817154 | 2.7 | M | 4B, BSC | 7 | 8 | 6 | 280 | 0.050 | B | | 10 | 5.0C | Y | 24 | Morris,C.S | A |
| 10.313 | 817155 | | | | | | 3 | | | EY | | | 6.0 | | 3 | Martinez,C | |
| 10.32 | 817156 | 2.8 | M | 4B, BSC | | 7 | | | 0.070 | B | | 16 | 5.0C | Y | 24 | Morris,C.S | |
| 10.32 | 817157 | 2.7 | | 4B, BSC | | 7 | 9.5 | 280 | | EY | | | 5.0C | Y | 24 | Morris,C.S | B |
| 10.375 | 817158 | 2.6 | B | AAVSO | | | 1.8 | | 0.12 | B | | 20 | 5.8 | | 2 | Ferrin,I | |
| 10.403 | 817159 | | B | 122 | 4 2 | 4 | 2.00 | 250 | 0.05 | B | | 7 | 5.0 | Y | 1 | Lairet,R | |
| 10.442 | 817160 | 3.2: | M | 4B | 7 | | | | 0.063 | B | | 9 | 3.1 | Y | 1 | DeYoung,J.A | |
| 10.447 | 817161 | 3.4 | B | 122 | | 4 | 3 | 247 | 0.05 | B | | 10 | 3.1 | Y | 1 | Harris,L.A | C |
| 10.69 | 817162 | 2.9 | S | 4B | | | | | 0.023 | B | | 3 | 5.3 | Y | | Jones,A | D |
| 10.69 | 817163 | | | | | | 3.5 | | 0.080 | B | | 11 | | | | Jones,A | |
| 10.69 | 817164 | | | | 7 | | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 10.73 | 817165 | 2.8 | S | 4B | | 7 | 6.0 | 260 | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | E |
| 10.73 | 817166 | 3.0 | B | 4B | | | | | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | |
| 10.74 | 817167 | 2.8 | | 4B | | 8 | | | | EY | | | 6 | Y | 11 | Bouma,R.J | |
| 10.74 | 817168 | 2.7 | | 4B | | | 5 | 274 | | EY | | | 6 Z | Y | 1 | Seargent,D | |
| 10.745 | 817169 | 3.0 | S | 122 | | 9 | 3.0 | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 10.750 | 817170 | 3.0 | B | 4B | 4.5 | 9 | 2.5 | 275 | 0.05 | B | | 7 | 4.8 | Y | 3 | Bembrick,C | F |
| 10.750 | 817171 | 2.6 | S | 4B | | | 5 | | 0.05 | B | | 7 | 6.0 | Y | 15 | Garradd,G | G |
| 10.750 | 817172 | | | 4B | 6 | | 6 | | 0.114 | N | 8 | 45 | 6.5 | Y | 4 | Parkinson,M | H |
| 10.771 | 817173 | 2.5 | S | 4B | | | 13.0 | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | |
| 10.777 | 817174 | 3.4 | S | 4B | 5 | 8 | 3.5 | 270 | 0.050 | B | | 12 | | Y | 1 | Batza,H | I |
| 10.778 | 817175 | 3.0 | | 4B | | | 3 | 260 | | EY | | | | Y | 1 | Tregaskis,T.B | J |
| 10.778 | 817176 | 3.0 | B | 4B | | 8 | 5 | 260 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | J |
| 10.79 | 817177 | 2.8 | B | 4B | | | 3.5 | | | EY | | | 6.2 | Y | | Clark,M.L | |
| 10.80 | 817178 | 3.4 | S | 4B | 8 | 7 | 2.4 | 268 | 0.25 | N | 5 | 38 | 6.2 | Y | | Clark,M.L | |
| 10.84 | 817179 | 2.8 | B | 4B | | | 4 | | | EY | | | 5.8 | Y | | Pearce,A | |
| 10.84 | 817180 | 3.1 | S | 4B | | | 10 | | 0.030 | B | | 8 | 5.8 | Y | | Pearce,A | |

NOTE A Gas tail 6 deg. at PA 250; dust tail 2.5 deg. at PA 270.
NOTE B Condensation had a hook shaped feature from north side back into the tail.
NOTE C This estimate was made with the light of dawn (5:43 am local time).
NOTE D Cloud curtailed observing.
NOTE E DE at 3 deg. from nucleus? Brighter spot seen, just separated from dust tail. Tail, very faintly, seen out to 6 deg. from nucleus, or 3 deg. from DE. Dust tail at PA approximately 275.
NOTE F South edge of tail sharp and distinct; north edge diffuse and concave to north.
NOTE G First tail is gas; second tail is dust.
NOTE H Tail length approximate.
NOTE I (Observer gave limit as 9.0. Ed.)
NOTE J PA approximate. Clear and calm.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.12 | 830905 | 4 | 0.08 | B | | 11 | | | 1 | Fleet,R.W | A |
| 10.365 | 830906 | | 0.203 | SC | 5 | 113 | 30 | | 4 | Arpin,P | B |
| 10.397 | 830907 | 0.25 | 0.20 | N | 8 | 120 | 13 | 6 | 1 | Vargas B.,A.G | C |
| 10.494 | 830908 | | 0.203 | SC | 10 | 81 | | | 1 | Lohvinenko,T.W | D |
| 10.656 | 830909 | | 0.050 | B | | 7 | 30 | 6 | 1 | Notley,M | E |
| 10.748 | 830910 | | | | | | 64 | | | McNaught,R.H | |
| 10.766 | 830911 | | 0.254 | N | 6 | 61 | 75 | | | Pawlutschenko,B | F |

NOTE A Gas tail at PA 260. Dust tail at PA 272. Between clouds, observation incomplete. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Coma is circular and blue; nucleus is stellar. Jet, front coma [sic], coma, tail indicated.
NOTE C Central oblique tail at PA 270 approx. Tail side at PA 230 approx. The tail was very remarkable in their extrems a central and oblique little tail was observed during good seeing moments. [sic] The brighter is the southeast side. This date the comet appear with a very bright central condensation; sometimes during the observations a diffuse filament is visible. The tail is more bright in its round however. [sic] DC 8; coma diameter: 3' approx.
NOTE D The comet is seen here with difficulty, but it is seen as a yellowish blue coma and the nucleus is seen as a yellow colour. This may be due to the sky conditions however instead of the dust from the comet. A tail can be seen at PA 228 deg. E of N. [sic] The tail is just visible however and is quickly hidden by the poor contrast between it and the sky. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Detail of tail at PA 30 NE. [sic]
NOTE F Extraordinary bright semicircular plume; clear distinctive nucleus; 2.5 deg. fan tail; comet head. Between the hours of 4:45 am and 6:00 am DST on 11th March, 1986, the comet was noticed to exude a beautiful semicircular plume. This plume was easily discernible and reminded me of the volcanic plume discovered on Io. Focus of the head of the comet was incredibly clear and the nucleus produced an image comparable to neighbouring stars. A most exquisite view of the comet was gone the next morning, to reveal a nucleus surrounded by a ball of bright glowing dust, making the whole head appear unfocusable. (Drawing data inferred from written description. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.245 | 850997 | 0.055 | 2.8 | | 36.2 x24.6 | 5.00 | Agfachr. Pro | 1000/ | N | | 18/P | 3 | Conrad,R | A |
| 10.245 | 850998 | 0.135 | 1.8 | | 15.2 x10.2 | 5.00 | Kodak 2415 | | Y | | 20/P | 3 | Conrad,R | B |
| 10.247 | 850999 | 0.135 | 1.8 | | 15.2 x10.2 | 20.00 | Kodak 2415 | | Y | | 21/P | 3 | Conrad,R | C |
| 10.328 | 851000 | 0.700 | 5 | 0.140 | 2.9 x 2.0 | 25.00 | Tri-X Pro | 320/ | N | X | 1/T | 1 | Travnik,N.A.S | D |
| 10.406 | 851001 | 0.050 | 2.8 | | 39.6 x27.0 | 2.00 | Kodak Tri-X | 400/ | N | O | 28/N | 1 | Haagh,N | E |
| 10.444 | 851002 | 0.058 | 1.4 | | 34.5 x23.4 | 0.67 | Kodak Tri-X | | N | T | 2/C | 2 | Priester,D.C | F |
| 10.445 | 851003 | 0.058 | 1.4 | | 34.5 x23.4 | 0.33 | Kodak Tri-X | | N | T | 3/C | 2 | Priester,D.C | F |
| 10.445 | 851004 | 0.058 | 1.4 | | 34.5 x23.4 | 0.17 | Kodak Tri-X | | N | T | 4/C | 2 | Priester,D.C | F |
| 10.587 | 851005 | 0.200 | 3.5 | | 10.3 x 6.9 | 20.00 | Kodak 2415 | | N | O | 47/N | | Haagh,N | |
| 10.730 | 851006 | 0.200 | 3.5 | | 10.3 x 6.9 | 25.00 | Kodak 2415 | | N | O | 29/N | 1 | Haagh,N | G |
| 10.737 | 851007 | 0.180 | 2.8 | | 11.4 x 7.6 | 4.17 | Kodak 2415 | | Y | O | 22/S | 15 | Garradd,G | |
| 10.744 | 851008 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 2415 | | Y | O | 23/S | 15 | Garradd,G | |
| 10.748 | 851009 | 0.200 | 3.5 | | 10.3 x 6.9 | 15.00 | Kodak 2415 | | N | O | 30/N | 1 | Haagh,N | |
| 10.760 | 851010 | 0.200 | 3.5 | | 10.3 x 6.9 | 10.00 | Kodak 2415 | | N | O | 31/N | 1 | Haagh,N | |
| 10.761 | 851011 | 0.180 | 2.8 | | 11.4 x 7.6 | 25.00 | Kodak 2415 | | Y | O | 24/S | 15 | Garradd,G | |
| 10.766 | 851012 | 0.200 | 3.5 | | 10.3 x 6.9 | 5.00 | Kodak 2415 | | N | O | 32/N | 1 | Haagh,N | |
| 10.776 | 851013 | 0.200 | 5.6 | | 10.3 x 6.9 | 15.00 | Kodak 2415 | | N | O | 33/N | 1 | Haagh,N | |
| 10.780 | 851014 | 0.300 | 4.5 | | 6.9 x 4.6 | 11.17 | Kodak 2415 | | Y | O | 25/S | 15 | Garradd,G | |
| 10.785 | 851015 | 0.055 | 1.2 | | 36.2 x24.6 | 0.17 | Ektachr.400 | | N | | 10/S | 1 | Tregaskis,T.B | F |
| 10.785 | 851016 | 0.055 | 1.2 | | 36.2 x24.6 | 0.33 | Ektachr.400 | | N | | 11/S | 1 | Tregaskis,T.B | F |
| 10.785 | 851017 | 0.055 | 1.2 | | 36.2 x24.6 | 0.67 | Ektachr.400 | | N | | 12/S | 1 | Tregaskis,T.B | F |

NOTE A Zodiacal light interfered with the observation. Film "pushed" to 4000 ISO/37 DIN.
NOTE B Zodiacal light interfered with the observation. UV filter used. (This probably means a UV blocking, clear glass filter. Ed.)
NOTE C Zodiacal light interfered with the observation. Composite of 3 neg. (Individual negative details not specified on original

DATE: 10 MAR 1986

report form. Ed.)
NOTE D Instrument is Zeiss Tessar. Format size 88 [redacted] x 128 [redacted].
NOTE E UV #1A filter used.
NOTE F Push processed to 800 ASA.
NOTE G Red #29 filter used.

DATE: 11 MAR 1986

DATE: 11 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.073 | 817181 | 2.5 | B | 4B | 30 25 | 7 | 4 | 270 | 0.065 | B | | 20 | 6.4 | Y | 1 | McBain,J | A |
| 11.096 | 817182 | 3.4 | M | 4B | 4 | 8 | 5 | 265 | 0.04 | B | | 12 | 5.3 | Y | 1 | Henshaw,C | |
| 11.111 | 817183 | 3.0 | B | 4B | | 7 | 6.5 | 265 | 0.06 | B | | 15 | 5.6 | Y | 2 | Vincent,J | B |
| 11.115 | 817184 | 3.2 | S | 4B | 4.0 | 7 | 3.00 | 279 | 0.13 | R | 4 | 21 | 5.7 | Y | 1 | Campos,J | |
| 11.156 | 817185 | 4.3 | M | 4B | 11.5 | 7 | 5.1 | | 0.07 | B | | 20 | 5.5 | Y | 1 | Tanti,T | C |
| 11.201 | 817186 | 3.7 | B | 4B | 20 | 8 | 6 | | 0.05 | B | | 7 | 5.5 | Y | 6 | Gomez,A | D |
| 11.250 | 817187 | 2.8 | M | 4B | 60 | 6 | 6.0 | | | EY | | | 5.5 | Y | 3 | Gallego,J | E |
| 11.260 | 817188 | 3.5 | M | 4B | 45 | | 4 | | 0.05 | B | | 20 | 5.5 | Y | 3 | Gallego,J | F |
| 11.328 | 817189 | 3.9 | B | 122 | 6.3 | 3 | 2.45 | | 0.050 | B | | 20 | 5.9 | Y | 1 | Siccardi,L | G |
| 11.39 | 817190 | 2.7: | M | 4B, BSC | | | | | 0.050 | B | | 10 | 5.0 | Y | 25 | Morris,C.S | |
| 11.39 | 817191 | 2.6 | | 4B, BSC | | | 11.5 | 265 | | EY | | | 5.0 | Y | 25 | Morris,C.S | H |
| 11.395 | 817192 | 2.6 | | AAVSO | | | 2.4 | | | EY | | | 6.0 | | 2 | Ferrin,I | |
| 11.395 | 817193 | | | AAVSO | | | 2.0 | | 0.100 | | | 6 | 6.0 | | 2 | Ferrin,I | |
| 11.418 | 817194 | | | 122 | | 3 | 1.5 | 207 | 0.05 | B | | 20 | 4.5C | Y | 2 | Ludewig O.,F.L | I |
| 11.67 | 817195 | 2.8 | B | AA | 10 | 0 | 5.5 | 130 | 0.05 | B | | 10 | | Y | 1 | Campbell,R.N | J |
| 11.733 | 817196 | 3.0 | B | 4B | | 9 | 3.5 | 275 | 0.05 | B | | 7 | 4.8 | Y | 3 | Bembrick,C | K |
| 11.736 | 817197 | 2.8 | | 4B | | | 3 | 260 | | EY | | | | Y | 1 | Tregaskis,T.B | L |
| 11.74 | 817198 | 2.9 | S | 4B | | 7 | 5.0 | 270 | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | M |
| 11.74 | 817199 | 3.1 | B | 4B | | | | | 0.05 | B | | 10 | | | | Bouma,R.J | |
| 11.75 | 817200 | 2.9 | | 4B | | | 5.0 | 270 | | EY | | | 6 | Y | 11 | Bouma,R.J | N |
| 11.75 | 817201 | 2.7 | | 4B | | | 12 | 264 | | EY | | | 6.1Z | Y | 1 | Seargent,D | O |
| 11.750 | 817202 | 3.0 | B | 4B | | 8 | 5 | 260 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | P |
| 11.750 | 817203 | 3.0 | S | 122 | | 9 | 1.5 | | | EY | | | 5.0 | Y | 1 | Williams,P.F | |
| 11.755 | 817204 | | | | | 9 | 3.5 | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 11.767 | 817205 | 3.4 | S | 4B | 5 | 8 | 4.0 | 270 | 0.050 | B | | 12 | | Y | 1 | Batza,H | Q |
| 11.767 | 817206 | 3.8 | S | 4B | 4 | | 2.2 | 270 | 0.05 | B | | 7 | 5.1 | Y | 1 | Bryant,K | R |
| 11.779 | 817207 | 2.7 | S | 4B | | | | | | EY | | | 6.0 | Y | 15 | Garradd,G | |
| 11.785 | 817208 | | | | | | 6 | | 0.05 | B | | 7 | | | | Garradd,G | S |
| 11.788 | 817209 | | | 4B | | | | | 0.10 | N | 6 | 24 | | Y | | Tregaskis,T.B | T |
| 11.799 | 817210 | 3.0 | B | 4B | | | 10 | | 0.05 | B | | 7 | 6.0 | Y | 5 | Hayashi,H | |
| 11.819 | 817211 | 3.6 | M | 4B | 4.5 | 7 | | | 0.08 | B | | 11 | 5 | Y | 1 | Mitsuma,S | U |
| 11.819 | 817212 | | | | | | 5 | 275 | 0.05 | B | | 7 | 5 | Y | 1 | Mitsuma,S | |
| 11.819 | 817213 | | | | | | 7 | | | EY | | | 5 | Y | 1 | Mitsuma,S | |
| 11.82 | 817214 | 3.9 | M | SAO | 9 | 7 | 2.1 | 270 | 0.065 | R | 8 | 16 | 4.5 | Y | 6 | Nakamura,A | |
| 11.826 | 817215 | | | | | 5 | | 310 | 0.05 | R | 7.6 | 19 | | Y | 2 | Kitamura,K | |
| 11.83 | 817216 | 2.9 | S | | 8 | 6 | 4 | 255 | 0.08 | B | | 11 | 5.5 | Y | 1 | Akita,I | |
| 11.837 | 817217 | 3.1 | | 4B | 12 | 5 | 3 | 270 | 0.07 | B | | 10 | 3.0 | Y | 1 | Kobayashi,J | V |
| 11.851 | 817218 | 3.1 | M | 4B | 6 | 6 | 1 | 270 | 0.030 | B | | 8 | 4.0T | Y | 1 | Kato,T | |

NOTE A Some skyglow.
NOTE B Centre line of tails 280 deg. 6.5 deg. tail is gas, 3.5 deg. tail is dust. I got the impression that the dust tail was spiralling around the gas tail, which of course is impossible, all very strange.
NOTE C Seeing good, transparency excellent. Artificial light. PA 268 to 281.
NOTE D Stellar nucleus. Coma diameter approximate; tail length exceeds 6 deg.
NOTE E Gas & dust tails. Tail longer than 6 deg.
NOTE F Bluish. Tail length approximate.
NOTE G Coma diameter and tail length approximate.
NOTE H PAs define fan tail.
NOTE I Sky of Barquisimeto has much light interference. (Roughly translated by IHW staff. Ed.)
NOTE J Clear. PA uncertain.
NOTE K South edge of tail sharp and distinct; north edge diffuse and concave to north.
NOTE L Tail length and PA approximate.
NOTE M Dust tail, PA approximate.
NOTE N PA 270 listed as approximate position. Gas tail only (very faintly) visible to naked eye, possibly even longer than 11 deg.
NOTE O Gas tail approximately 12 deg. at PA 264, dust tail approximately 5 deg. at PA 270.
NOTE P PA approximate.
NOTE Q (Observer gave limit as 9.0. Ed.)
NOTE R DC = strong.
NOTE S First tail is gas; second tail is dust.
NOTE T No stellar-like nucleus but bright, diffuse central condensation. Dark line in middle behind head. Magnification of 68 also used.
NOTE U m2 = 7.1.
NOTE V Magnitude estimation method = F.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.20 | 830912 | | 0.356 | SC | 11 | 200 | | | | Soc. Astro. de France | A |
| 11.260 | 830913 | | 0.050 | B | | 20 | | | 3 | Gallego,J | B |
| 11.356 | 830914 | | | | | | 5 | | 1 | Zanette,D | C |
| 11.365 | 830915 | | 0.203 | SC | 5 | 113 | 30 | | 4 | Arpin,P | D |
| 11.377 | 830916 | 0.25 | 0.20 | N | 8 | 120 | 65 | 6 | 1 | Vargas B.,A.G | E |
| 11.418 | 830917 | 0.39 | 0.65 | R | 16.5 | 105 | 5 | 6.0 | 1 | Ferrin,I | F |
| 11.792 | 830918 | | | | | | | | | McNaught,R.H | G |
| 11.984 | 830919 | 0.41 | 0.317 | N | 6 | 95 | 13 | 5.3 | 1 | Soc. Astro. de France | H |

NOTE A Drawing made by M. Verdenet. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE B Bluish colour. The coma and tail have a conspicuous degrees of luminosity. [sic] False nucleus very visible. (Spines in the tail, (?)) (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE C Drawing made from a negative exposed 5 minutes on Agfapan 400 ASA, 50 mm lens. The large number of stars seen on the negative are depicted as they appear in the Atlas Coeli. The maximum magnitude estimated on the negative is approximately 8. (Translated by IHW staff. Ed.) Tail I diffuse and wide. Tail II narrow and very faint. Scale = 12.0'/mm.
NOTE D Two jets, tail indicated. Tail very broad and brighter at the edges. Coma uniform and circular. The nucleus is stellar.
NOTE E Remarkable tail at approx. PA 295. The northeast side of the tail was very bright. The coma appear very hazy. [sic] The drawing show some relative bright stars; there is no a bright central region like was in March 10. [sic] A very diffuse and wider tail was observed. The coma appear regular and diffuse. DC 3; coma diameter 3.5' approx.
NOTE F There was a fan-shaped region in the solar direction.
NOTE G Mag. about same as last night. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE H A lot of clouds (intermittent). Central nebulosity 6.7'x4.7'. Estimated visual magnitude 2.3 (Bobrovnikoff method). Streamer at PA 177, 3.53' long; tail at PA 262, 40.78' long; tail at PA 283, 25.49' long; streamer at PA 340, 6.87'long. Drawing made by J. Claude Thorel.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.185 | 851018 | 0.050 | 1.7 | | 39.6 x27.0 | 3.00 | Agfachrome | 1000/ | N | | 002/P | 2 | Brandli,W | A |
| 11.524 | 851019 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | 3M 1000 | 1000/ | N | O | 5/N | 8 | Edberg,S.J | |

DATE: 11 MAR 1986

DATE: 11 MAR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.533 | 851020 | 0.508 | 5 | 0.102 | 4.1 x 2.7 | 10.00 | Kodak IIa-O | | N | | 02/P | 1 | Padilla,S | B |
| 11.546 | 851021 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 3.00 | Kodak EES | 1600/ | N | | 013/P | | Royer,R | |
| 11.737 | 851022 | 0.085 | 2.4 | | 23.9 x16.1 | 15.00 | Kodak 2415 | | Y | O | 26/S | 15 | Garradd,G | C |
| 11.752 | 851023 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.17 | Kodak 2415 | | Y | O | 27/S | 15 | Garradd,G | |
| 11.770 | 851024 | 0.180 | 2.8 | | 11.4 x 7.6 | 25.33 | Kodak 2415 | | Y | O | 28/S | 15 | Garradd,G | |
| 11.784 | 851025 | 0.055 | 1.2 | | 36.2 x24.6 | 1.00 | Ektachr.400 | | N | | 13/S | 1 | Tregaskis,T.B | D |
| 11.785 | 851026 | 0.055 | 1.2 | | 36.2 x24.6 | 0.50 | Ektachr.400 | | N | | 14/S | 1 | Tregaskis,T.B | D |
| 11.785 | 851027 | 0.055 | 1.2 | | 36.2 x24.6 | 0.25 | Ektachr.400 | | N | | 15/S | 1 | Tregaskis,T.B | D |

NOTE A Photo equipment mounted parallel to telescope; hand drive. (Translated by IHW staff. Ed.)
NOTE B (Observer gave emulsion as IIaO + 0. "0" may refer to a UV absorbing filter. Ed.)
NOTE C Lens aperture stopped down from f/2.0 to 2.4.
NOTE D Push processed to 800 ASA.

DATE: 12 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.095 | 817219 | 3.1 | M | 4B | | | | | 0.035 | B | | 9 | 5.4 | Y | 1 | Begbie,M.J.R | |
| 12.10 | 817220 | 4.2 | B | AAVSO | 60 | | 5.5 | | 0.08 | B | | 8 | | | | Korneev,V | |
| 12.10 | 817221 | 2.8 | B | E | 20 | 5 | 2.5 | 270 | 0.05 | B | | 7 | | | | Mormil,V | |
| 12.104 | 817222 | | | | 5.1 | 8 | | 265 | 0.30 | N | 8.5 | 102 | 5.4 | Y | 1 | Begbie,M.J.R | A |
| 12.104 | 817223 | 3.4 | M | 4B | | 6 | 2.7 | 270 | | EY | | | 5.1 | Y | 1 | Fleet,R.W | |
| 12.104 | 817224 | 3.0 | B | 4B | | 7 | 6 | 270 | 0.06 | B | | 15 | 5.4 | Y | 2 | Vincent,J | B |
| 12.115 | 817225 | 3.8 | M | 4B | 5.5 | 7 | 4.0 | 265 | 0.08 | B | | 11 | 5.1 | Y | 1 | Fleet,R.W | C |
| 12.177 | 817226 | 4.0 | S | 4B | 3 | 8 | 0.4 | | 0.050 | B | | 10 | 3.0T | N | 6 | Vanin,G | |
| 12.219 | 817227 | 3.5: | M | 4B | 7 | 8 | 3.5 | 263 | 0.114 | N | 3.7 | 47 | 5.0 | Y | 2 | Gomez,T.L | D |
| 12.317 | 817228 | 4.2 | B | 122 | 0.0 | 4 | 1.05 | | 0.050 | B | | 20 | 6.1 | Y | 1 | Castrillon,M.E | E |
| 12.317 | 817229 | 4.6 | B | 122 | | 4 | 2.1 | | 0.05 | B | | 20 | 6.0 | Y | 1 | Carello,S | |
| 12.317 | 817230 | 4.5 | B | 13 | | 4 | | | 0.05 | B | | 20 | 6.1 | Y | 1 | Girardo,M.M | |
| 12.317 | 817231 | 4 | B | 122 | 6.3 | 3 | 2.97 | | 0.050 | B | | 20 | 5.8 | Y | 1 | Siccardi,L | F |
| 12.340 | 817232 | 3.5 | B | 122 | 5 | 2 | 3 | 265 | 0.06 | R | 12 | 56 | 5.3 | Y | 1 | Onofre D.,D | G |
| 12.40 | 817233 | 3.4 | B | IHW BAA | | 7 | 3 | | | EY | | | | | | Green,D.W.E | H |
| 12.41 | 817234 | | | | 3.5 | 7 | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | I |
| 12.41 | 817235 | 3.6 | B | 4B | 5 | 7 | 4.5 | 267 | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | J |
| 12.41 | 817236 | 3.3 | | 4B | | | 3 | 267 | | EY | | | 6 | Y | 1 | Bortle,J.E | J |
| 12.42 | 817237 | 3.5 | B | IHW BAA | 6 | 8 | 5 | | 0.035 | B | | 7 | | | | Green,D.W.E | K |
| 12.435 | 817238 | 4.5 | S | 4B | 5 | 1 | 1.6 | 275 | 0.05 | B | | 7 | 3.5 | Y | 5 | House,R.R | L |
| 12.521 | 817239 | 2.6 | S | 4B | 38 | 8 | 2 | 265 | 0.035 | B | | 7 | 4.5C | Y | 1 | Gronek,J.D | M |
| 12.54 | 817240 | 2.9: | B | 4B | | | 3.8 | 270 | | EY | | | 5.5 | Y | 2 | Hale,A | N |
| 12.719 | 817241 | 3.0 | B | 4B | | 9 | 4.0 | 275 | 0.05 | B | | 7 | 4.6 | Y | 3 | Bembrick,C | O |
| 12.743 | 817242 | 2.8 | S | 4B | | | 5 | | | EY | | | 6.0 | Y | 15 | Garradd,G | |
| 12.747 | 817243 | | | | | | 5 | | 0.05 | B | | 7 | | | | Garradd,G | P |
| 12.756 | 817244 | 2.6 | S | 4B | 7.5 | | 13.0 | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | |
| 12.764 | 817245 | 2.8 | | 4B | | | 3 | 260 | | EY | | | | Y | 1 | Tregaskis,T.B | Q |
| 12.764 | 817246 | 3.0 | B | 4B | 8 | 8 | 5 | 260 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | R |
| 12.767 | 817247 | | | 4B | | 8 | | 260 | 0.10 | N | 6 | 24 | | Y | 1 | Tregaskis,T.B | S |
| 12.77 | 817248 | 2.8 | | 4B | | | 12.0 | 262 | | EY | | | 6 Z | Y | 11 | Bouma,R.J | T |
| 12.77 | 817249 | 2.9 | S | 4B | 6.5 | 7 | 4.5 | 275 | 0.05 | B | | 10 | 6 Z | Y | 11 | Bouma,R.J | U |
| 12.77 | 817250 | 3.1 | B | 4B | | | | | 0.05 | B | | 10 | 6 Z | Y | 11 | Bouma,R.J | |
| 12.77 | 817251 | 2.8 | | 4B | | | 8.5 | 267 | | EY | | | 6.1Z | Y | 1 | Seargent,D | |
| 12.77 | 817252 | | | | 7 | 8 | | | 0.08 | B | | 15 | | | | Seargent,D | |
| 12.777 | 817253 | 3.4 | S | 4B | 5 | 8 | 4.0 | 270 | 0.050 | B | | 12 | | Y | 1 | Batza,H | V |
| 12.778 | 817254 | 3.8 | S | 4B | 4 | | 2.5 | 270 | 0.05 | B | | 7 | 5.1 | N | 1 | Bryant,K | W |
| 12.82 | 817255 | 3.9 | S | AAVSO | 4 | 6 | 2 | | 0.07 | B | | 10 | 5.0 | Y | 1 | Hayashi,A | X |
| 12.82 | 817256 | 3.9 | M | SAO | 9 | 7 | 2.0 | 265 | 0.065 | R | 8 | 16 | 4.5 | Y | 6 | Nakamura,A | |
| 12.823 | 817257 | 3.8 | M | 4B | 4.5 | 7 | | | 0.08 | B | | 11 | 4 CT | Y | 1 | Mitsuma,S | Y |
| 12.823 | 817258 | | | | | | 3 | 275 | 0.05 | B | | 7 | 4 CT | Y | 1 | Mitsuma,S | |
| 12.826 | 817259 | | | | 5.7 | 5 | | 310 | 0.05 | R | 7.6 | 19 | | Y | 2 | Kitamura,K | |
| 12.826 | 817260 | 3.6 | M | 4B | 7.2 | 6 | 2 | 250 | 0.1 | N | 10 | 40 | 5.0 | Y | 1 | Ichikawa,K | |
| 12.826 | 817261 | 3.9 | B | 4B | | | | | 0.07 | B | | 10 | 3.1 | Y | 1 | Date,M | |
| 12.830 | 817262 | 3.5 | M | 4B | 6 | 6 | | | 0.030 | B | | 8 | 4.0CT | Y | 1 | Kato,T | Z |
| 12.83 | 817263 | 3.5 | M | 4B | | | 6.0 | | 0.05 | B | | 7 | 5.0 | Y | 1 | Suzuki,K | |
| 12.83 | 817264 | | | 4B | 3.3 | 6 | | | 0.25 | | 4.2 | 88 | | Y | 1 | Suzuki,K | a |
| 12.831 | 817265 | | | | 4 | 6 | 0.3 | 270 | 0.10 | N | 10 | 55 | 4.0CT | Y | 1 | Kato,T | Z |
| 12.833 | 817266 | 4.0 | B | 4B | 4.1 | 7 | 3.3 | 270 | 0.05 | B | | 7 | 3.0T | N | 1 | Kanai,K | |
| 12.833 | 817267 | 3.0 | B | 4B | | 7 | 5 | | 0.070 | B | | 10 | 4.0 | Y | 1 | Nakamura,Y | |
| 12.837 | 817268 | | | | 5.3 | 7 | | | 0.12 | N | 6 | 60 | 2.0T | Y | 1 | Kishi,A | |
| 12.838 | 817269 | 3.8 | S | 4B | 4.1 | 7 | 3.3 | 270 | 0.05 | B | | 7 | 3.0T | N | 1 | Kanai,K | |
| 12.84 | 817270 | 3.6 | M | 4B | 5 | 7 | 3 | 270 | 0.08 | B | | 20 | 4.0 | Y | 1 | Oka,A | |
| 12.84 | 817271 | 3 : | | | 6 | 5 | | | 0.12 | B | | 20 | 3.5 | Y | 1 | Washi,S | b |
| 12.84 | 817272 | 3.5 | S | 4B | 4.5 | 7 | | | 0.07 | B | | 10 | 3.5 | Y | 1 | Yasuki,M | |
| 12.979 | 817273 | | | | 2.3 | 7 | 4 | | 0.254 | N | 6 | 61 | 4.7CT | Y | 1 | Bhadriah,L.H.E | c |

NOTE A Tail measurement refers to dust tail only.
NOTE B Tail centred on 270 deg. I got the impression that the dust tail was spiralling around the gas tail, which of course is impossible, all very strange.
NOTE C Gas tail at PA 265. Dust tail at PA 267.
NOTE D See drawing 1.
NOTE E Coma diameter 0.04.
NOTE F Coma diameter and tail length approximate.
NOTE G Cirrus.
NOTE H Tail length approximate.
NOTE I Bright, parabolic coma with sharply condensed center. Coma's boundaries diffuse. As twilight advances a sharp, almost stellar nucleus appears at the heart of the condensation. No particular structure evident within coma; object rather disappointing overall.
NOTE J Extinction correction applied.
NOTE K Coma diameter approximate. Tail length is lower limit.
NOTE L Comet 7 deg. lower than comparison stars.
NOTE M Exc. see.
NOTE N Comet observed through breaks in cloud cover.
NOTE O South edge of tail sharp and distinct; north edge diffuse and concave to north. Mag. 7 star within southern edge of tail appears to be dimmed to 7.5 mag. Star is 1/2 deg. from central condensation.
NOTE P First tail is gas; second tail is dust.
NOTE Q PA approximate. Tail broader now?
NOTE R PA approximate. Sky slightly hazy. Calm.
NOTE S No stellar-like nucleus. No dark patch behind head in tail.
NOTE T Gas tail at PA 262.
NOTE U Dust tail at approximately PA 275.
NOTE V (Observer gave limit as 9.0. Ed.)
NOTE W DC = strong.
NOTE X PA 250 to 270.
NOTE Y m2 = 6.7.
NOTE Z Haze.
NOTE a Coma dia. Meter. Instrument type is Wright-Schmidt.
NOTE b Coma diameter uncertain and DC uncertain. (Observer indicated "Y" method. Ed.)
NOTE c First time saw immediately with naked eye.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.115 | 830920 | 4 | 0.08 | B | | 11 | | 5.1 | 1 | Fleet,R.W | A |
| 12.219 | 830921 | 0.45 | 0.114 | N | 3.7 | 13, 47 | 30 | 5.0 | 2 | Gomez,T.L | B |
| 12.434 | 830922 | 0.83 | 0.152 | N | 8 | 38 | | 5.4 | 1 | Cuthill,L | C |
| 12.458 | 830923 | 0.55 | 0.065 | R | 15 | 50 | 19 | 5.5 | 2 | Moreno,G | D |
| 12.635 | 830924 | 0.17 | 0.30 | N | 5 | 60 | | 5.8 | 2 | Thompson,G | E |
| 12.767 | 830925 | | 0.102 | N | 6 | 24 | | | 1 | Tregaskis,T.B | F |
| 12.793 | 830926 | | | | | | 5 | | | McNaught,R.H | G |

DATE: 12 MAR 1986

NOTE A Gas tail at PA 265. Dust tail at PA 267. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B The coma have a densest zone to the east. [sic] With a 15 cm f/5, at 83x, the nucleus appears stellar.
NOTE C Coma DC = 9. Axis of head at PA 82. Tail at PA 230-290. The coma has become rather diffuse but still strong at the center. There is no evidence of a parabolic hood. The tail between PA 230 and 290 has widened since last observed on Mar. 1. Semi latus rectum - 2.5'. Vertex distance - 1.5'. Magnitude estimated to be 3.4 using 10x50 binoculars (Morris method).
NOTE D Twilight. Nucleus easy to see. Coma faint. Tail at PA 240, very faint.
NOTE E (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F No stellar-like nucleus but good central condensation. Tail at PA 260. No dark lane visible in middle of tail immediately behind head as seen vaguely the previous morning at 1855 UT in the same telescope. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE G No inner envelope. 1820 UT inner coma blue/green as on previous few nights. Stellar nucleus. (Two unspecified magnifications used. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.037 | 851028 | 1.200 | 6 | 0.200 | 1.7 x 1.1 | 17.00 | Kodak 2415 | | Y | | 7/P | 1 | Martinez,P | |
| 12.048 | 851029 | 0.200 | 2.8 | | 10.3 x 6.9 | 7.00 | Fujichrome | 400/ | N | | 00/P | 1 | Association M31 | |
| 12.056 | 851030 | 0.135 | 2.5 | | 15.2 x10.2 | 7.00 | Fujichrome | 400/ | N | C | 1/P | 1 | Martinez,P | |
| 12.058 | 851031 | 1.200 | 6 | 0.200 | 1.7 x 1.1 | 1.67 | Kodak 2415 | | Y | | 8/P | 1 | Martinez,P | |
| 12.363 | 851032 | 0.230 | 4.5 | | 8.9 x 6.0 | 15.00 | 3M 400 | 400/ | N | | 22/P | | Pizzi,R | |
| 12.403 | 851033 | 3.00 | | 1.00 | 0.7 x 0.5 | 3.00 | IIa-O | | N | | 10/P | 1 | Ferrin,I | A |
| 12.415 | 851034 | 0.629 | 5.1 | 0.123 | | 0.47 | Fujicolor HR | 1600/ | N | X | 3/P | 4 | Wallace,B.G | B |
| 12.418 | 851035 | 0.135 | 2.8 | | 15.2 x10.2 | 5.00 | Ektachrome | 400/ | N | | 401/P | | Gianforte,J.S | C |
| 12.430 | 851036 | 0.629 | 5.1 | 0.123 | | 4.80 | Fujicolor HR | 1600/ | N | X | 4/P | 4 | Wallace,B.G | D |
| 12.435 | 851037 | 0.629 | 5.1 | 0.123 | | 0.47 | Fujicolor HR | 1600/ | N | X | 5/P | 4 | Wallace,B.G | E |
| 12.709 | 851038 | 0.050 | 2.8 | | 39.6 x27.0 | 25.00 | Agfachrome | 1000/ | N | O | 1/S | 1 | Haagh,N | F |
| 12.711 | 851039 | 0.024 | 1.8 | | 73.7 x53.1 | 5.00 | Kodak 2415 | | Y | | 01/P | 1 | McNaught,R.H | |
| 12.729 | 851040 | 0.200 | 3.5 | | 10.3 x 6.9 | 20.00 | Agfachrome | 1000/ | N | O | 3/S | 1 | Haagh,N | |
| 12.756 | 851041 | 0.200 | 3.5 | | 10.3 x 6.9 | 30.00 | Kodak 2415 | | N | O | 34/N | 1 | Haagh,N | |
| 12.765 | 851042 | 0.055 | 1.2 | | 36.2 x24.6 | 0.33 | Ektachr.400 | | N | | 17/S | 1 | Tregaskis,T.B | G |
| 12.766 | 851043 | 0.055 | 1.2 | | 36.2 x24.6 | 0.67 | Ektachr.400 | | N | | 16/S | 1 | Tregaskis,T.B | G |
| 12.766 | 851044 | 0.055 | 1.2 | | 36.2 x24.6 | 0.17 | Ektachr.400 | | N | | 18/S | 1 | Tregaskis,T.B | G |
| 12.777 | 851045 | 0.300 | 2.8 | | 6.9 x 4.6 | 6.33 | Sakura SR | 1600/ | N | | 11/P | 2 | Kojima,T | |
| 12.800 | 851046 | 0.300 | 2.8 | | 6.9 x 4.6 | 14.75 | Kodak 6415 | | Y | C | 12/P | 2 | Kojima,T | H |
| 12.804 | 851047 | 0.675 | 2.7 | 0.25 | 3.1 x 2.0 | 6.00 | Kodak 6415 | | Y | C | 13/P | 2 | Kojima,T | I |

NOTE A Instrument is Schmidt camera.
NOTE B (Observer's image identifier is G. Ed.)
NOTE C (Observer's image identifier is 114-1. Ed.) UT start time approximate.
NOTE D (Observer's image identifier is B. Ed.)
NOTE E (Observer's image identifier is H. Ed.)
NOTE F Wratten 1A UV filter used.
NOTE G Push processed to 800 ASA.
NOTE H Large format (120 size) film used.
NOTE I Instrument is Schmidt camera. Large format (120 size) film used.

DATE: 13 MAR 1986

DATE: 13 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.085 | 817274 | 3.8 | M | 4B | 4.3 | 7 | 5.5 | 264 | 0.08 | B | | 11 | 5.5 | Y | 1 | Fleet,R.W | A |
| 13.090 | 817275 | 3.2 | S | 4B | 4.5 | 7 | 4.25 | 270 | 0.08 | B | | 30 | 5.6 | Y | 1 | Campos,J | |
| 13.090 | 817276 | 3.4 | M | 4B | 4 | 8 | 5 | 260 | 0.04 | B | | 12 | 5.3 | Y | 1 | Henshaw,C | |
| 13.097 | 817277 | 3.0 | | 4B | | | 5.00 | 275 | | EY | | | 5.6 | Y | 1 | Campos,J | |
| 13.104 | 817278 | 3.1 | S | 4B | 5.0 | 7 | 4.00 | 272 | 0.13 | R | 4 | 21 | 5.6 | Y | 1 | Campos,J | |
| 13.104 | 817279 | 3.0 | B | 4B | | 7 | 6 | 270 | 0.06 | B | | 15 | 5.4 | Y | 2 | Vincent,J | B |
| 13.108 | 817280 | 3.4 | M | 4B | | 6 | 4.0 | 271 | | EY | | | 5.3 | Y | 1 | Fleet,R.W | |
| 13.156 | 817281 | 4.3 | M | 4B | 13 | 7 | 4.2 | 275 | 0.07 | B | | 20 | 6 | Y | 2 | Tanti,T | C |
| 13.167 | 817282 | 4.2 | M | 4B | 12 | 7 | 2 | 265 | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | D |
| 13.174 | 817283 | | | | | | 1.8 | | | EY | | | 6 | Y | 2 | Tanti,T | C |
| 13.227 | 817284 | 3.0 | | AAVSO | | | 1.8 | | 0.12 | B | | 20 | 4.0 | | 1 | Ferrin,I | |
| 13.354 | 817285 | 2.5 | M | 4B | | 9 | 8.5 | | 0.05 | B | | 20 | 4.8 | Y | 5 | Diaz P.,E | |
| 13.406 | 817286 | | | 122 | | 3 | 1.5 | 210 | 0.05 | B | | 20 | 4.6 | Y | 2 | Ludewig O.,F.L | E |
| 13.432 | 817287 | | | | | | | | | EY | | | 4.5 | Y | 1 | Stephan,C | F |
| 13.50 | 817288 | 3.0 | B | 4B | 5 | 8 | 4 | 270 | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | G |
| 13.50 | 817289 | 3.0 | V | 4B | | | 5 | 270 | | EY | | | 6.0 | Y | 1 | Keen,R | G |
| 13.535 | 817290 | 3.1 | M | 4B | | 3 | 18 | 138 | 0.080 | B | | 11 | 5.6 | Y | 1 | Glassett,W | H |
| 13.70 | 817291 | 3.3 | S | 4B | | | | | 0.023 | B | | 3 | 5.7 | | | Jones,A | |
| 13.70 | 817292 | | | | | 8 | 3.5 | | 0.080 | B | | 11 | | | | Jones,A | I |
| 13.70 | 817293 | | | | 6.5 | | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 13.73 | 817294 | 7.3 | S | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | J |
| 13.743 | 817295 | 2.7 | | 4C | | | | | | EY | | | 6.2 | Y | 1 | Seargent,D | |
| 13.75 | 817296 | 2.8 | | 4B | | | 10 | 261 | | EY | | | 6 | Y | 11 | Bouma,R.J | K |
| 13.75 | 817297 | 3.1 | B | 4B | 8 | 7 | 4 | 270 | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | L |
| 13.767 | 817298 | 3.0 | B | 4B | | 9 | 4.5 | 270 | 0.05 | B | | 7 | 4.8 | Y | 3 | Bembrick,C | M |
| 13.770 | 817299 | 3.4 | S | 4B | 5 | 8 | 3 | 275 | 0.050 | B | | 12 | | Y | 1 | Batza,H | N |
| 13.774 | 817300 | 3.6 | S | 4B | 5 | | 2.5 | 270 | 0.05 | B | | 7 | 5.1 | Y | 1 | Bryant,K | O |
| 13.781 | 817301 | 2.8 | | 4B | | | 3 | 260 | | EY | | | | Y | 1 | Tregaskis,T.B | P |
| 13.781 | 817302 | 2.8 | B | 4B | | | 5 | 260 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | P |
| 13.781 | 817303 | | | 4B | 5 | 8 | | 260 | 0.15 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | Q |
| 13.79 | 817304 | 2.8 | B | 4B | | | 3.1 | | | EY | | | 6.0 | Y | | Clark,M.L | R |
| 13.82 | 817305 | 3.5 | S | 4B | 10 | 7 | 3.1 | 271 | 0.25 | N | 5 | 38 | 6.0 | Y | | Clark,M.L | |
| 13.82 | 817306 | 2.7 | B | 4B | | | 5 | | | EY | | | 5.8 | Y | | Pearce,A | |
| 13.82 | 817307 | 3.1 | S | 4B | | 5 | | | 0.030 | B | | 8 | 5.8 | Y | | Pearce,A | |
| 13.83 | 817308 | 3.7 | S | AAVSO | 5 | 6 | 1 | | 0.13 | N | 6.3 | 24 | 5.0 | Y | 1 | Hayashi,A | S |
| 13.997 | 817309 | | | | 2.3 | 6 | | | 0.254 | N | 6 | 61 | 3 CT | Y | 1 | Bhadriah,L.H.E | T |

NOTE A Gas tail at PA 264. Curved dust tail at PA 268. 2.2 deg. tail is fan from main tail to PA 287.
NOTE B General fuzziness suggesting violent motion in nucleus and central condensation. I got the impression that the dust tail was spiralling around the gas tail, which of course is impossible, all very strange.
NOTE C Seeing good, transparency excellent.
NOTE D Coma diameter approximate. Tail I PA 265.
NOTE E Binoculars method [sic] utilized for the encounter with the tail length. (Roughly translated by IHW staff. Ed.)
NOTE F 7x35 mm binoculars also used. Easy naked eye. In 7x35's, tail has blue tint.
NOTE G Extinction correction applied.
NOTE H Spectacular nucleus, coma and tail clearly visible at this time from desert site even with the naked eye. (PA value appears incorrect. Ed.)
NOTE I Tail PA 258-268. Also short tail PA 277. Tail brightness at 0.5 degrees from head, fainter than Sct cloud to naked eye.
NOTE J Nucleus (stars slightly defocused).
NOTE K Gas tail at PA 261. Dust tail at PA 270.
NOTE L Dust tail.
NOTE M South edge of tail sharp and distinct, north edge diffuse and concave to north.
NOTE N (Observer gave limit as 9.0. Ed.)
NOTE O DC = strong.
NOTE P PA approximate.
NOTE Q No stellar-like nucleus. Diffuse 5' round object 30' s.f. Halley (8 mag). PA approximate.
NOTE R Sky hazy.
NOTE S PA 245 to 275.
NOTE T Haze. Not visible naked eye except averted vision.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.085 | 830927 | 4 | 0.08 | B | | 11 | | 5.5 | 1 | Fleet,R.W | A |
| 13.365 | 830928 | | 0.203 | SC | 5 | 113 | 30 | | 4 | Arpin,P | B |
| 13.781 | 830929 | | | | | 76,304 | | | | McNaught,R.H | C |
| 13.781 | 830930 | | 0.152 | N | 8 | 64 | | | 1 | Tregaskis,T.B | D |

NOTE A Gas tail at PA 264. Dust tail at PA 268. Fan at PA 287. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Star, three jets indicated. Coma circular and blue. The central condensation is stellar. The star in the coma is much fainter than the coma.
NOTE C No colour, nucleus less stellar than yesterday. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Tail at PA 260. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.370 | 851048 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Kodak 2415 | | Y | S | 2/P | 4 | Dilsizian,R | A |
| 13.410 | 851049 | 0.63 | 1.8 | 0.35 | 3.3 x 2.2 | 4.70 | Agfachrome | 50/ | N | | 20/P | 2 | Ferrin,I | B |
| 13.425 | 851050 | 0.200 | 3.8 | | 10.3 x 6.9 | 15.00 | 3M 1000 | 1000/ | Y | O | 3/S | 1 | Soder,J | |
| 13.583 | 851051 | 0.200 | 3.5 | | 10.3 x 6.9 | 23.00 | Agfachrome | 1000/ | N | O | 48/S | 1 | Haagh,N | |
| 13.714 | 851052 | 0.200 | 3.5 | | 10.3 x 6.9 | 30.00 | Kodak Tri-X | 400/ | N | O | 35/N | 1 | Haagh,N | |
| 13.730 | 851053 | 0.050 | 1.8 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 37/N | 1 | Haagh,N | C |
| 13.756 | 851054 | 0.200 | 3.5 | | 10.3 x 6.9 | 45.00 | Kodak 2415 | | N | O | 39/N | 1 | Haagh,N | |
| 13.783 | 851055 | 0.135 | 3.5 | | 15.2 x10.2 | 2.00 | Ektachr.400 | | N | X | 19/S | 1 | Tregaskis,T.B | D |
| 13.876 | 851056 | 0.300 | 1.5 | | 6.9 x 4.6 | 10.00 | Kodak 2415 | | Y | S | 1/P | 1 | Nassr,J.L | |

NOTE A Some cloudiness appeared. Stellar guiding used because long focal lengths not used. Film was hypersensitized before leaving New York and remained frozen until used.
NOTE B Instrument is Schmidt camera.
NOTE C UV #1A filter used.
NOTE D Push processed to 800 ASA.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.046 | 817310 | 3.0 | M | 4B | | | | | 0.035 | B | | 9 | 5.6 | Y | 1 | Begbie,M.J.R | |
| 14.052 | 817311 | | | | 5.1 | 8 | | 270 | 0.30 | N | 8.5 | 102 | 5.6 | Y | 1 | Begbie,M.J.R | A |
| 14.076 | 817312 | 3.3 | M | 4B | | | 3.7 | 270 | | EY | | | 5.5 | Y | 1 | Fleet,R.W | |
| 14.083 | 817313 | 2.9 | B | 4B | | 7 | 7 | 270 | 0.06 | B | | 15 | 5.6 | Y | 2 | Vincent,J | B |
| 14.090 | 817314 | 3.7 | M | 4B | 6.0 | 7 | 5.4 | 259 | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | C |
| 14.101 | 817315 | 3.3 | M | 4B | 6 | 7 | 5 | 250 | 0.04 | B | | 12 | 4.8 | Y | 1 | Henshaw,C | D |
| 14.120 | 817316 | 3.5 | B | 4B | 30 20 | 7 | 5 | 270 | 0.065 | B | | 20 | 6.4 | Y | 1 | McBain,J | E |
| 14.125 | 817317 | 3.0 | | 4B | | | | | | EY | | | 5.5 | Y | 1 | van der Mey,L | |
| 14.125 | 817318 | | | | | | 1.33 | 260 | 0.030 | B | | 8 | 5.5 | Y | 1 | van der Mey,L | F |
| 14.125 | 817319 | | | | | | 2.5 | 271 | 0.030 | B | | 8 | 5.5 | Y | 1 | van der Mey,L | G |
| 14.13 | 817320 | 4.2 | B | 4B | 6.5 | 8 | 1 | 250 | 0.05 | B | | 7 | 3.1C | Y | 2 | Maraziti,A | H |
| 14.153 | 817321 | 4.1 | M | 4B | | 7 | | | 0.07 | B | | 20 | | Y | 2 | Tanti,T | I |
| 14.293 | 817322 | 4.0 | B | 13 | | 4 | | | 0.05 | B | | 20 | 6.0 | Y | 1 | Girardo,M.M | |
| 14.294 | 817323 | 3.9 | B | 121 | 0.1 | 4 | 1.75 | | 0.050 | B | | 20 | 4.8 | Y | 1 | Castrillon,M.E | |
| 14.294 | 817324 | 4.1 | B | 122 | | 4 | 2.8 | | 0.050 | B | | | 6.0 | Y | 1 | Lovera,A | |
| 14.295 | 817325 | 4 | B | 122 | 6.3 | 4 | 2.97 | | 0.050 | B | | 20 | 5.9 | Y | 1 | Siccardi,L | J |
| 14.298 | 817326 | 4.2 | B | 122 | | 4 | 2.97 | | 0.05 | B | | 20 | 6 | Y | 1 | Carello,S | |
| 14.385 | 817327 | 3.1 | B | 121 | 8 | 4 | 5.00 | 254 | 0.05 | B | | 7 | 4.8 | Y | 1 | Lairet,R | |
| 14.403 | 817328 | 4.2 | B | 122 | | 4 | 1.9 | 226 | 0.05 | B | | 20 | 5.9 | Y | 2 | Ludewig O.,F.L | |
| 14.47 | 817329 | 3.4 | B | 4B | 10 | 8 | 2 | | 0.080 | B | | 20 | | Y | | Kronk,G | K |
| 14.50 | 817330 | 3.1 | B | 4B | 5 | 8 | 5 | 270 | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | L |
| 14.50 | 817331 | 3.0 | V | 4B | | | 6 | 270 | | EY | | | 5.5 | Y | 2 | Keen,R | L |
| 14.507 | 817332 | 3.8 | | | | | 2 | | 0.050 | B | | 7 | 6 | Y | 2 | Minton,R.B | M |
| 14.51 | 817333 | 2.8 | M | 4B | 7 | 7 | 0.5 | 245 | 0.080 | B | | 20 | 5.0 | Y | 13 | Morris,C.S | N |
| 14.51 | 817334 | | | | 7 | 7 | 5 | 270 | 0.050 | B | | 10 | 5.0 | Y | 13 | Morris,C.S | O |
| 14.524 | 817335 | 3.1 | M | 4B | | 3 | 18 | 140 | 0.080 | B | | 11 | 5.6 | Y | 1 | Glassett,W | P |
| 14.53 | 817336 | 2.7 | | 4B, BSC | | 8 | 10.5 | 280 | | EY | | | 5.0 | Y | 13 | Morris,C.S | Q |
| 14.5354 | 817337 | | | | 10 | 6 | 3.13 | 264 | | EY | | | 6.0 | Y | 12 | Cook,A.J | |
| 14.5417 | 817338 | 3.0 | M | 4B | 10 | 6 | | 264 | 0.05 | B | | 7 | 6.0 | Y | 12 | Cook,A.J | |
| 14.729 | 817339 | 3.0 | | 4B, 4C | | | | | | EY | | | 6 | Y | 1 | Seargent,D | |
| 14.729 | 817340 | | | | 8 | 8 | | | 0.08 | B | | 15 | | | | Seargent,D | |
| 14.73 | 817341 | 2.9 | | 4B | | | 11 | 259 | | EY | | | 6 | Y | 11 | Bouma,R.J | R |
| 14.730 | 817342 | 3.0 | S | 122 | | 9 | | | | EY | | | 5.0 | Y | 1 | Williams,P.F | |
| 14.731 | 817343 | | | | | | 8 | | 0.05 | B | | 7 | 6.5 | | 7 | Garradd,G | S |
| 14.750 | 817344 | 2.5 | S | 4B | | | 5 | | | EY | | | 6.5 | Y | 7 | Garradd,G | T |
| 14.76 | 817345 | 3.2 | B | 4B | 8 | 7 | 4 | 272 | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | U |
| 14.777 | 817346 | | V | | | | | | 0.152 | N | 5 | 127 | | | | Seargent,D | V |
| 14.78 | 817347 | 8.0: | V | 121 | 0.1 | | | | 0.152 | N | 5 | 127 | 6 | Y | 11 | Bouma,R.J | W |
| 14.781 | 817348 | 3.0 | B | 4B | | 9 | 4.0 | 265 | 0.05 | B | | 7 | 5.5 | Y | 2 | Bembrick,C | X |

NOTE A Tail measurement refers to dust tail only.
NOTE B 1 deg. spike gas tail beyond 6 deg. dust tail. I got the impression that the dust tail was spiralling around the gas tail, which of course is impossible, all very strange.
NOTE C Gas tail at PA 261. Curved dust tail at PA 271. 3.2 deg. tail is fan from main tail to PA 287.
NOTE D Gas tail.
NOTE E Fainter than Beta Cap.
NOTE F Type I tail.
NOTE G Type II tail.
NOTE H Very low in the sky.
NOTE I Low. Haze. Clouds.
NOTE J Coma diameter and tail length approximate.
NOTE K Some twilight.
NOTE L Extinction correction applied.
NOTE M Used 7x50 binoculars out-of-focus. It was the same magnitude as Epsilon Aquarius (Epsilon Aqu = 3.8, type A0). Daniels Park is a dark site 8 miles south of my house.
NOTE N Differential extinction correction of -0.2 mag. was applied. Multiple tails define the shape of the fan tail which was brightest toward the west. The northern edge was sharply defined and brighter than much of the remaining fan.
NOTE O Tail much narrower in 5 cm binoculars.
NOTE P Spectacular nucleus, coma and tail clearly visible at this time from desert site even with the naked eye. (PA value appears incorrect. Ed.)
NOTE Q Differential extinction correction of -0.2 mag. was applied. Multiple tails define the shape of the fan tail.
NOTE R Gas tail at PA 259. Dust tail at PA 272.
NOTE S 8 deg. tail is gas; 5 deg. tail is dust.
NOTE T First tail is gas; second tail is dust.
NOTE U Dust tail.
NOTE V m2 = 8.
NOTE W Coma diameter is upper limit. Comparison stars 64 and 83.
NOTE X Condensation still stellar in 10 cm refractor and 25 mm eyepiece.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.076 | 830931 | 0.34 | 0.035 | B | | 9 | 12 | 5.6 | 1 | Begbie,M.J.R | A |
| 14.090 | 830932 | 4 | 0.08 | B | | 11 | | 5.6 | 1 | Fleet,R.W | B |
| 14.365 | 830933 | 0.39 | 0.65 | R | 16.5 | 105 | 9 | 6.0 | 1 | Ferrin,I | C |
| 14.370 | 830934 | | | | | | 5 | | 1 | Zanette,D | D |
| 14.384 | 830935 | | | | | | | | | McNaught,R.H | E |
| 14.542 | 830936 | 0.17 | 0.30 | N | 5 | 60 | | | 2 | Thompson,G | F |
| 14.543 | 830937 | 3 | 0.050 | B | | 7 | 5 | 6.0 | 12 | Cook,A.J | G |

NOTE A Gas tail knot at PA 262; dust tail PA 262-290. Excellent observing conditions. Drawing made near time of Giotto approach. Gas tail observed to have a knot about 5.5 degrees from the coma. Dust tail easily separable from gas tail. Longest part of dust tail (6.5 deg) in PA 285. Gas tail bluish, dust lemon yellow. (Telescopically, little activity in the coma.)
NOTE B Gas tail at PA 259. Dust tail at PA 271. Fan at PA 287. Suspected dust at PA 275. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C There was a fan of bright emission in the solar direction.
NOTE D Drawing made from a negative exposed 5 minutes on Agfapan 400 ASA, 50 mm lens. The large number of stars seen on the negative are depicted as they appear in the Atlas Coeli. The maximum magnitude estimated on the negative is approximately 8. Tail I is more diffuse than 11/03/86. Tail II is very narrow near the nucleus, widening farther away. Tail I is diffuse and wide; tail II is narrow and faint. (Translated by IHW staff. Ed.) Scale = 12.0'/mm.
NOTE E (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F There is a small jet on the western edge of the nucleus. A prominent tail seemed to radiate directly back from the nucleus but not join the nucleus. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE G Slight interference from dawn.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.231 | 851057 | 0.135 | 1.8 | | 15.2 x10.2 | 5.00 | Kodak 2415 | | Y | | 22/P | 3 | Conrad,R | A |

DATE: 14 MAR 1986

DATE: 14 MAR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.242 | 851058 | 0.055 | 2 | | 36.2 x24.6 | 7.00 | Fujichr. Pro | 100/ | Y | | 13/P | 3 | Conrad,R | B |
| 14.299 | 851059 | 0.700 | 5 | 0.140 | 2.9 x 2.0 | 10.00 | Tri-X Pro | 320/ | N | X | 2/T | 1 | Travnik,N.A.S | C |
| 14.367 | 851060 | 0.050 | 2.8 | | 39.6 x27.0 | 6.00 | Kodak 2415 | | Y | S | 3/P | 4 | Dilsizian,R | D |
| 14.503 | 851061 | 0.165 | 2.8 | | 12.5 x 8.3 | 10.00 | Kodak 2415 | | Y | S | 113/P | 3 | Yen,B | E |
| 14.516 | 851062 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 111/P | 3 | Yen,B | F |
| 14.526 | 851063 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 112/P | 3 | Yen,B | G |
| 14.527 | 851064 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | Kodak Tri-X | 400/ | N | | 29/C | 8 | Edberg,S.J | |
| 14.528 | 851065 | 0.711 | 2.8 | 0.254 | 2.9 x 1.9 | 20.00 | Kodak Plus-X | 125/ | N | S | 46/P | 1 | Young,J.W | H |
| 14.530 | 851066 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | Kodak Tri-X | 400/ | N | | 30/C | 8 | Edberg,S.J | |
| 14.708 | 851067 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.25 | Kodak 2415 | | Y | O | 29/S | 7 | Garradd,G | |
| 14.730 | 851068 | 0.050 | 1.8 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 38/N | 1 | Haagh,N | I |
| 14.741 | 851069 | 0.085 | 2.4 | | 23.9 x16.1 | 20.00 | Kodak 2415 | | Y | O | 30/S | 7 | Garradd,G | J |
| 14.748 | 851070 | 0.200 | 3.5 | | 10.3 x 6.9 | 40.00 | Kodak Tri-X | 400/ | N | O | 36/N | 1 | Haagh,N | |
| 14.765 | 851071 | 0.180 | 2.8 | | 11.4 x 7.6 | 15.83 | Kodak 2415 | | Y | O | 31/S | 7 | Garradd,G | |
| 14.775 | 851072 | 0.180 | 2.8 | | 11.4 x 7.6 | 9.83 | Kodak 2415 | | Y | O | 32/S | 7 | Garradd,G | |

NOTE A Zodiacal light interfered with the observation.
NOTE B Zodiacal light interfered with the observation. UV filter used. (This probably means a UV blocking, clear glass filter. Ed.)
NOTE C Instrument is Zeiss Tessar. Format size 88 mm x 128 mm.
NOTE D Some cloudiness appeared. Stellar guiding used because long focal lengths not used. Film was hypersensitized before leaving New York and remained frozen until used.
NOTE E (Observer's image identifier is 11C = 2. Ed.)
NOTE F (Observer's image identifier is 11A = 12. Ed.) Instrument is Schmidt camera.
NOTE G (Observer's image identifier is 11B = 14. Ed.) Instrument is Schmidt camera.
NOTE H Instrument is Schmidt camera. (Observer's image identifier is followed suffix -HS. Ed.)
NOTE I UV #1A filter used.
NOTE J Lens aperture stopped down from f/2.0 to 2.4.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.083 | 817349 | 3.5 | B | 4B | 30 20 | 7 | 5 | 270 | 0.065 | B | | 20 | 6.4 | Y | 1 | McBain,J | A |
| 15.083 | 817350 | 3.0 | B | 4B | 10 8 | 5 | 7 | | 0.06 | B | | 15 | 5.6 | Y | 2 | Vincent,J | B |
| 15.090 | 817351 | 3.5 | M | 4B | 9.0 | 7 | 9.1 | 260 | 0.08 | B | | 11 | 5.7 | Y | 1 | Fleet,R.W | C |
| 15.101 | 817352 | 3.2 | M | 4B | | 7 | 4.0 | 269 | | EY | | | 5.7 | Y | 1 | Fleet,R.W | D |
| 15.107 | 817353 | 3.0 | M | 4B | | | | | 0.035 | B | | 9 | 5.6 | Y | 1 | Begbie,M.J.R | |
| 15.114 | 817354 | | | | 5.5 | 8 | | 267 | 0.30 | N | 8.5 | 102 | 5.6 | Y | 1 | Begbie,M.J.R | E |
| 15.178 | 817355 | 3.2 | S | 121 | | | | 249 | 0.05 | B | | 7 | 3.9 | | 2 | Benavides,A | |
| 15.181 | 817356 | 2.3 | B | 121 | | | | | 0.05 | B | | 7 | 6 | Y | 1 | Galli,A | |
| 15.201 | 817357 | 3.5: | B | 4B | 11 | 7 | 4.5 | 255 | 0.03 | B | | 8 | 5.5 | Y | 1 | Gomez,T.L | F |
| 15.21 | 817358 | 3.1 | S | 4B | | | | | | EY | | | 5.0 | | 8 | Shanklin,J.D | |
| 15.23 | 817359 | 3.4 | B | DCS 9 | | | | | 0.018 | B | | 3 | 6.5 | Y | 8 | Bus,E.P | |
| 15.23 | 817360 | 3.2 | S | DCS 9 | 12 | 7 | 10 | 264 | 0.018 | B | | 3 | 6.5 | Y | 8 | Bus,E.P | G |
| 15.23 | 817361 | 3.4 | S | DCS 8,9 | 5 | 6 | 10 | | 0.050 | B | | 10 | 6.5 | Y | 7 | Comello,G | H |
| 15.24 | 817362 | 2.7 | | DCS 9 | | | | | | EY | | | 6.5 | Y | 8 | Bus,E.P | |
| 15.292 | 817363 | 3.5 | B | 121 | 0.1 | 4 | 2.80 | | 0.050 | B | | 20 | 4.8 | Y | 1 | Castrillon,M.E | |
| 15.292 | 817364 | 4.2 | B | 14 | | 4 | | | 0.05 | B | | 20 | 5.0 | Y | 1 | Girardo,M.M | |
| 15.292 | 817365 | 4.0 | B | 121 | | 4 | 2.8 | | 0.050 | B | | | 5.0 | Y | 1 | Lovera,A | |
| 15.293 | 817366 | 4.1 | B | 121 | | 4 | 2.62 | | 0.05 | B | | 20 | 5 | Y | 1 | Carello,S | |
| 15.293 | 817367 | 4 | B | 122 | 7.3 | 4 | 2.8 | | 0.050 | B | | 20 | 5 | Y | 1 | Siccardi,L | H |
| 15.361 | 817368 | 3.2 | B | 121 | 4 2 | 4 | 2.93 | 247 | 0.05 | B | | 7 | 4.8 | Y | 1 | Lairet,R | |
| 15.427 | 817369 | 3.4 | M | 4B | 8 | 6 | 4.0 | 262 | 0.063 | B | | 9 | 2.9 | Y | 1 | DeYoung,J.A | I |
| 15.438 | 817370 | 3.6 | B | 4B | | | | | 0.08 | B | | 11 | 4.2 | Y | 4 | Gorski,L | |
| 15.48 | 817371 | 3.2 | B | 4B | 12 | 7 | 3 | 270 | 0.080 | B | | 20 | | Y | | Kronk,G | J |
| 15.48 | 817372 | | B | 4B | 10.9 | 8 | | | 0.154 | N | 8.0 | 68 | | Y | | Kronk,G | K |
| 15.490 | 817373 | 3.0 | B | 4B | 12 | 6 | 9.0 | 265 | 0.05 | B | | 10 | 7.0 | Y | 3 | Hays Jr,R.H | L |
| 15.50 | 817374 | 2.8 | B | 4B | | | 7 | 270 | | EY | | | 6 | Y | 32 | Hale,A | |
| 15.510 | 817375 | 2.5 | S | 4B | 38 | 9 | 2.5 | 267 | 0.035 | B | | 7 | 4.5C | Y | 1 | Gronek,J.D | M |
| 15.5174 | 817376 | 2.6 | M | 4B | 10 | 6 | 7.70 | 266 | | EY | | | 6.3 | Y | 13 | Cook,A.J | N |
| 15.70 | 817377 | 3.2 | S | 4B | | | | | 0.023 | B | | 3 | 5.0 | | | Jones,A | O |
| 15.70 | 817378 | | | | | 8 | 3.7 | | 0.080 | B | | 11 | | | | Jones,A | P |
| 15.72 | 817379 | 2.9 | S | SAO | 10 | 7 | 7 | 270 | 0.05 | B | | 7 | 6.0 | Y | 3 | Ashdown,M | |
| 15.729 | 817380 | 3.0 | B | 4B | | 9 | 4.0 | 265 | 0.05 | B | | 7 | 5.5 | Y | 2 | Bembrick,C | Q |
| 15.733 | 817381 | 2.6 | S | 4B | 10 | | 18.5 | | | EY | | | 6.5 | Y | 1 | Lovejoy,T | |
| 15.765 | 817382 | 2.5 | S | 4B | | | | | | EY | | | 6.5 | Y | 7 | Garradd,G | |
| 15.771 | 817383 | | | | | | 8 | | 0.05 | B | | 7 | 6.5 | | | Garradd,G | R |
| 15.78 | 817384 | 3.1 | B | 4B | 10 | 7 | 5 | 260 | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | S |
| 15.78 | 817385 | 2.8 | | 4B | | | | | | EY | | | 6 | Y | 11 | Bouma,R.J | |
| 15.78 | 817386 | 2.8 | B | 4B | | | 3.7 | | | EY | | | 6.4 | | | Clark,M.L | T |
| 15.80 | 817387 | 3.2 | S | 4B | | | 4.2 | | 0.05 | B | | 10 | 6.4 | Y | | Clark,M.L | |
| 15.81 | 817388 | 3.6 | S | 4B | 14 | 7 | 4.2 | 274 | 0.25 | N | 5 | 38 | 6.4 | Y | | Clark,M.L | U |
| 15.81 | 817389 | 3.2 | S | 4B | | 6 | 7 | | 0.08 | B | | 11 | 4.5 | Y | 3 | Momose,M | V |
| 15.81 | 817390 | 2.8 | B | 4B | | 5 | | | | EY | | | 5.8 | Y | | Pearce,A | |
| 15.81 | 817391 | 3.0 | S | 4B | | 7 | | | 0.050 | B | | 10 | 5.8 | Y | | Pearce,A | |
| 15.833 | 817392 | 3.5 | B | 4B | 5.1 | 8 | 3.7 | 265 | 0.05 | B | | 7 | 3.5T | N | 1 | Kanai,K | |

NOTE A Tail length estimated with averted vision.
NOTE B Comp. star Pi Sgr and Beta Cap. 7 deg. tail is gas, 5.5 deg. tail is dust, centre PA 267 deg.
NOTE C Gas tail at PA 260. Midpoints in dust tail: 2.4 deg. at PA 268; 3.6 deg. at PA 271. End point of dust tail: 4.7 deg. at PA 274. 2.9 deg. tail is fan from main tail to PA 280.
NOTE D Material up to PA 280.
NOTE E Tail measurement refers to dust tail only.
NOTE F See drawing 2.
NOTE G Gas tail exceeds 10 deg. at PA 264. Dust tail exceeds. 7.5 deg. at PA 258-280.
NOTE H Coma diameter and tail length approximate.
NOTE I Sky hazy.
NOTE J Tail PA approximate.
NOTE K Coma structure to SW.
NOTE L Gas tail always more prominent than dust tail on March mornings. Maximum lengths were also noted with naked eye in March.
NOTE M Exc. see.
NOTE N South tail boundary 7.70 deg. at PA 259; greatest length 7.70 deg. at PA 266; north boundary 7.42 deg. at PA 274.
NOTE O Cloud curtailed observing.
NOTE P Tail PA 252-270. Bright nucleus in paraboloid coma/tail.
NOTE Q Condensation still stellar in 10 cm refractor and 25 mm eyepiece.
NOTE R 8 deg. tail is gas; 5 deg. tail is dust.
NOTE S Gas tail at PA 260. Dust tail at PA 270.
NOTE T Tails photo'd. to 8.5 deg. and 11.5 deg.
NOTE U Comet followed until 6 minutes prior to sunrise in 25 cm Newtonian at 120x. Light, patchy cloud was some hindrance. May have been able to follow it longer if no cloud.
NOTE V Saw moon with eye. 2 deg. [sic] (Translated by IHW staff. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.090 | 830938 | 4 | 0.08 | B | | 11 | | 5.7 | 1 | Fleet,R.W | A |
| 15.219 | 830939 | 0.55 | 0.114 | N | 3.7 | 47 | 30 | 5.5 | 1 | Gomez,T.L | B |
| 15.375 | 830940 | | 0.203 | SC | 5 | 113 | 30 | | 4 | Arpin,P | C |
| 15.498 | 830941 | 0.5 | 0.13 | SC | 10 | 32,120 | 15 | 6.5 | 3 | Hays Jr,R.H | D |
| 15.794 | 830942 | | | | | | 6 | | | McNaught,R.H | E |

NOTE A Gas tail at PA 260. Dust tail end point at PA 274. Fan at PA 280. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Coma more luminous to the south.
NOTE C Three jets certainly indicated, two uncertain. The area between the uncertain jets is darker than the remaining part of the coma. The blue color of the coma is obvious. Central condensation is stellar.
NOTE D Fan or jet at PA 0; fan or jet at PA 180. 'Bow-tie' pattern evident around nucleus at 120x. Original sketch was made in early twilight.
NOTE E Two bright jets still visible. Nucleus very diffuse.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.305 | 851073 | 0.600 | 4.0 | | 3.4 x 2.3 | 9.00 | 3M 1000 | 1000/ | N | | 21/P | | Pizzi,R | |
| 15.314 | 851074 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | C | 4/P | | Falsarella,N | |
| 15.356 | 851075 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Kodak 2415 | | Y | S | 4/P | 4 | Dilsizian,R | A |
| 15.499 | 851076 | 0.210 | 4 | | 9.8 x 6.5 | 8.00 | Konica | 1600/ | Y | S | 4/S | 1 | Pacholka,W | |
| 15.503 | 851077 | 0.210 | 4 | | 9.8 x 6.5 | 8.00 | Konica 1600 | | N | | 3/P | 1 | Pacholka,W | B |
| 15.544 | 851078 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 5.00 | Kodak 2415 | | Y | | 015/P | 3 | Royer,R | |
| 15.546 | 851079 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 2.50 | Kodak 2415 | | Y | | 014/P | 3 | Royer,R | C |
| 15.713 | 851080 | 0.200 | 3.5 | | 10.3 x 6.9 | 30.00 | Kodak Tri-X | 400/ | N | O | 40/N | 1 | Haagh,N | |

DATE: 15 MAR 1986

DATE: 15 MAR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.722 | 851081 | 0.180 | 2.8 | | 11.4 x 7.6 | 20.00 | Kodak 2415 | | Y | O | 33/S | 7 | Garradd,G | D |
| 15.739 | 851082 | 0.180 | 2.8 | | 11.4 x 7.6 | 11.25 | Kodak 2415 | | Y | O | 34/S | 7 | Garradd,G | D |

NOTE A Some cloudiness appeared. Stellar guiding used because long focal lengths not used. Film was hypersensitized before leaving New York and remained frozen until used.
NOTE B Push processed to 4000 ASA. (Start time appears to be approximate. Ed.)
NOTE C Red Wr. 29 filter used.
NOTE D Emulsion not sufficiently hypersensitized.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.060 | 817393 | 3.1 | M | 4B | | | | | 0.035 | B | | 9 | 5.6 | Y | 1 | Begbie,M.J.R | |
| 16.069 | 817394 | | | | 5.5 | 7 | | 268 | 0.30 | N | 8.5 | 102 | 5.6 | Y | 1 | Begbie,M.J.R | A |
| 16.069 | 817395 | 3.5 | M | 4B | 8.0 | 7 | 5.5 | 262 | 0.08 | B | | 11 | 5.0 | Y | 1 | Fleet,R.W | B |
| 16.108 | 817396 | 3.3 | M | 4B | | 7 | 3.2 | 269 | | EY | | | 5.0 | Y | 1 | Fleet,R.W | |
| 16.160 | 817397 | 3.0 | S | 4B | 8 | 7 | 3 | | 0.050 | B | | 10 | 4.0T | N | 7 | Vanin,G | |
| 16.170 | 817398 | 3.7 | S | 4B | 7 | 6 | 1.4 | | 0.15 | B | | 25 | 4.0 | Y | 5 | Parisio,R | C |
| 16.18 | 817399 | 3.0 | S | 4B | | | | | | EY | | | 5.5 | | 8 | Shanklin,J.D | |
| 16.23 | 817400 | 3.1 | S | DCS 9 | 13 | 8 | 10 | 264 | 0.018 | B | | 3 | 6.5 | Y | 8 | Bus,E.P | D |
| 16.23 | 817401 | 3.4 | S | DCS 8,9 | 6 | 6 | 10 | | 0.050 | B | | 10 | 6.5 | Y | 7 | Comello,G | E |
| 16.24 | 817402 | 3.3 | B | DCS 9 | | | | | 0.018 | B | | 3 | 6.5 | Y | 8 | Bus,E.P | |
| 16.24 | 817403 | 2.7 | | DCS 9 | | | | | | EY | | | 6.5 | Y | 8 | Bus,E.P | |
| 16.417 | 817404 | 3.6 | M | 4B | 8 | 5 | 4.0 | 264 | 0.063 | B | | 9 | 3.1 | Y | 1 | DeYoung,J.A | F |
| 16.451 | 817405 | 3.2 | B | 121 | | | | | 0.080 | B | | 20 | 5.0 | Y | | Smith,D | G |
| 16.497 | 817406 | 3.1 | B | 4B | 12 | 5 | 10 | 260 | 0.05 | B | | 10 | 7.0 | Y | 4 | Hays Jr,R.H | H |
| 16.50 | 817407 | 2.8 | B | 4B | | | 7 | 270 | | EY | | | 6 | Y | 30 | Hale,A | I |
| 16.510 | 817408 | 2.5 | S | 4B | 38 | 9 | 2.5 | 267 | 0.035 | B | | 7 | 4.5C | Y | 1 | Gronek,J.D | J |
| 16.531 | 817409 | 4.0 | S | 4B | 7 | 6 | 1 | 100 | 0.080 | B | | 11 | 6 | Y | 7 | Pryal,J | K |
| 16.536 | 817410 | 3.0 | M | 4B | | 3 | 18 | 140 | 0.080 | B | | 11 | 5.3 | Y | 1 | Glassett,W | L |
| 16.70 | 817411 | 3.4 | S | 4B | | | | | 0.023 | B | | 3 | 5.0 | | | Jones,A | M |
| 16.70 | 817412 | | | | 9 | 7 | 3.7 | | 0.080 | B | | 11 | | | | Jones,A | N |
| 16.729 | 817413 | 2.7 | S | 4B | | | | | | EY | | | 6.0 | Y | 6 | Garradd,G | |
| 16.73 | 817414 | 8.3 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | O |
| 16.73 | 817415 | 7.8 | S | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | O |
| 16.735 | 817416 | | | | | | 6 | | 0.05 | B | | 7 | | | | Garradd,G | P |
| 16.781 | 817417 | 3.8 | S | 4B | 6 | | 2.5 | 270 | 0.05 | B | | 7 | 5.1 | Y | 1 | Bryant,K | Q |
| 16.788 | 817418 | 2.8 | | 4B | | | 5 | 275 | | EY | | | | Y | 1 | Tregaskis,T.B | R |
| 16.788 | 817419 | 2.8 | B | 4B | | 8 | 5 | 275 | 0.050 | B | | 10 | | Y | 1 | Tregaskis,T.B | S |
| 16.788 | 817420 | | | 4B | 6.3 | 8 | 0.5 | 275 | 0.15 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | T |
| 16.795 | 817421 | 3.0 | B | 4B | | | 10 | | 0.05 | B | | 7 | 6.0 | Y | 2 | Hayashi,H | |
| 16.798 | 817422 | 3.8 | S | 4B | 4.4 | 7 | 2.9 | 260 | 0.05 | B | | 7 | 3.5C | Y | 1 | Kanai,K | |
| 16.80 | 817423 | 3.8 | M | SAO | 11 | 7 | 1.9 | | 0.065 | R | 8 | 16 | 5.0 | Y | 5 | Nakamura,A | U |
| 16.80 | 817424 | 3.3 | M | 4B | | | 6.0 | | 0.05 | B | | 7 | 5.5 | Y | 1 | Suzuki,K | |
| 16.80 | 817425 | | | 4B | 3.9 1.6 | 5 | | | 0.25 | | 4.2 | 88 | 5.5 | Y | 1 | Suzuki,K | V |
| 16.803 | 817426 | 4.1 | B | 4B | 4.4 | 7 | 2.9 | 260 | 0.05 | B | | 7 | 3.5C | Y | 1 | Kanai,K | |
| 16.81 | 817427 | 3.3 | S | 4B | | 6 | 5 | | 0.08 | B | | 11 | 4.0 | Y | 3 | Momose,M | |
| 16.81 | 817428 | 3.0 | B | | 15 | 7 | 2 | 255 | 0.05 | B | | 10 | 5.0 | Y | 1 | Uda,K | |
| 16.816 | 817429 | 3.8 | M | 4B | 4.0 | 7 | | | 0.08 | B | | 11 | 4.5CT | Y | 1 | Mitsuma,S | W |
| 16.816 | 817430 | | | | | | | | 0.16 | N | 6.3 | 31 | 4.5CT | Y | 1 | Mitsuma,S | X |
| 16.816 | 817431 | | | | | | 3 | 265 | 0.05 | B | | 7 | 4.5CT | Y | 1 | Mitsuma,S | |
| 16.82 | 817432 | 3.7 | S | AAVSO | 6 | 5 | 1 | | 0.13 | N | 6.3 | 24 | 5.5 | Y | 1 | Hayashi,A | Y |
| 16.874 | 817433 | 3.4 | S | 4B | 20 | 5 | 10 | 270 | 0.07 | B | | 10 | 4.0 | Y | 1 | Kobayashi,J | |

NOTE A Tail measurement refers to dust tail only.
NOTE B Gas tail at PA 262. Dust tail at PA 271. Between clouds.
NOTE C Tail PA 293, 303.
NOTE D Tail at PA 264 exceeds 10 deg. Tail 2 exceeds 7 deg. at PA 250-280.
NOTE E Tail length approximate.
NOTE F Sky hazy.
NOTE G Comet elevation 15 deg.
NOTE H Gas tail always more prominent than dust tail on March mornings. Maximum lengths were also noted with naked eye in March.
NOTE I Measured coma diameter 12' in 20 cm reflector, 61x.
NOTE J Exc. see.
NOTE K About 10 deg. above horizon. Difficult.
NOTE L Spectacular nucleus, coma and tail clearly visible at this time from desert site, even with the naked eye. (PA value appears incorrect. Ed.)
NOTE M Fair sky, coma/tail fairly symmetrical.
NOTE N 3.7 degree tail PA 264-267. 2.5 degree tail PA 259-271. Fairly symmetrical paraboloid coma/tail.
NOTE O Nucleus.
NOTE P 6 deg. tail is gas; 4 deg. tail is dust.
NOTE Q DC = strong.
NOTE R Broad, fan shaped tail. PA approximate.
NOTE S PA approximate. (Observer gave limit as 10. Ed.)
NOTE T No stellar-like nucleus. Tail length is lower limit, PA approximate. (Observer gave limit as 12.5. Ed.)
NOTE U PA 250 to 280.
NOTE V Meter. (Coma diameter. Ed.) Instrument is Wright-Schmidt.
NOTE W m2 = 7.1.
NOTE X m2 = 8.5.
NOTE Y PA 255 to 260.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.069 | 830943 | 4 | 0.08 | B | | 11 | | 5.0 | 1 | Fleet,R.W | A |
| 16.502 | 830944 | 0.5 | 0.13 | SC | 10 | 32,120 | 15 | 6.5 | 4 | Hays Jr,R.H | B |
| 16.618 | 830945 | 0.17 | 0.30 | N | 5 | 60 | | 6.0 | 2 | Thompson,G | C |
| 16.788 | 830946 | 0.31 | 0.152 | N | 8 | 64 | | | 1 | Tregaskis,T.B | D |
| 16.795 | 830947 | | | | | | | | | McNaught,R.H | E |

NOTE A Gas tail at PA 262. Dust tail at PA 271. Suspected fan at PA 280. Between clouds, observation incomplete. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Spike at PA approximately 240; fan at PA 30. Single 'fan' roughly NE of 'nucleus'. Conspicuous spike near S edge of gas tail. 'Nucleus' seemed less prominent than on 15th. Original sketch was also made in early twilight.
NOTE C Note the two jets emanating sunward and the separation of the tail. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Tail at PA 275. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.318 | 851083 | 0.058 | 2 | | 34.5 x23.4 | 5.00 | Kodak Tri-X | | N | | 1/P | 1 | Lopez,E.V.A | A |
| 16.321 | 851084 | 0.058 | 2 | | 34.5 x23.4 | 3.00 | Kodak Tri-X | | N | | 2/P | 1 | Lopez,E.V.A | B |
| 16.334 | 851085 | 0.230 | 4.5 | | 8.9 x 6.0 | 5.00 | 3M 400 | 400/ | N | | 20/P | | Pizzi,R | |
| 16.574 | 851086 | 0.200 | 8 | | 10.3 x 6.9 | 20.00 | Fujichrome | 400/ | Y | X | 102/P | 3 | Snyder,L.F | |

NOTE A (Observer's image identifier is A. Ed.)
NOTE B Start time approximate. (Observer's image identifier is B. Ed.)

DATE: 17 MAR 1986

DATE: 17 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.00 | 817434 | | | | 10 | 7 | 4 | 260 | 0.05 | R | 4 | 7 | | | | Chernis,K | |
| 17.063 | 817435 | 3.0 | M | 4B | | | | | 0.035 | B | | 9 | 5.4 | Y | 1 | Begbie,M.J.R | |
| 17.069 | 817436 | | | | 5.7 | 8 | | 275 | 0.30 | N | 8.5 | 102 | 5.4 | Y | 1 | Begbie,M.J.R | A |
| 17.083 | 817437 | 3.0 | B | 4B | 12 10 | 5 | 6 | | 0.06 | B | | 15 | 5.4 | Y | 2 | Vincent,J | B |
| 17.093 | 817438 | 3.7 | M | 4B | 3 | 7 | 2 | 250 | 0.04 | B | | 12 | 5.3 | Y | 1 | Henshaw,C | C |
| 17.10 | 817439 | 2.9 | B | E | 20 | 5 | 3.5 | 260 | 0.05 | B | | 7 | | | | Mormil,V | |
| 17.115 | 817440 | 3.4 | M | 4B | | 6 | 2.3 | 264 | | EY | | | 5.7 | Y | 1 | Fleet,R.W | D |
| 17.118 | 817441 | 3.8 | M | 4B | 10 | 6 | 9.5 | 261 | 0.08 | B | | 11 | 5.7 | Y | 1 | Fleet,R.W | E |
| 17.128 | 817442 | 3.0 | | 4B | | | | | | EY | | | 6.0 | Y | 1 | van der Mey,L | |
| 17.128 | 817443 | | | | | | 3.33 | 255 | 0.050 | B | | 7 | 6.0 | Y | 1 | van der Mey,L | F |
| 17.128 | 817444 | | | | | | 4.0 | 265 | 0.050 | B | | 7 | 6.0 | Y | 1 | van der Mey,L | G |
| 17.174 | 817445 | 4 : | S | 4B | 10 | 6 | | | 0.050 | B | | 7 | T | | 1 | Mikuz,H | H |
| 17.287 | 817446 | 2.9 | B | 121 | 0.1 | 4 | 2.88 | | 0.050 | B | | 20 | 5.0 | Y | 1 | Castrillon,M.E | I |
| 17.292 | 817447 | 4.0 | B | 121 | | 4 | 2.97 | | 0.05 | B | | 20 | 5 | Y | 1 | Carello,S | |
| 17.342 | 817448 | 3.9 | B | 121 | 7.3 | 4 | 2.8 | | 0.050 | B | | 20 | 5.5 | Y | 2 | Siccardi,L | J |
| 17.382 | 817449 | 3.4 | B | | 8 4 | 3 | 3.60 | 244 | 0.05 | B | | 7 | 4.0 | Y | 1 | Lairet,R | |
| 17.41 | 817450 | 3.5 | B | 4B | 6 | 7 | 4.0 | 265 | 0.050 | B | | 10 | 6.5 | Y | 1 | Bortle,J.E | K |
| 17.41 | 817451 | 3.2 | V | 4B | | | | | | EY | | | 6.5 | Y | 1 | Bortle,J.E | K |
| 17.422 | 817452 | 3.6 | S | 4B | | | 1.8 | 265 | 0.035 | B | | 7 | 5.0 | Y | 3 | Morrison,W | L |
| 17.451 | 817453 | 3.2 | B | 121 | | | | | 0.080 | B | | 20 | 5.2 | Y | | Smith,D | M |
| 17.5278 | 817454 | 3.0 | M | 4B | 10 | 6 | 4.12 | 259 | 0.05 | B | | 7 | 6.0 | Y | 14 | Cook,A.J | N |
| 17.53 | 817455 | 2.8 | | 4B, BSC | | 10 | | 267 | | EY | | | 5.0 | Y | 13 | Morris,C.S | O |
| 17.53 | 817456 | 2.8 | M | 4B, BSC | 8.4 | 7 | 5 | 270 | 0.050 | B | | 10 | 5.0 | Y | 13 | Morris,C.S | P |
| 17.67 | 817457 | 3.2 | B | AA | 10 | 0 | 7 | 120 | 0.05 | B | | 10 | | Y | 2 | Campbell,R.N | Q |
| 17.70 | 817458 | 3.3 | S | 4B | | | | | 0.023 | B | | 3 | 5.5 | Y | | Jones,A | R |
| 17.70 | 817459 | | | | 7 | 7 | 3.6 | | 0.080 | B | | 11 | | | | Jones,A | S |
| 17.719 | 817460 | 3.2 | B | 4B | 7 | | 5 | | 0.05 | B | | 7 | 5.8C | Y | 1 | Parkinson,M | T |
| 17.73 | 817461 | 8.5 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | U |
| 17.75 | 817462 | 3.3 | B | 4B | 10 | 7 | 4.5 | 255 | 0.05 | B | | 10 | 5.5 | Y | 11 | Bouma,R.J | V |
| 17.75 | 817463 | 2.9 | | 4B | | | | | | EY | | | 5.5 | Y | 11 | Bouma,R.J | |
| 17.753 | 817464 | 3.0 | | 4C | | | 3.5 | 262 | | | | | 5.5 | Y | 1 | Seargent,D | W |
| 17.757 | 817465 | 3.2 | B | 4B | | 8 | 2.5 | 265 | 0.05 | B | | 7 | 3.8 | Y | 3 | Bembrick,C | X |
| 17.763 | 817466 | 3.1 | | 4B | | | 3 | 270 | | EY | | | | Y | 1 | Tregaskis,T.B | Y |
| 17.763 | 817467 | 2.8 | B | 4B | | 8 | 4 | 270 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | Z |
| 17.763 | 817468 | | | 4B | 5.9 | | | | 0.15 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | a |
| 17.77 | 817469 | 2.7 | S | 4B | | | 4.0 | | | EY | | | 6.0 | Y | 1 | Lovejoy,T | |
| 17.778 | 817470 | 3.6 | S | 4B | 5 | | 1.8 | 270 | 0.05 | B | | 7 | 4.9 | Y | 1 | Bryant,K | b |
| 17.799 | 817471 | 3.3 | M | 4B | 5.7 | 7 | | | 0.12 | N | 6 | 36 | 3.0 | Y | 1 | Kishi,A | |
| 17.80 | 817472 | 3.0 | S | 4B | | 7 | 3 | | 0.08 | B | | 11 | 4.0 | Y | 3 | Momose,M | |
| 17.80 | 817473 | 3.0 | | | 15 | 7 | 1 | | 0.23 | | 4.4 | 40 | 4.0 | Y | 1 | Washi,I | c |
| 17.80 | 817474 | 3.5 | | | 8 | 6 | 3 | | 0.12 | B | | 20 | 6.0 | Y | 1 | Washi,S | d |
| 17.809 | 817475 | 3.6 | M | 4B | 4.5 | 7 | | | 0.08 | B | | 11 | 4.5C | Y | 1 | Mitsuma,S | e |
| 17.809 | 817476 | | | | | | 3 | 270 | 0.05 | B | | 7 | 4.5C | Y | 1 | Mitsuma,S | |
| 17.81 | 817477 | 3.6 | S | AAVSO | 6 | 6 | 2 | | 0.07 | B | | 10 | 5.5 | Y | 1 | Hayashi,A | f |
| 17.81 | 817478 | 3.0 | | 4B | 8 | 7 | 4 | | 0.080 | B | | 11 T | | Y | 1 | Okuda,M | g |
| 17.81 | 817479 | 3 : | | | 10 | | 0 | 270 | 0.09 | M | 10.1 | 40 | 3 | Y | 7 | Tanikawa,M | h |
| 17.811 | 817480 | 3.5 | M | 4B | 8.2 | 6 | 2.2 | 252 | 0.1 | N | 10 | 25 | 5.0 | Y | 1 | Ichikawa,K | |
| 17.813 | 817481 | 3.9 | B | 4B | 4.4 | 8 | 2.9 | 270 | 0.05 | B | | 7 | 3.5 | Y | 1 | Kanai,K | |
| 17.817 | 817482 | 3.8 | S | 4B | 4.4 | 8 | 2.9 | 270 | 0.05 | B | | 7 | 3.5 | Y | 1 | Kanai,K | |
| 17.82 | 817483 | 3.6 | S | AAVSO | 6 | 6 | 1.5 | | 0.13 | N | 6.3 | 24 | 5.5 | Y | 1 | Hayashi,A | i |
| 17.82 | 817484 | 3.1 | M | 4B | | 6 | 5.0 | | 0.05 | B | | 7 | 4.0 | Y | 1 | Suzuki,K | j |
| 17.82 | 817485 | 3.8 | M | 4B | 6.3 | 6 | 3 | 270 | 0.080 | B | | 11 | 3 T | Y | 1 | Watanabe,N | |
| 17.826 | 817486 | 3 : | B | 4B | | | 5 | | 0.05 | B | | 7 | 3.5 | Y | 1 | Hayashi,H | j |

NOTE A Tail measurement refers to dust tail only.
NOTE B Tail triangular. PA 259 to 284.
NOTE C Haze. Gas tail 2 deg. at PA 250; dust tail 4 deg. at PA 270.
NOTE D Gas tail at PA 264. Dust tail at PA 280.
NOTE E Midpoint on gas tail: 4.4 deg. at PA 258. End point of gas tail: 9.5 deg. at PA 261. Midpoints of dust tail: 2.7 deg. at PA 272; 5.0 deg. at PA 275. End point of dust tail: 6.8 deg. at PA 280.
NOTE F Type I tail.
NOTE G Type II tail.
NOTE H Comet just above the horizon.
NOTE I Clouds in the area of the comet. (Translated by IHW staff. Ed.)
NOTE J Coma diameter and tail length approximate.
NOTE K Extinction correction applied.
NOTE L Comet altitude 7 deg., comparison stars' altitudes 11 deg., comet's uncorrected magnitude is 4.0.
NOTE M Comet elevation 15 deg.
NOTE N Tail 1 (PA 259). Tail 2 southern boundary length 3.88 deg. at PA 266; northern boundary length 3.22 deg. at PA 278; greatest length 4.25 deg. at PA 270.
NOTE O Differential extinction correction of -0.1 mag. was applied. Multiple tails define the shape of the fan tail. Fan was very faint.
NOTE P Differential extinction correction of -0.1 mag. was applied. Tail much narrower in binoculars.
NOTE Q Dark rural sky.
NOTE R Tail a little fainter than Sct cloud to naked eye.
NOTE S Tail PA 258-278.
NOTE T Tail length approximate.
NOTE U Nucleus.
NOTE V Gas tail at PA 255. Dust tail at PA 267.
NOTE W Haze.
NOTE X Both edges of tail diffuse.
NOTE Y PA approximate. Hazy cloud.
NOTE Z Tail length and PA approximate. Hazy cloud.
NOTE a No jets or other features seen. Tail barely visible.
NOTE b DC = strong.
NOTE c Instrument is Wright-Schmidt. (Observer indicated "Y" method. Ed.)
NOTE d Type II. (Observer indicated "Y" method. Ed.)
NOTE e m2 = 6.8.
NOTE f PA 260 to 280.
NOTE g (Observer indicated "Y" method. Ed.) H. 10 deg. cloudiness.
NOTE h Tail length approximate.
NOTE i PA 260 to 285.
NOTE j Cloud.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.118 | 830948 | 4 | 0.08 | B | | 11 | | 5.7 | 1 | Fleet,R.W | A |
| 17.374 | 830949 | | 0.203 | SC | 5 | 113 | 27 | | 4 | Arpin,P | B |
| 17.431 | 830950 | 0.83 | 0.152 | N | 8 | 38 | | 5.5 | 1 | Cuthill,L | C |

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.533 | 830951 | 3 | 0.050 | B | | 7 | 15 | 6.3 | 14 | Cook,A.J | D |
| 17.728 | 830952 | | | | | | 143 | | | McNaught,R.H | E |

NOTE A Gas tail at PA 261. Dust tail end point at PA 280. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Five jets indicated. Coma circular and uniform and the central condensation is stellar and the color is blue. The tail is broad.
NOTE C Coma DC = 7. Axis of head at PA 75. Tail at PA 235-285. The inner coma has decreased in size since last observation (Mar. 12). Also outer coma looks weaker and fainter. Semi latus rectum = 2.5'. Vertex distance = 1.5'. Magnitude estimated using 10x50 binoculars is 3.3 (Morris method).
NOTE D Through holes in cumulus clouds.
NOTE E Nucleus not stellar, but sharper toward centre. (Drawings at 1617 UT and 1840 UT submitted. Duration not indicated. Time of observations are assumed to be start times. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.235 | 851087 | 0.135 | 1.8 | | 15.2 x10.2 | 7.00 | Agfachr. Pro | 1000/ | N | | 19/P | 4 | Conrad,R | A |
| 17.240 | 851088 | 0.055 | 2.8 | | 36.2 x24.6 | 10.00 | Fujichr. Pro | 100/ | Y | | 14/P | 4 | Conrad,R | B |
| 17.368 | 851089 | 0.230 | 4.5 | | 8.9 x 6.0 | 10.00 | 3M 400 | 400/ | N | | 26/P | | Pizzi,R | |
| 17.369 | 851090 | 0.63 | 1.8 | 0.35 | 3.3 x 2.2 | 8.00 | Agfachrome | 50/ | N | | 21/P | 2 | Ferrin,I | C |
| 17.381 | 851091 | 0.230 | 4.5 | | 8.9 x 6.0 | 1.50 | 3M 400 | 400/ | N | | 23/P | | Pizzi,R | |
| 17.428 | 851092 | 0.052 | 2.8 | | 38.2 x26.0 | 2.50 | Kodak 2415 | | Y | O | 20/S | 1 | Lund,L | D |
| 17.443 | 851093 | 0.200 | 4.5 | | 10.3 x 6.9 | 1.50 | Kodak Tri-X | | N | T | 7/C | 2 | Priester,D.C | E |
| 17.444 | 851094 | 0.200 | 4.5 | | 10.3 x 6.9 | 0.75 | Kodak Tri-X | | N | T | 8/C | 2 | Priester,D.C | E |
| 17.446 | 851095 | 0.058 | 1.4 | | 34.5 x23.4 | 0.25 | Kodak Tri-X | | N | T | 9/C | 2 | Priester,D.C | E |
| 17.447 | 851096 | 0.058 | 1.4 | | 34.5 x23.4 | 0.50 | Kodak Tri-X | | N | T | 10/C | 2 | Priester,D.C | E |
| 17.448 | 851097 | 0.058 | 1.4 | | 34.5 x23.4 | 1.00 | Kodak Tri-X | | N | T | 11/C | 2 | Priester,D.C | E |
| 17.529 | 851098 | 3.660 | 12 | 0.305 | 0.6 x 0.4 | 17.00 | Kodak 2415 | | Y | | 016/P | 3 | Royer,R | F |
| 17.543 | 851099 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | 3M 1000 | 1000/ | N | O | 19/N | 8 | Edberg,S.J | |
| 17.553 | 851100 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 8.00 | Kodak 2415 | | Y | | 017/P | 3 | Royer,R | G |
| 17.820 | 851101 | 1.760 | 5.8 | 0.300 | 1.2 x 0.8 | 10.00 | Kodak 2415 | | Y | | 106/P | 1 | Niijima,T | H |

NOTE A Zodiacal light interfered with the observation. Film "pushed" to 4000 ISO/37 DIN.
NOTE B Zodiacal light interfered with the observation. UV filter used. (This probably means a UV blocking, clear glass filter. Ed.)
NOTE C Instrument is Schmidt camera.
NOTE D Auxiliary lens used for image with FL = 4.180. Original instrument characteristics are FL = 1.530, f/6.
NOTE E Push processed to 800 ASA.
NOTE F Auxiliary lens used. Original instrument characteristics are FL = 1.83, f/6.
NOTE G Red Wr. 29 filter used.
NOTE H (Observer's image identifier is preceded by prefix Nj. Ed.)

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.434 | 870131 | 600G-O | CL | 0.135 | 2.8 | | 32.00 | Kodak 2415 | | Y | C | 205/S | 4 | Buchanan,W.T | A |
| 17.535 | 870132 | 300G-N | R | 0.485 | | 0.088 | 10.00 | Kodak Tri-X | 400/27 | N | O | 31/C | 8 | Edberg,S.J | B |

NOTE A City lights interfered with observation. (Observer's image identifier is E-122-05. Ed.) Window on front of instrument selected to correspond with aperture: 54 mm for f/2.8, 38 mm for f/4.8.
NOTE B Emission bands visible at measured wavelegths of 470 nm, 550 nm, 610 nm, and 654 nm.

DATE: 18 MAR 1986

DATE: 18 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.00 | 817487 | 2.9 | B | AAVSO | 10 | 7 | 6 | 260 | 0.05 | R | 4 | 7 | | | | Chernis,K | |
| 18.046 | 817488 | 3.6 | M | 4B | | | | | 0.035 | B | | 9 | 5.5 | Y | 1 | Begbie,M.J.R | |
| 18.054 | 817489 | | | | 6.6 | 7 | | 260 | 0.30 | N | 8.5 | 102 | 5.5 | Y | 1 | Begbie,M.J.R | A |
| 18.063 | 817490 | 3.2 | M | 4B | | | 4.9 | 275 | | EY | | | 5.7 | Y | 1 | Fleet,R.W | |
| 18.066 | 817491 | 3.4 | M | 4B | 11 | 7 | 9.8 | 257 | 0.08 | B | | 11 | 5.7 | Y | 1 | Fleet,R.W | B |
| 18.088 | 817492 | 3.6 | M | 4B | 4 | 7 | 8 | 250 | 0.04 | B | | 12 | 5.6 | Y | 1 | Henshaw,C | C |
| 18.149 | 817493 | 2.7 | B | 4B | 20 | 7 | 5 | | 0.07 | B | | 20 | 5.5T | Y | 1 | Filimon,E | D |
| 18.157 | 817494 | 3.5 | B | 4B | 15 | 7 | 2.5 | | 0.07 | B | | 20 | 4.5T | Y | 1 | Filimon,E | |
| 18.167 | 817495 | 4.2: | M | 4B | 9 | 7 | | | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | E |
| 18.170 | 817496 | 3.4 | S | 122 | 10.0 | 5 | 4.0 | 260 | 0.05 | B | | 7 | 4.2T | Y | 2 | Haver,R | |
| 18.170 | 817497 | 4.5 | S | 4B | 10 | 6 | | | 0.050 | B | | 7 | T | | 1 | Mikuz,H | F |
| 18.180 | 817498 | | B | 4B | | | 1 | | | EY | | | 5.5T | Y | 1 | Filimon,E | G |
| 18.199 | 817499 | 4.0 | S | 121 | | | | 277 | 0.05 | B | | 7 | 3.9 | | 2 | Benavides,A | |
| 18.21 | 817500 | 3.3 | S | DCS 8,9 | 6 | 7 | 10 | | 0.018 | B | | 3 | 6.5 | Y | 7 | Comello,G | H |
| 18.23 | 817501 | 3.2 | S | DCS 9 | 15 | 7 | 10 | 263 | 0.018 | B | | 3 | 6.5 | Y | 8 | Bus,E.P | I |
| 18.24 | 817502 | 3.4 | B | DCS 9 | | | | | 0.018 | B | | 3 | 6.5 | Y | 8 | Bus,E.P | |
| 18.24 | 817503 | 2.7 | | DCS 9 | | | | | | EY | | | 6.5 | Y | 8 | Bus,E.P | |
| 18.293 | 817504 | 3.4 | B | 121 | 6 | 2 | 5 | 260 | 0.06 | R | 12 | 56 | 5.3 | Y | 1 | Onofre D.,D | J |
| 18.294 | 817505 | 3.2 | B | 121 | | 4 | 2.8 | | 0.050 | B | | | 5.6 | Y | 1 | Lovera,A | |
| 18.297 | 817506 | 3.0 | B | 121 | | 4 | 2.8 | | 0.050 | B | | | 6.1 | Y | 1 | Lovera,A | |
| 18.299 | 817507 | 2.9 | B | 121 | 0.1 | 4 | 2.88 | | 0.050 | B | | 20 | 5.5 | Y | 1 | Castrillon,M.E | |
| 18.332 | 817508 | | | | | 3 | | | 0.05 | B | | 20 | 5.5 | Y | 2 | da Silva,L.A.L | |
| 18.347 | 817509 | 3.8 | B | 121 | 6.3 | 4 | 2.62 | | 0.050 | B | | 20 | 5.8 | Y | 2 | Siccardi,L | K |
| 18.41 | 817510 | 3.4 | B | 4B | 7 | 6 | 3.5 | 267 | 0.050 | B | | 10 | 6.5 | Y | 1 | Bortle,J.E | L |
| 18.41 | 817511 | 3.1 | V | 4B | | | | | | EY | | | 6.5 | Y | 1 | Bortle,J.E | L |
| 18.41 | 817512 | | | | 5 | 6 | | | 0.317 | N | 6 | 55 | 6.5 | Y | 1 | Bortle,J.E | M |
| 18.417 | 817513 | 3.3 | M | 4B | 8 | 5 | 3.5 | 270 | 0.05 | B | | 7 | 3.3 | Y | 1 | DeYoung,J.A | N |
| 18.486 | 817514 | 3.1 | B | 4B | 12 | 5 | 10 | 260 | 0.05 | B | | 10 | 7.0 | Y | 5 | Hays Jr,R.H | O |
| 18.5035 | 817515 | 2.6 | M | 4B | 9 | 6 | 7.48 | 260 | 0.05 | B | | 7 | 6.3 | Y | 15 | Cook,A.J | P |
| 18.5083 | 817516 | 2.6 | M | 4B | 10 | 6 | 10.35 | 270 | | EY | | | 6.3 | Y | 15 | Cook,A.J | Q |
| 18.517 | 817517 | 3.0 | M | 4B | | 3 | | | 0.080 | B | | 11 | 4.1 | N | 5 | Glassett,W | |
| 18.52 | 817518 | 2.8 | | 4B, BSC | | 8 | 11 | 285 | | EY | | | 5.0 | Y | 13 | Morris,C.S | R |
| 18.52 | 817519 | 2.9 | M | 4B, BSC | 11 | 7 | 3 | 265 | 0.050 | B | | 10 | 5.0 | Y | 13 | Morris,C.S | S |
| 18.53 | 817520 | 2.9 | M | 4B, BSC | 10 | 7 | | | 0.080 | B | | 20 | 5.0 | Y | 13 | Morris,C.S | T |
| 18.70 | 817521 | 3.3 | S | 4B | | 8 | | | 0.023 | B | | 3 | 5.5 | Y | | Jones,A | U |
| 18.70 | 817522 | | | | 10 | 8 | 3.7 | | 0.080 | B | | 11 | | | | Jones,A | V |
| 18.708 | 817523 | 2.9 | | 4C | | | 5 | 270 | | | | | 6.1 | Y | 1 | Seargent,D | W |
| 18.708 | 817524 | | | | 8 | 8 | | | 0.08 | B | | 15 | | | | Seargent,D | |
| 18.72 | 817525 | 8.6 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | X |
| 18.73 | 817526 | 3.2 | B | 4B | 12 | 6 | 5 | 260 | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | Y |
| 18.73 | 817527 | 2.8 | | IHW 4B | | | 9 | 260 | | EY | | | 6 | Y | 11 | Bouma,R.J | Y |
| 18.771 | 817528 | 2.7 | S | 4B | | | 7.5 | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | |
| 18.99 | 817529 | 4.5 | B | M | 6 | 8 | 0.7 | | 0.05 | B | | 7 | | | | Konstantinov,S | |

NOTE A Tail measurement refers to dust tail only.
NOTE B Gas tail disconnection?. 2.3 deg. at PA 259. Gas tail at PA 257. Suspected gas tail 12.9 deg. at PA 257. Midpoints of dust tail: 2.0 deg. at PA 269; 3.5 deg. at PA 273. End point of dust tail: 7.2 deg. at PA 276.
NOTE C Gas tail 8 deg. at PA 250; dust tail 4.5 deg. at PA 270.
NOTE D Naked eye. Coma diameter approximate.
NOTE E Clouds interfere.
NOTE F Excellent conditions. Comet just above the horizon.
NOTE G Naked eye.
NOTE H Tail length approximate.
NOTE I Kink in gas tail, approximately 3 deg. from head, in PA 251 deg. measured from kink. Tail at PA 263 exceeds 10 deg. Tail 2 exceeds 7 deg. at PA 255-280.
NOTE J Cirrus.
NOTE K Coma diameter and tail length approximate.
NOTE L Extinction correction applied.
NOTE M At 68x: roughly parabolic coma with extremely vague outlines. Diffuse sunward fan of bright material extends a short distance from nucleus in a wide arc. At 110x fan is at least 120 deg. wide. Nucleus appears almost stellar.
NOTE N Sky hazy.
NOTE O Gas tail always more prominent than dust tail on March mornings. Maximum lengths were also noted with naked eye in March.
NOTE P Tail 1 (PA 260). Tail 2 southern boundary and greatest length at PA 270; tail 2 northern boundary 5.08 deg. at PA 280.
NOTE Q Tail 1 (PA 270); tail 2 (PA 280).
NOTE R Differential extinction correction of -0.1 mag. was applied. Multiple tails define the shape of the fan tail. Fan was very faint.
NOTE S Differential extinction correction of -0.1 mag. was applied. Multiple tails define the shape of the fan tail.
NOTE T Differential extinction correction of -0.1 mag. was applied.
NOTE U Coma wider than tail near head of comet.
NOTE V Tail PA 256-272. Tail a little fainter than Sct cloud to naked eye. Coma wider than tail near head (in 11x80 binoculars). Southern part of tail longer and brighter.
NOTE W Dust tail 5 deg. at PA 270, gas tail perhaps 9 deg. at PA 265.
NOTE X Nucleus.
NOTE Y Gas tail at PA 260. Dust tail at PA 270.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.066 | 830953 | 4 | 0.08 | B | | 11 | | 5.7 | 1 | Fleet,R.W | A |
| 18.088 | 830954 | 0.09 | 0.30 | N | 8.5 | 102,212,425 | 21 | 5.5 | 1 | Begbie,M.J.R | B |
| 18.424 | 830955 | 0.83 | 0.152 | N | 8 | 38 | | 5.5 | 1 | Cuthill,L | C |
| 18.490 | 830956 | 0.5 | 0.13 | SC | 10 | 32,120 | 30 | 7.0 | 5 | Hays Jr,R.H | D |
| 18.507 | 830957 | 3 | 0.050 | B | | 7 | 10 | 6.3 | 15 | Cook,A.J | |
| 18.794 | 830958 | 0.12 | 0.20 | N | 6.3 | 140 | | | 5 | Lovejoy,T | E |
| 18.804 | 830959 | | | | | | | | | McNaught,R.H | F |
| 18.973 | 830960 | 0.18 | 0.317 | N | 6.0 | 112 | 23 | 5.8 | 2 | Soc. Astro. de France | G |

NOTE A Gas tail at PA 257. Dust tail end point at PA 276. (Suspected) fan at PA 285. Disconnection? at PA 259. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Fan at PA 320-170; inner tail centred at PA 260. Vertex distance 3.5 arc min.; semi latus rectums P1 = 3.5 arc min. and P2 = 4 arc min. For internal envelopes: P1 = 2.8 arc min., P2 = 2.8 arc min. For "fan" feature P1 = 0.8 arc min., P2 = 1.4 arc min. Extremely prominent fan near central condensation symmetrical with sharply defined edges. Fan appeared distinctly yellow-orange in colour. Symmetrical internal envelopes appeared to 'flow' into a bright region of tail centred on PA 260.
NOTE C Coma DC = 7. Axis of head at PA 75. Tail at PA 230-275. The comet has not changed much in appearence since last observed (Mar. 17). Semi latus rectum = 2.5'. Vertex distance = 1.5'. Magnitude estimated to be 3.3 using 10x50 binoculars (Morris method).
NOTE D Fan or jet at PA 0, fan or jet at PA 180. 'Bow-tie' pattern around tiny 'nucleus' much like on 15th, except fan to north seemed more prominent than one to south.
NOTE E Scale is approximate. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F Nucleus looks fairly stellar. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

NOTE G Tail at PA 252, 6 deg. length (naked eye). Drawing made by Jean-Philippe Garsztka.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.233 | 851102 | 0.055 | 2.8 | | 36.2 x24.6 | 10.00 | Fujichr. Pro | 100/ | Y | | 15/P | 4 | Conrad,R | A |
| 18.330 | 851103 | 0.700 | 5 | 0.140 | 2.9 x 2.0 | 40.00 | Tri-X Pro | 320/ | N | X | 3/T | 1 | Travnik,N.A.S | B |
| 18.413 | 851104 | 0.300 | 4.5 | | 6.9 x 4.6 | 10.00 | Kodak 2415 | | Y | S | 1/C | 3 | Chester,G.R | C |
| 18.433 | 851105 | 0.050 | 1.4 | | 39.6 x27.0 | 1.00 | Kodak VR | 1000/ | N | T | 13/C | 2 | Priester,D.C | |
| 18.434 | 851106 | 0.050 | 1.4 | | 39.6 x27.0 | 0.50 | Kodak VR | 1000/ | N | T | 14/C | 2 | Priester,D.C | |
| 18.436 | 851107 | 0.050 | 2.0 | | | 0.33 | Fujicolor HR | 1600/ | N | I | 14/P | 4 | Wallace,B.G | D |
| 18.437 | 851108 | 0.100 | 2.8 | | 20.4 x13.7 | 1.50 | Kodak VR | 1000/ | N | T | 15/C | 2 | Priester,D.C | E |
| 18.439 | 851109 | 0.100 | 2.8 | | 20.4 x13.7 | 3.00 | Kodak VR | 1000/ | N | T | 16/C | 2 | Priester,D.C | E |
| 18.503 | 851110 | 0.165 | 2.8 | | 12.5 x 8.3 | 10.00 | Kodak 2415 | | Y | S | 123/P | 3 | Yen,B | F |
| 18.511 | 851111 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/ | N | O | 20/N | 8 | Edberg,S.J | |
| 18.516 | 851112 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 121/P | 3 | Yen,B | G |
| 18.518 | 851113 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | 3M 1000 | 1000/ | N | O | 21/N | 8 | Edberg,S.J | |
| 18.524 | 851114 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 15.00 | Kodak Tri-X | | N | M | 17/P | 1 | Webb,R | H |
| 18.524 | 851115 | 0.200 | 4 | | 10.3 x 6.9 | 15.00 | Kodak Tri-X | | N | M | 18/P | 1 | Webb,R | I |
| 18.528 | 851116 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 122/P | 3 | Yen,B | J |
| 18.529 | 851117 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 6.75 | Kodak Tri-X | 400/ | N | | 34/C | 8 | Edberg,S.J | |
| 18.529 | 851118 | 0.500 | 5 | | 4.1 x 2.7 | 3.00 | Fujichr.1600 | | N | | 1/P | 5 | Sanford,J | K |
| 18.532 | 851119 | 0.050 | 1.8 | | 39.6 x27.0 | 1.00 | Agfachrome | 1000/ | N | | 14/P | 15 | Cook,A.J | L |
| 18.532 | 851120 | 0.050 | 1.8 | | 39.6 x27.0 | 2.00 | Agfachrome | 1000/ | N | | 15/P | 15 | Cook,A.J | M |
| 18.536 | 851121 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | Kodak Tri-X | 400/ | N | | 35/C | 8 | Edberg,S.J | |
| 18.536 | 851122 | 0.500 | 5 | | 4.1 x 2.7 | 3.00 | Fujichrome P | 1600/ | N | | 1/S | 5 | Sanford,J | |
| 18.538 | 851123 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | Kodak Tri-X | 400/ | N | | 36/C | 8 | Edberg,S.J | |
| 18.539 | 851124 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 9.00 | Kodak 2415 | | Y | | 018/P | 3 | Royer,R | |
| 18.549 | 851125 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 11.00 | Kodak 2415 | | Y | | 019/P | 3 | Royer,R | N |

NOTE A Zodiacal light interfered with the observation. UV filter used. (This probably means a UV blocking, clear glass filter. Ed.)
NOTE B Instrument is Zeiss Tessar. Format size 88 mm x 128 mm.
NOTE C (Observer's image identifier is 1A. Ed.)
NOTE D (Observer's image identifier is C. Ed.)
NOTE E Auxiliary Soligor lens used. Original instrument characteristics are FL = 0.050, f/1.4.
NOTE F (Observer's image identifier is 12C = 9. Ed.)
NOTE G (Observer's image identifier is 12A = 27. Ed.) Instrument is Schmidt camera.
NOTE H Wind vibration. Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE I Windy. Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE J (Observer's image identifier is 12B = 29. Ed.) Instrument is Schmidt camera.
NOTE K Start time very uncertain. "Push" processed 2 stops.
NOTE L Start time uncertain.
NOTE M Start time uncertain. Exposure duration uncertain.
NOTE N Red Wr. 29 filter used.

DATE: 19 MAR 1986

DATE: 19 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.00 | 817530 | 2.8 | B | AAVSO | 11 | 7 | 6 | 262 | 0.05 | R | 4 | 7 | | | | Chernis,K | |
| 19.055 | 817531 | 3.7 | M | 4B | 9 | 6 | 5 | 250 | 0.04 | B | | 12 | 5.6 | Y | 1 | Henshaw,C | A |
| 19.077 | 817532 | 3.6 | M | 4B | | | | | 0.035 | B | | 9 | 5.3 | Y | 1 | Begbie,M.J.R | |
| 19.083 | 817533 | 2.9 | B | 4B | 15 12 | 5 | 7.5 | 275 | 0.06 | B | | 15 | 5.4 | Y | 2 | Vincent,J | B |
| 19.090 | 817534 | | | | 7.7 | 7 | | 261 | 0.30 | N | 8.5 | 102 | 5.3 | Y | 1 | Begbie,M.J.R | C |
| 19.090 | 817535 | 3.4 | M | 4B | | 6 | 3.7 | 278 | | EY | | | 5.5 | Y | 1 | Fleet,R.W | |
| 19.094 | 817536 | 3.7 | M | 4B | 11 | 6 | 8.9 | 297 | 0.08 | B | | 11 | 5.5 | Y | 1 | Fleet,R.W | D |
| 19.167 | 817537 | | | 4B | 20 | | | | 0.05 | B | | 10 | 3.0T | Y | 2 | Melandri,F | E |
| 19.167 | 817538 | | | 4B | 27 | 7 | | | 0.030 | B | | 8 | 3.5T | Y | 2 | Villa,M | |
| 19.174 | 817539 | 4.0 | M | 4B | 17 | 7 | | | 0.05 | B | | 12 | | Y | 2 | Tanti,T | F |
| 19.175 | 817540 | 4.5 | B | | | 3 | | | 0.080 | R | 6.2 | 12 | 3.0 | Y | 1 | Lieder,F | |
| 19.23 | 817541 | 2.7 | | DCS 9 | | | | | | EY | | | 7 | Y | 9 | Bus,E.P | |
| 19.23 | 817542 | 3.0 | S | DCS 9 | 18 | 7 | 13 | 262 | 0.018 | B | | 3 | 7 | Y | 9 | Bus,E.P | G |
| 19.23 | 817543 | 2.8 | | DCS 8,9 | | | 13 | | | EY | | | 7 | Y | 8 | Comello,G | |
| 19.23 | 817544 | 3.1 | S | DCS 8,9 | 6 | 7 | 13 | | 0.018 | B | | 3 | 6.5 | Y | 8 | Comello,G | |
| 19.24 | 817545 | 3.2 | B | DCS 9 | | | | | 0.08 | B | | 3 | 7 | Y | 9 | Bus,E.P | |
| 19.297 | 817546 | 3.0 | B | 14 | | 4 | | | 0.05 | B | | 20 | 6.1 | Y | 1 | Girardo,M.M | |
| 19.299 | 817547 | 2.9 | B | 121 | 0.1 | 4 | 2.97 | | 0.050 | B | | 20 | 6.0 | Y | 1 | Castrillon,M.E | |
| 19.299 | 817548 | 3.8 | B | 121 | | 4 | 2.97 | | 0.05 | B | | 20 | 6.1 | Y | 1 | Carello,S | |
| 19.314 | 817549 | 3.1 | B | 121 | | 3 | 2.0 | 264 | 0.05 | B | | 20 | 5.5 | Y | 1 | da Silva,L.A.L | |
| 19.316 | 817550 | 3.4 | B | 121 | 6 | 2 | 5 | 260 | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 19.371 | 817551 | 3.8 | B | 121 | 6.3 | 4 | 2.62 | | 0.050 | B | | 20 | 6.2 | Y | 2 | Siccardi,L | H |
| 19.375 | 817552 | | | | | | 3.5 | | 0.12 | B | | 20 | 6.0 | | 2 | Ferrin,I | |
| 19.4917 | 817553 | | | | 9.1 | 6 | | | 0.14 | SN | 3.6 | 20 | 6.3 | Y | 15 | Cook,A.J | |
| 19.5118 | 817554 | 2.7 | M | 4B | 10 | 6 | 9.32 | 261 | 0.05 | B | | 7 | 6.3 | Y | 15 | Cook,A.J | I |
| 19.52 | 817555 | 3.0 | | 4B, BSC | | 7 | 9 | 290 | | EY | | | 5.0 | Y | 13 | Morris,C.S | J |
| 19.5208 | 817556 | 2.7 | M | 4B | 9 | 6 | 4.07 | 257 | 0.05 | B | | 7 | 6.3 | Y | 15 | Cook,A.J | K |
| 19.53 | 817557 | 3.1 | M | 4B, BSC | 12.5 | 7 | 2 | 270 | 0.050 | B | | 10 | 5.0 | Y | 13 | Morris,C.S | L |
| 19.53 | 817558 | | | | | | | | 0.256 | N | 4.5 | 222 | 5.0 | Y | 13 | Morris,C.S | M |
| 19.54 | 817559 | 2.8 | B | 4B | | | 7.5 | 270 | | EY | | | 6 | Y | 22 | Hale,A | |
| 19.669 | 817560 | | | | | | 4 | | 0.05 | B | | 7 | 6.0 | Y | 15 | Garradd,G | N |
| 19.674 | 817561 | 2.9 | S | 4B | | | | | | EY | | | | | | Garradd,G | |
| 19.681 | 817562 | | | | | 6 | | | 0.31 | N | 5.4 | 129 | | | | Garradd,G | |
| 19.71 | 817563 | 3.4 | S | 4B | | | | | 0.023 | B | | 3 | | | | Jones,A | O |
| 19.71 | 817564 | | | | 9 | 7 | 3.7 | | 0.080 | B | | 11 | | | | Jones,A | P |
| 19.72 | 817565 | 3.0 | S | 4B | 12 | 6 | | | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | |
| 19.72 | 817566 | 3.3 | B | 4B | | | | | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | |
| 19.726 | 817567 | 2.9 | S | 4C | | | 5 | 270 | | EY | | | 6.0 | Y | 1 | Seargent,D | |
| 19.726 | 817568 | | | | 11 | 7 | | | 0.08 | B | | 15 | | | | Seargent,D | |
| 19.73 | 817569 | 2.9 | | 4B | | | 9 | 260 | | EY | | | 6 | Y | 11 | Bouma,R.J | Q |
| 19.750 | 817570 | 2.8 | | 4B | | | 3 | | | EY | | | | Y | 1 | Tregaskis,T.B | R |
| 19.755 | 817571 | 2.8 | B | 4B | | 8 | 4 | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | S |
| 19.764 | 817572 | | | 4B | 9.9 | 6 | 0.67 | 285 | 0.15 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | T |
| 19.767 | 817573 | 3.1 | B | 4B | | 8 | 2.0 | 265 | 0.05 | B | | 7 | 3.5 | Y | 3 | Bembrick,C | U |
| 19.77 | 817574 | 2.7 | S | 4B | 15 | | 8.0 | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | |
| 19.792 | 817575 | 4.0 | S | 4B | 8 | 5 | 3 | 270 | 0.050 | B | | 12 | | Y | 1 | Batza,H | V |
| 19.792 | 817576 | 3.8 | S | 4B | 6 | | 2.2 | 260 | 0.05 | B | | 7 | 5.4 | Y | 1 | Bryant,K | W |
| 19.80 | 817577 | 2.7 | S | | 15 | 6 | 7 | 255 | 0.08 | B | | 11 | 5.7 | Y | 2 | Akita,I | |
| 19.81 | 817578 | 3.9 | M | SAO | 13 | 7 | 2.2 | 265 | 0.065 | R | 8 | 16 | 4.5 | Y | 6 | Nakamura,A | |
| 19.81 | 817579 | 3.3 | M | 4B | | | 7.0 | | 0.05 | B | | 7 | 6.0 | Y | 1 | Suzuki,K | |
| 19.81 | 817580 | | | 4B | 3.9 | 5 | | | 0.25 | | 4.2 | 88 | 6.0 | Y | 1 | Suzuki,K | X |
| 19.829 | 817581 | 3.5 | S | 4B | 12 | 5 | 4 | 270 | 0.07 | B | | 10 | 4.0 | Y | 1 | Kobayashi,J | |

NOTE A Length of spine 1 deg.; PA of spine 240. Gas tail 5 deg. at PA 250; dust tail 3 deg. at PA 265.
NOTE B Comp stars Pi Sgr and Beta Cap. Cirrus cloud.
NOTE C Tail measurement refers to dust tail only.
NOTE D Midpoint of old gas tail: 4.0 deg. at PA 262. End point of old gas tail: 8.9 deg. at PA 257. New gas tail: 3.2 deg. at PA 259. Spike: 1.0 deg. at PA 258. Midpoints of dust tail: 2.8 deg. at PA 272; 5.3 deg. at PA 276. End point of dust tail: 8.3 deg. at PA 277.
NOTE E I haven't seen the tail with the binoculars.
NOTE F Clouds. Twilight.
NOTE G Gas tail approximately 13 deg. at PA 262. Dust tail exceeds 7 deg. at PA 248-280.
NOTE H Coma diameter and tail length approximate.
NOTE I Tail 1 (PA 261). Tail 2 greatest length and southern boundary at PA 268; tail 2 north boundary 7.25 deg. at PA 290.
NOTE J Differential extinction correction of -0.1 mag. was applied. Multiple tails define the shape of the fan tail. Tail was brighter on south side.
NOTE K Tail 1 (PA 257). Tail 2 south boundary 6.45 deg. at PA 260; tail 2 greatest length (PA 268); tail 2 north boundary 6.80 deg. at PA 279.
NOTE L Tail much narrower in binoculars.
NOTE M Jet activity was suspected toward PAs 90: and 180:. Condensation was offset toward the north.
NOTE N First tail is dust; second tail is gas.
NOTE O Cloud cleared away about dawn.
NOTE P Tail PA 260-282.
NOTE Q Gas tail at PA 260. Dust tail at PA 270.
NOTE R Tail single and not particularly broad.
NOTE S Omega Cen more impressive than Halley's comet.
NOTE T Tail length is lower limit. PA approximate: main tail - with fainter broad tail to N.
NOTE U Both edges of tail diffuse.
NOTE V Haze. (Observer gave limit as 8.5. Ed.)
NOTE W DC = strong.
NOTE X Meter. (Coma diameter. Ed.) Instrument is Wright-Schmidt.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.094 | 830961 | 4 | 0.08 | B | | 11 | | 5.5 | 1 | Fleet,R.W | A |
| 19.105 | 830962 | 0.20 | 0.30 | N | 8.5 | 102,212,425 | 29 | 5.3 | 1 | Begbie,M.J.R | B |
| 19.361 | 830963 | | | | | | 5 | | | Zanette,D | C |
| 19.524 | 830964 | 3 | 0.050 | B | | 7 | 10 | 6.3 | 15 | Cook,A.J | |
| 19.769 | 830965 | 0.60 | 0.152 | N | 8 | 64 | | | 1 | Tregaskis,T.B | D |
| 19.771 | 830966 | 0.15 | 0.30 | N | 5 | 176 | | 6.0 | 2 | Thompson,G | E |
| 19.778 | 830967 | | | | | | 10 | | | McNaught,R.H | F |

NOTE A Old gas tail end point at PA 257. New gas tail at PA 259. Spike at PA 258. Dust tail end point at PA 277. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Gas tail at PA 261. Fan centred at PA 90. Vertex distance 3 arc min. Semi latus rectums P1 = 3.5 arc min., P2 = 3.5 arc min. Nuclear jet approx. 30 arc sec. Coma appears very dusty. A prominent gas tail has appeared. Fan is less prominent than yesterday - material appears to be flowing into the tail.
NOTE C Drawing made from a negative exposed 5 minutes on Agfapan 400 ASA 50 mm lens. The large number of stars seen on the negative are depicted as they appear in Atlas Coeli. The maximum magnitude estimated on the negative is approximately 8. "Stylet" is

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curved and cut away to the south. (Translate IHW staff. Ed.) Scale = 11.9'/mm.
NOTE D Tail at PA 285. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Note the prominent sunward jets from the nucleus - one larger than the other. There is also a rift in the tail. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F Tail about 6 deg. At 76x envelope and details quite indistinct.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.053 | 851126 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | O | 10/P | 2 | Soc. Astro. de France | A |
| 19.107 | 851127 | 0.200 | 2 | | 10.3 x 6.9 | 9.00 | Kodak 103a-O | | N | S | 9/P | 1 | Dragesco,J | |
| 19.488 | 851128 | 0.205 | 3.8 | | 10.0 x 6.7 | 10.00 | Kodak VR 200 | 200/ | N | X | 8/P | 1 | Cunningham,J | |
| 19.491 | 851129 | 0.050 | 1.8 | | 39.6 x27.0 | 1.00 | Agfachrome | 1000/ | N | | 16/P | 15 | Cook,A.J | |
| 19.493 | 851130 | 0.205 | 3.8 | | 10.0 x 6.7 | 5.00 | Kodak VR 200 | 200/ | N | X | 9/P | 1 | Cunningham,J | |
| 19.494 | 851131 | 0.050 | 1.8 | | 39.6 x27.0 | 2.00 | Agfachrome | 1000/ | N | | 17/P | 15 | Cook,A.J | |
| 19.501 | 851132 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 2.00 | Kodak VR 200 | 200/ | N | X | 10/P | 1 | Cunningham,J | |
| 19.505 | 851133 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 2.00 | Kodak VR 200 | 200/ | N | X | 11/P | 1 | Cunningham,J | |
| 19.510 | 851134 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | 3M 1000 | 1000/ | N | O | 2/N | 8 | Edberg,S.J | |
| 19.510 | 851135 | 0.085 | 3.8 | | 23.9 x16.1 | 10.00 | Ektachrome | 400/ | N | O | 6/N | 8 | Edberg,S.J | B |
| 19.516 | 851136 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 131/P | 3 | Yen,B | C |
| 19.517 | 851137 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/ | N | O | 3/N | 8 | Edberg,S.J | |
| 19.520 | 851138 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | 3M 1000 | 1000/ | N | O | 4/N | 8 | Edberg,S.J | |
| 19.524 | 851139 | 0.500 | 5 | | 4.1 x 2.7 | 10.00 | Fujichrome P | 1600/ | N | | 2/S | 5 | Sanford,J | |
| 19.524 | 851140 | 0.711 | 2.8 | 0.254 | 2.9 x 1.9 | 15.00 | Kodak Plus-X | 125/ | N | S | 48/P | 1 | Young,J.W | D |
| 19.531 | 851141 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/ | N | O | 5/N | 8 | Edberg,S.J | |
| 19.531 | 851142 | 0.500 | 5 | | 4.1 x 2.7 | 5.00 | Fujichr.1600 | | N | | 2/P | 5 | Sanford,J | E |
| 19.531 | 851143 | 0.165 | 2.8 | | 12.5 x 8.3 | 10.00 | Kodak 2415 | | Y | S | 132/P | 3 | Yen,B | F |
| 19.533 | 851144 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 13.00 | Kodak Tri-X | | N | M | 19/P | 1 | Webb,R | G |
| 19.534 | 851145 | 0.200 | 4 | | 10.3 x 6.9 | 18.00 | Kodak Tri-X | | N | M | 20/P | 1 | Webb,R | H |
| 19.536 | 851146 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 4.58 | 3M 1000 | 1000/ | N | O | 6/N | 8 | Edberg,S.J | |
| 19.538 | 851147 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | 3M 1000 | 1000/ | N | O | 7/N | 8 | Edberg,S.J | |
| 19.545 | 851148 | 1.830 | 6 | 0.305 | 1.1 x 0.8 | 12.00 | Kodak 2415 | | Y | | 021/P | 3 | Royer,R | I |
| 19.715 | 851149 | 0.180 | 2.8 | | 11.4 x 7.6 | 19.50 | Kodak 2415 | | Y | O | 35/S | 15 | Garradd,G | J |
| 19.734 | 851150 | 0.135 | 3.5 | | 15.2 x10.2 | 4.00 | Ektachr.400 | | N | X | 20/S | 1 | Tregaskis,T.B | K |
| 19.740 | 851151 | 0.055 | 1.2 | | 36.2 x24.6 | 1.00 | Ektachr.400 | | N | X | 21/S | 1 | Tregaskis,T.B | K |
| 19.740 | 851152 | 0.055 | 1.2 | | 36.2 x24.6 | 0.50 | Ektachr.400 | | N | X | 22/S | 1 | Tregaskis,T.B | K |
| 19.741 | 851153 | 0.055 | 1.2 | | 36.2 x24.6 | 2.00 | Ektachr.400 | | N | X | 23/S | 1 | Tregaskis,T.B | K |
| 19.744 | 851154 | 0.085 | 2.0 | | 23.9 x16.1 | 15.00 | Kodak 2415 | | Y | O | 36/S | 15 | Garradd,G | J |
| 19.762 | 851155 | 0.180 | 2.8 | | 11.4 x 7.6 | 16.00 | Kodak 2415 | | Y | O | 37/S | 15 | Garradd,G | J |
| 19.777 | 851156 | 0.180 | 2.8 | | 11.4 x 7.6 | 19.00 | Kodak 2415 | | Y | O | 38/S | 15 | Garradd,G | J |

NOTE A (Observer's image identifier is 4a. Ed.)
NOTE B 120 size film used (6x6 cm).
NOTE C (Observer's image identifier is 13A = 31. Ed.) Instrument is Schmidt camera.
NOTE D Instrument is Schmidt camera. (Observer's image identifier is followed suffix -HS. Ed.)
NOTE E "Push" processed 2 stops.
NOTE F (Observer's image identifier is 13B = 18. Ed.)
NOTE G Wind vibration/poor seeing. Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE H Windy/soft focus? Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE I Poor focus. Red Wr. 29 filter used.
NOTE J Temperature for hypersensitization 60-65 deg. C.
NOTE K Push processed to 800 ASA.

DATE: 20 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.00 | 817582 | 3.6 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 20.00 | 817583 | 3.0 | V | AAVSO | | | | | | EY | | | | | | Churyumov,K | |
| 20.101 | 817584 | 3.9 | M | 4B | 12 | 6 | 6.5 | 263 | 0.08 | B | | 11 | | | | Fleet,R.W | A |
| 20.104 | 817585 | 3.4 | M | 4B | | 6 | 5.0 | 276 | | EY | | | 5.6 | Y | 1 | Fleet,R.W | |
| 20.111 | 817586 | 3.5 | S | 4B | 11.0 | 6 | 6.00 | 275 | 0.08 | B | | 30 | 5.8 | Y | 1 | Campos,J | B |
| 20.23 | 817587 | 2.9 | | DCS 8,9 | | | | | | EY | | | 6.5 | Y | 8 | Comello,G | |
| 20.24 | 817588 | 2.6 | | DCS 9 | | | | | | EY | | | 7 | Y | 8 | Bus,E.P | |
| 20.24 | 817589 | 3.2 | B | DCS 9 | | | | | 0.018 | B | | 3 | 7 | Y | 8 | Bus,E.P | |
| 20.24 | 817590 | 2.9 | S | DCS 9 | 18 | 7 | 13 | 263 | 0.018 | B | | 3 | 7 | Y | 9 | Bus,E.P | C |
| 20.24 | 817591 | 3.2 | S | DCS 8,9 | 6 | 7 | 12 | | 0.018 | B | | 3 | 6.5 | Y | 8 | Comello,G | |
| 20.292 | 817592 | 3.4 | B | AAVSO | | 3 | 15.00 | 265 | 0.040 | B | | 10 | 5.5 | Y | 1 | Alves,A.A | |
| 20.302 | 817593 | | | | | 4 | | | 0.05 | B | | 20 | 6.5 | Y | 3 | da Silva,L.A.L | |
| 20.323 | 817594 | 3.4 | B | 121 | 6 | 2 | 6 | 260 | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 20.33 | 817595 | 3.8 | B | | | | 6 | | 0.35 | B | | 7 | | | | Kiselev,N | |
| 20.375 | 817596 | | | | | | 4.0 | | 0.12 | B | | 20 | 6.0 | | 2 | Ferrin,I | |
| 20.385 | 817597 | 4.4 | M | 4B | 20.0 | 7 | 6.0 | | 0.05 | B | | 12 | 5.5 | Y | 2 | Knight,S | D |
| 20.490 | 817598 | 3.3 | B | 4B | 11 | 5 | 8.5 | 260 | 0.05 | B | | 10 | 6.5 | Y | 6 | Hays Jr,R.H | E |
| 20.510 | 817599 | 2.4 | S | 4B | 38 | 9 | 3 | 272 | 0.035 | B | | 7 | 4.5C | Y | 1 | Gronek,J.D | F |
| 20.5104 | 817600 | 2.7 | M | 4B | | 6 | 7.5 | 270 | | EY | | | 6.3 | Y | 15 | Cook,A.J | G |
| 20.52 | 817601 | 2.8 | | 4B, BSC | | 7 | 4 | 265 | | EY | | | 5.0 | Y | 13 | Morris,C.S | H |
| 20.53 | 817602 | 3.0 | M | 4B, BSC | 14 | 7 | 7 | 270 | 0.050 | B | | 10 | 5.0 | Y | 13 | Morris,C.S | I |
| 20.692 | 817603 | 2.9 | S | 4B | | | 8 | | | EY | | | 6.5 | Y | 2 | Garradd,G | |
| 20.694 | 817604 | | | | | | 8 | | 0.05 | B | | 7 | 6.5 | Y | 2 | Garradd,G | J |
| 20.701 | 817605 | | | | | 9 | | | 0.31 | N | 5.4 | 129 | | | | Garradd,G | K |
| 20.72 | 817606 | 3.0 | S | 4B | 10 | 6 | | | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | |
| 20.72 | 817607 | 3.3 | B | 4B | | | | | 0.05 | B | | 10 | 6 | Y | 11 | Bouma,R.J | |
| 20.729 | 817608 | | | | 8 | 8 | 0.25 | 5 | 0.08 | B | | 15 | | | | Seargent,D | L |
| 20.729 | 817609 | 2.7 | S | 4C | | | 7 | 262 | | EY | | | 6.1 | Y | 1 | Seargent,D | M |
| 20.729 | 817610 | | | | 8 | 8 | 0.25 | 5 | 0.08 | B | | 15 | | | | Seargent,D | L |
| 20.76 | 817611 | 2.8 | | 4B | | | 11 | 262 | | EY | | | 6.5 | Y | 11 | Bouma,R.J | N |
| 20.76 | 817612 | | | | | | 0.25 | 5 | 0.080 | B | | 15 | 6.5 | Y | 11 | Bouma,R.J | O |
| 20.76 | 817613 | 2.6 | S | 4B | 17 | | 10.0 | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | |
| 20.778 | 817614 | 3.2 | B | 4B | | 8 | 2.5 | 270 | 0.05 | B | | 7 | 3.8 | Y | 3 | Bembrick,C | P |
| 20.79 | 817615 | 4.0 | S | AAVSO | 4 | 5 | 3 | 275 | 0.07 | B | | 10 | 5.5 | Y | 1 | Hayashi,A | |
| 20.792 | 817616 | 3.2 | M | 4B | 7.6 | 6 | | | 0.12 | N | 6 | 60 | 3.0 | Y | 2 | Kishi,A | |
| 20.80 | 817617 | 3.2 | S | 4B | | | | | 0.08 | B | | 11 | 4.0 | Y | 3 | Momose,M | |
| 20.806 | 817618 | 3.4 | M | 4B | 6.2 | 6 | 2.0 | 260 | 0.1 | N | 10 | 25 | 4.5 | Y | 1 | Ichikawa,K | |
| 20.819 | 817619 | 3.7 | M | 4B | 7.5 | 7 | | | 0.08 | B | | 11 | 4 T | Y | 2 | Mitsuma,S | Q |
| 20.819 | 817620 | | | | | | 4.5 | 270 | 0.05 | B | | 7 | 4 T | Y | 2 | Mitsuma,S | |
| 20.82 | 817621 | 3.8 | S | AAVSO | 6 | 5 | 2 | | 0.13 | N | 6.3 | 24 | 5.0 | Y | 1 | Hayashi,A | R |
| 20.83 | 817622 | 3.3 | M | 4B | 5 | 7 | 4 | 270 | 0.08 | B | | 20 | 4.5 | Y | 1 | Oka,A | |
| 20.833 | 817623 | 3.5 | S | 4B | 6.7 | 6 | 0.4 | 280 | 0.05 | B | | 7 | 2.5T | Y | 1 | Kanai,K | |
| 20.838 | 817624 | 4.0 | B | 4B | 6.7 | 6 | 0.4 | 280 | 0.05 | B | | 7 | 2.5T | Y | 1 | Kanai,K | |
| 20.99 | 817625 | 3.6 | B | AAVSO | | | | | 0.08 | B | | 20 | | | | Churyumov,K | |
| 20.99 | 817626 | 2.8 | V | AAVSO | | | | | | EY | | | | | | Churyumov,K | |

NOTE A Kink in gas tail: 5.3 deg. at PA 259. End point of gas tail: 6.5 deg. at PA 263. Midpoint of dust tail: 3.3 deg. at PA 274. End point of gas tail: 6.9 deg. at PA 282.
NOTE B Narrow, distinct bluish tail.
NOTE C Tail at PA 263 approximately 13 deg. Tail 2 exceeds 7 deg. at PA 255-290.
NOTE D Haze.
NOTE E Gas tail always more prominent than dust tail on March mornings. Maximum lengths were also noted with naked eye in March.
NOTE F Exc. see.
NOTE G Tail 1 at PA 270. Tail 2 greatest length at PA 280; tail 2 south boundary at 8.02 deg. at PA 274, north boundary at 6.20 deg. at PA 282.
NOTE H Differential extinction correction of -0.1 mag. was applied. Additional tail data: 9 degrees in PA 310; 5 degrees in PA 325; and 5 degrees in PA 0. Multiple tails define the shape of the fan tail. Tail lost in the Milky Way.
NOTE I Differential extinction correction of -0.1 mag. was applied. Tail much narrower in binoculars. Head shaped like a rounded "V" rather than parabolic.
NOTE J 8 deg. tail is gas; 4 deg. tail is dust.
NOTE K Very faint central condensation.
NOTE L Prob. anti-tail, length uncertain, PA approximate.
NOTE M 8 deg. tail length uncertain, PA approximate.
NOTE N Gas tail at PA 262. Dust tail at PA 273.
NOTE O PA value approximate.
NOTE P Both edges of tail diffuse.
NOTE Q m2 = 7.3.
NOTE R PA 260 to 280.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.101 | 830968 | 4 | 0.08 | B | | 11 | | 5.6 | 1 | Fleet,R.W | A |
| 20.112 | 830969 | 0.16 | 0.30 | N | 8.5 | 102,212,425 | 13 | 5.3 | 1 | Begbie,M.J.R | B |
| 20.731 | 830970 | | | | | | 196 | | | McNaught,R.H | C |
| 20.802 | 830971 | 0.12 | 0.20 | N | 6.3 | 250 | | | 5 | Lovejoy,T | D |

NOTE A Gas tail kink at PA 259, end point at PA 263. Dust tail end point at PA 282. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Fan PA 30-120; tail (inner) at PA 259. Vertex distance 3.5 arc min.; semi latus rectums P1 = 3 arc min., P2 = 3 arc min. Symmetrical fan very like a fountain in shape. Coma symmetrical, but slightly elongated tailwards.
NOTE C Diffuse jet relatively faint but certain. Head looked almost stellar to naked eye about 4 1/2. Two drawings supplied.
NOTE D (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.026 | 851157 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 5.00 | Fujichrome | 400/ | N | O | 24/P | 2 | Soc. Astro. de France | A |
| 20.053 | 851158 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | X | 1/P | 1 | Marafie,A.H | |
| 20.108 | 851159 | 0.200 | 2 | | 10.3 x 6.9 | 8.00 | Kodak 2415 | | Y | S | 10/P | 1 | Dragesco,J | B |
| 20.334 | 851160 | 1.710 | 5.7 | | 1.2 x 0.8 | 1.00 | 3M 1000 | 1000/ | N | | 16/P | | Pizzi,R | |
| 20.337 | 851161 | 1.710 | 5.7 | | 1.2 x 0.8 | 1.50 | 3M 1000 | 1000/ | N | | 17/P | | Pizzi,R | |
| 20.341 | 851162 | 1.710 | 5.7 | | 1.2 x 0.8 | 3.00 | 3M 1000 | 1000/ | N | | 18/P | | Pizzi,R | |
| 20.390 | 851163 | 0.63 | 1.8 | 0.35 | 3.3 x 2.2 | 4.50 | 103a-F | | N | | 5/P | 2 | Ferrin,I | C |
| 20.415 | 851164 | 0.63 | 1.8 | 0.35 | 3.3 x 2.2 | 5.00 | Agfachrome | 50/ | N | | 19/P | 2 | Ferrin,I | C |
| 20.469 | 851165 | 0.050 | 1.8 | | 39.6 x27.0 | 5.00 | Agfachrome | 1000/ | N | | 18/P | 15 | Cook,A.J | |
| 20.474 | 851166 | 0.050 | 1.8 | | 39.6 x27.0 | 3.00 | Agfachrome | 1000/ | N | | 19/P | 15 | Cook,A.J | |
| 20.475 | 851167 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 5.00 | Kodak VR 200 | 200/ | N | X | 15/P | 1 | Cunningham,J | |
| 20.476 | 851168 | 0.050 | 1.8 | | 39.6 x27.0 | 1.00 | Agfachrome | 1000/ | N | S | 20/P | 15 | Cook,A.J | |

DATE: 20 MAR 1986

DATE: 20 MAR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.477 | 851169 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 3.00 | Kodak VR 200 | 200/ | N | X | 16/P | 1 | Cunningham,J | |
| 20.480 | 851170 | 0.050 | 1.8 | | 39.6 x27.0 | 3.00 | Agfachrome | 1000/ | N | S | 21/P | 15 | Cook,A.J | |
| 20.484 | 851171 | 1.829 | 4.5 | 0.406 | 1.1 x 0.8 | 10.00 | Kodak VR 200 | 200/ | N | X | 17/P | 1 | Cunningham,J | |
| 20.487 | 851172 | 0.085 | 3.8 | | 23.9 x16.1 | 11.00 | Ektachrome | 400/ | N | O | 7/N | 9 | Edberg,S.J | D |
| 20.489 | 851173 | 0.050 | 2 | | 39.6 x27.0 | 12.00 | 3M 1000 | 1000/ | N | O | 8/N | 9 | Edberg,S.J | |
| 20.493 | 851174 | 0.165 | 2.8 | | 12.5 x 8.3 | 10.00 | Kodak 2415 | | Y | S | 142/P | 3 | Yen,B | E |
| 20.495 | 851175 | 0.205 | 3.8 | | 10.0 x 6.7 | 11.00 | Kodak VR 200 | 200/ | N | X | 18/P | 1 | Cunningham,J | |
| 20.497 | 851176 | 0.050 | 2 | | 39.6 x27.0 | 5.00 | 3M 1000 | 1000/ | N | O | 9/N | 9 | Edberg,S.J | |
| 20.501 | 851177 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 141/P | 3 | Yen,B | F |
| 20.510 | 851178 | 0.050 | 2 | | 39.6 x27.0 | 20.00 | 3M 1000 | 1000/ | N | O | 10/N | 9 | Edberg,S.J | |
| 20.510 | 851179 | 0.050 | 2 | | 39.6 x27.0 | 20.00 | Kodak Tri-X | 400/ | N | O | 4/C | 9 | Edberg,S.J | |
| 20.514 | 851180 | 0.105 | 2.5 | | 19.5 x13.0 | 15.00 | Kodak EES | 1600/ | N | | 023/P | | Royer,R | G |
| 20.514 | 851181 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 15.00 | Kodak IIa-D | | N | | 025/P | 6 | Royer,R | H |
| 20.518 | 851182 | 0.050 | 2 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 11/N | 9 | Edberg,S.J | |
| 20.518 | 851183 | 0.050 | 2 | | 39.6 x27.0 | 1.00 | Kodak Tri-X | 400/ | N | O | 5/C | 9 | Edberg,S.J | |
| 20.522 | 851184 | 0.711 | 2.8 | 0.254 | 2.9 x 1.9 | 19.00 | Kodak Plus-X | 125/ | N | S | 49/P | 1 | Young,J.W | I |
| 20.523 | 851185 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | FujichromePZ | | N | | 5/S | 3 | Sanford,J | J |
| 20.525 | 851186 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/ | N | O | 12/N | 9 | Edberg,S.J | |
| 20.525 | 851187 | 0.050 | 2 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 6/C | 9 | Edberg,S.J | |
| 20.528 | 851188 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 13.00 | Kodak IIa-O | | Y | | 024/P | 6 | Royer,R | K |
| 20.530 | 851189 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | 3M 1000 | 1000/ | N | O | 13/N | 9 | Edberg,S.J | |
| 20.530 | 851190 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | Fujichr.1600 | | N | | 3/P | 3 | Sanford,J | L |
| 20.531 | 851191 | 0.050 | 2 | | 39.6 x27.0 | 2.00 | Kodak Tri-X | 400/ | N | O | 7/C | 9 | Edberg,S.J | |
| 20.534 | 851192 | 0.180 | 2.8 | | 11.4 x 7.6 | 7.00 | FujichromePZ | | N | | 4/S | 3 | Sanford,J | J |
| 20.538 | 851193 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 10.00 | Kodak 098 | | N | | 026/P | 6 | Royer,R | M |
| 20.543 | 851194 | 0.200 | 8 | | 10.3 x 6.9 | 10.00 | Fujichrome | 400/ | Y | X | 108/P | 3 | Snyder,L.F | |
| 20.683 | 851195 | 0.180 | 2.8 | | 11.4 x 7.6 | 20.00 | Kodak 2415 | | Y | O | 39/S | 2 | Garradd,G | N |
| 20.706 | 851196 | 0.085 | 2.4 | | 23.9 x16.1 | 9.33 | Kodak 2415 | | Y | O | 40/S | 2 | Garradd,G | O |
| 20.742 | 851197 | 0.180 | 2.8 | | 11.4 x 7.6 | 13.33 | Kodak 2415 | | Y | O | 41/S | 2 | Garradd,G | N |

NOTE A (Observer's image identifier is 5d. Ed.)
NOTE B Haze.
NOTE C Instrument is Schmidt camera.
NOTE D 120 size film used (6x6 cm).
NOTE E (Observer's image identifier is 14B = 29. Ed.)
NOTE F (Observer's image identifier is 14A. Ed.) Instrument is Schmidt camera.
NOTE G About 8 deg. tail shown - ends near Zeta Sgr.
NOTE H Visual plate. Photograph made by S. Padilla and R. Royer. Wr. 4 filter used.
NOTE I Instrument is Schmidt camera. (Observer's image identifier is followed suffix -HS. Ed.)
NOTE J Push processed 2 stops. Normal ASA 1600.
NOTE K Apparent dust glow to north of comet may be spurious on hypered plate. Photograph made by S. Padilla and R. Royer.
NOTE L Start time very uncertain. "Push" processed 2 stops.
NOTE M Red plate. Wr. 29 filter used. Into dawn light. Photograph made by S. Padilla and R. Royer.
NOTE N Temperature for hypersensitization 60-65 deg. C.
NOTE O Lens aperture stopped down from f/2.0 to f/2.4. Temperature for hypersensitization 60-65 deg. C.

DATE: 21 MAR 1986

DATE: 21 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.003 | 817627 | 3.4 | B | 4B | 15 | 7 | 5 | 290 | 0.050 | B | | 20 | 6.0 | Y | 2 | Auckbur,R | A |
| 21.014 | 817628 | 3.3 | B | 4B | 15 | 7 | 5 | 290 | 0.050 | B | | 20 | 6.0 | Y | 2 | Auckbur,R | B |
| 21.031 | 817629 | 3.4 | B | 4B | 15 | 7 | 5 | 290 | 0.050 | B | | 20 | 6.0 | Y | 2 | Auckbur,R | B |
| 21.089 | 817630 | 4.0 | M | 4B | 7 | 6 | 6 | 260 | 0.04 | B | | 12 | 5.6 | Y | 1 | Henshaw,C | C |
| 21.208 | 817631 | 3.7 | | 4B | | | 7 | 96 | | EY | | | 5.5 | Y | 3 | Thomas,A | D |
| 21.329 | 817632 | 3.2 | B | 121 | 0.1 | 4 | 2.80 | | 0.050 | B | | 20 | 4.5 | Y | 1 | Castrillon,M.E | E |
| 21.361 | 817633 | 4.5: | | 121 | | 3 | | | 0.114 | N | 8 | 39 | 4.9 | Y | 1 | Levai,R | |
| 21.399 | 817634 | 2.9 | M | 4B | 10 | 6 | 4.0 | 274 | 0.05 | B | | 7 | 4.9 | Y | 1 | DeYoung,J.A | |
| 21.40 | 817635 | 2.9 | B | IHW BAA | | 7 | 3 | | | EY | | | | | | Green,D.W.E | F |
| 21.416 | 817636 | 3.6 | S | 4B | 12 | 6 | 1.7 | 270 | 0.035 | B | | 7 | 5.0 | Y | 3 | Morrison,W | G |
| 21.42 | 817637 | 3.8 | B | 4B | 13 | 7 | 2 | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 21.424 | 817638 | | | 4B | | 6 | | | 0.106 | N | 4.5 | 16 | 6.0 | Y | 1 | Williams,D.J | H |
| 21.427 | 817639 | 3.0 | B | 5B | 35 | 8 | 3 | 302 | 0.20 | SC | 10 | 77 | 5.5 | Y | 1 | Hodonsky,K | |
| 21.427 | 817640 | 3.8 | B | 4B | | | | | 0.08 | B | | 11 | 4.2 | Y | 4 | Gorski,L | |
| 21.430 | 817641 | 4.5 | B | 4B | 3.4 | 6 | | | 0.05 | B | | 7 | 3.3C | Y | 1 | Dodd,W.J | I |
| 21.441 | 817642 | 4.0 | S | 4B | 14 | 6 | 1.4 | 280 | 0.030 | B | | 7 | 5.0 | Y | 2 | Jacobs,T | |
| 21.448 | 817643 | 3.1 | B | 121 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | J |
| 21.458 | 817644 | 3.3 | S | 4B | 60 | 3 | 7 | 101 | 0.080 | B | | 11 | 5.8C | Y | 2 | Bailey,G | K |
| 21.46 | 817645 | | B | 4B | 10.6 | 7 | | | 0.335 | N | 4.5 | 56 | | Y | | Kronk,G | |
| 21.472 | 817646 | 3.2 | B | 4B | 14 | 5 | 8.5 | 260 | 0.05 | B | | 10 | 7.0 | Y | 6 | Hays Jr,R.H | L |
| 21.48 | 817647 | 2.5 | B | 4B | | | 7 | 270 | | EY | | | 6.5 | Y | 2 | Keen,R | M |
| 21.49 | 817648 | 3.1 | B | 4B | 10 | 6 | 7 | 270 | 0.040 | B | | 8 | 6.5 | Y | 2 | Keen,R | M |
| 21.49 | 817649 | 2.8 | S | DCS 9 | 15 | 6 | 3 | 270 | 0.050 | B | | 10 | 5 | Y | 4 | Zanstra,W.T | |
| 21.510 | 817650 | 2.4 | S | 4B | 38 | 9 | 2.5 | 272 | 0.035 | B | | 7 | 4.5C | Y | 1 | Gronek,J.D | N |
| 21.52 | 817651 | 3.0 | M | 4B, BSC | 14 | 7 | 5 | | 0.050 | B | | 10 | 4.5C | Y | 10 | Morris,C.S | O |
| 21.722 | 817652 | | | | 15 | 7 | 0.25 | 7 | 0.05 | B | | 10 | 6.2 | Y | 1 | Seargent,D | P |
| 21.722 | 817653 | 2.7 | S | 4C | | | 6.5 | 270 | | EY | | | 6.2 | Y | 1 | Seargent,D | |
| 21.735 | 817654 | 3.1 | S | 4B | | | 6 | | | EY | | | 6.5 | Y | 2 | Garradd,G | |
| 21.737 | 817655 | | | | | | 7 | | 0.05 | B | | 7 | | | | Garradd,G | Q |
| 21.74 | 817656 | 2.7 | | 4B | | | 8 | 262 | | EY | | | 6.5 | Y | 11 | Bouma,R.J | R |
| 21.74 | 817657 | 3.2 | B | 4B | 14 | 7 | 0.25 | 7 | 0.05 | B | | 10 | 6.5 | Y | 11 | Bouma,R.J | |
| 21.77 | 817658 | 2.6 | S | 4B | | | 10.0 | | | EY | | | 6.5 | Y | 1 | Lovejoy,T | |
| 21.770 | 817659 | 2.9 | S | 159 | | 9 | 1.5 | | | EY | | | 4.0 | Y | 1 | Williams,P.F | |
| 21.775 | 817660 | | | | | 9 | 3.5 | | 0.05 | B | | 10 | 4.0 | Y | 1 | Williams,P.F | |
| 21.78 | 817661 | 3.0 | B | 4B | | 5 | | | | EY | | | 5.8 | Y | | Pearce,A | |
| 21.792 | 817662 | 3.8 | S | 4B | 6 | | 2.2 | 270 | 0.05 | B | | 7 | 5.1 | Y | 1 | Bryant,K | S |
| 21.80 | 817663 | 2.8 | B | 4B | | | | | | EY | | | 6.0 | Y | | Clark,M.L | T |
| 21.81 | 817664 | 3.0 | B | | 20 | 7 | 3 | 250 | | EY | | | 5.0 | Y | 1 | Uda,K | |
| 21.814 | 817665 | 3.6 | M | 4B | 9 | 5 | 1 | 270 | 0.030 | B | | 8 | 4.0C | Y | 1 | Kato,T | |
| 21.826 | 817666 | 4.0 | M | 4B | 25 | 7 | 2.0 | 265 | 0.1 | N | 10 | 25 | 6.5 | Y | 1 | Ichikawa,K | |
| 21.83 | 817667 | 3.5 | S | 4B | 16 | 7 | 3.6 | 276 | 0.25 | N | 5 | 38 | 6.0 | Y | | Clark,M.L | |
| 21.99 | 817668 | 3.2 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 21.99 | 817669 | 2.2 | V | AAVSO | | | 8 | 270 | | EY | | | | | | Churyumov,K | |

NOTE A My first report. PA found by plotting and measuring on a star chart.
NOTE B PA found by plotting and measuring on a star chart.
NOTE C Gas tail 6 deg. at PA 260; dust tail 3 deg. at PA 270.
NOTE D Tail length approximate. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE E Little visible in simple view. (Roughly translated by IHW staff. Ed.)
NOTE F Tail length approximate.
NOTE G Comet altitude 8 deg., comparison stars' altitudes 13 deg., comet's uncorrected magnitude is 4.0.
NOTE H Tail length 6-8 deg. Very clear.
NOTE I Only used 2 comparison stars for magnitude estimate. Haze near horizon. No tail seen.
NOTE J Comet elevation 12 deg.
NOTE K Outstanding! but low on horizon. (PA value appears to be incorrect. Ed.)
NOTE L Gas tail always more prominent than dust tail on March mornings. Maximum lengths were also noted with naked eye in March.
NOTE M Extinction correction applied.
NOTE N Exc. see.
NOTE O Differential extinction correction of -0.2 mag. was applied. Multiple tails define the shape of the fan tail.
NOTE P Anti-tail.
NOTE Q First tail is gas; second tail is dust.
NOTE R Gas tail at PA 262. Dust tail at PA 271.
NOTE S DC = strong.
NOTE T Tails photo'd. to 8.3 deg and 10.8 deg.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.366 | 830972 | | 0.203 | SC | 5 | 113 | 27 | | 4 | Arpin,P | A |
| 21.394 | 830973 | 1.5 | 0.406 | N | 4.5 | 85 | 15 | 5.5 | 1 | Nowak,G.T | B |
| 21.424 | 830974 | | 0.105 | N | 4.2 | 16 | | 6.0 | | Williams,D.J | C |
| 21.490 | 830975 | 0.5 | 0.13 | SC | 10 | 32,120 | 30 | 7.0 | 6 | Hays Jr,R.H | D |
| 21.783 | 830976 | | | | | | | | | McNaught,R.H | E |

NOTE A Three jets and a fountain indicated. Coma circular and uniform. Tail very broad and uniform from edge to edge.
NOTE B Dust tail at PA 45; gas tail at PA 0; antitail at PA 225.
NOTE C The nucleus is compact and bright (mag. 2). The tail is about 6-8 degrees in length. (Duration not indicated. Time of observation is start time. Ed.)
NOTE D Fan or hood at PA 0; fan or hood at PA 180. Vacant area at PA 90. Bright areas form birdlike pattern around 'nucleus'. Vacant area on sunward side of 'nucleus' was not totally dark, but dimmer than rest of coma. This dim area was obvious enough to be distracting. West end of bright open-wing pattern was very ill-defined.
NOTE E V. faint jet? Details v. faint. Near stellar nucleus. (Duration not specified. Time of observation assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.007 | 851198 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 11.00 | Fujichrome | 400/ | N | O | 27/P | 2 | Soc. Astro. de France | A |
| 21.035 | 851199 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | X | 9/P | 1 | Marafie,A.H | B |
| 21.225 | 851200 | 0.100 | 2.9 | | 20.4 x13.7 | 15.00 | Kodak Tri-X | 400/ | N | T | 33/P | 2 | Hernschier,W | C |
| 21.325 | 851201 | 0.700 | 5 | 0.140 | 2.9 x 2.0 | 55.00 | Tri-X Pro | 320/ | N | X | 4/T | 1 | Travnik,N.A.S | D |
| 21.401 | 851202 | 0.63 | 1.8 | 0.35 | 3.3 x 2.2 | 4.50 | 103a-F | | N | | 6/P | 2 | Ferrin,I | B |
| 21.408 | 851203 | 0.135 | 3.5 | | 15.2 x10.2 | 0.50 | Kodak Tri-X | 400/ | N | X | 55/P | 1 | Higuera,A | |
| 21.418 | 851204 | 0.050 | 4.0 | | 39.6 x27.0 | 5.00 | Ektachrome | 400/ | N | | 411/P | | Gianforte,J.S | E |
| 21.418 | 851205 | 0.135 | 2.8 | | 15.2 x10.2 | 5.00 | Ektachrome | 400/ | N | | 410/P | | Gianforte,J.S | F |
| 21.425 | 851206 | 0.058 | 1.4 | | 34.5 x23.4 | 2.00 | Kodak Tri-X | | N | T | 12/C | 2 | Priester,D.C | G |
| 21.427 | 851207 | 0.058 | 1.4 | | 34.5 x23.4 | 1.00 | Kodak Tri-X | | N | T | 13/C | 2 | Priester,D.C | G |
| 21.428 | 851208 | 0.058 | 1.4 | | 34.5 x23.4 | 0.50 | Kodak Tri-X | | N | T | 14/C | 2 | Priester,D.C | G |
| 21.434 | 851209 | 0.200 | 4.5 | | 10.3 x 6.9 | 1.50 | Kodak Tri-X | | N | T | 16/C | 2 | Priester,D.C | G |

DATE: 21 MAR 1986 DATE: 21 MAR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.435 | 851210 | 0.200 | 4.5 | | 10.3 x 6.9 | 0.75 | Kodak Tri-X | | N | T | 17/C | 2 | Priester,D.C | G |
| 21.493 | 851211 | 0.210 | 4 | | 9.8 x 6.5 | 10.00 | Konica | 1600/ | Y | S | 1/S | 1 | Pacholka,W | |
| 21.497 | 851212 | 0.165 | 2.8 | | 12.5 x 8.3 | 10.00 | Kodak 2415 | | Y | S | 152/P | 3 | Yen,B | H |
| 21.502 | 851213 | 0.210 | 4 | | 9.8 x 6.5 | 6.00 | Konica 1600 | | N | | 6/P | 1 | Pacholka,W | I |
| 21.503 | 851214 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/ | N | O | 14/N | 9 | Edberg,S.J | |
| 21.503 | 851215 | 0.210 | 4 | | 9.8 x 6.5 | 10.00 | Konica 1600 | | N | | 5/P | 1 | Pacholka,W | I |
| 21.505 | 851216 | 0.210 | 4 | | 9.8 x 6.5 | 13.00 | Konica 1600 | | N | | 4/P | 1 | Pacholka,W | I |
| 21.508 | 851217 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | 3M 1000 | 1000/ | N | O | 15/N | 9 | Edberg,S.J | |
| 21.509 | 851218 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 151/P | 3 | Yen,B | J |
| 21.513 | 851219 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | 3M 1000 | 1000/ | N | O | 16/N | 9 | Edberg,S.J | |
| 21.514 | 851220 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 0.50 | 3M 1000 | 1000/ | N | O | 17/N | 9 | Edberg,S.J | |
| 21.515 | 851221 | 0.210 | 4 | | 9.8 x 6.5 | 13.00 | Konica | 1600/ | Y | S | 3/S | 1 | Pacholka,W | |
| 21.522 | 851222 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/ | N | O | 18/N | 9 | Edberg,S.J | |
| 21.522 | 851223 | 0.085 | 3.8 | | 23.9 x16.1 | 10.00 | Ektachrome | 400/ | N | O | 11/N | 9 | Edberg,S.J | K |
| 21.526 | 851224 | 0.210 | 4 | | 9.8 x 6.5 | 6.00 | Konica | 1600/ | Y | S | 5/S | 1 | Pacholka,W | |
| 21.528 | 851225 | 0.400 | 6.3 | | 5.2 x 3.4 | 4.00 | Fujicolor HR | 1600/ | N | | 26/N | 1 | Persell,D | |
| 21.531 | 851226 | 0.400 | 6.3 | | 5.2 x 3.4 | 2.00 | Fujicolor HR | 1600/ | N | | 27/N | 1 | Persell,D | |
| 21.535 | 851227 | 0.400 | 6.3 | | 5.2 x 3.4 | 2.00 | Fujicolor HR | 1600/ | N | | 28/N | 1 | Persell,D | |
| 21.537 | 851228 | 0.400 | 6.3 | | 5.2 x 3.4 | 1.00 | Fujicolor HR | 1600/ | N | | 29/N | 1 | Persell,D | |
| 21.542 | 851229 | 0.400 | 6.3 | | 5.2 x 3.4 | 2.00 | Fujicolor HR | 1600/ | N | | 30/N | 1 | Persell,D | |
| 21.543 | 851230 | 0.400 | 6.3 | | 5.2 x 3.4 | 1.00 | Fujicolor HR | 1600/ | N | | 31/N | 1 | Persell,D | |
| 21.685 | 851231 | 0.085 | 2.0 | | 23.9 x16.1 | 25.00 | Kodak 2415 | | Y | O | 42/S | 2 | Garradd,G | L |
| 21.712 | 851232 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.50 | Kodak 2415 | | Y | O | 43/S | 2 | Garradd,G | L |
| 21.725 | 851233 | 0.180 | 2.8 | | 11.4 x 7.6 | 25.00 | Kodak 2415 | | Y | O | 44/S | 2 | Garradd,G | L |
| 21.750 | 851234 | 0.180 | 2.8 | | 11.4 x 7.6 | 30.50 | Kodak 2415 | | Y | O | 45/S | 2 | Garradd,G | L |

NOTE A (Observer's image identifier is 6d. Ed.)
NOTE B Instrument is Schmidt camera.
NOTE C (Observer's image identifier is 3.3/86. Ed.) Photograph has been taken from the area of the Observatorio del Teide, Tenerife (Canary Islands).
NOTE D Instrument is Zeiss Tessar. Format size 88 mm x 128 mm.
NOTE E (Observer's image identifier is 114-11. Ed.) UT start time approximate.
NOTE F (Observer's image identifier is 114-10. Ed.) UT start time approximate.
NOTE G Push processed to 800 ASA.
NOTE H (Observer's image identifier is 15B. Ed.)
NOTE I Push processed to 4000 ASA. (Start time appears to be approximate. Ed.)
NOTE J (Observer's image identifier is 15A = 3. Ed.) Instrument is Schmidt camera.
NOTE K 120 size film used (6x6 cm).
NOTE L Temperature for hypersensitization 60-65 deg. C.

DATE: 22 MAR 1986

DATE: 22 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.01 | 817670 | 3.0 | B | AAVSO | 9 | | 7 | 267 | 0.05 | R | 4 | 7 | | | | Chernis,K | |
| 22.01 | 817671 | 3.8 | B | M | 9 | 9 | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 22.021 | 817672 | 3.3 | M | 4B | | 6 | 4.1 | 272 | | EY | | | 5.7 | Y | 1 | Fleet,R.W | |
| 22.090 | 817673 | 3.6 | M | 4B | 13 | 6 | 4.4 | 261 | 0.08 | B | | 11 | 5.7 | Y | 1 | Fleet,R.W | A |
| 22.094 | 817674 | 4.0 | B | 4B | 30 | 7 | 5.5 | 270 | 0.076 | R | 18 | 56 | 6.1 | Y | 1 | McBain,J | B |
| 22.095 | 817675 | | | 4B | 8 | 6 | | | 0.04 | B | | 12 | 5.6 | Y | 1 | Henshaw,C | |
| 22.113 | 817676 | 3.5 | M | 4B | | | | | 0.035 | B | | 9 | 5.3T | Y | 1 | Begbie,M.J.R | |
| 22.118 | 817677 | 3.5 | S | 4B | 7.0 | 7 | 5.00 | 262 | 0.13 | R | 4 | 21 | 5.7 | Y | 1 | Campos,J | C |
| 22.122 | 817678 | | | | 8.2 | 8 | | 259 | 0.30 | N | 8.5 | 102 | 5.3T | Y | 1 | Begbie,M.J.R | D |
| 22.214 | 817679 | 3.5 | M | 4B | 60 | 5 | 3 | | 0.05 | R | 11 | 30 | | Y | 2 | Mendez,J | E |
| 22.249 | 817680 | 2.6 | M | 4B | 60 | 8 | 10 | | | EY | | | 6.0 | Y | 5 | Gallego,J | F |
| 22.249 | 817681 | 3.0 | M | 4B | 60 | 8 | | | 0.256 | N | 5.6 | 45 | 6.0 | Y | 5 | Gallego,J | G |
| 22.250 | 817682 | | | | | | 6 | | | EY | | | 6.5 | | 3 | Martinez,C | |
| 22.287 | 817683 | 3.0 | B | 145 | | 4 | | | 0.050 | B | | 20 | 5.5 | Y | 1 | Castrillon,M.E | |
| 22.361 | 817684 | 3.8 | B | 121 | 10 | 3 | | | 0.040 | B | | 8 | 4.0 | N | 1 | Levai,R | H |
| 22.363 | 817685 | | | | | 6 | | | 0.05 | B | | 20 | 2.0 | Y | 1 | da Silva,L.A.L | |
| 22.385 | 817686 | 4.2 | B | 145 | 5.6 | 4 | 2.2 | 225 | 0.05 | B | | 20 | 5.5 | Y | 2 | Ludewig O.,F.L | I |
| 22.39 | 817687 | 3.3 | B | IHW BAA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 22.39 | 817688 | 3.4 | B | IHW BAA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 22.39 | 817689 | 3.1 | S | IHW BAA | 6 | 8 | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 22.396 | 817690 | 3.6 | S | 4B | 5.3 | 8 | | | 0.203 | N | 6 | 101 | 5.5 | Y | 3 | Hudak,D.M | J |
| 22.410 | 817691 | 4.0 | B | 4B | | | 1 | | 0.035 | B | | 7 | 5.0 | Y | 4 | Gilchrist,D.K | K |
| 22.414 | 817692 | 3.4 | S | 4B | 12 | 5 | 1.2 | 270 | 0.035 | B | | 7 | 4.0 | Y | 3 | Morrison,W | L |
| 22.417 | 817693 | 4.0 | B | 4B | 10 | 6 | 1 | | 0.15 | N | 8 | 60 | 5.0 | Y | 4 | Gilchrist,D.K | M |
| 22.426 | 817694 | 4.0 | B | 4B | 6.8 | 6 | | | 0.05 | B | | 7 | 3.3C | Y | 1 | Dodd,W.J | N |
| 22.434 | 817695 | 3.1 | B | 145 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | O |
| 22.438 | 817696 | 4.0 | S | 4B | 14 | 6 | 1.2 | 280 | 0.030 | B | | 7 | 4.5 | Y | 2 | Jacobs,T | |
| 22.441 | 817697 | 4.0 | | 4B | | 6 | | | | EY | | | 4.5 | Y | 2 | Jacobs,T | |
| 22.465 | 817698 | 3.4 | B | 4B | 14 | 5 | 8.0 | 260 | 0.05 | B | | 10 | 6.5 | Y | 7 | Hays Jr,R.H | P |
| 22.48 | 817699 | 2.4 | B | 4B | 20 | 6 | 7 | 270 | | EY | | | 6.5 | Y | 3 | Keen,R | Q |
| 22.4965 | 817700 | 2.5 | M | 4B | | | 9.17 | 270 | | EY | | | 6.0 | Y | 16 | Cook,A.J | |
| 22.50 | 817701 | 2.6 | | BSC | | 7 | 13 | 275 | | EY | | | 6.5 | Y | 26 | Morris,C.S | |
| 22.507 | 817702 | 3.3: | | 4B | | | 7 | | | EY | | | | | 19 | Edberg,S.J | R |
| 22.510 | 817703 | 2.4 | S | 4B | 38 | 9 | 2.5 | 273 | 0.035 | B | | 7 | 4.5C | Y | 1 | Gronek,J.D | S |
| 22.51 | 817704 | 2.7 | M | BSC | | | | | 0.050 | B | | 10 | 6.5 | Y | 26 | Morris,C.S | |
| 22.53 | 817705 | 2.9 | B | 4B | | | 5 | 270 | | EY | | | 5.5M | Y | 22 | Hale,A | T |
| 22.53 | 817706 | | | | | | 5 | 270 | 0.05 | B | | 10 | 5.5M | Y | 22 | Hale,A | T |
| 22.604 | 817707 | 2.9 | B | 4B | | 5 | 2.6 | 280 | | EY | | 1 | 5 | Y | 5 | Krisciunas,K | U |
| 22.70 | 817708 | 3.8 | S | SAO | 15 | 8 | 7 | 270 | 0.05 | B | | 7 | 6.0 | Y | 2 | Ashdown,M | |
| 22.73 | 817709 | 2.7 | B | 4B | | | | | | EY | | | 6.1 | Y | | Clark,M.L | V |
| 22.75 | 817710 | 2.6 | | 4B | | | | | | EY | | | 6.5 | Y | 11 | Bouma,R.J | |
| 22.75 | 817711 | 2.8 | S | 4B | 14 | 7 | 6 | 258 | 0.05 | B | | 10 | 6.5 | Y | 11 | Bouma,R.J | W |
| 22.750 | 817712 | 2.6 | S | 4C | | | 5 | 273 | | EY | | | 6.1 | Y | 1 | Seargent,D | X |
| 22.76 | 817713 | 3.1 | B | 4B | | | | | 0.050 | B | | 10 | 6.5 | Y | 11 | Bouma,R.J | |
| 22.76 | 817714 | 3.4 | S | 4B | 17 | 7 | 3.6 | 284 | 0.25 | N | 5 | 38 | 6.1 | Y | | Clark,M.L | |
| 22.77 | 817715 | | | | 10 | | 0.25 | 0 | 0.152 | N | 5 | 29 | 6.5 | Y | 11 | Bouma,R.J | Y |
| 22.77 | 817716 | 2.4 | S | 4B | | | 9.0 | | | EY | | | 7.0 | Y | 1 | Lovejoy,T | |
| 22.771 | 817717 | 2.8: | | 4B | | | | | | EY | | | | Y | 4 | Tregaskis,T.B | Z |
| 22.771 | 817718 | 2.8: | | 4B | | | 6 | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | a |
| 22.785 | 817719 | 2.9 | S | 4B | | | 5 | | | EY | | | 6.5 | Y | 2 | Garradd,G | |
| 22.788 | 817720 | | | | | | 9 | | 0.05 | B | | 7 | | | | Garradd,G | b |
| 22.97 | 817721 | 2.7 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 22.98 | 817722 | 2.0 | V | AAVSO | | | | | | EY | | | | | | Churyumov,K | |

NOTE A Kink at end of new gas tail: 4.4 deg. at PA 261. End of kink to old gas tail: 5.3 deg. at PA 263. End of old gas tail: 9.0 deg. at PA 263. Midpoint in dust tail 3.6 deg. at PA 276. End point of dust tail: 7.4 deg. at PA 280.
NOTE B Seeing good.
NOTE C Gas tail at PA 262. Dust tail at PA 277. Comet's motion against background stars was easily noticed after about 10 minutes of observing, at the eyepiece.
NOTE D Tail measurement refers to dust tail only.
NOTE E Visible naked eye. Coma diameter is lower limit. Tail length is lower limit.
NOTE F Superb sky.
NOTE G Stellar nucleus.
NOTE H Magnitude estimate uncertainty +/-0.2 mag.
NOTE I Clouds. (Translated by IHW staff. Ed.)
NOTE J Coma diameter approximate.
NOTE K Haze. Tail length is rough estimate.
NOTE L Comet altitude 9 deg., comparison stars' altitudes 14 deg., comet's uncorrected magnitude is 3.8.
NOTE M Haze. Coma diameter and tail length are rough estimations.
NOTE N No definite tail seen.
NOTE O Comet elevation 12 deg.
NOTE P Gas tail always more prominent than dust tail on March mornings. Maximum lengths were also noted with naked eye in March.
NOTE Q Extinction correction applied.
NOTE R Estimate made through window. Estimate made from MD-80 at 35000 ft. near Las Vegas, NV.
NOTE S Exc. see.
NOTE T Observation possibly affected slightly by moonlight.
NOTE U Tail length from photo.
NOTE V Tails photo'd. to 6.9 deg. and 13.4 deg.
NOTE W Gas tail at PA 258. Dust tail at PA 270.
NOTE X 5 deg. tail is dust tail. 6 deg. tail is ion tail.
NOTE Y PA value approximate.
NOTE Z Tail 3-4 deg. long. Seen briefly through drifting cloud.
NOTE a Tail length approximate. Seen briefly through drifting cloud.
NOTE b 9 deg. tail is gas; 6 deg. tail is dust.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.090 | 830977 | 4 | 0.08 | B | | 11 | | 5.7 | 1 | Fleet,R.W | A |
| 22.128 | 830978 | 0.09 | 0.30 | N | 8.5 | 102,212,425 | 9 | 5.3 | 1 | Begbie,M.J.R | B |
| 22.20 | 830979 | | 0.356 | SC | 11 | 200 | | | | Soc. Astro. de France | C |
| 22.205 | 830980 | | | | | | | 6.0 | 5 | Cardiel,N | D |
| 22.208 | 830981 | | 0.256 | N | 5.6 | 45 | | 6.0 | 5 | Cardiel,N | E |
| 22.249 | 830982 | | 0.256 | N | 5.6 | 45 | | | 5 | Gallego,J | F |
| 22.367 | 830983 | | | | | | 5 | | 1 | Zanette,D | G |
| 22.745 | 830984 | | 0.254 | N | 6 | 61, 7 | 45 | | | Pawlutschenko,B | H |
| 22.780 | 830985 | | | | | | 5 | | | McNaught,R.H | I |

NOTE A Gas tail kink at PA 261. Gas tail kink at PA 263. Gas tail end point at PA 263. Dust tail end point at PA 280. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 22 MAR 1986

NOTE B Jet and fan centered PA 90; streamers centred at PA 272. Vertex distance 3.5 arc min.; semi latus rectums P1 = 3.5 arc min., P2 = 3.5 arc min. For internal envelopes P1 = 2.5 arc min., P2 = 2.5 arc min. Prominent jet and fan sunward of central condensation. Prominent internal envelopes apparent. Inner tail composed of several streamers flowing from coma. Drawing completed in twilight.
NOTE C Drawing made by M. Verdenet (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)
NOTE D Tail 8-10 deg. Naked eye observation. (Duration not indicated. Time of observation is assumed to be mid time. Ed.)
NOTE E Stellar nucleus. The tail have an equal luminosity. [sic] (Duration not indicated. Time of observation is assumed to be mid time. Ed.)
NOTE F Stellar nucleus perfectly visible. Two jets (?) in opposite sides of the "nucleus", one is long and narrow and the other is broad and diffuse.
NOTE G Drawing made from a negative exposed 5 minutes on Agfapan 400 ASA, 50 mm lens. The large number of stars seen on the negative are depicted as they appear in the Atlas Coeli. Tail I has widened and is much larger. Tail II is seen brighter, widening farther from the nucleus. (Translated by IHW staff. Ed.) Scale = 12.1'/mm.
NOTE H Distinctive lopsided fan protrusion; clear bright nucleus; 3-3.5 faint broad fantail; comet head. Between the hours of 4:30 am and 5:15 am EST on 23rd March 1986, the comet was noted to show a bright lopsided fan, protruding from the nucleus (which was comparable in clarity to nearby stars). The comet appeared to be larger in volume that on the previous observation on 11th March, 1986, but was fainter. The fantail extended out to 3-3.5 through averted vision and there was noticeable movement of the comet against the starry background, within a half hour period. However on the following morning between the hours of 3:40 am and 5:15 am EST on 24th March, 1986, the comet once again showed a hidden nucleus shrouded in dust that was unfocusable. 7x50 binoculars also used. (Drawing data inferred from written description. Ed.)
NOTE I Bright near stellar nucleus which looks elongated in low power. Poor seeing but stars sharp in 28 mm. (Three drawings supplied. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Eyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.207 | 851235 | 0.135 | 2.8 | | 15.2 x10.2 | 10.00 | Kodak 2415 | | Y | S | 22/P | 5 | Portela,A | A |
| 22.293 | 851236 | 0.700 | 5 | 0.140 | 2.9 x 2.0 | 15.00 | Tri-X Pro | 320/ | N | X | 5/T | 1 | Travnik,N.A.S | B |
| 22.314 | 851237 | 0.105 | 3.5 | | 19.5 x13.0 | 5.00 | Kodak VR1000 | 1000/ | N | | 1/P | 1 | Taylor,D.L | |
| 22.323 | 851238 | 0.105 | 3.5 | | 19.5 x13.0 | 10.00 | Kodak VR1000 | 1000/ | N | | 2/P | 1 | Taylor,D.L | |
| 22.342 | 851239 | 0.700 | 5 | 0.140 | 2.9 x 2.0 | 65.00 | Ektachrome | 100/ | N | X | 1/S | 1 | Travnik,N.A.S | C |
| 22.347 | 851240 | 0.63 | 1.8 | 0.35 | 3.3 x 2.2 | 4.00 | 103a-F | | N | | 7/P | 2 | Ferrin,I | D |
| 22.375 | 851241 | 0.198 | 4.5 | | 10.4 x 6.9 | 5.00 | 3M 400 | 400/ | N | | 25/P | | Pizzi,R | |
| 22.390 | 851242 | 0.050 | 1.4 | | 39.6 x27.0 | 6.00 | Kodak 2415 | | Y | S | 25/P | 1 | Sabia,J.D | E |
| 22.394 | 851243 | 0.300 | 4.5 | | 6.9 x 4.6 | 10.00 | Fujicolor | 400/ | C | X | 1/P | | Crossley,G | |
| 22.399 | 851244 | 0.050 | 1.4 | | 39.6 x27.0 | 6.00 | Kodak 2415 | | Y | S | 27/P | 1 | Sabia,J.D | F |
| 22.406 | 851245 | 0.050 | 1.4 | | 39.6 x27.0 | 7.00 | Kodak 2415 | | Y | S | 28/P | 1 | Sabia,J.D | |
| 22.413 | 851246 | 0.300 | 4.5 | | 6.9 x 4.6 | 10.00 | Kodak 2415 | | Y | S | 10/C | 4 | Chester,G.R | G |
| 22.429 | 851247 | 0.058 | 1.4 | | 34.5 x23.4 | 2.00 | Kodak Tri-X | | N | T | 19/C | 3 | Priester,D.C | H |
| 22.431 | 851248 | 0.058 | 1.4 | | 34.5 x23.4 | 1.00 | Kodak Tri-X | | N | T | 20/C | 3 | Priester,D.C | H |
| 22.431 | 851249 | 0.058 | 1.4 | | 34.5 x23.4 | 0.50 | Kodak Tri-X | | N | T | 21/C | 3 | Priester,D.C | H |
| 22.435 | 851250 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | Kodak Tri-X | | N | T | 22/C | 3 | Priester,D.C | H |
| 22.438 | 851251 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | Kodak Tri-X | | N | T | 23/C | 3 | Priester,D.C | H |
| 22.442 | 851252 | 0.100 | 2.8 | | 20.4 x13.7 | 2.00 | Kodak VR | 1000/ | N | T | 17/C | 3 | Priester,D.C | I |
| 22.443 | 851253 | 0.100 | 2.8 | | 20.4 x13.7 | 1.00 | Kodak VR | 1000/ | N | T | 18/C | 3 | Priester,D.C | I |
| 22.493 | 851254 | 0.165 | 2.8 | | 12.5 x 8.3 | 10.00 | Kodak 2415 | | Y | S | 162/P | 3 | Yen,B | J |
| 22.502 | 851255 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 161/P | 3 | Yen,B | K |
| 22.502 | 851256 | 0.050 | 1.8 | | 39.6 x27.0 | 3.00 | Agfachrome | 1000/ | N | S | 22/P | 16 | Cook,A.J | |
| 22.507 | 851257 | 0.050 | 1.8 | | 39.6 x27.0 | 8.00 | Agfachrome | 1000/ | N | S | 23/P | 16 | Cook,A.J | |
| 22.524 | 851258 | 0.500 | 5 | | 4.1 x 2.7 | 10.00 | Fujichr.1600 | | N | | 5/P | 3 | Sanford,J | L |
| 22.524 | 851259 | 0.500 | 5 | | 4.1 x 2.7 | 10.00 | FujichromePZ | | N | | 6/S | 3 | Sanford,J | M |
| 22.524 | 851260 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 0.50 | Kodacolor | 400/ | N | S | 23/N | 1 | Gronek,J.D | N |
| 22.530 | 851261 | 0.500 | 5 | | 4.1 x 2.7 | 5.00 | Fujichr.1600 | | N | | 4/P | 3 | Sanford,J | O |
| 22.530 | 851262 | 0.500 | 5 | | 4.1 x 2.7 | 5.00 | FujichromePZ | | N | | 7/S | 3 | Sanford,J | M |
| 22.726 | 851263 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 2415 | | Y | O | 46/S | 2 | Garradd,G | P |
| 22.741 | 851264 | 0.180 | 2.8 | | 11.4 x 7.6 | 19.50 | Kodak 2415 | | Y | O | 47/S | 2 | Garradd,G | P |
| 22.769 | 851265 | 0.180 | 2.8 | | 11.4 x 7.6 | 25.50 | Kodak 2415 | | Y | O | 48/S | 2 | Garradd,G | P |
| 22.789 | 851266 | 0.024 | 3.5 | | 73.7 x53.1 | 18.50 | Kodak 2415 | | Y | O | 49/S | 2 | Garradd,G | P |

NOTE A (Time supplied by observer may have been start time or mid-exposure time Ed.)
NOTE B Instrument is Zeiss Tessar. Format size 88 mm x 128 mm.
NOTE C Instrument is Zeiss Tessar.
NOTE D Instrument is Schmidt camera.
NOTE E Gelatin 47A filter used.
NOTE F Gelatin 21 filter used.
NOTE G (Observer's image identifier is 10A. Ed.)
NOTE H Push processed to 800 ASA.
NOTE I Auxiliary Soligor lens used. Original instrument characteristics are FL = 0.050, f/1.4.
NOTE J (Observer's image identifier is 16B = 17. Ed.)
NOTE K (Observer's image identifier is 16A = 10. Ed.) Instrument is Schmidt camera.
NOTE L Start time approximate. "Push" processed 2 stops.
NOTE M Start time and exposure duration approximate. Push processed 2 stops. Normal ASA 1600.
NOTE N City lights interfered with the observation.
NOTE O "Push" processed 2 stops.
NOTE P Temperature for hypersensitization 60-65 deg. C.

DATE: 23 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.156 | 817723 | 3.9 | S | 145 | | | | 256 | 0.05 | B | | 7 | 5.1 | | 3 | Benavides,A | |
| 23.165 | 817724 | 3.6 | S | 122 | 9.0 | 6 | 2.0 | 265 | 0.08 | B | | 15 | 3.8T | Y | 2 | Haver,R | |
| 23.165 | 817725 | 3.2 | S | 122 | 12 | | | | | EY | | | 3.8T | Y | 2 | Haver,R | |
| 23.167 | 817726 | | | 4B | 20 | | | | 0.05 | B | | 10 | 3.0T | Y | 1 | Melandri,F | A |
| 23.24 | 817727 | 2.7 | | DCS 9 | | | | | | EY | | | 6.5 | Y | 7 | Bus,E.P | |
| 23.24 | 817728 | 3.1 | S | DCS 9 | 17 | 7 | 10 | 264 | 0.018 | B | | 3 | 6.5 | Y | 8 | Bus,E.P | B |
| 23.25 | 817729 | 3.3 | B | DCS 9 | | | | | 0.018 | B | | 3 | 6.5 | Y | 7 | Bus,E.P | |
| 23.250 | 817730 | 3.7 | | 4B | 25 | 6 | 6 | 95 | 0.050 | B | | 10 | 5.5 | Y | 3 | Thomas,A | C |
| 23.322 | 817731 | 3.3 | B | 145 | | 5 | 2.7 | 264 | 0.05 | B | | 20 | 6.0 | Y | 6 | da Silva,L.A.L | |
| 23.323 | 817732 | 3.4 | B | 145 | 6 | 2 | 5 | 260 | 0.06 | R | 12 | 56 | 5.3 | Y | 1 | Onofre D.,D | D |
| 23.35 | 817733 | 3.8 | B | AAVSO | | | 5.5 | | 0.04 | B | | 7 | | | | Kiselev,N | |
| 23.354 | 817734 | 2.6 | M | 4B | | 8 | 5.5 | | 0.05 | B | | 20 | 4.8 | Y | 1 | Diaz P.,E | |
| 23.392 | 817735 | 3.6 | B | 145 | 5.5 | 4 | 4.3 | | 0.05 | B | | 7 | 5.8 | Y | 3 | Ludewig O.,F.L | |
| 23.396 | 817736 | 3.7 | S | 4B | | 0 | | 300 | 0.050 | B | | 7 | 3.0 | Y | 1 | Lifgren Jr,M | E |
| 23.40 | 817737 | 3.0 | S | IHW BAA | 6 | 8 | | | 0.050 | B | | 7 | | | | Green,D.W.E | F |
| 23.40 | 817738 | 3.4 | B | 4B | 11 | 5 | 4.0 | 270 | 0.050 | B | | 10 | 5.5 | Y | 1 | Bortle,J.E | G |
| 23.41 | 817739 | 3.1 | V | 4B | | | 3.0 | 270 | | EY | | | | Y | 1 | Bortle,J.E | G |
| 23.41 | 817740 | | | | 8 | 6 | 1 | 270 | 0.120 | B | | 20 | | Y | 1 | Bortle,J.E | |
| 23.438 | 817741 | 2.5 | S | 4B | 6 | 4 | | | 0.035 | B | | 7 | 5 | Y | 1 | Lewis,D.E | |
| 23.47 | 817742 | 3.6 | B | 4B | 10 | 8 | 1.5 | 300 | 0.080 | B | | 20 | | Y | | Kronk,G | H |
| 23.5174 | 817743 | 2.7 | M | 4B | 10 | 6 | 5.3 | 264 | | EY | | | 6.0 | Y | 16 | Cook,A.J | I |
| 23.5208 | 817744 | 2.7 | M | 4B | 10 | 6 | 5.38 | | 0.05 | B | | 7 | 5.5 | Y | 16 | Cook,A.J | J |
| 23.69 | 817745 | 3.1 | S | 4B | | | | | 0.023 | B | | 3 | | | | Jones,A | K |
| 23.69 | 817746 | | | | | | 3.5 | | 0.080 | B | | 11 | | | | Jones,A | L |
| 23.74 | 817747 | 2.7 | | 4B/C | | | 12 | 258 | | EY | | | 6.5 | Y | 11 | Bouma,R.J | M |
| 23.74 | 817748 | 3.2 | B | 4B/C | 16 | 6 | 0.33 | 5 | 0.05 | B | | 10 | 6.5 | Y | 11 | Bouma,R.J | |
| 23.74 | 817749 | 2.6 | S | 4B | 20 | | 12.0 | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | |
| 23.743 | 817750 | 2.7 | S | 4C | | | | | | EY | | | 6.2 | Y | 1 | Seargent,D | |
| 23.743 | 817751 | | | | 15 | | | | 0.08 | B | | 15 | | | | Seargent,D | |
| 23.778 | 817752 | | | | | | 6 | | 0.05 | B | | 7 | 6.5 | Y | 2 | Garradd,G | N |
| 23.780 | 817753 | 2.9 | S | 4B | | | 6 | | | EY | | | | | | Garradd,G | |
| 23.792 | 817754 | 3.3 | S | 4B | 9 | 5 | 3 | 270 | 0.050 | B | | 12 | | Y | 1 | Batza,H | O |
| 23.83 | 817755 | 3.2 | M | 4B | | | | | 0.05 | B | | 7 | 4.5M | Y | 2 | Suzuki,K | |
| 23.837 | 817756 | 3.5 | S | 4B | 20 | 5 | 6 | 270 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |

NOTE A I haven't seen the tail with the binoculars.
NOTE B Tail at PA 264 exceeds 10 deg. Tail 2 exceeds 6.5 deg. at PA 250-285.
NOTE C Tail length approximate. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE D Cirrus.
NOTE E Unspectacular tail. (PA value appears to be incorrect. Ed.)
NOTE F Coma diameter approximate.
NOTE G Extinction correction applied.
NOTE H Tail PA approximate.
NOTE I Tail greatest length and south boundary at PA 264; tail north boundary 5.3 deg. at PA 276.
NOTE J Tail south boundary at PA 259; tail north boundary at PA 280.
NOTE K Brief clearing in clouds.
NOTE L Tail PA 258-280.
NOTE M Gas tail at PA 258. Dust tail at PA 270.
NOTE N 6 deg. tail is gas; 5 deg. tail is dust.
NOTE O Clouds. (Observer gave limit as 8.5. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.420 | 830986 | 3.0 | 0.040 | B | | 8 | 20 | 4.5 | 1 | Bailey,G | A |
| 23.442 | 830987 | | 0.203 | N | 6 | 40 | 12 | 6.5 | 7 | Troiani,D.M | B |
| 23.524 | 830988 | 3 | 0.050 | B | | 7 | 10 | 5.5 | 16 | Cook,A.J | C |
| 23.536 | 830989 | 0.46 | 0.41 | N | 5 | 113 | 15 | 6.5 | 1 | Levy,D.H | D |
| 23.792 | 830990 | 0.13 | 0.20 | N | 6.3 | 250 | | | 5 | Lovejoy,T | E |
| 23.793 | 830991 | | | | | | | | | McNaught,R.H | F |

NOTE A Tail PA 92.
NOTE B Transparency (1-5): 5. Seeing (1-3): 5. [sic] Sky darkness (1-5): 5. Streamer PA 270 deg. DC = 6.5. Nucleus was star-like. Tail was visible for just over 3 deg. long. [sic]
NOTE C Dawn interference.
NOTE D Scale is approximate.
NOTE E (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F V. faint near stellar nucleus. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.026 | 851267 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 5.00 | Kodak 2415 | | Y | X | 10/P | 1 | Marafie,A.H | A |
| 23.110 | 851268 | 0.200 | 2 | | 10.3 x 6.9 | 8.00 | Kodak 103a-E | | N | S | 12/P | 1 | Dragesco,J | |
| 23.363 | 851269 | 0.63 | 1.8 | 0.35 | 3.3 x 2.2 | 10.00 | Kodak 2415 | | N | | 8/P | 2 | Ferrin,I | A |
| 23.368 | 851270 | 0.050 | 1.4 | | 39.6 x27.0 | 0.25 | Kodak Tri-X | 400/ | N | | 7/P | 1 | Pena,E.D | |
| 23.377 | 851271 | 0.149 | 4.5 | | 13.8 x 9.2 | 4.00 | 3M 400 | 400/ | N | | 24/P | | Pizzi,R | |
| 23.385 | 851272 | 2.30 | 10 | 0.23 | 0.9 x 0.6 | 60.00 | ORWO ZU-21 | | N | O | 1/P | 1 | Zalles,R | B |
| 23.406 | 851273 | 0.050 | 1.4 | | 39.6 x27.0 | 0.25 | Kodak Tri-X | 400/ | N | X | 36/P | 1 | Rodriguez,J | |
| 23.462 | 851274 | 0.205 | 4 | | 10.0 x 6.7 | 5.00 | Fujicolor | 1600/ | N | X | 1/P | 1 | Tuten,J | C |
| 23.736 | 851275 | 0.085 | 2.8 | | 23.9 x16.1 | 24.17 | Kodak 2415 | | Y | O | 50/S | 2 | Garradd,G | D |
| 23.752 | 851276 | 0.180 | 2.8 | | 11.4 x 7.6 | 6.00 | Kodak 2415 | | Y | O | 51/S | 2 | Garradd,G | E |
| 23.761 | 851277 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | Kodak 2415 | | Y | O | 52/S | 2 | Garradd,G | E |
| 23.770 | 851278 | 0.180 | 2.8 | | 11.4 x 7.6 | 20.00 | Kodak 2415 | | Y | O | 53/S | 2 | Garradd,G | E |
| 23.789 | 851279 | 0.180 | 2.8 | | 11.4 x 7.6 | 19.50 | Kodak 2415 | | Y | O | 54/S | 2 | Garradd,G | E |

NOTE A Instrument is Schmidt camera.
NOTE B Astronomical emulsion used.
NOTE C City lights. Photograph made by M. Searles and J. Tuten.
NOTE D Lens aperture stopped down from f/2.0 to f/2.8. Temperature for hypersensitization 60-65 deg. C.
NOTE E Temperature for hypersensitization 60-65 deg. C.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.119 | 817757 | 4.1 | M | 4B | 11 | 5 | 5 | 250 | 0.04 | B | | 12 | 5.6 | Y | 1 | Henshaw,C | A |
| 24.146 | 817758 | 2.9 | B | 4B | 25 | 7 | 5 | | | EY | | | 5.5 | N | 3 | Fischer,D | B |
| 24.146 | 817759 | 2.8 | M | 4B | 28 | | | | 0.030 | B | | 8 | 5.5 | Y | 10 | Villa,M | |
| 24.149 | 817760 | 4.3 | M | 4B | 13 | 7 | | | 0.07 | B | | 20 | | Y | 2 | Tanti,T | C |
| 24.150 | 817761 | 3.9 | S | 145 | | | | 261 | 0.05 | B | | 7 | 5.1 | | 3 | Benavides,A | |
| 24.160 | 817762 | | | 4B | | | 2.5 | | 0.030 | B | | 8 | 5.5 | Y | 10 | Villa,M | |
| 24.336 | 817763 | 3.1 | B | 145 | 6 | 3 | 8.5 | 255 | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 24.357 | 817764 | 3.4 | B | | 8 4 | 3 | 2.40 | 255 | 0.05 | B | | 7 | 3.8 | | | Lairet,R | |
| 24.358 | 817765 | 3.1 | B | 4B | | 6 | | | 0.050 | | | 7 | 5.5 | Y | 1 | Ocampo M.,W | |
| 24.411 | 817766 | 4.2 | S | 4B | 11 | 5 | | | 0.035 | B | | 7 | 4.2M | N | 3 | Morrison,W | D |
| 24.441 | 817767 | 3.9 | B | 4B | 6.8 | 5 | | | 0.05 | B | | 7 | 3.3MTC | Y | 1 | Dodd,W.J | E |
| 24.72 | 817768 | 3.3 | S | 4B | | | | | 0.023 | B | | 3 | 5.5 | | | Jones,A | F |
| 24.72 | 817769 | | | | | 8 | 3.2 | | 0.080 | B | | 11 | | | | Jones,A | G |
| 24.722 | 817770 | 3.3: | | 4B | | | | | | EY | | | | Y | 1 | Tregaskis,T.B | H |
| 24.74 | 817771 | 8.3 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | I |
| 24.778 | 817772 | 3.0 | S | 4B | | | 5 | | | EY | | | 6.0M | Y | 2 | Garradd,G | |
| 24.779 | 817773 | | | | | | 5 | | 0.05 | B | | 7 | 6.0 | Y | 2 | Garradd,G | J |
| 24.78 | 817774 | 2.4 | S | 4B | 21 | | 11.0 | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | |
| 24.785 | 817775 | 2.7 | S | 4C | | | | | | EY | | | 6 | Y | 1 | Seargent,D | |
| 24.785 | 817776 | | | | 16 | 7 | | | 0.08 | B | | 15 | | | | Seargent,D | K |
| 24.787 | 817777 | | | | 5 | 5 | 0.2 | 270 | 0.10 | N | 10 | 55 | 3.0C | Y | 1 | Kato,T | L |
| 24.79 | 817778 | 3.8 | S | AAVSO | 6 | 6 | 1 | 275 | 0.07 | B | | 10 | 4.0M | Y | 1 | Hayashi,A | |
| 24.794 | 817779 | 3.7 | S | 4B | 4.1 | 8 | 1.5 | 270 | 0.05 | B | | 7 | 3.5M | Y | 1 | Kanai,K | |
| 24.800 | 817780 | 3.5 | B | 4B | 4.1 | 8 | 1.5 | 270 | 0.05 | B | | 7 | 3.5M | Y | 1 | Kanai,K | |
| 24.800 | 817781 | 3.0 | B | 4B | 8 | 5 | 4 | | 0.05 | B | | 7 | 4.5 | Y | 1 | Hayashi,H | C |
| 24.80 | 817782 | 3.0 | | | 20 | 8 | | | 0.23 | | 4.4 | 40 | 4.0 | Y | 1 | Washi,I | M |
| 24.802 | 817783 | 3.5 | M | 4C | 5.5 | 8 | | | 0.08 | B | | 11 | 4 M | Y | 1 | Mitsuma,S | N |
| 24.802 | 817784 | | | | | | | | 0.16 | N | 6.3 | 31 | 4 M | Y | 1 | Mitsuma,S | O |
| 24.802 | 817785 | | | | | | 2.5 | 270 | 0.05 | B | | 7 | 4 M | Y | 1 | Mitsuma,S | |
| 24.81 | 817786 | 2.7 | | 4B/C | | | | | | EY | | | 6 | Y | 12 | Bouma,R.J | |
| 24.81 | 817787 | 3.2 | B | 4B/C | 15 | 6 | 6 | 259 | 0.05 | B | | 10 | 6 | Y | 12 | Bouma,R.J | P |
| 24.81 | 817788 | 3.5 | S | AAVSO | 8 | 6 | 0.5 | 275 | 0.13 | N | 6.3 | 24 | 4.0M | Y | 1 | Hayashi,A | |
| 24.813 | 817789 | 4.9 | B | 4B | 6.9 | 6 | 4 | 290 | 0.05 | R | 7.6 | 19 | 3.5MT | Y | 2 | Kitamura,K | |
| 24.819 | 817790 | 3.3 | B | 4B | | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | Q |
| 24.82 | 817791 | 3.2 | M | 4B | | | 3.0 | | 0.05 | B | | 7 | 4.5M | Y | 1 | Suzuki,K | |
| 24.82 | 817792 | | | 4B | 4.2 1.9 | 5 | | | 0.25 | | 4.2 | 88 | 4.5M | Y | 1 | Suzuki,K | R |
| 24.82 | 817793 | 3.0 | | | 15 | 6 | 3 | | 0.12 | B | | 20 | 5.5 | Y | 1 | Washi,S | S |
| 24.824 | 817794 | 3.3 | M | 4B | 8 | 6 | 0.5 | 270 | 0.030 | B | | 8 | 3.5C | Y | 1 | Kato,T | L |
| 24.831 | 817795 | 3.2 | S | 4B | 10 | 5 | 1.5 | 260 | 0.07 | B | | 10 | 5.0 | Y | 1 | Kobayashi,J | |

NOTE A Gas tail 5 deg at PA 250; dust tail 5 deg. at PA 270.
NOTE B Tail length exceeds 5 deg. DC in 5"-Newton: 8.5'.
NOTE C Moon.
NOTE D Comet altitude 9 deg., comparison stars' altitudes 14 deg., comet's uncorrected magnitude is 4.5.
NOTE E No definite tail seen.
NOTE F Tail visible by direct vision but not intense to naked eye.
NOTE G Tail PA 262-278. Ray 262-267 longest and brightest.
NOTE H Tail straight and broad, 2-3 deg. long. Glimpsed briefly through drifting cloud.
NOTE I Nucleus.
NOTE J 5 deg. tail is gas; 4 deg. tail is dust.
NOTE K Sharp kink in ion tail to SW about 3 deg. from coma. [sic]
NOTE L Diffuse cloud.
NOTE M Instrument is Wright-Schmidt. (Observer indicated "Y" method. Ed.)
NOTE N m2 = 7.1.
NOTE O m2 = 7.7.
NOTE P Gas tail at PA 259. Dust tail at PA 271. Coma diameter approximate.
NOTE Q Near full moon. (Translated by IHW staff. Ed.)
NOTE R Meter. (Coma diameter. Ed.) Instrument is Wright-Schmidt.
NOTE S Type II. (Observer indicated "Y" method. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.542 | 830992 | 0.49 | 0.41 | N | 5 | 113 | 30 | 5 | 1 | Levy,D.H | A |
| 24.814 | 830993 | 0.32 | 0.050 | R | 7.6 | 42 | 5 | 3.5 | 1 | Kitamura,K | B |

NOTE A Scale is approximate.
NOTE B Unspecified feature at PA 290. DC 6. Tail length is not clear of moonlight. Coma total magnitude 4.9. Moonlight and twilight interfered with the observation.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.165 | 851280 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M Slide | 400/ | N | X | 4/P | 10 | Villa,M | A |
| 24.409 | 851281 | 0.050 | 2.8 | | 39.6 x27.0 | 8.00 | Fujicolor | 400/ | N | X | 9/P | 1 | Villate,F | |
| 24.743 | 851282 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 2415 | | Y | O | 55/S | 2 | Garradd,G | B |
| 24.772 | 851283 | 0.180 | 2.8 | | 11.4 x 7.6 | 9.25 | Kodak 2415 | | Y | O | 56/S | 2 | Garradd,G | B |
| 24.788 | 851284 | 0.180 | 2.8 | | 11.4 x 7.6 | 20.00 | Kodak 2415 | | Y | O | 57/S | 2 | Garradd,G | B |

NOTE A Enlargement of the print 2x.
NOTE B Temperature for hypersensitization 60-65 deg. C.

DATE: 25 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.146 | 817796 | 3.2 | B | IHW | | | 3.5 | | 0.050 | B | | 10 | 5.0 | Y | 3 | Guthier,O | |
| 25.149 | 817797 | 3.8 | M | 4B | | 7 | 1 | | 0.089 | R | 5.5 | 18 | 5.0M | N | 1 | Ventura,F | |
| 25.163 | 817798 | 3.0 | M | 4B | 14 | 8 | 2.0 | | 0.030 | B | | 8 | 5.0 | Y | 10 | Villa,M | |
| 25.359 | 817799 | 3.3 | B | 145 | | 4 | | | 0.050 | B | | 20 | 4.9 | Y | 1 | Castrillon,M.E | |
| 25.38 | 817800 | 3.3 | B | IHW BAA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 25.38 | 817801 | 3.1 | S | IHW BAA | 7 | 6 | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 25.389 | 817802 | 3.4 | B | | 8 | 3 | 1.80 | 261 | 0.05 | B | | 7 | 4.0 | | | Lairet,R | A |
| 25.39 | 817803 | 3.1 | B | IHW BAA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 25.39 | 817804 | 2.7 | S | IHW BAA | 7.5 | 6 | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 25.392 | 817805 | 3.3 | B | 4B | | 6 | | | 0.050 | | | 7 | 5.5 | Y | 1 | Ocampo M.,W | A |
| 25.40 | 817806 | 2.7 | S | IHW BAA | 8.1 | 5 | | | 0.080 | B | | 20 | | | | Green,D.W.E | |
| 25.40 | 817807 | 3.2 | B | 4B | 8 | 5 | | | 0.050 | B | | 10 | 5.5 | Y | 1 | Bortle,J.E | A |
| 25.40 | 817808 | 2.9 | S | 4B | | | | | | EY | | | 5.5 | Y | 1 | Bortle,J.E | B |
| 25.442 | 817809 | 3.5 | B | 4B | 6.8 | 6 | | | 0.05 | B | | 7 | 3.3MTC | Y | 1 | Dodd,W.J | B |
| 25.52 | 817810 | 2.9 | | 4B, BSC | | 7 | | | | EY | | | 4.0MC | Y | 10 | Morris,C.S | C |
| 25.52 | 817811 | 3.0 | M | 4B, BSC | | 7 | 4 | 265 | 0.050 | B | | 10 | 4.0MC | Y | 10 | Morris,C.S | D |
| 25.521 | 817812 | 2.6 | S | 4B | 36 | 8 | 2 | 280 | 0.035 | B | | 7 | 4 CT | Y | 1 | Gronek,J.D | D |
| 25.625 | 817813 | | | | | | 2.5 | | | | | | | N | 1 | Lovejoy,T | E |
| 25.69 | 817814 | 3.3 | S | 4B | | 8 | | | 0.023 | B | | 3 | 5 | | | Jones,A | F |
| 25.69 | 817815 | | | | 9 | 8 | 1.8 | | 0.078 | R | 7.5 | 30 | | | | Jones,A | G |
| 25.691 | 817816 | | | 4B | | | | | | EY | | | | Y | 1 | Tregaskis,T.B | H |
| 25.691 | 817817 | 3.2: | B | 4B | 12 | 8 | 3 | 270 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | I |
| 25.71 | 817818 | 8.5 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | J |
| 25.768 | 817819 | 3.0 | S | 4B | | | | | | EY | | | 5.0M | Y | 6 | Garradd,G | K |
| 25.771 | 817820 | | | | | | 3 | | 0.05 | B | | 7 | | | | Garradd,G | |
| 25.788 | 817821 | 4.6 | B | 4B | | | | | 0.07 | B | | 10 | 3.3M | Y | 1 | Date,M | |
| 25.79 | 817822 | 3.8 | S | AAVSO | 5 | 6 | 1 | 280 | 0.07 | B | | 10 | 3.0M | Y | 1 | Hayashi,A | |
| 25.79 | 817823 | 3.2 | M | 4B | 10 | 5 | | | 0.080 | B | | 11 | 3 M | Y | 1 | Watanabe,N | |
| 25.799 | 817824 | 3.4 | M | 4B | 7.2 | 6 | 1.5 | 270 | 0.1 | N | 10 | 25 | 4.0 | Y | 1 | Ichikawa,K | L |
| 25.799 | 817825 | 3.4 | M | 4C | 7.2 | 7 | | | 0.08 | B | | 11 | 4 M | Y | 1 | Mitsuma,S | |
| 25.799 | 817826 | | | | | | | | 0.16 | N | 6.3 | 31 | 4 M | Y | 1 | Mitsuma,S | M |
| 25.799 | 817827 | | | | | | 1.5 | 270 | 0.05 | B | | 7 | 4 M | Y | 1 | Mitsuma,S | N |
| 25.801 | 817828 | 3.4 | S | 4B, 4C | 6.9 | 7 | 0.7 | 280 | 0.05 | B | | 7 | 3.5M | Y | 1 | Kanai,K | |
| 25.806 | 817829 | 3.4 | B | 4B, 4C | 6.9 | 7 | 0.7 | 280 | 0.05 | B | | 7 | 3.5M | Y | 1 | Kanai,K | |
| 25.808 | 817830 | 3.3 | M | 4B | 10 | 6 | 1.0 | 270 | 0.030 | B | | 8 | 4.0C | Y | 1 | Kato,T | |
| 25.81 | 817831 | 3.4 | S | AAVSO | 7 | 6 | 0.5 | | 0.13 | N | 6.3 | 24 | 3.0M | Y | 1 | Hayashi,A | O |
| 25.813 | 817832 | 3.5 | B | 4B | 6.0 | 5 | 6.0 | 280 | 0.062 | R | 14.6 | 46 | 3.0MT | Y | 2 | Kitamura,K | |
| 25.82 | 817833 | 3.4 | S | 4B | 6 | 7 | | | 0.07 | B | | 10 | 3.0M | Y | 1 | Yasuki,M | |

NOTE A Coma diameter approximate.
NOTE B Extinction correction applied.
NOTE C No tail seen. High, thin haze possibly reaching to horizon.
NOTE D Differential extinction correction of -0.3 was applied.
NOTE E Good see.
NOTE F Naked eye tail length. Brilliant moonlight.
NOTE G Moon 15 d. low west.
NOTE H Tail PA 259-279.
NOTE I Seen faintly. Bright moonlight.
NOTE J Coma diameter approximate. Tail straight and broad. PA approximate. Binocular limit approximately mag. 8. Bright moonlight.
NOTE K Nucleus.
NOTE L Coma diameter uncertain.
NOTE M m2 = 7.6.
NOTE N m2 = 9.0.
NOTE O PA 250 to 280.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.174 | 830994 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | A |
| 25.424 | 830995 | 0.12 | 0.204 | N | 8 | 81,677 | 50 | 3.0 | 1 | Robinson,P.C | B |
| 25.516 | 830996 | 0.49 | 0.41 | N | 5 | 64 | 75 | 5 | 1 | Levy,D.H | C |
| 25.738 | 830997 | | 0.254 | N | 6 | 61, 7 | 55 | | | Pawlutschenko,B | D |
| 25.823 | 830998 | 0.39 | 0.062 | R | 14.6 | 46 | 10 | 3.0 | 1 | Kitamura,K | E |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Wide dust tail >20' long at PA 275; bright spot at PA 5; bright spot at PA 35; bright spot at PA 15; jets at PAs 20, 5, and 50; dust tails at PA 0 and PA 170; enhancement in tail at PA 10. The central condensation was stellar. East half of coma was bright, with 3 parts. Northern part between jets at PAs 5 and 50 was brightest. The southern part dimmest. The bright spot at PA 15 was very faint. Bright spots at PAs 15 and 35 were only seen at high power. Moonlight and city lights interfered with the observation.
NOTE C Scale is approximate.
NOTE D Protruding jet of gas or material; bright nucleus; glowing shroud of dust. Comet head only definable due to full moon. No visible tail. Between the hours of 4:15 am and 5:10 am on 26th March, 1986, the comet, although flooded by full moon light, appeared to show a projecting jet of material from the nucleus in the approximate direction of the invisible tail. Averted vision was used to distinguish this phenomenon from other possibilities. Viewing conditions were not as clear as desired for this observation due to dust cover within the comet head and moonlight. 7x50 binoculars also used. (Drawing data inferred from written description. Ed.)
NOTE E Unspecified feature at PA 280. DC 5. Central condensations draw near the south. Shape of coma is not clear of moonlight. Coma total magnitude 3.5. Moonlight and twilight interfered with the observation.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.137 | 851285 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Ektachrome | 1600/ | N | M | 360/P | 1 | Stolzen,P | A |
| 25.144 | 851286 | 0.135 | 2.8 | | 15.2 x10.2 | 5.00 | Ektachrome | 1600/ | N | M | 362/P | 1 | Stolzen,P | A |

NOTE A (Observer's image identifier is preceded by prefix 2. Ed.)

DATE: 26 MAR 1986 DATE 26 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.069 | 817834 | 3.7 | S | 4B | 13.0 | 6 | 2.25 | 278 | 0.08 | B | | 30 | 4.9 | Y | 1 | Campos,J | A |
| 26.073 | 817835 | 3.2 | | 4B | | | 2.00 | | | EY | | | 4.9 | Y | 1 | Campos,J | B |
| 26.181 | 817836 | 2.9 | B | SAO,IHW | 16.0 | 7 | 3.0 | | 0.050 | B | | 10 | 4.6 | Y | 3 | Guthier,O | |
| 26.1875 | 817837 | 4.5: | B | 4B | 3 | 5 | | | 0.05 | B | | 10 | 4.5TCM | | 2 | Franciosi,C | C |
| 26.208 | 817838 | 4.0 | M | 4B | 60 | 6 | | | 0.05 | R | 11 | 30 | | N | 3 | Mendez,J | D |
| 26.250 | 817839 | 3.5 | | 4B | 5 | 6 | 2.5 | | 0.030 | B | | 8 | 4.5 | Y | 2 | Kerber,F | E |
| 26.351 | 817840 | 3.0 | B | 145 | 16 | 5 | | | 0.05 | B | | 20 | 3.5 | Y | 1 | da Silva,L.A.L | F |
| 26.39 | 817841 | 3.1 | B | IHW BAA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 26.39 | 817842 | 2.7 | S | IHW BAA | 9 | 5 | | | 0.080 | B | | 20 | | | | Green,D.W.E | G |
| 26.39 | 817843 | 2.8 | S | IHW BAA | 6 | 6 | | | 0.035 | B | | 7 | | | | Green,D.W.E | G |
| 26.41 | 817844 | 3.2 | B | 4B | 11 | 5 | | | 0.050 | B | | 10 | 5 | Y | 1 | Bortle,J.E | H |
| 26.54 | 817845 | | | | | | | | 0.305 | R | 16.4 | 476 | 3.5MC | Y | 27 | Morris,C.S | I |
| 26.70 | 817846 | 3.2 | S | 4B, 120 | | | | | 0.023 | B | | 3 | 4.2 | | | Jones,A | |
| 26.70 | 817847 | | | | 6 | 5 | 1.3 | | 0.078 | R | 7.5 | 30 | | | | Jones,A | J |
| 26.71 | 817848 | 9.1 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | K |
| 26.792 | 817849 | 3.2 | S | 4B | 10 | 5 | 3.0 | 250 | 0.050 | B | | 12 | | Y | 1 | Batza,E | L |
| 26.799 | 817850 | 3.2 | S | 4B, 4C | 6.7 | 6 | 0.4 | 295 | 0.05 | B | | 7 | 3.0M | Y | 1 | Kanai,K | |
| 26.806 | 817851 | 3.4 | B | 4B, 4C | 6.7 | 6 | 0.4 | 295 | 0.05 | B | | 7 | 3.0M | Y | 1 | Kanai,K | |
| 26.809 | 817852 | | | | 4.8 | 4 | 4 | 270 | 0.062 | R | 14.6 | 46 | 2.5MT | Y | 2 | Kitamura,K | |
| 26.819 | 817853 | 3.8 | B | 4B | | | | | 0.02 | R | 6 | 8 | 2.5MT | Y | 2 | Kitamura,K | |

NOTE A Moonlight interfering.
NOTE B Moonlight. Elevation of comet = 48 deg.
NOTE C No nucleus. Coma diameter approximate.
NOTE D Coma diameter is lower limit. Full moon.
NOTE E Moon. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE F Full moon and twilight.
NOTE G Coma diameter approximate.
NOTE H Extinction correction applied.
NOTE I At least two jets were seen coming from the condensation in PAs 30: and 90:. The jets were straight. Lengths not determined.
NOTE J Tail PA 266-281.
NOTE K Nucleus.
NOTE L Clouds. (Observer gave limit as 8.5. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.505 | 830999 | 0.56 | 0.41 | N | 5 | 64 | 45 | 5 | 1 | Levy,D.H | A |
| 26.823 | 831000 | 0.30 | 0.062 | R | 14.6 | 46 | 10 | 2.5 | 1 | Kitamura,K | B |

NOTE A Scale is approximate.
NOTE B Unspecified feature at PA 270. DC 4. Coma and tail direction is not clear of moonlight. Coma total magnitude 3.8. Make out the nucleus of moonlight!? Moonlight and twilight interfered with the observation.

DATE: 27 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.094 | 817854 | 3.8 | S | 4B | 7.0 | 6 | 3.00 | 268 | 0.035 | B | | 7 | 4.8 | Y | 1 | Campos,J | A |
| 27.143 | 817855 | 2.8 | B | IHW | 19.0 | 7 | 3.0 | | 0.050 | B | | 10 | 5.0 | Y | 3 | Guthier,O | |
| 27.145 | 817856 | 2.8 | B | IHW | | 7 | | | | EY | | | | Y | 3 | Guthier,O | |
| 27.1979 | 817857 | 4.5: | B | 4B | 3 | 5 | | | 0.05 | B | | 10 | 5.0TCM | Y | 2 | Franciosi,C | B |
| 27.212 | 817858 | 3.4 | B | 4C | | 2 | | | 0.03 | B | | 8 | 3.3MC | Y | 2 | Giraudi,J.D | |
| 27.215 | 817859 | 3.6 | B | 4C | | 2 | | | 0.03 | B | | 8 | 3.3MC | Y | 2 | Giraudi,J.D | |
| 27.218 | 817860 | 3.4 | B | 4C | | 2 | | | 0.03 | B | | 8 | 3.3MC | Y | 2 | Giraudi,J.D | |
| 27.229 | 817861 | 3.5 | | 4B | 8 | 5 | 0.5 | | 0.030 | B | | 8 | 4.2 | Y | 2 | Kerber,F | C |
| 27.340 | 817862 | 3.9 | B | 145 | 10 | 2 | | | 0.040 | B | | 8 | 4.5 | Y | 1 | Levai,R | D |
| 27.48 | 817863 | 3.0 | | 4C | | | | | 0.040 | B | | 8 | 4.0 | Y | 1 | Keen,R | E |
| 27.52 | 817864 | 3.0 | | 4C, | | | | | | EY | | | 3.5MC | Y | 10 | Morris,C.S | F |
| 27.52 | 817865 | 3.1 | M | 4C | 14 | 6 | 5 | | 0.050 | B | | 10 | 3.5MC | Y | 10 | Morris,C.S | F |
| 27.66 | 817866 | 3.3 | S | 145, 4B | | | | | 0.023 | B | | 3 | 4.2 | Y | | Jones,A | G |
| 27.66 | 817867 | | | | 6 | 6 | 1 | | 0.078 | R | 7.5 | 30 | | | | Jones,A | H |
| 27.67 | 817868 | 8.6 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | I |
| 27.677 | 817869 | | | | | | 3 | | 0.05 | B | | 7 | | | | Garradd,G | |
| 27.677 | 817870 | 3.1 | | 4C | | | | | | EY | | | 5.0M | | 6 | Garradd,G | J |
| 27.681 | 817871 | | | | | | 3 | | 0.05 | B | | 7 | | | | Garradd,G | |
| 27.736 | 817872 | 3.3 | | 4B | | | 1 | | | EY | | | | | 1 | Tregaskis,T.B | K |
| 27.736 | 817873 | 3.3 | B | 4B | 10 | 7 | 3 | 270 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | L |
| 27.78 | 817874 | 3.3: | S | | | | 4.0 | | | EY | | | 5.3M | N | 1 | Lovejoy,T | M |
| 27.80 | 817875 | 3.1 | | 4B/C | | | | | | EY | | | 5 M | Y | 12 | Bouma,R.J | |
| 27.80 | 817876 | 3.5 | B | 4B/C | | 6 | 2.5 | 270 | 0.05 | B | | 10 | 5 M | Y | 12 | Bouma,R.J | N |

NOTE A Moonlight.
NOTE B No nucleus. Coma diameter approximate.
NOTE C Moon. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE D Magnitude estimate uncertainty +/-0.2 mag.
NOTE E Modified Sidgwick method used. Full moon. Extinction correction applied.
NOTE F Differential extinction correction of -0.3 was applied.
NOTE G Moon 17 d.
NOTE H Tail PA 259-273. Short tail faint to unaided eye.
NOTE I Nucleus.
NOTE J Moon.
NOTE K Tail length approximate. Bright moonlight.
NOTE L Tail straight and broad, PA approximate.
NOTE M Naked eye tail length.
NOTE N Dust tail.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.174 | 831001 | | 0.125 | R | 6 | 37 | | | 4 | Guthier,O | A |
| 27.283 | 831002 | 0.55 | 0.30 | N | 6 | 40 | 6 | | 1 | Monopoli,M.O | B |
| 27.505 | 831003 | 0.51 | 0.20 | N | 7 | 79 | 15 | 4.5 | 6 | Levy,D.H | C |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Moonlight, city lights.
NOTE C Scale is approximate.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.172 | 851287 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Ektachrome | 1600/ | N | M | 384/P | 1 | Stolzen,P | A |
| 27.193 | 851288 | 0.135 | 2.8 | | 15.2 x10.2 | 5.00 | Ektachrome | 1600/ | N | M | 390/P | 1 | Stolzen,P | A |

NOTE A (Observer's image identifier is preceded by prefix 2. Ed.)

DATE: 28 MAR 1986 DATE: 28 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.128 | 817877 | 3.3 | M | 4C | | 5 | | | | EY | | | 4.6M | Y | 1 | Fleet,R.W | A |
| 28.131 | 817878 | 3.9 | M | 4C | 12 | 6 | | | 0.08 | B | | 11 | 4.6M | Y | 1 | Fleet,R.W | |
| 28.168 | 817879 | 4.4 | B | 4B | 6 | 1 | 0.3 | 60 | 0.03 | B | | 8 | 6.2MT | Y | 1 | Dominici,A | |
| 28.250 | 817880 | 3.4 | B | AAVSO | | 3 | | | 0.040 | B | | 10 | 4.0 | Y | 1 | Alves,A.A | |
| 28.250 | 817881 | 3.5 | B | 145,144 | | | | | 0.05 | B | | 7 | 4.5CM | N | 2 | Martinez,C | |
| 28.326 | 817882 | 3.9 | B | 145 | 17 | 2 | 1.5 | 272 | 0.040 | B | | 8 | 5.2 | Y | 1 | Levai,R | B |
| 28.403 | 817883 | 2.6 | M | 4C | 15 | 5 | 4.0 | 271 | 0.05 | B | | 7 | 3.3M | Y | 1 | DeYoung,J.A | |
| 28.442 | 817884 | 4.1 | B | 4B | 5.3 | 1 | | | 0.05 | B | | 7 | 3.3MTC | Y | 1 | Dodd,W.J | C |
| 28.49 | 817885 | 3.1 | | 4C | 12 | 6 | | | 0.040 | B | | 8 | 4.0 | Y | 1 | Keen,R | D |
| 28.667 | 817886 | 3.2 | S | 4C | 12.0 | 5 | 2 | 250 | 0.080 | B | | 20 | | Y | 1 | Batza,H | E |
| 28.79 | 817887 | 3.1 | | 4C | | | 8.0 | | | EY | | | 5.5M | N | 1 | Lovejoy,T | F |
| 28.792 | 817888 | 3.2 | | 4C | | | | | | EY | | | 5.0M | | 6 | Garradd,G | G |
| 28.81 | 817889 | 3.0 | | 4B/C | | | | | | EY | | | 5 M | Y | 12 | Bouma,R.J | |
| 28.81 | 817890 | 3.4 | B | 4B/C | 15 | 6 | 2 | | 0.05 | B | | 10 | 5 M | Y | 12 | Bouma,R.J | H |
| 28.823 | 817891 | | | 4C | | | | 270 | 0.05 | B | | 10 | | N | 5 | Tregaskis,T.B | I |
| 28.991 | 817892 | 4.2 | M | 4B | 10 | 6 | 2.33 | 270 | 0.04 | B | | 12 | 4.8 | N | 2 | Henshaw,C | G |

NOTE A After cloud.
NOTE B Magnitude estimate uncertainty +/-0.2 mag.
NOTE C No tail seen.
NOTE D Modified Sidgwick method used. Extinction correction applied.
NOTE E Moonlight. (Observer gave limit as 9.5. Ed.)
NOTE F Naked eye tail length.
NOTE G Moon.
NOTE H Coma diameter approximate.
NOTE I DC = not visible. Tail length = faint smear. PA approximate. Binocular limit approximately mag. 4. Clear but dawn breaking. In city.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.171 | 831004 | 0.2 | 0.030 | B | | 8 | 6 | 6.2 | 1 | Dominici,A | A |

NOTE A Moonlight and twilight interfered with observation. "Luminous strip in the tail" at PA 60 deg.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Eyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.160 | 851289 | 0.050 | 2.7 | | 39.6 x27.0 | 0.17 | Kodak Tri-X | 400/27 | N | | 8/P | 1 | Afeltra,J | A |
| 28.174 | 851290 | 0.050 | 2.8 | | 39.6 x27.0 | 10.00 | Ektachrome | 1600/ | N | M | 396/P | 1 | Stolzen,P | B |
| 28.175 | 851291 | 0.135 | 2.8 | | 15.2 x10.2 | 5.00 | Ektachrome | 1600/ | N | M | 397/P | 1 | Stolzen,P | B |
| 28.198 | 851292 | 0.135 | 4 | | 15.2 x10.2 | 0.27 | Kodak Tri-X | 400/27 | N | | 7/P | 1 | Afeltra,J | C |
| 28.211 | 851293 | 0.135 | 4 | | 15.2 x10.2 | 0.17 | Kodak Tri-X | 400/27 | N | | 6/P | 1 | Afeltra,J | C |

NOTE A Moonlight and city lights.
NOTE B (Observer's image identifier is preceded by prefix 2. Ed.)
NOTE C City lights.

DATE: 29 MAR 1986

DATE: 29 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.05 | 817893 | 3.1 | S | 4C | | | | | 0.05 | B | | 7 | 3.5 | | 9 | Shanklin,J.D | |
| 29.146 | 817894 | | | 4B | 15 | | | | 0.030 | B | | 8 | 4.0M | Y | 10 | Villa,M | |
| 29.156 | 817895 | 3.0 | S | 4C, 126 | 3 | 6 | | | 0.114 | N | 7.9 | 45 | 4.0M | Y | 1 | Di Meglio,F | |
| 29.167 | 817896 | 3.0 | M | 4B | | | | | 0.030 | B | | 8 | 4.0M | Y | 10 | Villa,M | |
| 29.169 | 817897 | 3.5 | B | SAO,IHW | 25.0 | | 3.0 | | 0.050 | B | | 10 | 5.0 | Y | 3 | Guthier,O | |
| 29.208 | 817898 | 3.0 | S | 4C | 32 | 5 | 3.9 | 276 | 0.04 | B | | 8 | 6.0 | Y | 6 | Parisio,R | A |
| 29.279 | 817899 | 3.2 | B | 144 | 14 | 6 | | | 0.05 | B | | 20 | 3.5 | Y | 8 | da Silva,L.A.L | B |
| 29.292 | 817900 | 3.9 | B | 4C | | 3 | | | 0.03 | B | | 8 | 4.1M | Y | 3 | Giraudi,J.D | |
| 29.295 | 817901 | 3.9 | B | 4C | | 3 | | | 0.03 | B | | 8 | 4.1M | Y | 3 | Giraudi,J.D | |
| 29.296 | 817902 | 3.8 | B | 4C | | 3 | | | 0.03 | B | | 8 | 4.1M | Y | 3 | Giraudi,J.D | |
| 29.410 | 817903 | 2.9 | M | 4C | 15 | 5 | 3.0 | 280 | 0.05 | B | | 7 | 3.3M | Y | 1 | DeYoung,J.A | |
| 29.417 | 817904 | 5.0 | B | 4B | | | | | 0.08 | B | | 11 | 2.5 | Y | 4 | Gorski,L | |
| 29.573 | 817905 | 4 : | B | 4C | 10 | 7 | 1 | 270 | 0.05 | B | | 10 | | N | 5 | Tregaskis,T.B | C |
| 29.573 | 817906 | | | 4C | | | | | | EY | | | 4 | N | 5 | Tregaskis,T.B | D |
| 29.625 | 817907 | 3.2 | S | 4C | 12 | 7 | | | 0.080 | B | | 20 | | Y | 1 | Batza,H | E |
| 29.747 | 817908 | | | | | 9 | | | 0.31 | N | | 129 | | | | Garradd,G | |
| 29.747 | 817909 | 2.9 | | 4C | | | | | | EY | | | 5.0M | Y | 6 | Garradd,G | |
| 29.750 | 817910 | | | | | 9 | | | 0.31 | N | 5.4 | 129 | | | | Garradd,G | |
| 29.76 | 817911 | 2.7 | | 4C | | | 7.0 | | | EY | | | 5.5M | N | 1 | Lovejoy,T | F |
| 29.792 | 817912 | 3.3 | S | 4C | 7 | | 1.8 | 280 | 0.05 | B | | 7 | 4.6M | N | 1 | Bryant,K | G |
| 29.823 | 817913 | 3.5 | M | 4B | 9 | 5 | | | 0.030 | B | | 8 | 3.0C | Y | 1 | Kato,T | |

NOTE A Centro Atlantico Da Air Jumbo.
NOTE B Moonlight.
NOTE C PA approximate. Bright moon and cloud. In city. (Observer gave limit as approximately 8. Ed.)
NOTE D Comet not visible. Bright moon and cloud. In city.
NOTE E Moonlight. (Observer gave limit as 9.5. Ed.)
NOTE F Naked eye tail length.
NOTE G DC = strong.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.152 | 831005 | | 0.125 | R | 6 | 37 | | | 4 | Guthier,O | |
| 29.510 | 831006 | | 0.41 | N | 5 | 64 | 30 | 5 | 1 | Levy,D.H | A |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.400 | 870133 | 600G-O | CL | 0.135 | 2.8 | | 5.00 | Kodak 2415 | | Y | C | 213/S | 4 | Buchanan,W.T | A |

NOTE A Moonlight interfered with the observation. Halley invisible to naked eye. (Observer's image identifier is E-122-13. Ed.)
Window on front of instrument selected to correspond with aperture: 54 mm for f/2.8, 38 mm for f/4.8.

DATE: 30 MAR 1986

DATE: 30 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.006 | 817914 | 3.7 | M | 4C | | | | | 0.035 | B | | 9 | 4.7M | Y | 1 | Begbie,M.J.R | |
| 30.021 | 817915 | | | | 8.9 | 7 | | 272 | 0.30 | N | 8.5 | 102 | 4.7M | Y | 1 | Begbie,M.J.R | A |
| 30.031 | 817916 | 3.1 | B | 4C | 15 12 | 5 | | 269 | 0.06 | B | | 15 | 4.8 | Y | 2 | Vincent,J | B |
| 30.042 | 817917 | 3.3 | M | 4C | | 6 | 2.4 | 283 | | EY | | | 4.9M | Y | 1 | Fleet,R.W | |
| 30.066 | 817918 | 4.2 | M | 4C | 12 | 6 | 2.5 | 270 | 0.04 | B | | 12 | 5.4 | N | 2 | Henshaw,C | C |
| 30.076 | 817919 | 3.7 | M | 4C | 12 | 6 | 0.5 | 270 | 0.08 | B | | 11 | 4.9M | Y | 1 | Fleet,R.W | D |
| 30.11 | 817920 | 3.4 | S | 4C | | | | | 0.08 | B | | 20 | 3.0 | | 10 | Shanklin,J.D | |
| 30.13 | 817921 | 3.4 | B | 4C | | 6 | | | 0.050 | B | | 7 | M | Y | 3 | Jannink,D.W | E |
| 30.160 | 817922 | 2.9 | M | 4C | 14 | 8 | | | 0.030 | B | | 8 | 3.5M | Y | 11 | Villa,M | |
| 30.233 | 817923 | 3.4 | B | 4C | 5 | 5 | | | 0.06 | R | 8 | 15 | 3.0M | Y | 2 | Schambeck,C.M | |
| 30.292 | 817924 | 3.3 | B | 145 | 12 | 5 | 1 | | 0.05 | B | | 7 | 4.5CM | Y | 2 | Martinez,C | |
| 30.358 | 817925 | 3.3 | B | | 8 | 2 | 1.47 | | 0.05 | B | | 7 | 3.8 | | | Lairet,R | |
| 30.410 | 817926 | 3.5 | S | 4C | | | | | 0.05 | B | | 10 | 3 M | Y | 1 | House,R.R | F |
| 30.417 | 817927 | 3.1 | B | 4B | | | | | 0.08 | B | | 11 | 2.5 | Y | 4 | Gorski,L | |
| 30.46 | 817928 | 3.3 | B | 4C | 6 | 8 | 0.25 | 315 | 0.154 | N | 8.0 | 68 | 3.5 | Y | | Kronk,G | G |
| 30.49 | 817929 | 2.8 | | 4C | | | | | 0.040 | B | | 8 | 4.0 | Y | 1 | Keen,R | H |
| 30.67 | 817930 | 2.6 | | 4B, 4C | | | 5.5 | | | EY | | | 5.5M | N | 1 | Lovejoy,T | I |
| 30.69 | 817931 | 3.1 | S | 4C | | | | | 0.023 | B | | 3 | | | | Jones,A | J |
| 30.69 | 817932 | | | | 10 | 7 | 1.5 | 259 | 0.078 | R | 7.5 | 30 | | | | Jones,A | |
| 30.70 | 817933 | 2.7 | V | 4C | | | | | | | | | 4.7 | | | Jones,A | K |
| 30.74 | 817934 | 9.8 | V | RASNZ | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | L |
| 30.74 | 817935 | 8.1 | S | RASNZ | | 7 | | | 0.317 | N | 5 | 86 | | | | Jones,A | M |
| 30.743 | 817936 | 2.9 | | 4C | | | | | | EY | | | 5.0M | Y | 6 | Garradd,G | |
| 30.792 | 817937 | 3.2 | | 4C | | | 1 | 270 | | EY | | | 4 | Y | 5 | Tregaskis,T.B | N |
| 30.792 | 817938 | 3.2 | B | 4C | 20 | 5 | | 270 | 0.05 | B | | 10 | | Y | 5 | Tregaskis,T.B | O |
| 30.80 | 817939 | 2.7 | | 4C | | | | | | EY | | | 4.5M | Y | 12 | Bouma,R.J | |
| 30.80 | 817940 | 3.0 | B | 4C | 20 | 5 | 2 | 267 | 0.05 | B | | 10 | 4.5M | Y | 12 | Bouma,R.J | P |

NOTE A Tail measurement refers to dust tail only.
NOTE B Bright moonlight. Reduced tail? Comp. star Eta Sgr. Tail 3.5 to 4 deg. long.
NOTE C Moon.
NOTE D Spike: 0.5 deg. at PA 270. Midpoint on dust tail: 2.7 deg. at PA 280. End point of dust tail: 4.5 deg. at PA 283.
NOTE E Binocular limit is 6.5.
NOTE F 10 minutes into astron. twilight.
NOTE G Tail PA approximate. Moon and twilight.
NOTE H Modified Sidgwick method used. Extinction correction applied.
NOTE I Easily visible to naked eye with (rest of note illegible. Ed.). Coma diameter through 15x80 binoculars: 15'.
NOTE J Moon 20 d.
NOTE K Bifocal spectacles - viewed stars through distance section and comet out of focus in close-up section.
NOTE L Nucleus.
NOTE M Condensation.
NOTE N Tail length and PA approximate. Clear, bright moon.
NOTE O Coma diameter approximate. Tail length 3-4 deg., PA approximate. Clear, bright moon. (Observer gave limit as approximately 8. Ed.)
NOTE P Coma diameter approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.063 | 831007 | 0.29 | 0.30 | N | 8.5 | 102,212,425 | 12 | 4.7 | 1 | Begbie,M.J.R | A |
| 30.076 | 831008 | 4 | 0.08 | B | | 11 | | 4.9 | 1 | Fleet,R.W | B |
| 30.097 | 831009 | 2.97 | 0.035 | B | | 9 | 10 | 4.7 | 1 | Begbie,M.J.R | C |
| 30.169 | 831010 | 0.07 | 0.125 | N | 5.8 | 24, 28, 40 | 12 | 4.0 | 4 | Riccabone,G | D |

NOTE A Jet in PA 90. Vertex distance 4 arc min.; semi latus rectums P1 = 4 arc min., P2 = 4 arc min. Coma and near nuclear tail symmetrical. A prominent jet in PA 90 is very straight and 51 arc sec. long. Besides the jet, the coma appears very dust free - slightly bluish in colour.
NOTE B Spike at PA 270. Dust tail end point at PA 283. Suspected tail at PA 284. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Gas tail 6 deg. in PA 260. Dust tail 4 deg. in PA 275 deg. (brightest part of dust tail in PA 275 deg.). Dust tail PA 260-280. Both gas and dust tails shorter as Halley now lies in Milky Way.
NOTE D Comet very low above the horizon, haze over the valley. Couldn't measure diameters due to sunrise. Therefore the image scale is approximate. Moonlight, twilight, and city lights interfered with the observation. (Translated by IHW staff. Ed.)

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.415 | 870134 | 600G-O | CL | 0.135 | 4.8 | | 30.00 | Kodak 2415 | | Y | C | 223/S | 4 | Buchanan,W.T | A |

NOTE A Moonlight interfered with the observation. (Observer's image identifier is E-122-23. Ed.) Window on front of instrument selected to correspond with aperture: 54 mm for f/2.8, 38 mm for f/4.8.

DATE: 31 MAR 1986

DATE: 31 MAR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.000 | 817941 | 3.1 | B | 4C | | | 5 | 270 | 0.06 | B | | 15 | 5.2 | Y | 2 | Vincent,J | A |
| 31.04 | 817942 | 2.7 | S | 4C | | | | | 0.05 | B | | 7 | 3.3 | | 11 | Shanklin,J.D | |
| 31.063 | 817943 | 3.3 | M | 4C | | 6 | 2.5 | 286 | | EY | | | 4.8M | Y | 1 | Fleet,R.W | |
| 31.069 | 817944 | 4.2 | M | 4C | 15 | 6 | 2.25 | 270 | 0.04 | B | | 12 | 5.4 | N | 2 | Henshaw,C | B |
| 31.104 | 817945 | 3.6 | M | 4C | 15 | 6 | 0.9 | 266 | 0.08 | B | | 11 | 4.8M | Y | 1 | Fleet,R.W | C |
| 31.112 | 817946 | 3.5 | M | 5A | | | | | 0.035 | B | | 9 | 4.7M | Y | 1 | Begbie,M.J.R | |
| 31.122 | 817947 | | | | 8.8 | 6 | | 275 | 0.30 | N | 8.5 | 102 | 4.7M | Y | 1 | Begbie,M.J.R | D |
| 31.160 | 817948 | 2.6 | M | 4C | 26 | 7 | | | 0.030 | B | | 8 | 3.5M | Y | 11 | Villa,M | |
| 31.172 | 817949 | 2.8 | B | 144 | | | | | 0.05 | B | | 7 | 4.6 | | 2 | Galli,A | |
| 31.173 | 817950 | 3.1 | B | IHW | 30.0 | | 4.0 | | 0.050 | B | | 10 | 5.0 | Y | 3 | Guthier,O | |
| 31.174 | 817951 | 3.3 | B | 144 | | 2 | | | 0.05 | B | | 7 | 4.0CM | Y | 2 | Martinez,C | E |
| 31.178 | 817952 | 3.3 | B | IHW | | | 6.0 | | | EY | | | | Y | 3 | Guthier,O | |
| 31.208 | 817953 | 3.4 | B | AAVSO | | 3 | | | 0.040 | B | | 10 | 4.0 | Y | 1 | Alves,A.A | |
| 31.219 | 817954 | 3.3 | B | 4C | | 6 | | | 0.06 | R | 8 | 15 | 4.0M | Y | 2 | Schambeck,C.M | |
| 31.250 | 817955 | 3.6 | B | 144 | 18 | 2 | | | 0.05 | B | | 7 | 3.2CM | Y | 2 | Lupianez,B | |
| 31.252 | 817956 | 3.7 | B | 4C | | 3 | | | 0.03 | B | | 8 | 3.1 | Y | 3 | Giraudi,J.D | |
| 31.259 | 817957 | 3.6 | B | 4C | | 3 | | | 0.03 | B | | 8 | 3.1 | Y | 3 | Giraudi,J.D | |
| 31.266 | 817958 | 3.5 | B | 4C | | 3 | | | 0.03 | B | | 8 | 3.1 | Y | 3 | Giraudi,J.D | |
| 31.269 | 817959 | 3.3 | B | 4C | | 3 | | | 0.03 | B | | 8 | 3.1 | Y | 3 | Giraudi,J.D | |
| 31.286 | 817960 | 3.6 | S | 144 | | | | 281 | 0.05 | B | | 7 | 3.8 | | 2 | Benavides,A | |
| 31.294 | 817961 | 3.0 | B | 144 | 11 | 6 | | | 0.05 | B | | 20 | 4.0 | Y | 1 | da Silva,L.A.L | F |
| 31.360 | 817962 | 3.3 | B | | 16 | 2 | 1.67 | | 0.05 | B | | 7 | 4.0 | | | Lairet,R | |
| 31.395 | 817963 | 3.3 | S | 4C | 13 | 1 | | | 0.05 | B | | 10 | 3.5M | Y | 1 | House,R.R | |
| 31.404 | 817964 | 4.0 | S | 4C | 15 | | | | 0.035 | B | | 7 | 3.0M | N | 3 | Morrison,W | G |
| 31.54 | 817965 | 2.6 | B | 4C | 35 | 7 | 4 | 275 | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 31.54 | 817966 | 2.7 | | 4C | 40 | 7 | | 270 | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 31.55 | 817967 | | | | 20 | 6 | 1 | 300 | 0.050 | B | | 10 | 4.0M | Y | 28 | Morris,C.S | |
| 31.56 | 817968 | 2.6 | | 4C, BSC | 30 | 4 | | | | EY | | | 4.0M | Y | 28 | Morris,C.S | |
| 31.625 | 817969 | 3.2 | | 4C | | | 1 | 270 | | EY | | | 4 | N | 1 | Tregaskis,T.B | H |
| 31.625 | 817970 | 3.2 | S | 4C | 25 | 5 | | | 0.05 | B | | 10 | | N | 1 | Tregaskis,T.B | I |
| 31.649 | 817971 | 3.0 | | 4C | | | | | | EY | | | 5.0M | Y | 6 | Garradd,G | |
| 31.71 | 817972 | 3.1 | S | 4C | | | | | 0.023 | B | | 3 | | | | Jones,A | J |
| 31.71 | 817973 | | | | 14 | 5 | | | 0.050 | B | | 7 | | | | Jones,A | |
| 31.71 | 817974 | | | | 6 | | 0.5 | | 0.078 | R | 7.5 | 30 | | | | Jones,A | K |
| 31.72 | 817975 | 2.8 | | 4C | | | | | | EY | | | 5 M | Y | 12 | Bouma,R.J | |
| 31.72 | 817976 | 3.2 | B | 4C | 20 | 5 | 2 | | 0.05 | B | | 10 | 5 M | Y | 12 | Bouma,R.J | L |
| 31.73 | 817977 | 8.2 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | M |
| 31.77 | 817978 | 2.6 | | 4C | | 7 | 5.0 | | | EY | | | 5.0M | N | 1 | Lovejoy,T | N |
| 31.781 | 817979 | 3.6 | M | 4C | 7.7 | 6 | | | 0.08 | B | | 11 | 3.5M | Y | 1 | Mitsuma,S | O |
| 31.781 | 817980 | | | | | | | | 0.16 | N | 6.3 | 31 | 3.5M | Y | 1 | Mitsuma,S | P |
| 31.788 | 817981 | 3.4 | B | 4C | | | | | 0.035 | B | | 7 | | Y | 1 | Okada,M | |
| 31.79 | 817982 | 4.1 | S | AAVSO | 8 | 5 | | | 0.07 | B | | 10 | 4.5M | Y | 1 | Hayashi,A | |
| 31.792 | 817983 | 3.6 | S | 4C | 5.4 | 7 | 0.2 | 320 | 0.05 | B | | 7 | 3.0M | Y | 1 | Kanai,K | |
| 31.792 | 817984 | 3.1 | S | 4C | 10 | 4 | 1 | 270 | 0.07 | B | | 10 | 3.0 | Y | 1 | Kobayashi,J | |
| 31.800 | 817985 | 4.1 | B | 4C | 5.4 | 7 | 0.2 | 320 | 0.05 | B | | 7 | 3.0M | Y | 1 | Kanai,K | |
| 31.80 | 817986 | 3.9 | S | AAVSO | 9 | 5 | | | 0.13 | N | 6.3 | 24 | 4.5M | Y | 1 | Hayashi,A | |
| 31.82 | 817987 | 3.1 | M | 4C | | | | | 0.05 | B | | 7 | 4.5M | Y | 1 | Suzuki,K | Q |
| 31.833 | 817988 | 4.9 | S | 4C | | 6 | | | 0.153 | N | 8.6 | 33 | 3.5 | Y | 1 | Iwaki,Y | R |
| 31.860 | 817989 | 3.0 | S | 144 | 12 | | | | | EY | | | 4.1M | Y | 7 | Haver,R | |
| 31.860 | 817990 | 3.2 | S | 144 | 16.0 | 6 | 1.0 | 270 | 0.05 | B | | 7 | 4.1M | Y | 7 | Haver,R | |
| 31.927 | 817991 | 3.0 | B | 4C | | | 2 | 270 | 0.06 | B | | 15 | 4.6 | Y | 2 | Vincent,J | S |
| 31.99 | 817992 | 3.2 | S | 4C | | | | | 0.05 | B | | 7 | 4.0 | | 12 | Shanklin,J.D | Q |

NOTE A Comp. star Eta Sgr. Bright moon.
NOTE B Moon.
NOTE C Spike: 0.9 deg. at PA 266. End gas tail: 3.9 deg. at PA 266. Midpoint dust tail: 3.5 deg. at PA 285. End point of dust tail: 6.2 deg. at PA 289.
NOTE D Tail measurement refers to dust tail only.
NOTE E Cirrus.
NOTE F Moon near to the comet.
NOTE G Altitude 5 deg.
NOTE H Clear, bright moon.
NOTE I Coma diameter approximate. Very faint tail 3-4 deg. long, PA approximate. Tail fan-like. Clear, bright moon. (Observer gave limit as approximately 8. Ed.)
NOTE J Moon 21 d. +/-14 degrees distant.
NOTE K Tail PA 262-288.
NOTE L Coma diameter approximate.
NOTE M Nucleus.
NOTE N Coma diameter through 15x80 binoculars: 30'.
NOTE O m2 = 7.5.
NOTE P m2 = 8.2.
NOTE Q Cloud.
NOTE R Not real dark (dusk). Saw bottom moon. [sic] (Translated by IHW staff. Ed.)
NOTE S Tail shapeless. PA approximate. Bright moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.104 | 831011 | 4 | 0.08 | B | | 11 | | 4.8 | 1 | Fleet,R.W | A |
| 31.133 | 831012 | 0.30 | 0.30 | N | 8.5 | 102,212,425 | 20 | 4.7 | 1 | Begbie,M.J.R | B |
| 31.153 | 831013 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | C |

NOTE A Gas tail spike at PA 266. Gas tail end point at PA 266. Tail end point at PA 289. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Fan PA 45-160. Inner tail at PA 274. Vertex distance 4.5 arc min.; semi latus rectums P1 = 5 arc min., P2 = 4 arc min. Yesterday's sharp jet appears to have developed into a broad asymmetrical fan - more dense and brighter to the northeast. Material in the form of "streamers" appears to flow from the coma into the tail, producing a bright narrow inner tail.
NOTE C (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.212 | 851294 | 0.135 | 2.8 | | 15.2 x10.2 | 10.00 | Ektachrome | 1600/ | N | M | 410/P | 1 | Stolzen,P | A |

NOTE A (Observer's image identifier is preceded by prefix 2. Ed.)

DATE: 1 APR 1986 DATE: 1 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.099 | 817993 | 3.6 | M | 5A | | | | | 0.035 | B | | 9 | 4.9M | Y | 1 | Begbie,M.J.R | |
| 1.101 | 817994 | 3.2 | M | 4C | | | 3.5 | 284 | | EY | | | 4.7M | Y | 1 | Fleet,R.W | |
| 1.108 | 817995 | | | | 7.8 | 7 | | 250 | 0.30 | N | 8.5 | 102 | 4.9M | Y | 1 | Begbie,M.J.R | A |
| 1.115 | 817996 | 3.7 | M | 4C | 15 | 6 | 1.9 | 283 | 0.08 | B | | 11 | 4.7M | Y | 1 | Fleet,R.W | |
| 1.139 | 817997 | 2.9 | B | IHW | 27.0 | 7 | 4.0 | | 0.050 | B | | 10 | 5.0 | Y | 3 | Guthier,O | |
| 1.14 | 817998 | 3.7 | B | 4C | | 5 | | | 0.050 | B | | 7 | M | Y | 3 | Jannink,D.W | B |
| 1.15 | 817999 | 4.5 | M | 4C | 12 | 2 | | | 0.05 | B | | 7 | | | | Keszthelyi,S | C |
| 1.160 | 818000 | 2.9 | M | 4C | 13 | 8 | | | 0.030 | B | | 8 | 3.5M | Y | 11 | Villa,M | |
| 1.365 | 818001 | | B | | 20 | 2 | 0.80 | | 0.05 | B | | 7 | 4.0 | | | Lairet,R | |
| 1.528 | 818002 | 2.6 | S | 4C | 20 | | 5 | | | EY | | | | Y | 1 | Seargent,D | |
| 1.53 | 818003 | 2.5 | | 4C | | | 7 | 278 | | EY | | | 6 | Y | 13 | Bouma,R.J | |
| 1.53 | 818004 | 2.9 | B | 4C | 18 | 5 | | | 0.05 | B | | 10 | 6 | Y | 13 | Bouma,R.J | |
| 1.53 | 818005 | 2.7 | | 4C | 18 | 6 | 9 | 283 | | EY | | | 5.5 | Y | 29 | Morris,C.S | |
| 1.53 | 818006 | 2.8 | M | 4C | 12 | 5 | 8 | 283 | 0.050 | B | | 10 | 5.5 | Y | 29 | Morris,C.S | |
| 1.56 | 818007 | 2.5 | | 4C | | 7 | 9.0 | | | EY | | | 5.3M | N | 1 | Lovejoy,T | D |
| 1.60 | 818008 | 2.7 | | 4C | 30 | 6 | 4 | 270 | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 1.604 | 818009 | 3.0 | S | 4C | 12 | 7 | | | 0.080 | B | | 20 | | Y | 1 | Batza,H | E |
| 1.615 | 818010 | 3.5 | S | 4C | 20 | 7 | 4 | 75 | 0.080 | B | | 11 | 8 | Y | 8 | Pryal,J | F |
| 1.62 | 818011 | 2.6 | B | 4C | | | | | | EY | | | 5.2 | Y | | Clark,M.L | G |
| 1.63 | 818012 | 3.4 | S | 4C | 22 | 7 | 0.9 | | 0.25 | N | 5 | 38 | 5.2 | Y | | Clark,M.L | H |
| 1.635 | 818013 | 3.0 | | 4C | | | | | | EY | | | 5.5M | Y | 6 | Garradd,G | |
| 1.646 | 818014 | 3.0 | | 4C | | | 1 | 270 | | EY | | | 4 | Y | 1 | Tregaskis,T.B | I |
| 1.646 | 818015 | 3.0 | B | 4C | 20 | 5 | 3 | 270 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | J |
| 1.65 | 818016 | 2.7 | | 4C | 30 | 7 | | 270 | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 1.71 | 818017 | 2.9 | S | 4C | | | | | 0.023 | B | | 3 | 4.6 | | | Jones,A | K |
| 1.71 | 818018 | | | | 18 | 6 | | | 0.050 | B | | 7 | | | | Jones,A | |
| 1.71 | 818019 | | | | | | 0.5 | | 0.078 | R | 7.5 | 30 | | | | Jones,A | L |
| 1.729 | 818020 | 3.7 | B | 100 | 0.2 | 5 | 0.51 | 208 | 0.28 | SC | 5 | 70 | 4.7 | Y | 1 | Amoretti,M | |
| 1.74 | 818021 | 9.8 | V | SPV | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | M |
| 1.780 | 818022 | 3.0 | S | 4C | 30 | 5 | 1 | 280 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |
| 1.78 | 818023 | 3.0 | B | | 10 | 7 | | | 0.05 | B | | 10 | 3.0 | Y | 1 | Uda,K | |
| 1.79 | 818024 | 3.0 | M | 4C | | | 1.0 | | 0.05 | B | | 7 | 5.0M | Y | 1 | Suzuki,K | |
| 1.79 | 818025 | | | 4C | 4.6 2.5 | 5 | | | 0.25 | | 4.2 | 88 | 5.0M | Y | 1 | Suzuki,K | N |
| 1.79 | 818026 | 3.2 | S | 4C | 7 | 7 | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Yasuki,M | |
| 1.795 | 818027 | 2.9 | | 4C | | | | | | EY | | | 5.5M | Y | 6 | Garradd,G | |
| 1.813 | 818028 | | | 4C | | 5 | | 270 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | O |
| 1.823 | 818029 | | | 4C | 8 | 5 | | 270 | 0.15 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | P |
| 1.896 | 818030 | 3.5 | S | 4C | 10.0 | 6 | 3.00 | | 0.13 | R | 4 | 21 | 6.0 | Y | 5 | Campos,J | Q |
| 1.900 | 818031 | 3.3 | | 4C | 20.0 | 8 | | | | EY | | | 6.0 | Y | 5 | Campos,J | R |
| 1.905 | 818032 | 2.8 | S | 143 | 12 | | | | | EY | | | 4.5M | Y | 7 | Haver,R | |
| 1.910 | 818033 | 3.0 | S | 143 | 14.5 | 5 | 4.4 | 280 | 0.05 | B | | 7 | 4.5M | Y | 7 | Haver,R | |

NOTE A Tail measurement refers to dust tail only.
NOTE B Binocular limit is 6.5.
NOTE C Moon!
NOTE D Coma diameter through 15x80 binoculars: 30'. Tail length is lower limit.
NOTE E Moonlight and haze. (Observer gave limit as 9.5. Ed.)
NOTE F Moon only about 10 deg. above, "visible to naked eye".
NOTE G Moon up.
NOTE H Moon up. PA of 0.9 deg. tail 320 to 295.
NOTE I PA approximate. Hazy, bright moon.
NOTE J Coma diameter approximate. PA approximate. Hazy, bright moon. (Observer gave limit as approximately 8. Ed.)
NOTE K Moon 22 d. +/-14 degrees below comet.
NOTE L Tail PA 264-294.
NOTE M Nucleus.
NOTE N Instrument is Wright-Schmidt.
NOTE O Tail difficult to see, PA approximate. Clouds and bright moon. Limit in binoculars approximately mag. 7.
NOTE P 11 mag. stellar-like nucleus. Tail difficult to see, PA approximate. Magnification of 120 also used. Cloud and bright moon. (Observer gave limit as approximately 11. Ed.)
NOTE Q Bluish coma. Very faint tail.
NOTE R Tail not visible with naked eye.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.115 | 831014 | 4 | 0.08 | B | | 11 | | 4.7 | 1 | Fleet,R.W | A |
| 1.127 | 831015 | | 0.30 | N | 8.5 | 102,212,425 | 25 | 4.9 | 1 | Begbie,M.J.R | B |
| 1.150 | 831016 | 1 | 0.050 | B | | 7 | 10 | 3.5 | 5 | Keszthelyi,S | |
| 1.157 | 831017 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | C |
| 1.723 | 831018 | | 0.254 | N | 6 | 61, 7 | 133 | | | Pawlutschenko,B | D |

NOTE A Main tail at PA 283. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Vertex distance 4.5 arc min.; semi latus rectums P1 = 3.5 arc min., P2 = 3 arc min. A prominent jet is once more visible - 1.5 arc min. long in PA 130. Material flows from the coma into a prominent narrow tail in PA 250. The coma appeared quite dusty. (New jets have appeared approximately every two days during March. Without taking into account the length of jets, but taking into account only the position angles, an estimate of the rotation period of Halley's nucleus yielded a result of 52 hours 18 minutes - agreeing favourably with that obtained by Sekanina/Larson.) (Two drawings are included in this listing: one made at magnifications of 102 and 212 and scale 0.30 arc min./mm and one made at a magnification of 425 and scale 0.13 arc min./mm. Ed.)
NOTE C (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Distinctive bright fan protruding from the nucleus; small star like nucleus; no visible tail; comet head with very faint and tenuous coma. Between the hours of 3:14 am and 5:27 am EST on 2nd April, 1986, the comet was seen to have a faint tenuous head with a bright fan protruding from the nucleus. Tail was not visible due to the close proximity and brightness of the last quarter moon. The nucleus seemed distinctively bright but smaller than on previous occasions. The comet showed a rapid angular movement against the background stars within a 15 min. period. The apparent motion of the comet, on the morning of 2nd April, 1986, is shown. The pattern of stars defined were clear points of light but were reduced in magnitude due to the position and brightness of the last quarter moon. The comet moves substantially now within a 15 minute period as demonstrated. The constellation affected should be at the border of Scorpius. Star alignments were calculated by visual triangulation. 7x50 binoculars also used. (Two drawings included in this listing. Drawing data inferred from written description. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.491 | 851295 | 0.080 | 2.8 | | 25.4 x17.1 | 10.00 | Kodak Tri-X | | N | X | 210/P | 2 | Ward,A | A |
| 1.916 | 851296 | 0.050 | 1.8 | | 39.6 x27.0 | 2.50 | Kodak VR | 1000/ | N | C | 1/P | 3 | Vincent,F | |

NOTE A (Observer's image identifier is 12/10. Ed.) UV filter used.

DATE: 2 APR 1986

DATE: 2 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.000 | 818034 | 3.2 | B | 4C | | | | 5 | 275 | 0.06 | B | | 15 | | Y | 2 | Vincent,J | A |
| 2.041 | 818035 | 2.9 | B | 4C | 20 | | 6 | 1 | | 0.03 | B | | 8 | 4.7M | Y | 3 | Fischer,D | B |
| 2.073 | 818036 | 3.7 | M | 5A | 13 | | 5 | 2 | 270 | 0.04 | B | | 12 | 5.2 | N | 1 | Henshaw,C | C |
| 2.10 | 818037 | 5.0 | M | 4C | 15 | | 2 | | | 0.05 | B | | 10 | | | | Keszthelyi,S | D |
| 2.10 | 818038 | 3.0 | V | 4C | 30 | | 6 | 4.00 | 270 | | EY | | | 6.0 | Y | 4 | Merlin,J.-C | |
| 2.115 | 818039 | 3.3 | M | 4C | | | 6 | 2.2 | 308 | | EY | | | 4.9M | Y | 1 | Fleet,R.W | |
| 2.122 | 818040 | 3.6 | M | 4C | 18 | | 6 | 4.3 | 275 | 0.08 | B | | 11 | 4.9M | Y | 1 | Fleet,R.W | E |
| 2.125 | 818041 | 2.8 | B | IHW | 31.5 | | 6 | 3.0 | | 0.050 | B | | 10 | 5.0 | Y | 3 | Guthier,O | |
| 2.125 | 818042 | 2.9 | S | 4C | 33 | | 6 | 4.2 | | 0.08 | B | | 20 | 5.5 | Y | 7 | Parisio,R | |
| 2.146 | 818043 | 3.6 | M | 4C | | | | | | 0.040 | B | | 7 | 3.5M | Y | 11 | Westlund,M | |
| 2.146 | 818044 | | | | 13 | 8 | 6 | | | 0.09 | M | 11 | 56 | 3.5M | Y | 11 | Westlund,M | |
| 2.20 | 818045 | 2.8 | V | 4C | 30 | | 6 | | | | EY | | | 6.0 | Y | 4 | Merlin,J.-C | |
| 2.358 | 818046 | 3.6 | B | | 20 | | 2 | 0.83 | | 0.05 | B | | 7 | 3.8 | | | Lairet,R | |
| 2.396 | 818047 | 3.4 | S | 4C | 19 | | | | | 0.035 | B | | 7 | 3.2 | Y | 3 | Morrison,W | F |
| 2.42 | 818048 | 2.7 | | 4C | 30 | | 7 | | 275 | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 2.42 | 818049 | 2.8 | | 4C | 30 | | 7 | 4 | 270 | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 2.51 | 818050 | 2.4 | B | IHW BAA | | | | | | | EY | | | | | | Green,D.W.E | |
| 2.51 | 818051 | 2.5 | B | IHW BAA | | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 2.51 | 818052 | 2.4 | S | IHW BAA | 26 | | 5 | 5 | | 0.035 | B | | 7 | | | | Green,D.W.E | G |
| 2.52 | 818053 | 3.2 | B | 5A | | | 1 | | | 0.050 | B | | 7 | 4.3C | N | 1 | Matchett,V | |
| 2.53 | 818054 | 2.3 | | 4C | 27 | | 5 | 8 | 280 | | EY | | | 6.5 | Y | 30 | Morris,C.S | |
| 2.53 | 818055 | 2.4 | M | 4C | | | | 8 | 280 | 0.050 | B | | 10 | 6.5 | Y | 30 | Morris,C.S | |
| 2.542 | 818056 | 2.4 | S | 4C | | | | | | | EY | | | | Y | 3 | Seargent,D | |
| 2.56 | 818057 | 2.4 | | 4C | | | | | | | EY | | | 7 | Y | 14 | Bouma,R.J | |
| 2.56 | 818058 | 2.8 | B | 4C | 18 | | 4 | 4 | 285 | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | |
| 2.56 | 818059 | 2.4 | | 4C | | | | 10.5 | | | EY | | | 6.0M | Y | 1 | Lovejoy,T | H |
| 2.563 | 818060 | 2.9 | S | 4C | | | | | | | EY | | | 6.0 | Y | 7 | Garradd,G | |
| 2.563 | 818061 | 2.5 | | | | | | 2.1 | | 0.050 | B | | 10 | 6 | Y | 3 | Minton,R.B | I |
| 2.563 | 818062 | 3.0 | B | 4C | 25 | | 5 | 3 | 270 | 0.05 | B | | 10 | | Y | 6 | Tregaskis,T.B | J |
| 2.566 | 818063 | | | | | | | 3 | | 0.05 | B | | 7 | | | | Garradd,G | |
| 2.566 | 818064 | 3.0 | | 4C | | | | 1 | 270 | | EY | | | 6 | Y | 6 | Tregaskis,T.B | K |
| 2.569 | 818065 | | | 4C | 13 | | 5 | | 270 | 0.10 | N | 6 | 24 | | Y | 6 | Tregaskis,T.B | L |
| 2.580 | 818066 | | | | | | 9 | | | 0.31 | N | 5.4 | 129 | | | | Garradd,G | |
| 2.604 | 818067 | 3.0 | S | 4C | 12 | | 8 | 2.5 | 250 | 0.080 | B | | 20 | | Y | 1 | Batza,H | M |
| 2.604 | 818068 | 3.8 | S | 4C | 20 | | 6 | 3.5 | 75 | 0.080 | B | | 11 | 8 | Y | 8 | Pryal,J | N |
| 2.65 | 818069 | 2.6 | B | 4C | | | | | | | EY | | | 5.4 | Y | | Clark,M.L | O |
| 2.66 | 818070 | 3.0 | S | 4C | 25 | | 7 | 1.4 | | 0.05 | B | | 10 | 5.4 | Y | | Clark,M.L | P |
| 2.68 | 818071 | 2.8 | S | 4C | | | | | | 0.023 | B | | 3 | 4.9 | | | Jones,A | Q |
| 2.68 | 818072 | | | | 20 | | 7 | | | 0.050 | B | | 7 | | | | Jones,A | |
| 2.68 | 818073 | | | | | | | 1.0 | | 0.078 | R | 7.5 | 30 | | | | Jones,A | R |
| 2.708 | 818074 | 3.5 | B | 4C | 15 | | 7 | 2.0 | 265 | 0.05 | B | | 7 | 4.1 | Y | 3 | Bembrick,C | |
| 2.76 | 818075 | 3.6 | M | SAO | 18 | | | | | 0.065 | R | 8 | 16 | 4.0M | Y | 6 | Nakamura,A | S |
| 2.792 | 818076 | 3.0 | | 4C | | | 5 | 1 | 270 | | EY | | | 6 | Y | 7 | Tregaskis,T.B | T |
| 2.80 | 818077 | 2.9 | S | | 13 | | 6 | 2 | 270 | 0.080 | B | | 11 | 4.5 | Y | 1 | Akita,I | U |
| 2.80 | 818078 | 3.1 | M | 4C | | | | 3.0 | | 0.05 | B | | 7 | 4.5M | Y | 1 | Suzuki,K | |
| 2.80 | 818079 | | | 4C | 4.2 | 1.9 | 4 | | | 0.25 | | 4.2 | 88 | 4.5M | Y | 1 | Suzuki,K | |
| 2.809 | 818080 | 2.9 | B | 4C | | | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 2.81 | 818081 | 3.2 | M | 4C | 10.2 | | 4 | | | 0.080 | B | | 11 | 3 M | Y | 1 | Watanabe,N | |
| 2.863 | 818082 | 3.0 | | 4C | 40.0 | | | | | | EY | | | 6.0 | Y | 5 | Campos,J | |
| 2.940 | 818083 | 3.4 | S | 4C | 14.0 | | 6 | 2.75 | | 0.13 | R | 4 | 21 | 6.0 | Y | 5 | Campos,J | V |
| 2.948 | 818084 | 3.0 | | 4C | 65.0 | | 7 | | | | EY | | | 6.0 | Y | 5 | Campos,J | W |
| 2.955 | 818085 | 3.3 | S | 4C | 25.0 | | 6 | 3.00 | 285 | 0.035 | B | | 7 | 6.0 | Y | 5 | Campos,J | V |

NOTE A Comp. star 3.2 nearby.
NOTE B Milky Way hampers viewing (often the worst influence once the moon is gone). Tail length exceeds 1 deg.
NOTE C Moon.
NOTE D Moon!
NOTE E Gas tail at PA 275. Dust tail at PA 290.
NOTE F Comet altitude 3 deg., comparison stars' altitudes 6 deg., comet's uncorrected magnitude is 4.1.
NOTE G Coma diameter approximate. Tail length is lower limit.
NOTE H Naked eye tail length.
NOTE I I used 10x50 binoculars out-of-focus. Same mag. as Kappa Sco. Comet was 65 deg. above S horizon.
NOTE J Coma diameter approximate. Tail faint. Low in SE. (Observer gave limit as approximately 10. Ed.)
NOTE K Tail faint. Averted vision needed to see tail. Length is upper limit.
NOTE L PA approximate. (Observer gave limit as approximately 12. Ed.)
NOTE M Moonlight. (Observer gave limit as 10.0. Ed.)
NOTE N Moon still out but east of comet.
NOTE O Moon up.
NOTE P Moon up. PA of 1.4 deg. tail 325 to 298.
NOTE Q Moon 23 d.
NOTE R Tail PA 268-292.
NOTE S Tail length = yes. PA 260 to 320.
NOTE T Tail faint. Length is upper limit. Clear zenith. Thick crescent moon.
NOTE U Moon age 23.2 (Translated by IHW staff. Ed.)
NOTE V Tail very faint.
NOTE W Comet some 30 deg. above E horizon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.108 | 831019 | 0.94 | 0.050 | B | | 10 | 33 | 5.0 | 6 | Keszthelyi,S | |
| 2.122 | 831020 | 4 | 0.08 | B | | 11 | | 4.9 | 1 | Fleet,R.W | A |
| 2.144 | 831021 | 1.6 | 0.090 | M | 11 | 56 | 5 | 3.5 | 11 | Westlund,M | B |
| 2.146 | 831022 | | 0.125 | R | 6 | 37 | | | 4 | Guthier,O | C |
| 2.177 | 831023 | 0.17 | 0.31 | N | 8 | 61 | 10 | 6.0 | 4 | Merlin,J.-C | D |
| 2.516 | 831024 | 0.54 | 0.41 | N | 5 | 64 | 45 | 6.5 | 1 | Levy,D.H | E |

NOTE A Gas tail at PA 275. Dust tail at PA 290. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Disturbing lights: moon.
NOTE C (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Tail at PA 273; jet at PA 335, then curved to PA 20. Large fan-shaped structure toward south/southeast.
NOTE E Scale is approximate.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.145 | 851297 | 0.500 | 3.5 | | 4.1 x 2.7 | 5.00 | Kodak 2415 | | Y | | 1/P | 4 | Guthier,O | A |
| 2.210 | 851298 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Ektachrome | 1600/ | N | M | 415/P | 1 | Stolzen,P | B |

DATE: 2 APR 1986 DATE: 2 APR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.215 | 851299 | 0.135 | 2.8 | | 15.2 x10.2 | 10.00 | Ektachrome | 1600/ | N | M | 416/P | 1 | Stolzen,P | C |
| 2.516 | 851300 | 0.085 | 2.4 | | 23.9 x16.1 | 20.17 | Kodak 2415 | | Y | O | 58/S | 7 | Garradd,G | D |
| 2.518 | 851301 | 0.300 | 4.5 | | 6.9 x 4.6 | 15.00 | Kodak Tri-X | | N | X | 113/P | 2 | Ward,A | E |
| 2.556 | 851302 | 0.180 | 2.8 | | 11.4 x 7.6 | 13.67 | Kodak 2415 | | Y | O | 59/S | 7 | Garradd,G | F |
| 2.560 | 851303 | 0.135 | 2.8 | | 15.2 x10.2 | 6.00 | Kodak 2415 | | Y | S | 33/P | 3 | Minton,R.B | G |
| 2.563 | 851304 | 0.200 | 3.5 | | 10.3 x 6.9 | 20.00 | Kodak 2415 | | N | O | 42/N | 1 | Haagh,N | |
| 2.851 | 851305 | 0.050 | 1.8 | | 39.6 x27.0 | 2.00 | Kodak VR | 1000/ | N | C | 2/P | 3 | Vincent,F | |

NOTE A Photograph made by F. Wilken and O. Guthier.
NOTE B (Comet visible through hole in clouds. Observer's image identifier is preceded by prefix 2. Ed.)
NOTE C (Observer's image identifier is preceded by prefix 2. Ed.)
NOTE D Lens aperture stopped down from f/2.0 to f/2.4. Temperature for hypersensitization 60-65 deg. C.
NOTE E (Observer's image identifier is 11/3. Ed.) UV filter used.
NOTE F Temperature for hypersensitization 60-65 deg. C.
NOTE G (Observer's image identifier is preceded by prefix PX. Ed.)

DATE: 3 APR 1986

DATE: 3 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.000 | 818086 | 2.9 | B | 4C | | 5 | 4 | | 0.03 | B | | 8 | 4.9 | Y | 3 | Fischer,D | A |
| 3.042 | 818087 | 3.2 | B | 4C | | 5 | 5 | 285 | 0.06 | B | | 15 | 4.9 | Y | 2 | Vincent,J | B |
| 3.073 | 818088 | 2.8 | S | 4C | 34 | 6 | 4.3 | | 0.08 | B | | 20 | 5.0 | Y | 7 | Parisio,R | |
| 3.09 | 818089 | 2.7 | S | 4C | | | | | 0.05 | B | | 7 | 6.5 | | 13 | Shanklin,J.D | |
| 3.104 | 818090 | 2.9 | B | IHW | 37.0 | 6 | | | 0.050 | B | | 10 | 5.2 | Y | 3 | Guthier,O | C |
| 3.11 | 818091 | 2.6 | V | 4C | 40 | 5 | 3.00 | 278 | | EY | | | 6.5 | Y | 4 | Merlin,J.-C | |
| 3.123 | 818092 | 3.5 | M | 4C | 20 | 5 | 2.25 | 290 | 0.04 | B | | 12 | 5.2 | N | 1 | Henshaw,C | D |
| 3.135 | 818093 | 3.6 | B | 4C | | | | | 0.05 | B | | 7 | 6.5 | Y | 2 | Kukkonen,I.T | |
| 3.146 | 818094 | | | | 35 | 3 | 3.0 | 300 | 0.050 | B | | 7 | 6.5 | Y | 2 | Kukkonen,I.T | E |
| 3.146 | 818095 | 3.0 | B | 5A | | | | | | EY | | | 6.5 | Y | 3 | Hasubick,W | |
| 3.146 | 818096 | 3.0 | B | 5A | | | 6 | 295 | 0.03 | B | | 8 | 6.5 | Y | 3 | Hasubick,W | F |
| 3.146 | 818097 | | | 5A* | 29 | 5 | 3.2 | 295 | 0.08 | B | | 20 | 6.5 | Y | 3 | Hasubick,W | F |
| 3.159 | 818098 | 3.0 | B | 4C | 18 | 5 | 2.8 | 321 | | EY | | | 5.5M | Y | 8 | Linder,J | G |
| 3.174 | 818099 | 2.8 | B | 4C | 23 | 6 | 3.8 | 287 | | EY | | | 5.5M | Y | 4 | Bottger,B | |
| 3.212 | 818100 | 2.6 | B | 144 | | | | | 0.05 | B | | 7 | 5 | | 2 | Galli,A | |
| 3.215 | 818101 | 3.5 | M | 4C | 60 | | | | 0.05 | B | | 20 | 4.0 | N | 3 | Gallego,J | H |
| 3.219 | 818102 | 3.3 | B | 4C | | | | | | EY | | | 6.5M | Y | 2 | Kukkonen,I.T | |
| 3.356 | 818103 | 3.7 | B | | 20 | 2 | 1.20 | | 0.05 | B | | 7 | 3.8 | | | Lairet,R | |
| 3.39 | 818104 | 2.8 | | 4C | 30 | 6 | 3.5 | 270 | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 3.396 | 818105 | 3.5 | S | 4C | 24 | | | | 0.035 | B | | 7 | 3.0 | Y | 3 | Morrison,W | I |
| 3.45 | 818106 | 2.7 | | 4C | 30 | 7 | | 265 | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 3.483 | 818107 | 3.6 | B | 4C | 15 | 7 | 7.00 | 330 | 0.050 | B | | 20 | 6.0 | Y | 2 | Auckbur,R | J |
| 3.487 | 818108 | 2.7 | M | 4C | | 3 | | | 0.080 | B | | 11 | 5.1 | Y | 1 | Glassett,W | K |
| 3.49 | 818109 | 3.6 | S | SAO | 15 | 7 | 5 | 270 | 0.05 | B | | 7 | 5.5 | Y | 2 | Ashdown,M | L |
| 3.517 | 818110 | 2.5 | | 4C | 36 | | 8 | 285 | | EY | | | 6.2 | Y | 3 | Seargent,D | |
| 3.517 | 818111 | | | | | 6 | 0.3 | 30 | 0.08 | B | | 15 | | | | Seargent,D | M |
| 3.52 | 818112 | 3.2 | B | 5A | | 1 | | | 0.050 | B | | 7 | 4.8C | Y | 1 | Matchett,V | |
| 3.52 | 818113 | 2.5 | | 4C | 30 | 6 | 10 | 270 | | EY | | | 6.5 | Y | 30 | Morris,C.S | |
| 3.53 | 818114 | 2.4 | | 4C | | | 6 | 285 | | EY | | | 7 | Y | 14 | Bouma,R.J | N |
| 3.53 | 818115 | 2.5 | M | 4C | 15 | 6 | 4 | 270 | 0.050 | B | | 10 | 6.5 | Y | 30 | Morris,C.S | |
| 3.537 | 818116 | 2.6 | S | 4C | | | 5 | | | EY | | | 6.0 | Y | 2 | Garradd,G | |
| 3.54 | 818117 | 2.6 | M | 4C | 23 | 4 | | | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | |
| 3.540 | 818118 | | | | | 8 | | | 0.31 | N | 5.4 | 129 | | | | Garradd,G | O |
| 3.55 | 818119 | 2.9 | B | 4C | | | | | 0.063 | B | | 9 | 7 | Y | 14 | Bouma,R.J | |
| 3.56 | 818120 | | | | 23 | 5 | 5 | | 0.035 | B | | 7 | | | | Green,D.W.E | P |
| 3.56 | 818121 | 3.0 | B | IHW BAA | | | | | | EY | | | | | | Green,D.W.E | |
| 3.56 | 818122 | 2.4 | | 4C | | | 9.0 | | | EY | | | 6.0 | Y | 1 | Lovejoy,T | Q |
| 3.563 | 818123 | 3.5 | S | 4C | 22 | 7 | 4.5 | 70 | 0.080 | B | | 11 | | Y | 8 | Pryal,J | R |
| 3.58 | 818124 | 2.5 | M | 4C | | | | | 0.050 | R | | 8 | 6.5 | Y | 30 | Morris,C.S | |
| 3.604 | 818125 | 3.0 | S | 4C | 12 | 8 | 3.0 | 250 | 0.080 | B | | 20 | | Y | 1 | Batza,H | S |
| 3.61 | 818126 | 2.5 | B | 4C | | | | | | EY | | | 5.5 | Y | | Clark,M.L | T |
| 3.62 | 818127 | 3.3 | S | 4C | 24 | 7 | 1.1 | | 0.25 | N | 5 | 38 | 5.5 | Y | | Clark,M.L | U |
| 3.70 | 818128 | 3.0 | B | IHW BAA | | | | | | EY | | | | | | Green,D.W.E | |
| 3.729 | 818129 | 3.3 | | 4C | | | | | | EY | | | 4.5 | Y | 1 | Tregaskis,T.B | V |
| 3.736 | 818130 | 3.3 | | 4C | 25 | 3 | 3 | 270 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | W |
| 3.743 | 818131 | | | 4C | 15 | 3 | | 270 | 0.15 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | X |
| 3.80 | 818132 | 3.3: | M | 4C | | | 1.5 | 315 | 0.05 | B | | 10 | 3.5C | N | 34 | Hale,A | Y |
| 3.847 | 818133 | | S | | | | 6.20 | | 0.13 | R | 4 | 21 | 6.0 | Y | 5 | Campos,J | Z |
| 3.854 | 818134 | | S | | | | 5.00 | | 0.035 | B | | 7 | 6.0 | Y | 5 | Campos,J | Z |
| 3.875 | 818135 | 3.0 | | 4C | 60.0 | | 6.80 | 312 | | EY | | | 6.0 | Y | 5 | Campos,J | a |
| 3.927 | 818136 | 3.8 | S | 4C | 16.0 | 5 | 5.63 | 278 | 0.13 | R | 4 | 21 | 6.0 | Y | 5 | Campos,J | b |
| 3.958 | 818137 | 3.7 | M | 4C | 23 20 | 4 | | | 0.04 | B | | 12 | 5.9 | Y | 1 | Henshaw,C | |

NOTE A Coma diameter = 20'-25'. Tail length approximate. Milky Way hampers viewing.
NOTE B 4.9 star just beyond coma.
NOTE C Type I tail 6 to 7 deg. long, type II tail 3.0 deg. long.
NOTE D Moon.
NOTE E Coma diameter determined by comparing with neighboring stars.
NOTE F Tail I plasma; tail II gas. [sic]
NOTE G Tail type I.
NOTE H Very low.
NOTE I Comet altitude 2.5 deg., comparison stars' altitudes 4.5 and 6.5 deg., comet's uncorrected magnitude is 4.5.
NOTE J PA found by plotting and measuring on a star chart.
NOTE K Too windy for use of telescopes. Large, ill-defined coma visible at this time, but no clearly defined tail was visible from this location??? [sic] Tail possibly pointing away from viewing site??? [sic]
NOTE L PA = 270+.
NOTE M Anti-tail.
NOTE N PA value approximate.
NOTE O Central condensation much larger than April 2.
NOTE P Coma diameter approximate. Tail length is lower limit.
NOTE Q Naked eye tail length.
NOTE R Nice - easy! (Observer gave limit as 9. Ed.)
NOTE S (Observer gave limit as 10.0. Ed.)
NOTE T Street lights.
NOTE U Street lights. PA of 1.1 deg. tail 326-302.
NOTE V Through broken cloud. Crescent moon.
NOTE W Through broken cloud. Crescent moon. (Observer gave limit as approximately 8. Ed.)
NOTE X No detail in fairly broad fan-shaped tail, barely visible. PA approximate. Through broken cloud. Crescent moon.
NOTE Y Comet observed from center of large metropolitan area. Observation probably severely hampered by light pollution and lack of dark adaptation. Magnitude estimate is suspect, as is direction of tail. The comet could just be glimpsed with the naked eye.
NOTE Z Tail very faint.
NOTE a Faint curved dust tail at PA 312. Very faint gas straight tail at PA 276. The outer edge of the curved dust tail was best seen with naked eye than the gas, straight tail which was much fainter and slightly shorter in length. Broad tail from PA 276 deg. to PA 312 deg.
NOTE b Straight gas tail, very faint.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 3.505 | 831025 | | 0.41 | N | 5 | 64 | 15 | 5 | 1 | Levy,D.H |
| 3.66 | 831026 | | 0.31 | N | 7 | 233 | 14 | 4 | 1 | Tanikawa,M |

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.095 | 851306 | 0.500 | 3.5 | | 4.1 x 2.7 | 5.00 | Kodak 2415 | | Y | | 2/P | 4 | Guthier,O | A |
| 3.099 | 851307 | 0.500 | 3.5 | | 4.1 x 2.7 | 10.00 | Kodak 2415 | | Y | | 3/P | 4 | Guthier,O | A |
| 3.123 | 851308 | 0.035 | 1.9 | | 54.4 x37.8 | 6.00 | Fujichrome | 400/ | N | O | 07/P | 8 | Bottger,B | B |

DATE: 3 APR 1986

DATE: 3 APR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.123 | 851309 | 0.050 | 1.7 | | 39.6 x27.0 | 5.00 | Fujichrome | 400/ | N | O | 20/P | 8 | Bottger,B | C |
| 3.138 | 851310 | 0.200 | 2.8 | | 10.3 x 6.9 | 5.00 | Fujichrome | 400/ | N | O | 08/P | 8 | Bottger,B | B |
| 3.138 | 851311 | 0.200 | 3.5 | | 10.3 x 6.9 | 5.00 | Fujichrome | 400/ | N | O | 21/P | 8 | Bottger,B | C |
| 3.158 | 851312 | 0.050 | 2.0 | | | 4.00 | Kodak Tri-X | 400/ | N | C | 7/P | | Falsarella,N | |
| 3.161 | 851313 | 0.085 | 2.0 | | 23.9 x16.1 | 5.00 | Kodak Tri-X | 400/ | N | O | 15/P | 8 | Bottger,B | C |
| 3.501 | 851314 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak Tri-X | 400/ | N | X | 002/P | 1 | Rosenthal,D | D |
| 3.502 | 851315 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 13.00 | Kodak Tri-X | | N | M | 21/P | 1 | Webb,R | E |
| 3.514 | 851316 | 0.200 | 4 | | 10.3 x 6.9 | 11.00 | Kodak Tri-X | | N | M | 23/P | 1 | Webb,R | F |
| 3.549 | 851317 | 0.200 | 3.5 | | 10.3 x 6.9 | 20.00 | Kodak Tri-X | 400/ | N | O | 41/N | 1 | Haagh,N | |
| 3.558 | 851318 | 0.180 | 2.8 | | 11.4 x 7.6 | 11.67 | Kodak 2415 | | Y | O | 60/S | 2 | Garradd,G | G |
| 3.560 | 851319 | 0.050 | 2 | | 39.6 x27.0 | 3.50 | Ektachrome | 400/ | N | | 10/S | | Pryal,J | |
| 3.568 | 851320 | 0.135 | 2.8 | | 15.2 x10.2 | 6.50 | Ektachrome | 400/ | N | | 11/S | | Pryal,J | |
| 3.576 | 851321 | 0.085 | 2.4 | | 23.9 x16.1 | 23.00 | Kodak 2415 | | Y | O | 61/S | 2 | Garradd,G | H |
| 3.603 | 851322 | 0.180 | 2.8 | | 11.4 x 7.6 | 14.17 | Kodak 2415 | | Y | O | 62/S | 2 | Garradd,G | G |
| 3.944 | 851323 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 2.00 | Kodak 2415 | | Y | O | 001/T | 2 | Battaini,P | D |
| 3.950 | 851324 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 3.00 | Kodak 2415 | | Y | O | 002/T | 2 | Battaini,P | D |

NOTE A Photograph made by F. Wilken and O. Guthier.
NOTE B Observation made by J. Linder and B. Bottger.
NOTE C Photograph made by J. Linder and B. Bottger.
NOTE D Instrument is Schmidt camera.
NOTE E Wind vibration/low altitude/poor seeing. Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE F Windy/poor seeing. Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE G Temperature for hypersensitization 60-65 deg. C.
NOTE H Lens aperture stopped down from f/2.0 to f/2.4. Temperature for hypersensitization 60-65 deg. C.

DATE: 4 APR 1986

DATE: 4 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.000 | 818138 | 3.2 | B | 4C | | 5 | | | 0.03 | B | | 8 | 4.8 | Y | 3 | Fischer,D | A |
| 4.052 | 818139 | 3.3 | B | 5A | | 5 | 3 | 285 | 0.06 | B | | 15 | | Y | 2 | Vincent,J | B |
| 4.09 | 818140 | 3.5 | S | 5A | 20 | 4 | 2.0 | | 0.050 | B | | 10 | 6.5 | Y | 8 | van Loo,F.R | |
| 4.090 | 818141 | 3.7 | B | IHW | 34.0 | 6 | | | 0.050 | B | | 10 | 5.4 | Y | 3 | Guthier,O | |
| 4.10 | 818142 | 2.9 | V | 5A | 30 | 4 | | | | EY | | | 6.5 | Y | 4 | Merlin,J.-C | |
| 4.12 | 818143 | 3.8 | S | DCS 9 | 25 | 6 | 2.0 | 315 | 0.080 | B | | 15 | 7 | Y | 3 | Wils,P | |
| 4.133 | 818144 | 4 | B | 143 | | 3 | | | 0.050 | B | | | 5.5 | Y | 1 | Lovera,A | C |
| 4.134 | 818145 | 4 | B | 143 | | 3 | | | 0.05 | B | | 20 | 5.5 | Y | 1 | Carello,S | D |
| 4.142 | 818146 | 4.0 | B | 4C | | | | | 0.05 | B | | 7 | 6.5 | Y | 2 | Kukkonen,I.T | |
| 4.159 | 818147 | 3.2 | B | 4C | 10 | 5 | 0.4 | 305 | 0.050 | B | | 7 | 4.5C | N | 9 | Linder,J | E |
| 4.160 | 818148 | 3.0 | B | 4C | 16 | 6 | 1.8 | 290 | 0.05 | B | | 10 | 5.0C | Y | 5 | Bottger,B | |
| 4.167 | 818149 | | | | 20 | 3 | 3.0 | 300 | 0.050 | B | | 7 | 6.5 | Y | 2 | Kukkonen,I.T | F |
| 4.177 | 818150 | 2.8 | S | 5A | 35 | 6 | 4.4 | | 0.08 | B | | 20 | 6.0 | Y | 7 | Parisio,R | |
| 4.191 | 818151 | 3.8 | M | 4C | | | | | 0.040 | B | | 7 | 4.0C | Y | 6 | Westlund,M | |
| 4.191 | 818152 | | | | 9 | 5 | | | 0.09 | M | 11 | 56 | 4.0C | Y | 6 | Westlund,M | |
| 4.311 | 818153 | 3.5 | B | 143 | | | | 310 | 0.05 | B | | 7 | 3.3 | | 2 | Benavides,A | |
| 4.365 | 818154 | 3.4 | B | | 24 | 2 | 0.75 | | 0.05 | B | | 7 | 4.0 | | | Lairet,R | |
| 4.41 | 818155 | 2.8 | | 4C | 30 | 7 | | 270 | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 4.45 | 818156 | 2.9 | | 4C | 15 | 5 | 3 | 310 | 0.040 | B | | 8 | 5.0 | Y | 1 | Keen,R | G |
| 4.45 | 818157 | 2.6 | B | 4C | 20 | 5 | | | | EY | | | 5.0 | Y | 1 | Keen,R | H |
| 4.465 | 818158 | 4 | B | 143 | | 3 | | | 0.050 | B | | 20 | 5.5 | Y | 1 | Castrillon,M.E | |
| 4.48 | 818159 | 2.8 | | 4C | 25 | 6 | 3.5 | 270 | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 4.49 | 818160 | 3.2 | B | 5A | | 1 | | | 0.050 | B | | 7 | 4.6C | Y | 1 | Matchett,V | |
| 4.494 | 818161 | 2.6 | M | 4C | | 3 | | | 0.080 | B | | 11 | 5.2 | Y | 1 | Glassett,W | I |
| 4.507 | 818162 | 2.7 | S | 4C | | | 6 | | | EY | | | 6.5 | Y | 1 | Garradd,G | |
| 4.51 | 818163 | 2.3 | B | 4C | | | | | | EY | | | 6.7 | Y | | Clark,M.L | J |
| 4.510 | 818164 | | | | | | 7 | | 0.05 | B | | 7 | | | | Garradd,G | K |
| 4.51 | 818165 | 3.3 | B | IHW BAA | | | | | | EY | | | | | | Green,D.W.E | |
| 4.53 | 818166 | 3.1 | S | 4C | 34 | 7 | 2.1 | | 0.25 | N | 5 | 38 | 6.7 | Y | | Clark,M.L | L |
| 4.54 | 818167 | 2.4 | | 4C | 30 | | | | | EY | | | 7 | Y | 14 | Bouma,R.J | M |
| 4.542 | 818168 | 2.5 | S | 4C | 36 | | 6 | 285 | | EY | | | 6.2 | Y | 1 | Seargent,D | |
| 4.542 | 818169 | | | | | | 0.3 | 30 | 0.065 | B | | 20 | | | | Seargent,D | N |
| 4.55 | 818170 | 2.6 | M | 4C | 24 | 4 | | | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | |
| 4.55 | 818171 | | | | | | | | 0.317 | N | | 308 | 6.5 | Y | 31 | Morris,C.S | O |
| 4.56 | 818172 | 2.4 | | 4C | 30 | 6 | 7 | 280 | | EY | | | 7.0 | Y | 31 | Morris,C.S | |
| 4.56 | 818173 | 2.4 | M | 4C | 15 | 6 | 0.25 | 10 | 0.050 | B | | 10 | 7.0 | Y | 31 | Morris,C.S | P |
| 4.57 | 818174 | 2.3 | | 4C | | | 12.5 | | | EY | | | 6.7 | Y | 1 | Lovejoy,T | Q |
| 4.602 | 818175 | 4.2 | M | 4B | | 4 | 4 | | 0.05 | B | | 10 | | Y | 11 | Edberg,S.J | R |
| 4.62 | 818176 | 2.8 | B | 5A | | | 3 | 290 | | EY | | | 6.5 | Y | 35 | Hale,A | S |
| 4.71 | 818177 | 3.6 | S | 143, 4C | | | | | 0.023 | B | | 3 | | Y | | Jones,A | T |
| 4.71 | 818178 | | | | 15 | 5 | | | 0.050 | B | | 7 | | | | Jones,A | |
| 4.71 | 818179 | | | | | | | | 0.078 | R | 7.5 | 30 | | | | Jones,A | U |
| 4.75 | 818180 | 9.9 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | V |
| 4.774 | 818181 | 3.7 | S | 4C | 30 | 5 | 2 | 270 | 0.07 | B | | 10 | 3.0 | Y | 1 | Kobayashi,J | |
| 4.774 | 818182 | 3.9 | M | 5A | 12 | 5 | | 295 | 0.08 | B | | 11 | 3 | Y | 1 | Mitsuma,S | W |
| 4.860 | 818183 | 2.6 | S | 143 | 36 | | 5 | 305 | | EY | | | 6.4 | Y | 7 | Haver,R | |
| 4.865 | 818184 | 2.8 | S | 143 | 32 | 4 | 5.4 | 305 | 0.05 | B | | 7 | 6.4 | Y | 7 | Haver,R | |

NOTE A Coma diameter = 20'-25'. Milky Way extremely bad.
NOTE B Comp. star 3.2.
NOTE C Without tail. (Translated by IHW staff. Ed.)
NOTE D The tail is not divided. (Translated by IHW staff. Ed.)
NOTE E Type I tail.
NOTE F Coma diameter determined by comparing with neighboring stars.
NOTE G Modified Sidgwick method used. Extinction correction applied.
NOTE H Extinction correction applied.
NOTE I Too windy for use of telescopes. Large, ill-defined coma visible at this time, but no clearly defined tail was visible from this location??? [sic] Tail possibly pointing away from viewing site??? [sic]
NOTE J Tails photo'd. to 5.2 deg. and 5.5 deg.
NOTE K 7 deg. tail is gas; 3 deg. tail is dust.
NOTE L PA of 2.1 deg. tail is 348-297.
NOTE M Coma diameter approximate.
NOTE N Anti tail.
NOTE O Two jets were observed: 0.77' in PA 70 and 0.2' in PA 150. The first was narrow and straight. Coma appeared distorted in the direction of the jets.
NOTE P Main tail not measured. Indicated tail was a fuzzy extension to the coma. Central condensation was offset toward the north.
NOTE Q Naked eye tail length.
NOTE R Tail length approximate. Much more diffuse with lower surface brightness.
NOTE S Measured coma diameter 45' in 10x50 binoculars.
NOTE T Moon 25 d. low E.
NOTE U Tail definite to 1 degree, suspected to 2 degrees. Tail PA 277-297.
NOTE V Nucleus.
NOTE W Tail length = 1 deg. >. [sic]

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.097 | 831027 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | A |
| 4.186 | 831028 | 1.6 | 0.090 | M | 11 | 56 | 15 | 4.0 | 6 | Westlund,M | B |
| 4.70 | 831029 | | 0.31 | N | 7 | 53 | 14 | 5 | 1 | Tanikawa,M | |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Disturbing lights: city lights.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.084 | 851325 | 0.050 | 2.8 | | 39.6 x27.0 | 20.00 | Ektachrome | 400/ | N | M | 429/P | 1 | Stolzen,P | A |
| 4.090 | 851326 | 0.135 | 2.8 | | 15.2 x10.2 | 20.00 | Ektachrome | 400/ | N | M | 430/P | 1 | Stolzen,P | A |
| 4.097 | 851327 | 0.500 | 3.5 | | 4.1 x 2.7 | 10.00 | Kodak 2415 | | Y | | 4/P | 4 | Guthier,O | B |
| 4.109 | 851328 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 5/P | 4 | Guthier,O | B |
| 4.324 | 851329 | 0.050 | 2.0 | | | 0.33 | Fujicolor HR | 1600/ | N | X | 6/P | 4 | Wallace,B.G | C |
| 4.368 | 851330 | 0.200 | 3.5 | | 10.3 x 6.9 | 10.00 | Fujichrome | 400/ | N | S | 703/S | 3 | Woidyla,B | D |
| 4.371 | 851331 | 0.050 | 1.8 | | 39.6 x27.0 | 2.00 | Fujichrome | 400/ | N | T | 704/S | 3 | Woidyla,B | D |
| 4.374 | 851332 | 0.050 | 2.0 | | | 0.33 | Fujicolor HR | 1600/ | N | X | 11/P | 4 | Wallace,B.G | E |
| 4.374 | 851333 | 0.050 | 1.8 | | 39.6 x27.0 | 2.00 | Fujichrome | 400/ | N | T | 705/S | 3 | Woidyla,B | D |
| 4.378 | 851334 | 0.050 | 2.0 | | | 0.33 | Fujicolor HR | 1600/ | N | X | 12/P | 4 | Wallace,B.G | F |
| 4.388 | 851335 | 0.200 | 3.5 | | 10.3 x 6.9 | 8.00 | Fujichrome | 400/ | N | S | 708/S | 3 | Woidyla,B | D |
| 4.398 | 851336 | 0.200 | 3.5 | | 10.3 x 6.9 | 13.00 | Fujichrome | 400/ | N | S | 709/S | 3 | Woidyla,B | D |

DATE: 4 APR 1986 DATE: 4 APR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.415 | 851337 | 0.200 | 3.5 | | 10.3 x 6.9 | 15.00 | Fujichrome | 400/ | N | S | 672/S | 3 | Woidyla,B | D |
| 4.491 | 851338 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak Tri-X | 400/ | N | X | 003/P | 1 | Rosenthal,D | G |
| 4.592 | 851339 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 12.00 | Kodak IIa-D | | N | | 028/P | 4 | Royer,R | H |
| 4.592 | 851340 | 0.105 | 2.5 | | 19.5 x13.0 | 12.00 | Fujichrome | 1600/ | N | | 1/S | 4 | Royer,R | |
| 4.607 | 851341 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 15.00 | Kodak 098 | | N | | 029/P | 4 | Royer,R | |
| 4.623 | 851342 | 0.180 | 2.8 | | 11.4 x 7.6 | 15.00 | Kodak 2415 | | Y | O | 63/S | 1 | Garradd,G | I |
| 4.861 | 851343 | 0.050 | 2.8 | | 39.6 x27.0 | 0.50 | Kodak Tri-X | 400/ | N | T | 5/P | 2 | Jones,B.W | J |
| 4.861 | 851344 | 0.050 | 2.8 | | 39.6 x27.0 | 1.00 | Kodak Tri-X | 400/ | N | T | 6/P | 2 | Jones,B.W | J |
| 4.863 | 851345 | 0.050 | 2.8 | | 39.6 x27.0 | 2.00 | Kodak Tri-X | 400/ | N | T | 7/P | 2 | Jones,B.W | K |
| 4.865 | 851346 | 0.050 | 2.8 | | 39.6 x27.0 | 4.00 | Kodak Tri-X | 400/ | N | T | 8/P | 2 | Jones,B.W | K |
| 4.870 | 851347 | 0.050 | 2.8 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | 400/ | N | T | 9/P | 2 | Jones,B.W | K |
| 4.879 | 851348 | 0.050 | 2.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 10/P | 2 | Jones,B.W | K |
| 4.889 | 851349 | 0.050 | 2.8 | | 39.6 x27.0 | 0.50 | Kodak Tri-X | 400/ | N | T | 11/P | 2 | Jones,B.W | L |
| 4.889 | 851350 | 0.050 | 2.8 | | 39.6 x27.0 | 1.00 | Kodak Tri-X | 400/ | N | T | 12/P | 2 | Jones,B.W | L |
| 4.891 | 851351 | 0.050 | 2.8 | | 39.6 x27.0 | 2.00 | Kodak Tri-X | 400/ | N | T | 13/P | 2 | Jones,B.W | L |
| 4.893 | 851352 | 0.050 | 2.8 | | 39.6 x27.0 | 4.00 | Kodak Tri-X | 400/ | N | T | 14/P | 2 | Jones,B.W | L |
| 4.898 | 851353 | 0.050 | 2.8 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | 400/ | N | T | 15/P | 2 | Jones,B.W | L |
| 4.907 | 851354 | 0.050 | 2.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 16/P | 2 | Jones,B.W | L |
| 4.917 | 851355 | 0.050 | 2.8 | | 39.6 x27.0 | 0.50 | Kodak Tri-X | 400/ | N | T | 17/P | 2 | Jones,B.W | M |
| 4.917 | 851356 | 0.050 | 2.8 | | 39.6 x27.0 | 1.00 | Kodak Tri-X | 400/ | N | T | 18/P | 2 | Jones,B.W | M |
| 4.919 | 851357 | 0.050 | 2.8 | | 39.6 x27.0 | 2.00 | Kodak Tri-X | 400/ | N | T | 19/P | 2 | Jones,B.W | M |
| 4.962 | 851358 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 7.00 | Kodak 2415 | | Y | O | 1/T | 2 | Furia,S | G |
| 4.993 | 851359 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 20.00 | Ilford FP 4 | 125/ | N | O | 2/T | 2 | Furia,S | G |

NOTE A (Observer's image identifier is preceded by prefix 2. Ed.)
NOTE B Photograph made by F. Wilken and O. Guthier.
NOTE C (Observer's image identifier is also D. Observer's image identifier is followed by suffix A. Ed.)
NOTE D (Observer's image identifier is preceded by prefix 1. Ed.)
NOTE E (Observer's image identifier is also F. Observer's image identifier is followed by suffix A. Ed.)
NOTE F (Observer's image identifier is also E. Observer's image identifier is followed by suffix A. Ed.)
NOTE G Instrument is Schmidt camera.
NOTE H Exposure duration uncertain: +3 or -0 minute. Wr. 4 filter used.
NOTE I Temperature for hypersensitization 60-65 deg. C.
NOTE J The UT start time is accurate. [sic] The stand was not accurately set up, so we have off-centre start trails. [sic] Film roll Tri-X/1.
NOTE K The UT start time is estimated. The stand was not accurately set up, so we have off-centre start trails. [sic] Film roll Tri-X/1.
NOTE L The UT start time is estimated. Wratten 47A (blue) filter used. The stand was not accurately set up, so we have off-centre start trails. [sic] Film roll Tri-X/1.
NOTE M The UT start time is estimated. Wratten 21 (orange) filter used. The stand was not accurately set up, so we have off-centre start trails. [sic] Film roll Tri-X/1.

DATE: 5 APR 1986

DATE: 5 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.000 | 818185 | 2.9 | B | 4C | | 5 | | | 0.03 | B | | 8 | 4.9 | Y | 3 | Fischer,D | A |
| 5.031 | 818186 | 3.2 | M | 5A | | 4 | 2.1 | 297 | | EY | | | 5.4 | Y | 1 | Fleet,R.W | |
| 5.035 | 818187 | 4.1 | M | 5A | 21 | 6 | 1.8 | 299 | 0.08 | B | | 11 | 5.4 | Y | 1 | Fleet,R.W | |
| 5.061 | 818188 | 3.6 | B | IHW | | | | | | EY | | | 6.0 | Y | 3 | Guthier,O | |
| 5.070 | 818189 | 4.1 | M | 5A | | | | | 0.035 | B | | 9 | 6.3 | Y | 1 | Begbie,M.J.R | |
| 5.072 | 818190 | 4.0 | M | 4C, 5A | 15 | 6 | 1.32 | 300 | 0.04 | B | | 12 | 6.1 | Y | 1 | Henshaw,C | |
| 5.08 | 818191 | 3.1 | S | 5A | 30 | 6 | 2.0 | | 0.050 | B | | 10 | 7 | Y | 8 | van Loo,F.R | |
| 5.094 | 818192 | | | | 11.0 | 6 | 4.5 | 295 | 0.30 | N | 8.5 | 102 | 6.5 | Y | 1 | Begbie,M.J.R | B |
| 5.108 | 818193 | 4.6 | B | 4C | | 2 | | | 0.03 | B | | 8 | 4.5C | Y | 1 | Giraudi,J.D | |
| 5.11 | 818194 | 2.8 | V | 5A | 20 | 4 | 2.00 | 290 | | EY | | | 6.5 | Y | 4 | Merlin,J.-C | |
| 5.130 | 818195 | 4.5 | B | 4C | | 2 | | | 0.03 | B | | 8 | 4.5C | Y | 1 | Giraudi,J.D | |
| 5.135 | 818196 | 3.7 | B | 4C | | 2 | | | 0.03 | B | | 8 | 4.5C | Y | 1 | Giraudi,J.D | |
| 5.15 | 818197 | 4.3 | B | 4C | | 5 | | | 0.050 | B | | 7 | | Y | 3 | Jannink,D.W | C |
| 5.17 | 818198 | 2.9 | S | DCS 9 | 25 | 7 | 2.5 | | 0.080 | B | | 15 | 7.5 | Y | 3 | Wils,P | D |
| 5.191 | 818199 | 4.0 | B | 4C | 10 | 6 | | | 0.06 | R | 8 | 15 | 5.0 | Y | 3 | Schambeck,C.M | |
| 5.253 | 818200 | 3.8 | M | 4C | | | | | 0.040 | B | | 7 | 3.5C | Y | 6 | Westlund,M | |
| 5.253 | 818201 | | | | 10 | 5 | | | 0.09 | M | 11 | 56 | 3.5C | Y | 6 | Westlund,M | |
| 5.260 | 818202 | 2.8 | S | 5A | 37 | 6 | 4.5 | | 0.08 | B | | 20 | 5.5 | Y | 7 | Parisio,R | |
| 5.264 | 818203 | 4.3 | | 143 | | | | | 0.04 | B | | 30 | | Y | 1 | Moreno,G | |
| 5.267 | 818204 | 3.2 | B | 143 | | 5 | 4.5 | | 0.05 | B | | 7 | 5.5 | Y | 3 | Lupianez,B | |
| 5.365 | 818205 | 3.8 | B | | 24 | 2 | 0.67 | | 0.05 | B | | 7 | | | | Lairet,R | |
| 5.40 | 818206 | 2.8 | | 4C | 25 | 5 | 3 | 290 | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 5.44 | 818207 | 2.9 | | 4C | 15 | 4 | 2 | 310 | 0.040 | B | | 8 | 5.0 | Y | 1 | Keen,R | E |
| 5.45 | 818208 | 2.6 | B | 4C | 25 | 3 | 1 | 10 | | EY | | | 5.0 | Y | 1 | Keen,R | F |
| 5.48 | 818209 | 2.7 | | 4C | 25 | 6 | | 285 | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 5.531 | 818210 | 3.4 | | 5A | | 3 | 3 | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | G |
| 5.542 | 818211 | 3.7 | S | 4C | 18 | 6 | 5 | 50 | 0.080 | B | | 11 | | Y | 8 | Pryal,J | H |
| 5.56 | 818212 | 2.3 | | 4C | 30 | 2 | | | | EY | | | 7 | Y | 14 | Bouma,R.J | I |
| 5.56 | 818213 | | | | | 4 | 4.5 | 280 | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | J |
| 5.57 | 818214 | 2.4 | | 4C | 30 | 7 | 4 | 285 | | EY | | | 7.0 | Y | 31 | Morris,C.S | |
| 5.57 | 818215 | 2.5 | M | 4C | 15 | 6 | 3 | 280 | 0.050 | B | | 10 | 7.0 | Y | 31 | Morris,C.S | K |
| 5.57 | 818216 | 2.5 | M | 4C | | | | | 0.050 | R | | 8 | 7.0 | Y | 31 | Morris,C.S | |
| 5.576 | 818217 | 2.4 | S | 4C | | | | | | EY | | | 6.1 | Y | 1 | Seargent,D | L |
| 5.576 | 818218 | | | | | | 0.5 | | 0.08 | B | | 15 | | | | Seargent,D | M |
| 5.58 | 818219 | 2.5 | | 4C | | | 5.5 | | | EY | | | 6.7 | Y | 1 | Lovejoy,T | N |
| 5.59 | 818220 | 3.8 | S | SAO | 20 | 8 | 6 | 280 | 0.05 | B | | 7 | 5.5 | Y | 2 | Ashdown,M | O |
| 5.625 | 818221 | 3.6 | B | 5A | 20 | 8 | 1.5 | 295 | 0.05 | B | | 7 | 4.2 | Y | 3 | Bembrick,C | |
| 5.63 | 818222 | 2.4 | B | 4C | | | | | | EY | | | 6.5 | Y | | Clark,M.L | P |
| 5.646 | 818223 | 3.9 | M | 5A, 4A | 7.6 | 6 | 0.50 | 270 | 0.1 | N | 10 | 40 | 4.5 | Y | 1 | Ichikawa,K | |
| 5.65 | 818224 | 3.2 | S | 4C | 31 | 7 | 2.2 | | 0.25 | N | 5 | 38 | 6.5 | Y | | Clark,M.L | Q |
| 5.660 | 818225 | 2.5 | S | 5A | | | 2 | | | EY | | | 6.0 | Y | 5 | Garradd,G | |
| 5.66 | 818226 | | | | 23 | 7 | 4 | | 0.035 | B | | 7 | | | | Green,D.W.E | R |
| 5.66 | 818227 | 3.2 | B | IHW BAA | | 3 | 4.5 | | | EY | | | | | | Green,D.W.E | S |
| 5.70 | 818228 | 2.7 | B | 5A | | | 3 | 310 | | EY | | | 6.5 | Y | 35 | Hale,A | |
| 5.72 | 818229 | 4.0 | | 4C | 16 | 5 | 2 | | 0.120 | B | | 20 | T | Y | 1 | Okuda,M | T |
| 5.747 | 818230 | 3.5 | M | 5A, 5B | 16 | 5 | 3 | 295 | 0.08 | B | | 11 | 5 | Y | 3 | Mitsuma,S | U |
| 5.75 | 818231 | 4.0 | S | 5A | | 3 | | | 0.08 | B | | 11 | 2.0 | Y | 1 | Momose,M | |
| 5.760 | 818232 | 3.3 | B | 5A | | | | | 0.05 | B | | 7 | 5.5 | Y | 5 | Hayashi,H | |
| 5.76 | 818233 | 3.5 | M | SAO | 18 | 6 | 1.1 | | 0.065 | R | 8 | 16 | 4.5 | Y | 1 | Nakamura,A | V |
| 5.771 | 818234 | 4.5 | B | 5A | | | | | 0.02 | R | 6 | 8 | 3.0C | Y | 2 | Kitamura,K | |
| 5.778 | 818235 | | | | 5.5 | 3 | 5 | | 0.062 | R | 14.6 | 46 | 3.0C | Y | 2 | Kitamura,K | |
| 5.78 | 818236 | 4.3 | S | AAVSO | 7 | 5 | | | 0.07 | B | | 10 | 5.0M | Y | 1 | Hayashi,A | W |
| 5.79 | 818237 | 4.0 | S | AAVSO | 9 | 4 | | | 0.13 | N | 6.3 | 24 | 4.5M | Y | 1 | Hayashi,A | W |
| 5.79 | 818238 | 3.3 | M | 5A | | | 3.0 | | 0.05 | B | | 7 | 5.5 | Y | 1 | Suzuki,K | |
| 5.795 | 818239 | 3.2 | B | 5A | | | 0.5 | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 5.806 | 818240 | 3.5 | M | 5A | | 7 | 4 | 306 | 0.12 | C | 10 | 40 | 4.5 | Y | 6 | Cifuentes,E | |
| 5.812 | 818241 | 3.0 | S | 4C | 30 | 4 | 2.5 | 295 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |
| 5.854 | 818242 | 2.5 | M | 5A | 36 | 9 | 2.8 | | 0.05 | B | | 10 | 6.5 | Y | 12 | Melandri,F | X |
| 5.865 | 818243 | 2.8 | B | 5A | | 7 | 5.0 | 300 | | EY | | | 5.4 | Y | 1 | Abbott,J | Y |
| 5.865 | 818244 | 3.6 | B | 5A | | | 4.5 | 295 | 0.06 | B | | 15 | 4.8 | Y | 2 | Vincent,J | Z |
| 5.878 | 818245 | 3.5 | B | 5A | 17 | 7 | 5.0 | 319 | 0.050 | B | | 10 | 5.4 | Y | 1 | Abbott,J | a |
| 5.889 | 818246 | 3.1 | M | 5A | | 6 | 2.6 | 303 | | EY | | | 5.3 | Y | 1 | Fleet,R.W | |
| 5.903 | 818247 | 3.6 | M | 5A | 22 | 6 | 3.4 | 304 | 0.08 | B | | 11 | 5.3 | Y | 1 | Fleet,R.W | b |
| 5.915 | 818248 | 2.6 | S | 143 | 36 | | 3 | 305 | | EY | | | 6.6 | Y | 7 | Haver,R | |
| 5.915 | 818249 | 2.8 | S | 143 | 32 | 4 | 3.5 | 305 | 0.05 | B | | 7 | 6.6 | Y | 7 | Haver,R | |
| 5.938 | 818250 | 4.2 | B | | 29 | 2 | | | 0.060 | R | 16 | 50 | 4.2 | Y | 1 | Bagla,J.S | c |
| 5.965 | 818251 | 3.8 | M | 5A | | | | | 0.035 | B | | 9 | 6.2 | Y | 1 | Begbie,M.J.R | |
| 5.965 | 818252 | 3.8 | S | 5A | 16.0 | 5 | 4.00 | 316 | 0.13 | R | 4 | 21 | 5.9 | Y | 6 | Campos,J | d |
| 5.997 | 818253 | | | | 14.1 | 7 | 4.0 | 285 | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | B |

NOTE A Milky Way still a problem. Coma diameter = 20'-25'.
NOTE B Tail measurement refers to dust tail only.
NOTE C Binocular limit is 7.
NOTE D PA 320 to 340.
NOTE E Modified Sidgwick method used. Extinction correction applied.
NOTE F Extinction correction applied.
NOTE G Through broken cloud. (Observer gave limit as approximately 10. Ed.)
NOTE H Tail appears forked. (Observer gave limit as 10. Ed.)
NOTE I Coma diameter approximate.
NOTE J Gas tail at PA 280. Broad dust fan includes other tail listings.
NOTE K Multiple tails define the shape of the fan tail. Edge of fan in PA 45 was very sharply defined.
NOTE L Drifting clouds.
NOTE M Anti-tail longer and brighter, length approximate.
NOTE N Naked eye tail length.
NOTE O PA = 280+.
NOTE P Street lights.
NOTE Q Street lights. PA of 2.2 deg. tail 335-310.
NOTE R Coma diameter and tail length approximate.
NOTE S Tail length approximate.
NOTE T Large extend tail. [sic].
NOTE U Tail I = 3 deg. Tail II = 1 deg.
NOTE V PA 280 to 320.
NOTE W Tail detected?
NOTE X With naked eye I can see a tail length of 1.5 deg., the tail is open like a fan, the data can be influenced by the Milky Way. Tail length is for ion tail.
NOTE Y Comparison stars 2.9, 1.9. Milky Way. PA given for mid-tail (3 deg.).
NOTE Z Tail streamer 5 deg. long. PA 270.
NOTE a Comparison stars (2.8, 3.6), (3.3, 3.6), (3.1, 4.1). Coma too large to adequately defocus stars except by using one half of binoculars (the right). PA given for tail at 3 deg. distance. Milky Way background.
NOTE b Material out to 0.5 deg., PA 30.
NOTE c Tail not visible.

DATE: 5 APR 1986

NOTE d Very faint tail.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.035 | 831030 | 4 | 0.08 | B | | 11 | | 5.4 | 1 | Fleet,R.W | A |
| 5.157 | 831031 | 0.25 | 0.20 | N | 8 | 120 | 61 | 5 | 1 | Vargas B.,A.G | B |
| 5.252 | 831032 | 1.6 | 0.090 | M | 11 | 56 | 5 | 3.5 | 6 | Westlund,M | C |
| 5.781 | 831033 | 0.29 | 0.062 | R | 14.6 | 46 | 10 | 3.0 | 1 | Kitamura,K | D |
| 5.809 | 831034 | 2.18 | 0.12 | C | 10 | 40 | 40 | 4.5 | 6 | Cifuentes,E | E |
| 5.882 | 831035 | | 0.050 | B | | 10 | 10 | 5.4 | 1 | Abbott,J | F |
| 5.903 | 831036 | 4 | 0.08 | B | | 11 | | 5.3 | 1 | Fleet,R.W | G |
| 5.941 | 831037 | | 0.060 | R | 16 | 50 | 9 | | 1 | Bagla,J.S | |

NOTE A Tail end point at PA 307. Leading edge at PA 292. Trailing edge at PA 312. Tail features lost in Milky Way. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Central tail at approx. PA 300. The tail was very wide and almost no visible to naked eye. A central tail was brighter than in extremes. The tail is too diffuse and wider than before, is almost no visible to the naked eye. A central tail is more bright the contour is very hazy. [sic] DC 5, coma diameter: 8' approx.
NOTE C Disturbing lights: city lights.
NOTE D DC 3. Tail and PA is not clear of city light and the atmosphere. A little err "coma total magnitude" of city light and the atmosphere. [sic] (Observer may be indicating uncertainty of magnitude estimate because of city lights and low position above horizon. Ed.) Coma total magnitude 4.5. City lights interfered with the observation.
NOTE E Tail 4 deg., PA 306.
NOTE F Central condensation approximately 5.6 arc min. diameter. Type II tail root at PA 310 deg., approximately 17 arc min. across; at 1 deg. from central condensation, PA 313 deg., approximately 30 arc min. across; at 2 deg. from central condensation, PA 316 deg., approximately 45 arc min. across; at 3 deg. from central condensation, PA 319 deg., approximately 55 arc min. across; at 4 deg. from central condensation, PA 330 deg., approximately 80 arc min. across; at 5 deg. from central condensation tail merging into Milky Way. There was Milky Way interference. Semi latus rectums (both) 8.6'. Vertex distance 6.5'. Type II tail width measured perpendicular to PA at that point. PA measured along tail axis. All dimensions and angles derived from AAVSO chart drawing. The central condensation (c.c.) appeared rather pearly; not quite planetary but certainly disclike. The c.c. was set within a well defined circular coma of diameter 17' and was placed forward of centre. No distinct type I tail could be seen and thus the tail was assumed to be type II. This tail was observed to gently curve northward and could be traced for some 5 deg. before the merger of surface brightness with a locally prominent part of the Milky Way. The tail was observed to have a sharper edge on the western side, although the first degree or so was quite sharply defined on both sides and of significant brightness relative to the coma.
NOTE G Main tail at PA 304. Type III [sic] at PA 30. Gas tail (?) at PA 289. Fan (?). Tail features lost in Milky Way. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.003 | 851360 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 5.00 | Kodak 2415 | | Y | | 73/P | 3 | Koch,B | A |
| 5.024 | 851361 | 0.200 | 2 | | 10.3 x 6.9 | 8.00 | Kodak 2415 | | Y | S | 15/P | 2 | Dragesco,J | B |
| 5.115 | 851362 | 0.500 | 3.5 | | 4.1 x 2.7 | 10.00 | Kodak 2415 | | Y | | 6/P | 4 | Guthier,O | C |
| 5.289 | 851363 | 0.050 | 2.0 | | | 3.00 | Kodak Tri-X | 400/ | N | C | 8/P | | Falsarella,N | |
| 5.605 | 851364 | 0.050 | 2 | | 39.6 x27.0 | 3.50 | Fuji | 400/ | N | | 12/S | | Pryal,J | |
| 5.617 | 851365 | 0.135 | 2.8 | | 15.2 x10.2 | 4.75 | Fuji | 400/ | N | | 13/S | | Pryal,J | |
| 5.815 | 851366 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | Kodak 103a-O | | N | O | 1/C | 5 | Cimatti,A | |
| 5.833 | 851367 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 2/C | 5 | Cimatti,A | |
| 5.842 | 851368 | 0.050 | 2.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 8/P | 2 | Jones,B.W | D |
| 5.853 | 851369 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 9/P | 2 | Jones,B.W | E |
| 5.868 | 851370 | 0.050 | 1.8 | | 39.6 x27.0 | 17.00 | Kodak Tri-X | 400/ | N | T | 10/P | 2 | Jones,B.W | F |
| 5.882 | 851371 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 11/P | 2 | Jones,B.W | G |
| 5.905 | 851372 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 10.00 | Kodak 2415 | | Y | O | 001/T | 2 | Battaini,P | |
| 5.913 | 851373 | 0.050 | 2.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 16/P | 2 | Jones,B.W | H |
| 5.924 | 851374 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 20.00 | Ilford FP4 | 125/ | N | O | 002/T | 2 | Battaini,P | I |
| 5.954 | 851375 | 0.050 | 2.8 | | 39.6 x27.0 | 8.00 | Agfa 1000 RS | 1000/ | N | T | 213/S | 2 | Jones,B.W | J |
| 5.999 | 851376 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | X | 11/P | 1 | Marafie,A.H | |

NOTE A (Observer's image identifier preceded by prefix 100/. Ed.)
NOTE B (Observer supplied nonessential notes on original report form. Ed.)
NOTE C Photograph made by F. Wilken and O. Guthier.
NOTE D UT start time is accurate. Film roll Tri-X/2.
NOTE E UT start time is estimate. Film roll Tri-X/2.
NOTE F UT start time is estimate. Wratten 47A (blue) filter used. Film roll Tri-X/2.
NOTE G UT start time is estimate. Wratten 21 (orange) filter used. Film roll Tri-X/2.
NOTE H UT start time is estimate. Drive failed; hand driven. Film roll Tri-X/2.
NOTE I Instrument is Schmidt camera.
NOTE J (Observer's image identifier is Agfa/2/13. Ed.)

DATE: 6 APR 1986

DATE: 6 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.041 | 818254 | 3.0 | B | IHW | 29.0 | 6 | | | 0.050 | B | | 10 | 6.0 | Y | 3 | Guthier,O | A |
| 6.059 | 818255 | 4.5 | B | 5A | 30 | 7 | 6 | 0 | 0.065 | B | | 20 | 6.2 | Y | 1 | McBain,J | B |
| 6.073 | 818256 | 3.7 | M | 4C, 5A | | 6 | 1.98 | 290 | 0.04 | B | | 12 | 6.1 | Y | 1 | Henshaw,C | |
| 6.09 | 818257 | 2.9 | S | 4C | | | | | 0.05 | B | | 7 | 4.0 | | 14 | Shanklin,J.D | C |
| 6.094 | 818258 | 2.7 | B | 5A | | | | | | EY | | | 6.5 | Y | 3 | Hasubick,W | |
| 6.094 | 818259 | 2.7 | B | 5A | | | 8 | | 0.03 | B | | 8 | 6.5 | Y | 3 | Hasubick,W | D |
| 6.094 | 818260 | | | 5A | 29 | 5 | 5.3 | | 0.08 | B | | 20 | 6.5 | Y | 3 | Hasubick,W | D |
| 6.100 | 818261 | 2.6 | B | 4C | 25 | 8 | 4 | | 0.03 | B | | 8 | 5.5 | Y | 3 | Fischer,D | E |
| 6.10 | 818262 | 2.9 | S | 5A | 20 | 6 | 2.5 | | 0.080 | B | | 15 | 7 | Y | 8 | van Loo,F.R | |
| 6.104 | 818263 | 4.0 | M | 5A | | 6 | | | 0.050 | B | | 12 | 5.0 | N | 1 | Venturs,F | |
| 6.111 | 818264 | 3.6 | B | 5A | | | | | 0.05 | B | | 7 | 6.5 | Y | 2 | Kukkonen,I.T | |
| 6.125 | 818265 | | | 5A | 7.5 | 6 | | | 0.216 | N | 7.6 | 65 | 6.0 | Y | 4 | Rogers,J.H | F |
| 6.125 | 818266 | 3.3 | B | 5A | 18 | | | | | EY | | | 6.0 | Y | 4 | Rogers,J.H | G |
| 6.125 | 818267 | 2.8 | S | 5A | 38 | 6 | 4.6 | | 0.08 | B | | 20 | 5.5 | Y | 7 | Parisio,R | |
| 6.125 | 818268 | 3.0 | S | 5A | 10 | 6 | 2.3 | 295 | 0.050 | B | | 10 | 4.0 | Y | 8 | Vanin,G | |
| 6.128 | 818269 | 4.0 | M | 5A | 14 | 6 | | | 0.05 | B | | 12 | 5.5 | Y | 2 | Tanti,T | H |
| 6.13 | 818270 | 3.5 | S | DCS 10 | | 3 | 3 | 300 | 0.080 | B | | 15 | 4.5C | Y | 4 | Scholten,A | I |
| 6.132 | 818271 | | | | 35 | 4 | 4.0 | 300 | 0.050 | B | | 7 | 6.5 | Y | 2 | Kukkonen,I.T | J |
| 6.142 | 818272 | 3.1 | B | 5A | | | | | | EY | | | 6.5 | Y | 2 | Kukkonen,I.T | |
| 6.153 | 818273 | 3.3 | S | 5A | 12 | 3 | 2.5 | 290 | 0.050 | B | | 10 | 6.0 | Y | 4 | Rogers,J.H | K |
| 6.167 | 818274 | | | | 9 | 6 | | | 0.090 | M | 11 | 111 | 6.5 | Y | 2 | Kukkonen,I.T | L |
| 6.17 | 818275 | 2.9 | S | DCS 10 | 25 | 6 | 3.0 | | 0.080 | B | | 15 | 7.5 | Y | 3 | Wils,P | M |
| 6.174 | 818276 | 2.7 | B | 5A | 27 | 6 | 3.0 | 300 | | EY | | | 5.5 | Y | 6 | Bottger,B | |
| 6.194 | 818277 | | | | 11 | 8 | 0.3 | 290 | 0.09 | M | 11 | 56 | 6.0 | Y | 7 | Westlund,M | N |
| 6.208 | 818278 | 3.4 | | 143 | | | | | | EY | | | 5.0C | Y | 2 | Martinez,C | O |
| 6.208 | 818279 | 3.5 | | 143 | | | | | | EY | | | 5.0 | Y | 1 | Villegas,S | |
| 6.229 | 818280 | 3.6 | M | 5A | | | 3.8 | 282 | 0.040 | B | | 7 | 6.0 | Y | 7 | Westlund,M | N |
| 6.257 | 818281 | 3.1 | B | 143 | 16 | 5 | 1.5 | | 0.05 | B | | 7 | 4.8C | Y | 2 | Lupianez,B | |
| 6.333 | 818282 | 2.9 | B | 5A | 32 | 5 | 2.7 | 318 | | EY | | | 5.0 | Y | 10 | Linder,J | P |
| 6.382 | 818283 | 3.8 | B | 161 | | | | 282 | 0.05 | B | | 7 | 5.0 | | 3 | Benavides,A | |
| 6.415 | 818284 | 3.4 | S | 5A | | | 4 | | 0.050 | B | | 10 | 6.4 | Y | 3 | Kaila,K | |
| 6.45 | 818285 | 2.4 | | 4C | 12 | 6 | 3 | 310 | 0.040 | B | | 8 | 4.5 | Y | 1 | Keen,R | Q |
| 6.45 | 818286 | 2.8 | | 5A | 25 | 6 | | 290 | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 6.46 | 818287 | 2.1 | B | 4C | 15 | 5 | 1 | 310 | | EY | | | 4.5 | Y | 1 | Keen,R | R |
| 6.47 | 818288 | 3.0 | S | 5A | | | | | 0.023 | B | | 3 | 5.6 | | | Jones,A | |
| 6.47 | 818289 | | | | 18 | 8 | 1.5 | | 0.080 | B | | 11 | | | | Jones,A | S |
| 6.48 | 818290 | 8.6 | V | RASNZ | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | T |
| 6.52 | 818291 | 2.7 | B | 4C | 23 | | | | | EY | | | 6 | Y | 4 | Bortle,J.E | R |
| 6.535 | 818292 | 2.9 | S | 143 | | | 0.5 | 320 | | EY | | | 5.5 | N | 8 | Foulkes,M | |
| 6.545 | 818293 | 3.3 | | 5A | 35 | 3 | 3 | 310 | 0.05 | B | | 10 | | N | 1 | Tregaskis,T.B | U |
| 6.545 | 818294 | 3.3 | | 5A | | 3 | | | | EY | | | 5 | N | 1 | Tregaskis,T.B | V |
| 6.55 | 818295 | 2.9 | | 5A | 25 | 5 | 2.5 | 300 | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 6.56 | 818296 | 2.4 | | 5A | | 3 | | | | EY | | | 7 | Y | 14 | Bouma,R.J | |
| 6.58 | 818297 | 2.3 | | 4C | | | 3 | | | EY | | | 6.5 | Y | 1 | Lovejoy,T | W |
| 6.583 | 818298 | 4.0 | S | 5A | 15 | 5 | 3 | 45 | 0.080 | B | | 11 | | Y | 8 | Pryal,J | X |
| 6.67 | 818299 | 2.6 | S | | 35 | 6 | 12 | 295 | 0.080 | B | | 11 | 6.5 | Y | 3 | Akita,I | Y |
| 6.750 | 818300 | 2.3 | S | 5A | | | | | | EY | | | 6.5 | Y | 3 | Garradd,G | |
| 6.75 | 818301 | 2.2 | B | 5A | | | 4 | 310 | | EY | | | 6.5 | Y | 36 | Hale,A | Z |
| 6.753 | 818302 | | | | | | 2.5 | | 0.05 | B | | 7 | | | | Garradd,G | |
| 6.753 | 818303 | 3.2 | B | 5A | | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 6.757 | 818304 | 3.0 | M | 5A | 13 | 5 | 0.5 | 300 | 0.030 | B | | 8 | 4.5M | Y | 1 | Kato,T | |
| 6.76 | 818305 | 3.0 | M | 5A | 15 | 6 | | | 0.08 | B | | 20 | 4.5 | Y | 1 | Oka,A | |
| 6.77 | 818306 | 3.5 | M | SAO | 21 | 5 | | | 0.065 | R | 8 | 16 | 4.5 | Y | 5 | Nakamura,A | a |
| 6.771 | 818307 | 4.1 | B | 5A | 6.6 | 6 | 0.2 | 335 | 0.05 | B | | 7 | 2.0C | Y | 1 | Kanai,K | |
| 6.771 | 818308 | 3.9 | S | 5A | 6.6 | 6 | 0.2 | 335 | 0.05 | B | | 7 | 2.0C | Y | 1 | Kanai,K | |
| 6.798 | 818309 | 3.3 | S | 5A | 20 | 4 | 2.3 | 300 | 0.07 | B | | 10 | 5.0 | Y | 1 | Kobayashi,J | |
| 6.802 | 818310 | 2.7 | | 5A | | 3 | | | | EY | | | 5 | Y | 1 | Tregaskis,T.B | b |
| 6.805 | 818311 | 2.7 | B | 5A | 40 | 3 | 3 | 310 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | c |
| 6.806 | 818312 | 4.0 | B | 5A | 20 | 6 | | | 0.070 | B | | 10 | 4.0 | Y | 1 | Nakamura,Y | |
| 6.806 | 818313 | | | 5A | 12 | 5 | | | 0.15 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | d |
| 6.81 | 818314 | 1.9 | B | 5A | | | 4 | 310 | | EY | | | 6.5 | Y | 36 | Hale,A | Z |
| 6.875 | 818315 | 2.2 | M | 5A | 31 | 8 | 2.0 | | 0.05 | B | | 10 | 6.5 | Y | 12 | Melandri,F | e |
| 6.888 | 818316 | 3.3 | M | 5A | 16.1 | 7 | | 305 | 0.12 | C | 10 | 40 | 4.5 | Y | 6 | Cifuentes,E | f |
| 6.889 | 818317 | 2.8 | M | 5A | | 7 | 2.0 | | | EY | | | 5.5 | Y | 1 | Fleet,R.W | |
| 6.892 | 818318 | 3.3 | M | 5A | 23 | 6 | 3.0 | 299 | 0.08 | B | | 11 | 5.5 | Y | 1 | Fleet,R.W | g |
| 6.951 | 818319 | 2.7 | B | IHW | 45.0 | 7 | 5.0 | | 0.050 | B | | 10 | 6.2 | Y | 3 | Guthier,O | h |
| 6.96 | 818320 | 2.9 | S | 5A | | | | | 0.05 | B | | 7 | 4.5 | | 15 | Shanklin,J.D | C |

NOTE A Type I tail 7 deg. long, type II tail 4 to 5 deg. long.
NOTE B Seen 2 tails. [sic] 4 deg. tail at PA 370 [sic] noted at 6.063 April.
NOTE C Cloud.
NOTE D PA 315-330. Tail I plasma; tail II gas. [sic]
NOTE E Tail length approximate. Brilliant, fanned central condensation!!
NOTE F Not quite circular. Bright nucleus. Hint of tail.
NOTE G Coma diameter approximate. Faint stub of tail.
NOTE H Seeing good, transparency good. Haze.
NOTE I PA approximate.
NOTE J Coma diameter determined by comparing with neighboring stars.
NOTE K Tail very faint, broad and diffuse.
NOTE L Coma diameter determined as an average of two transit time observations.
NOTE M PA 330 to 350.
NOTE N Milky Way.
NOTE O Cloudy.
NOTE P Type I tail? Shadow behind nucleus.
NOTE Q Modified Sidgwick method used. Extinction correction applied.
NOTE R Extinction correction applied.
NOTE S Tail PA 285-310. Tail suspected to 2 degrees.
NOTE T Nucleus.
NOTE U Tail very faint and broad. PA approximate. Through broken cloud. (Observer gave limit as approximately 10. Ed.)
NOTE V Through broken cloud.
NOTE W Naked eye tail length.
NOTE X Getting nearer but fainter? (Observer gave limit as 10. Ed.)
NOTE Y Australia. (Translated by IHW staff. Ed.)
NOTE Z The 0.5 magnitude rise between the previous night's estimate and the first estimate on this night is believed real. During the next hour and a half the brightness appeared to rise an additional 0.3 magnitude, but the reality of this is not confirmed. An intense bright area in the central coma with two jets was observed with the 20 cm reflector; this appeared to be slightly more fanned out by the beginning of dawn.
NOTE a Tail length = yes. PA 290 to 350.
NOTE b Misty cloud.
NOTE c Tail very faint. Misty cloud. (Observer gave limit as approximately 9. Ed.)
NOTE d Misty cloud. (Observer gave limit as approximately 11.5. Ed.)

DATE: 6 APR 1986

NOTE e I can see all the 2 deg. of tail with naked eye. Tail length is for ion tail.
NOTE f Tail length 4 deg. to 4.5 deg.
NOTE g Material out to 1.8 deg., PA 313.
NOTE h Tail I + II length.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.076 | 831038 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | A |
| 6.118 | 831039 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | A |
| 6.125 | 831040 | | 0.216 | N | 7.6 | 135,230 | | 6.0 | 4 | Rogers,J.H | B |
| 6.130 | 831041 | 6.32 | 0.050 | B | | 7 | 15 | 6.5 | 2 | Kukkonen,I.T | C |
| 6.191 | 831042 | 1.6 | 0.090 | M | 11 | 56 | 10 | 6.0 | 7 | Westlund,M | D |
| 6.214 | 831043 | | 0.216 | N | 7.6 | 135,230 | 15 | 6.0 | 4 | Rogers,J.H | E |
| 6.227 | 831044 | 6 | 0.040 | B | | 7 | 5 | 6.0 | 7 | Westlund,M | F |
| 6.556 | 831045 | 0.42 | 0.090 | M | 11 | 40 | 10 | 6.0 | 8 | Foulkes,M | G |
| 6.623 | 831046 | 1.64 | 0.065 | B | | 12 | 4 | 6.0 | 8 | Foulkes,M | H |
| 6.885 | 831047 | 2.66 | 0.12 | C | 10 | 40 | 60 | 4.5 | 6 | Cifuentes,E | I |
| 6.892 | 831048 | 4 | 0.08 | B | | 11 | | 5.5 | 1 | Fleet,R.W | J |
| 6.949 | 831049 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | A |
| 6.951 | 831050 | 0.48 | 0.060 | R | 11.6 | 35 | 30 | | 1 | Shankar,A | K |
| 6.964 | 831051 | 0.11 | 0.060 | R | 11.6 | 30, 35 | 65 | | 1 | Shankar,A | L |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Broad diffuse jet at PA about 90 to 120, length 0.75'. Probably another jet, ever more diffuse at PA about 210. Bright unresolved nucleus visible. Coma diameter 3'. (Duration not indicated. Time of observation is start time. Ed.)
NOTE C Tail length 4 deg, PA 300. Tail brightness considerably lower than coma brightness. The SW edge of the tail was slightly brighter than other parts of tail. The central parts of coma brightest; degree of condensation approximately 4.
NOTE D Disturbing lights: Milky Way.
NOTE E Broad jet or fan at PA about 90 to 150. Narrower jet on edge at PA 90, length 0.3'. Coma diameter 5.4-6.0'. Nucleus - still very bright but not quite stellar.
NOTE F Field of view 9 deg. Disturbing lights: Milky Way.
NOTE G Bright almost star-like central condensation which was displaced to PA about 45 deg. from the coma centre. Kink in south west edge of tail. Tail PA 320-330.
NOTE H 2 degree tail, PA 320, from coma. Coma outer envelope 25' across, fuzzy. Single tail through slight broadening near the head at PA about 45 deg. Tail projected onto Milky Way which may have affected its visibility. DC = 6 to 7.
NOTE I Tail 4 deg. to 4 deg. 30', PA 305.
NOTE J Main tail at PA 299. Trailing edge at PA 313. Tail features lost in Milky Way. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE K 10x50 binoculars also used.
NOTE L (The observer supplied a detailed explanation of his intensity contour sketch. A summary prepared by the IHW staff could not do justice to the original sketch and explanation. Extreme ends of observer's start and end times given. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.009 | 851377 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 15.00 | Kodak 2415 | | Y | X | 12/P | 1 | Marafie,A.H | |
| 6.043 | 851378 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Ektachrome | 400/ | N | M | 434/P | 1 | Stolzen,P | A |
| 6.052 | 851379 | 0.500 | 3.5 | | 4.1 x 2.7 | 10.00 | Kodak 2415 | | Y | | 7/P | 4 | Guthier,O | B |
| 6.059 | 851380 | 0.135 | 2.8 | | 15.2 x10.2 | 10.00 | Ektachrome | 400/ | N | M | 435/P | 1 | Stolzen,P | A |
| 6.067 | 851381 | 0.500 | 3.5 | | 4.1 x 2.7 | 20.00 | Kodak 2415 | | Y | | 8/P | 4 | Guthier,O | B |
| 6.105 | 851382 | 0.200 | 2 | | 10.3 x 6.9 | 13.00 | Kodak 2415 | | Y | S | 16/P | 2 | Dragesco,J | C |
| 6.106 | 851383 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 10.00 | Kodak 2415 | | Y | | 85/P | 3 | Koch,B | D |
| 6.196 | 851384 | 0.050 | 1.8 | | 39.6 x27.0 | 5.00 | 3M 1000 | | N | S | 001/P | 2 | Mobberley,M | E |
| 6.228 | 851385 | 1.80 | 6 | 0.30 | 1.1 x 0.8 | 0.50 | Kodak Tri-X | 400/27 | N | X | 010/P | | Castineiras,R.S.J | F |
| 6.233 | 851386 | 0.085 | 4.0 | | 23.9 x16.1 | 20.00 | 103a-O | | N | C | 6/S | 1 | Binnewies,S | |
| 6.234 | 851387 | 0.085 | 2.0 | | 23.9 x16.1 | 1.00 | Kodak Tri-X | 400/ | N | O | 58/P | 8 | Bottger,B | G |
| 6.240 | 851388 | 0.050 | 1.8 | | 39.6 x27.0 | 4.50 | Fujichrome | 400/ | N | O | 12/P | 6 | Bottger,B | H |
| 6.240 | 851389 | 0.085 | 2.0 | | 23.9 x16.1 | 4.50 | Kodak Tri-X | 400/ | N | O | 59/P | 8 | Bottger,B | G |
| 6.240 | 851390 | 0.200 | 3.5 | | 10.3 x 6.9 | 4.50 | Fujichrome | 400/ | N | O | 23/P | 8 | Bottger,B | G |
| 6.246 | 851391 | 0.200 | 3.5 | | 10.3 x 6.9 | 3.50 | Fujichrome | 400/ | N | O | 25/P | 8 | Bottger,B | G |
| 6.258 | 851392 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | C | 9/P | | Falsarella,N | |
| 6.335 | 851393 | 0.135 | 2.8 | | 15.2 x10.2 | 5.50 | Fujichrome | 400/ | N | | 619/P | | Gianforte,J.S | I |
| 6.462 | 851394 | 0.050 | 2 | | 39.6 x27.0 | 10.00 | Konica | 1600/ | Y | S | 7/S | 1 | Pacholka,W | |
| 6.639 | 851395 | 2.100 | 7 | 0.30 | | 10.00 | Sakura SR | 1600/ | N | | 14/P | 2 | Kojima,T | J |
| 6.824 | 851396 | 0.050 | 2.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 7/P | 2 | Jones,B.W | K |
| 6.835 | 851397 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | Kodak 103a-O | | N | O | 3/C | 5 | Cimatti,A | |
| 6.836 | 851398 | 0.050 | 1.8 | | 39.6 x27.0 | 3.00 | Kodak VR | 1000/ | N | C | 3/P | 3 | Vincent,F | L |
| 6.838 | 851399 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 8/P | 2 | Jones,B.W | M |
| 6.851 | 851400 | 0.050 | 1.8 | | 39.6 x27.0 | 15.75 | Kodak Tri-X | 400/ | N | T | 9/P | 2 | Jones,B.W | N |
| 6.868 | 851401 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 12/P | 2 | Jones,B.W | N |
| 6.873 | 851402 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 4/C | 5 | Cimatti,A | |
| 6.882 | 851403 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 13/P | 2 | Jones,B.W | M |
| 6.888 | 851404 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 5/C | 5 | Cimatti,A | |
| 6.896 | 851405 | 0.050 | 2.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 14/P | 2 | Jones,B.W | K |
| 6.916 | 851406 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 6/C | 5 | Cimatti,A | |
| 6.934 | 851407 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 7/C | 5 | Cimatti,A | |
| 6.960 | 851408 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 6.00 | Kodak 2415 | | Y | | 88/P | 3 | Koch,B | D |
| 6.992 | 851409 | 0.500 | 3.5 | | 4.1 x 2.7 | 20.00 | Kodak 2415 | | Y | | 9/P | 4 | Guthier,O | B |

NOTE A (Observer's image identifier is preceded by prefix 2. Ed.)
NOTE B Photograph made by F. Wilken and O. Guthier.
NOTE C (Observer supplied nonessential notes on original report form. Ed.)
NOTE D (Observer's image identifier preceded by prefix 100/. Ed.)
NOTE E This color slide film was processed as a negative and push processed to approximately ASA 4000.
NOTE F City lights.
NOTE G Photograph made by J. Linder and B. Bottger.
NOTE H Observation made by J. Linder and B. Bottger.
NOTE I (Observer's image identifier is 116-9. Ed.) UT start time approximate.
NOTE J Jet structure.
NOTE K Film roll Tri-X/3.
NOTE L Some patchy cloud.
NOTE M Wratten 47A (blue) filter used. Film roll Tri-X/3.
NOTE N Wratten 21 (orange) filter used. Film roll Tri-X/3.

DATE: 7 APR 1986

DATE: 7 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.04 | 818321 | 2.6 | S | 5A | 30 | 7 | 2.5 | | 0.050 | B | | 10 | 7 | Y | 8 | van Loo,F.R | A |
| 7.07 | 818322 | 2.4 | V | 5A | 25 | 5 | 1.50 | 325 | | EY | | | 6.5 | Y | 4 | Merlin,J.-C | |
| 7.101 | 818323 | 3.9 | M | 5A | 25 | 5 | 1.5 | 270 | 0.04 | B | | 8 | 4.9C | Y | 3 | Taylor,M.D | B |
| 7.101 | 818324 | 4.4 | S | 5A | 20 | 6 | 1.5 | | 0.07 | B | | 16 | 4.9C | Y | 3 | Taylor,M.D | C |
| 7.111 | 818325 | | | | 13 10 | 6 | | | 0.09 | M | 11 | 56 | 5.0 | Y | 7 | Westlund,M | D |
| 7.12 | 818326 | 3.5 | M | 4C | 15 | 4 | 3.0 | 310 | 0.05 | B | | 7 | | | | Keszthelyi,S | E |
| 7.125 | 818327 | 2.5 | B | 5A | 25 | 6 | 2 | | 0.03 | B | | 8 | 5.0 | Y | 3 | Fischer,D | F |
| 7.125 | 818328 | 3.1 | B | 143,161 | 16 | 5 | 1.5 | | 0.05 | B | | 7 | 4.5C | Y | 2 | Lupianez,B | |
| 7.125 | 818329 | 3.7 | B | 5A | 18 | 5 | 2.6 | | 0.06 | R | 8 | 15 | 5.5 | Y | 3 | Schambeck,C.M | G |
| 7.142 | 818330 | 3.2 | B | 5A | | | | | | EY | | | 5.8 | Y | 4 | Rogers,J.H | H |
| 7.142 | 818331 | 3.2 | S | 5A | 18 | 4 | 1.2 | 290 | 0.050 | B | | 10 | 5.8 | Y | 4 | Rogers,J.H | I |
| 7.146 | 818332 | 2.4 | B | 5A | 36 | 6 | 4.5 | 313 | | EY | | | 5.5 | Y | 7 | Bottger,B | |
| 7.153 | 818333 | 3.3 | M | 5A | | | 2.0 | 294 | 0.040 | B | | 7 | 5.0 | Y | 7 | Westlund,M | D |
| 7.17 | 818334 | 2.7 | S | DCS 10 | 25 | 6 | | | 0.080 | B | | 15 | 7.5 | Y | 3 | Wils,P | |
| 7.177 | 818335 | 3.5 | B | 143,161 | 20 | 4 | 1.5 | 300 | 0.05 | B | | 7 | 5.5C | Y | 2 | Martinez,C | |
| 7.188 | 818336 | 2.5 | B | 5A | 32 | 6 | 2.4 | 315 | | EY | | | 5.5 | Y | 8 | Linder,J | J |
| 7.226 | 818337 | 2.9 | B | 161 | 7.5 | 2 | 0.5 | 240 | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 7.24 | 818338 | 2.7: | M | IHW | 30 | 5 | 2 | 290 | 0.035 | B | | 7 | 4.0 | Y | 5 | Granslo,B.H | K |
| 7.292 | 818339 | | B | | | 8 | | | 0.08 | B | | 11 | | Y | 5 | Gorski,L | |
| 7.351 | 818340 | 2.7 | B | 161 | 21 | 5 | 0.6 | 304 | 0.05 | B | | 20 | 4.0 | Y | 1 | da Silva,L.A.L | L |
| 7.4063 | 818341 | 3.1 | S | DCS | 32 | 8 | 2.15 | 328 | 0.080 | B | | 20 | 5.4 | | 5 | Machholz,D | |
| 7.4097 | 818342 | 3.0 | | DCS | 22 | 7 | 2.58 | 328 | | EY | | | 5.4 | | 5 | Machholz,D | |
| 7.4201 | 818343 | 3.0 | S | DCS | 36 | 7 | 2.16 | 328 | 0.050 | B | | 7 | 5.4 | | 5 | Machholz,D | |
| 7.44 | 818344 | 2.3 | B | OH, 4C | | | | | | EY | | | 6.0 | Y | 4 | Keen,R | M |
| 7.48 | 818345 | 3.0 | S | 5A | | | | | 0.023 | B | | 3 | | | | Jones,A | |
| 7.48 | 818346 | 2.8 | | SAO | 25 | | 4 | 290 | | EY | | | 6.0 | Y | 2 | Ashdown,M | N |
| 7.49 | 818347 | 2.3 | S | 5A | 27 | 7 | | | 0.023 | B | | 3 | 5.6 | | | Jones,A | |
| 7.49 | 818348 | | | | 25 | 7 | 2.0 | | 0.080 | B | | 11 | | | | Jones,A | O |
| 7.51 | 818349 | 3.0 | B | 5A | 25 | 6 | | 315 | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 7.521 | 818350 | 4.1 | S | 5A | 15 | 5 | 4 | 40 | 0.080 | B | | 11 | | Y | 8 | Pryal,J | P |
| 7.528 | 818351 | 2.6 | S | 142,143 | | | 0.75 | 300 | | EY | | | 5.6 | Y | 9 | Foulkes,M | |
| 7.53 | 818352 | 3.3 | B | 5A | | 4 | | | 0.050 | B | | 7 | 4.8C | Y | 1 | Matchett,V | |
| 7.559 | 818353 | 2.8 | | 5A | 30 | 3 | | | | EY | | | 6 | Y | 1 | Tregaskis,T.B | Q |
| 7.563 | 818354 | 2.8: | B | 5A | 40 | 3 | 3 | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | R |
| 7.576 | 818355 | 2.1 | S | 5A | 40 | 6 | | | | EY | | | 6.2 | Y | 1 | Seargent,D | |
| 7.576 | 818356 | | | | | | 4 | 290 | 0.08 | B | | 15 | | | | Seargent,D | |
| 7.583 | 818357 | 3.5 | B | 5A | 20 | 8 | 2.5 | 280 | 0.05 | B | | 7 | 4.1 | Y | 3 | Bembrick,C | |
| 7.59 | 818358 | 2.0 | M | 5A | 30 | 5 | 3.5 | 275 | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | S |
| 7.59 | 818359 | 1.9 | | 5A | | 4 | | | | EY | | | 7 | Y | 14 | Bouma,R.J | |
| 7.590 | 818360 | 3.0 | S | 5A | 20 | | 1 | 290 | 0.05 | B | | 7 | 5.7 | Y | 1 | Bryant,K | T |
| 7.60 | 818361 | 2.6 | B | IHW BAA | 35 | 5 | 5 | | | EY | | | | | | Green,D.W.E | U |
| 7.60 | 818362 | 3.1 | | 5A | 20 | 5 | | | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 7.604 | 818363 | 3.0 | S | 4C | 14 | 7 | 3.5 | 250 | 0.080 | B | | 20 | | Y | 1 | Batza,H | V |
| 7.62 | 818364 | | | | 40 | 7 | 13 | 300 | | EY | | | 6.0 | Y | 32 | Morris,C.S | |
| 7.62 | 818365 | 2.3 | M | 4C, 5B | 21 | 5 | 3.75 | 297 | 0.050 | B | | 10 | 6.0 | Y | 32 | Morris,C.S | W |
| 7.70 | 818366 | 2.5 | B | 5A | | 7 | 4.7 | 305 | | EY | | | 6.9 | Y | | Pearce,A | |
| 7.71 | 818367 | 2.4 | B | 5A | | | | | | EY | | | 7.0 | Y | | Clark,M.L | X |
| 7.711 | 818368 | 2.2 | S | 5A | | | | | | EY | | | 6.0 | Y | 2 | Garradd,G | |
| 7.715 | 818369 | | | | | | 4.5 | | 0.05 | B | | 7 | | | | Garradd,G | |
| 7.72 | 818370 | 2.8 | S | 5A | 41 | 7 | 1.1 | | 0.076 | | 8 | 15 | 7.0 | Y | | Clark,M.L | Y |
| 7.73 | 818371 | 3.3 | S | 5A | 35 | 7 | 3.1 | | 0.25 | N | 5 | 38 | 7.0 | Y | | Clark,M.L | Z |
| 7.753 | 818372 | 3.3 | M | 5A | 15 | 5 | | | 0.030 | B | | 8 | 5.0M | Y | 1 | Kato,T | |
| 7.753 | 818373 | 3.6 | M | 5B | 19 | 4 | | 315 | 0.08 | B | | 11 | 3.5 | Y | 1 | Mitsuma,S | a |
| 7.76 | 818374 | 1.9 | B | 5A | | | 3 | 315 | | EY | | | 6.5 | Y | 36 | Hale,A | b |
| 7.76 | 818375 | | | | | | 3 | 315 | 0.05 | B | | 10 | 6.5 | Y | 36 | Hale,A | b |
| 7.76 | 818376 | 3.6 | M | SAO | 22 | 6 | 0.8 | | 0.065 | R | 8 | 16 | 4.5 | Y | 6 | Nakamura,A | c |
| 7.76 | 818377 | 2.8 | M | 5A | 20 | 6 | | | 0.08 | B | | 20 | 5.0 | Y | 1 | Oka,A | |
| 7.761 | 818378 | 3.5 | S | 5B | 17.8 | 5 | 0.4 | 330 | 0.05 | B | | 7 | 2.5C | Y | 1 | Kanai,K | |
| 7.764 | 818379 | 3.4 | M | 5B | 20 | 4 | | | 0.05 | B | | 7 | 3.5 | Y | 1 | Mitsuma,S | |
| 7.769 | 818380 | 3.7 | B | 5B | 17.8 | 5 | 0.4 | 330 | 0.05 | B | | 7 | 2.5C | Y | 1 | Kanai,K | |
| 7.77 | 818381 | 1.9 | | 5A | | | | | | EY | | | 7 | Y | 15 | Bouma,R.J | |
| 7.78 | 818382 | 4.2 | S | AAVSO | 8 | 4 | | | 0.07 | B | | 10 | 4.0 | Y | 1 | Hayashi,A | |
| 7.79 | 818383 | 4.0 | S | AAVSO | 10 | 4 | | | 0.13 | N | 6.3 | 24 | 4.0 | Y | 1 | Hayashi,A | |
| 7.79 | 818384 | 3.5 | M | 5A | | | 4.0 | | 0.05 | B | | 7 | 6.0 | Y | 1 | Suzuki,K | d |
| 7.810 | 818385 | 2.5 | S | 143 | 42 | | 2.5 | 300 | | EY | | | 6.5 | Y | 7 | Haver,R | |
| 7.813 | 818386 | 2.6 | | 5A | 30 | 3 | | | | EY | | | 6 | N | 1 | Tregaskis,T.B | e |
| 7.816 | 818387 | 3.4 | S | 5A | 50.0 | 5 | 5.50 | 305 | 0.08 | B | | 30 | 7.0 | Y | 7 | Campos,J | |
| 7.819 | 818388 | | | 5A | 30 | 3 | 3 | 315 | 0.05 | B | | 10 | | N | 1 | Tregaskis,T.B | f |
| 7.820 | 818389 | 3.0 | | 5A | 1 | 3 | 3.0 | 310 | | EY | | | 7.0 | Y | 7 | Campos,J | |
| 7.820 | 818390 | 2.6 | S | 143 | 45 | 3 | 3.3 | 300 | 0.05 | B | | 7 | 6.5 | Y | 7 | Haver,R | |
| 7.875 | 818391 | 3.2 | | 5A | 30 | 7 | 5 | | 0.05 | B | | 7 | 6.0 | Y | 2 | Dietrich,M | g |
| 7.882 | 818392 | | | 5A | 35 | 7 | | | 0.05 | B | | 10 | 6.0 | Y | 12 | Melandri,F | |
| 7.894 | 818393 | 3.5 | M | 5A | 19.0 | 7 | 2 | 314 | 0.12 | C | 10 | 40 | 5.0 | Y | 6 | Cifuentes,E | |
| 7.896 | 818394 | 2.6 | B | IHW | 33.0 | 6 | 6.5 | | 0.050 | B | | 10 | 6.2 | Y | 3 | Guthier,O | h |
| 7.896 | 818395 | 3.6 | B | 5A | | | 4 | 310 | 0.06 | B | | 15 | 5.7 | Y | 2 | Vincent,J | i |
| 7.900 | 818396 | 2.5 | B | 5A | 25 | 7 | 5 | | 0.03 | B | | 8 | 5.5 | Y | 3 | Fischer,D | j |
| 7.928 | 818397 | 2.5 | B | IHW | | | | | | EY | | | 6.2 | Y | 3 | Guthier,O | |
| 7.962 | 818398 | 3.5 | M | 5A | 28 | 5 | 3.7 | 306 | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | |
| 7.965 | 818399 | 2.8 | M | 5A | | 4 | 2.9 | 314 | | EY | | | 5.6 | Y | 1 | Fleet,R.W | |
| 7.97 | 818400 | 2.6 | S | 5A | | | | | | EY | | | 6.0 | | 16 | Shanklin,J.D | k |
| 7.979 | 818401 | 2.8 | S | 5A | 39 | 6 | 4.7 | | 0.08 | B | | 20 | 6.0 | Y | 7 | Parisio,R | |

NOTE A Dust tail 2.5 deg. long, gas tail 2.0 deg. long.
NOTE B Antoniadi III. Second tail PA 270 to 300.
NOTE C Central condensation = 4.6 arc min. diameter. Tail PA 270 to 300.
NOTE D Milky Way.
NOTE E 6 mag. nucleus.
NOTE F Milky Way hampers interpretation of tail structure. Tail length exceeds 2 deg.
NOTE G PA 294 to 307.
NOTE H Tail suspected.
NOTE I Tail broad + faint; length approximate. See drawing. Coma elongated transverse to tail.
NOTE J Type I tail.
NOTE K Coma diameter and PA approximate.
NOTE L Cirrus.
NOTE M Observation from airplane near Hawaii.
NOTE N DC in 7x50 binoculars: 8.
NOTE O Coma wider than tail near head. Tail PA 285-300. Large nucleus or small condensation in 0.317 Newtonian at 86x.
NOTE P Tail much bright along west side. [sic] (Observer gave limit as 10. Ed.)
NOTE Q Coma diameter approximate. Clear.
NOTE R Tail faint. Clear. (Observer gave limit as approximately 10. Ed.)
NOTE S Gas tail at PA 275. Broad dust fan includes other tail listings. Tail length approximate at PA 50. PA 285 is approximate.

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NOTE T DC = strong.
NOTE U Coma diameter and tail length approximate.
NOTE V (Observer gave limit as 10.0. Ed.)
NOTE W Multiple tails define the shape of the fan tail. West edge of fan was sharply defined.
NOTE X Dust tail fanned with 3 main concentrations.
NOTE Y Tails photo'd. to 4.7 deg. and 8.8 deg. PA of 1.1 deg. tail is 332-327; PA of 1.5 deg. tail is 28-7. Instrument is catadioptric Newtonian.
NOTE Z PA of 3.1 deg. tail is 332-327.
NOTE a Tail length 1 to 2 deg.
NOTE b The magnitude was measured several times throughout the night, with the brightness remaining constant. In the 20 cm reflector the central bright area noted the previous night was much larger, with at least 3 or 4 jets observed.
NOTE c PA 300 to 350.
NOTE d Wind.
NOTE e Tail not definite. Clear.
NOTE f Tail PA approximate. Dawn and hazy. (Observer gave limit as approximately 9.5. Ed.)
NOTE g 5 deg. tail is dust, 3.5 deg. tail is ion. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE h Tail I.
NOTE i 5.7 near 6193. Comp. star Eta 3.3. Naked eye magnitude 3.3. DC = 5.
NOTE j Tail length exceeds 5 deg. Tail straight (obviously ion).
NOTE k Cloud.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.053 | 831052 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | A |
| 7.106 | 831053 | 1.6 | 0.090 | M | 11 | 56 | 15 | 5.0 | 7 | Westlund,M | B |
| 7.135 | 831054 | | 0.216 | N | 7.6 | 135,230 | 10 | 5.8 | 4 | Rogers,J.H | C |
| 7.142 | 831055 | | 0.050 | B | | 10 | | 5.8 | 4 | Rogers,J.H | D |
| 7.149 | 831056 | 6 | 0.040 | B | | 7 | 10 | 5.0 | 7 | Westlund,M | B |
| 7.202 | 831057 | 0.13 | 0.20 | SC | 10 | 226 | 17 | 5.5 | 3 | Schambeck,C.M | |
| 7.536 | 831058 | 1.95 | 0.065 | B | | 12 | 16 | 5.5 | 9 | Foulkes,M | E |
| 7.648 | 831059 | | 0.254 | N | 6 | 61, 11, 7 | 145 | | | Pawlutschenko,B | F |
| 7.868 | 831060 | | 0.050 | B | | 7 | | | 2 | Soc. Astro. de France | G |
| 7.884 | 831061 | 2 | 0.12 | C | 10 | 40 | 65 | 5.0 | 6 | Cifuentes,E | H |
| 7.951 | 831062 | 1.0 | 0.050 | B | | 10 | 10 | 6.2 | 1 | Abbott,J | I |
| 7.962 | 831063 | 4 | 0.08 | B | | 11 | | 5.6 | 1 | Fleet,R.W | J |
| 7.965 | 831064 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | A |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Disturbing lights: Milky Way.
NOTE C Nucleus - more diffuse than last night: a fuzzy blob of diameter about 15". Broad fan with sharp edge in PA 90 deg., length about 40"; fan extends diffusely to PA about 150 deg. (Generally like April 6, 0500, but nucleus more diffuse.) Tail not visible, but coma elongated in that direction.
NOTE D Coma elongated transversely to line of tail: 0.3 deg. diameter, DC 4. Broad faint tail 1.2 deg. long. Ray visible in tail. Possible diffuse glow on north side of tail - may be Milky Way. (Duration not included. Time of observation is assumed to be start time. Ed.)
NOTE E Tail at PA 290 , length 3 deg. 10'. Coma inner envelope 24', outer envelope 35'. Bright spot in centre. Coma DC = 6. Tail length measured from field stars identified on AAVSO charts. Southwest edge (PA 290 deg.) very sharp and distinct. North edge fuzzy. Brighter but short tail feature at PA 330 deg.
NOTE F Between the hours of 1:20 and 3:45 am on 8th April, 1986, the comet appeared to have a small, pinhead nucleus with a large tenuous coma whose faint glow filled the entire mirror [sic] of my f/6 10" Newtonian using a 25 mm orthoscopic lens. Rapid movement of the comet was easily perceptible against the starry background with only 20 seconds viewing, and moved at a rate similar to an hour hand of a clock. The faint wide tail was only visible to about 2 degrees of length. These details were also confirmed at Coonabarabran on two consecutive nights, being 4/4/86 and 5/4/86, from the N.E.C. Japanese observation site through an f/4 8" Newtonian, 11x80 and 7x50 binoculars. (Listing data inferred from written description. No drawing submitted. Ed.)
NOTE G Drawing made by S. Thebault. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE H Tail 2 deg., PA 314.
NOTE I Central condensation approximately 4.0 arc min. Brighter tail spine at PA 304 deg., approximately 16 arc min. length by 8 arc min. width at root tapering to 1 arc min. Plasma tail, type I at PA 304 deg., approximately 20 arc min. width at root tapering to 16 arc min., length 2 deg. 54 arc min. Dust tail, type II, at 20 arc min. from central condensation, PA 6 deg., width 20 arc min.; at 32 arc min. from central condensation PA 346 deg., width 19 arc min.; at 46 arc min. from central condensation PA 329 deg., width 20 arc min. Dust tail, type III?, at leading edge PA 6 deg., width 20 arc min. There was Milky Way interference; a darker region of the Milky Way though; less interference than April 5. Vertex distance 6.6'. Semi latus rectums 11.8' (both); coma presenting a well defined 'lens'. Type II widths measured perpendicular to type I tail PA. Dimensions and angles from AAVSO chart plot. The central condensation (c.c.) was observed to be very hard and sharply defined as a planetary-like disk. The c.c. was set forward of centre within the distinct lens-shaped coma (24x14 arc min.). A tail spine was observed, but only marginally brighter than the surrounding material. A straight type I tail was observed to the northwest. It appeared rather less broad than the coma at the root, narrowing slightly over the length of nearly 3 deg. The tail appeared to show a low rate of brightness fall-off with length away from the coma. The western tail edge appeared very sharply defined. There was a fuzzy and asymmetrical type II tail to the north. This tail appeared less bright than the type I tail and was soon lost to the Milky Way background. There was a short brush of material set at a sharp angle (62 deg.) to the type I tail. Of similar brightness to the asymmetrical type II tail, this possible type III tail [sic] exhibited a quite straight leading edge. Clouds not near comet.
NOTE J Gas tail(?) at PA 306. Dust tail at PA 327. Tail features lost in Milky Way. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.010 | 851410 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 10/P | 4 | Guthier,O | A |
| 7.011 | 851411 | 0.050 | 1.8 | | 39.6 x27.0 | 3.00 | Kodak Tri-X | 400/ | N | X | 1/P | 12 | Melandri,F | |
| 7.052 | 851412 | 0.050 | 2.8 | | 39.6 x27.0 | 10.00 | Ektachrome | 400/ | N | M | 440/P | 1 | Stolzen,P | B |
| 7.064 | 851413 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 11/P | 4 | Guthier,O | C |
| 7.106 | 851414 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 10.00 | Kodak 2415 | | Y | | 92/P | 3 | Koch,B | D |
| 7.153 | 851415 | 0.085 | 2.0 | | 23.9 x16.1 | 15.00 | Kodak Tri-X | 400/ | N | O | 18/P | 8 | Bottger,B | E |
| 7.168 | 851416 | 0.050 | 1.8 | | 39.6 x27.0 | 10.00 | Fujichrome | 400/ | N | O | 50/P | 8 | Bottger,B | E |
| 7.201 | 851417 | 0.050 | 1.8 | | 39.6 x27.0 | 8.00 | Fujichrome | 400/ | N | O | 45/P | 8 | Bottger,B | E |
| 7.232 | 851418 | 0.200 | 3.5 | | 10.3 x 6.9 | 19.50 | Fujichrome | 400/ | N | O | 44/P | 8 | Bottger,B | E |
| 7.232 | 851419 | 0.200 | 2.8 | | 10.3 x 6.9 | 19.50 | Fujichrome | 400/ | N | O | 51/P | 8 | Bottger,B | E |
| 7.276 | 851420 | 0.050 | 2.0 | | | 5.00 | Kodak Tri-X | 400/ | N | C | 10/P | | Falsarella,N | |
| 7.294 | 851421 | 0.085 | 4.0 | | 23.9 x16.1 | 20.00 | 103a-O | | N | C | 7/S | 1 | Binnewies,S | |
| 7.365 | 851422 | 0.055 | 2.8 | | 36.2 x24.6 | 120.00 | 103a-E | | N | S | 1/S | 1 | Binnewies,S | F |
| 7.410 | 851423 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak Tri-X | 400/ | N | X | 004/P | 1 | Rosenthal,D | G |
| 7.430 | 851424 | 0.605 | 1.7 | | 3.4 x 2.3 | 20.00 | Kodak 2415 | | N | T | 1/P | 1 | Levy,A | |
| 7.458 | 851425 | 0.605 | 1.7 | | 3.4 x 2.3 | 17.00 | Kodak 2415 | | N | T | 2/P | 1 | Levy,A | |
| 7.565 | 851426 | 0.100 | 2.8 | | 20.4 x13.7 | 7.00 | 3M 1000 | 1000/ | N | | 9/S | 2 | Robertson,G | H |
| 7.572 | 851427 | 0.210 | 4.5 | | 9.8 x 6.5 | 7.00 | 3M 1000 | 1000/ | N | | 10/S | 2 | Robertson,G | I |
| 7.583 | 851428 | 0.105 | 2.5 | | 19.5 x13.0 | 10.00 | Fujichrome | 1600/ | N | | 3/S | 2 | Royer,R | |
| 7.585 | 851429 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 16.00 | Kodak 098 | | N | | 030/P | 2 | Royer,R | |
| 7.586 | 851430 | 0.135 | 2.8 | | 15.2 x10.2 | 20.00 | Kodak EPD | 200/ | Y | | 2/S | 1 | Sabers,D | |
| 7.590 | 851431 | 0.050 | 1.7 | | 39.6 x27.0 | 2.00 | 3M | 1000/ | N | O | 1/T | 5 | Martin,D | |
| 7.590 | 851432 | 0.050 | 1.7 | | 39.6 x27.0 | 2.00 | Kodak Tri-X | 400/ | N | O | 20/C | 5 | Martin,D | |
| 7.594 | 851433 | 0.050 | 1.7 | | 39.6 x27.0 | 4.00 | 3M | 1000/ | N | O | 2/T | 5 | Martin,D | |
| 7.594 | 851434 | 0.050 | 1.7 | | 39.6 x27.0 | 4.00 | Kodak Tri-X | 400/ | N | O | 21/C | 5 | Martin,D | |

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| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.601 | 851435 | 0.050 | 2 | | 39.6 x27.0 | 20.00 | Ektachrome | 200/ | N | T | 1/S | 1 | Isenhart,C | J |
| 7.601 | 851436 | 0.050 | 1.7 | | 39.6 x27.0 | 6.00 | 3M | 1000/ | N | O | 3/T | 5 | Martin,D | |
| 7.601 | 851437 | 0.050 | 1.7 | | 39.6 x27.0 | 6.00 | Kodak Tri-X | 400/ | N | O | 23/P | 5 | Martin,D | |
| 7.606 | 851438 | 0.135 | 2.8 | | 15.2 x10.2 | 6.00 | Ektachrome | 400/ | N | | 15/S | | Pryal,J | |
| 7.607 | 851439 | 0.050 | 1.7 | | 39.6 x27.0 | 5.00 | 3M | 1000/ | N | O | 4/T | 5 | Martin,D | |
| 7.607 | 851440 | 0.050 | 1.7 | | 39.6 x27.0 | 5.00 | Kodak Tri-X | 400/ | N | O | 24/C | 5 | Martin,D | |
| 7.620 | 851441 | 0.050 | 1.7 | | 39.6 x27.0 | 8.00 | 3M | 1000/ | N | O | 5/T | 5 | Martin,D | |
| 7.620 | 851442 | 0.050 | 1.7 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | 400/ | N | O | 26/C | 5 | Martin,D | |
| 7.631 | 851443 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | 3M | 1000/ | N | O | 6/T | 5 | Martin,D | |
| 7.631 | 851444 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 28/C | 5 | Martin,D | |
| 7.641 | 851445 | 0.050 | 1.7 | | 39.6 x27.0 | 4.00 | 3M | 1000/ | N | O | 7/T | 5 | Martin,D | |
| 7.646 | 851446 | 0.050 | 1.7 | | 39.6 x27.0 | 6.00 | 3M | 1000/ | N | O | 8/T | 5 | Martin,D | |
| 7.646 | 851447 | 0.050 | 1.7 | | 39.6 x27.0 | 6.00 | Kodak Tri-X | 400/ | N | O | 31/C | 5 | Martin,D | K |
| 7.651 | 851448 | 0.050 | 1.7 | | 39.6 x27.0 | 8.00 | 3M | 1000/ | N | O | 9/T | 5 | Martin,D | |
| 7.651 | 851449 | 0.050 | 1.7 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | 400/ | N | O | 32/P | 5 | Martin,D | K |
| 7.660 | 851450 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | 3M | 1000/ | N | O | 10/T | 5 | Martin,D | |
| 7.660 | 851451 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 33/C | 5 | Martin,D | K |
| 7.674 | 851452 | 0.050 | 1.7 | | 39.6 x27.0 | 2.00 | Kodak Tri-X | 400/ | N | O | 34/C | 5 | Martin,D | L |
| 7.678 | 851453 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M | 1000/ | N | O | 11/T | 5 | Martin,D | |
| 7.678 | 851454 | 0.050 | 1.7 | | 39.6 x27.0 | 4.00 | Kodak Tri-X | 400/ | N | O | 35/C | 5 | Martin,D | L |
| 7.683 | 851455 | 0.050 | 1.7 | | 39.6 x27.0 | 6.00 | Kodak Tri-X | 400/ | N | O | 36/C | 5 | Martin,D | L |
| 7.689 | 851456 | 0.200 | 4.5 | | 10.3 x 6.9 | 8.00 | 3M | 1000/ | N | O | 12/T | 5 | Martin,D | |
| 7.689 | 851457 | 0.050 | 1.7 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | 400/ | N | O | 37/P | 5 | Martin,D | L |
| 7.697 | 851458 | 0.200 | 4.5 | | 10.3 x 6.9 | 10.00 | 3M | 1000/ | N | O | 13/T | 5 | Martin,D | |
| 7.697 | 851459 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 38/C | 5 | Martin,D | L |
| 7.824 | 851460 | 0.050 | 2.8 | | 39.6 x27.0 | 8.00 | Agfa 1000 RS | 1000/ | N | T | 319/S | 2 | Jones,B.W | M |
| 7.824 | 851461 | 0.050 | 1.8 | | 39.6 x27.0 | 2.00 | Kodak VR | 1000/ | N | C | 4/P | 3 | Vincent,F | N |
| 7.839 | 851462 | 0.180 | 2.8 | | 11.4 x 7.6 | 7.00 | Kodak 103a-O | | N | O | 8/C | 5 | Cimatti,A | |
| 7.848 | 851463 | 0.050 | 2.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 5/P | 2 | Jones,B.W | O |
| 7.861 | 851464 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 9/C | 5 | Cimatti,A | |
| 7.862 | 851465 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 6/P | 2 | Jones,B.W | P |
| 7.875 | 851466 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 7/P | 2 | Jones,B.W | Q |
| 7.884 | 851467 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 12/P | 4 | Guthier,O | C |
| 7.887 | 851468 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 10/C | 5 | Cimatti,A | |
| 7.889 | 851469 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 017/P | 1 | Sternwarte Frankfurt | R |
| 7.905 | 851470 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 018/P | 1 | Sternwarte Frankfurt | R |
| 7.915 | 851471 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 6.00 | Kodak 2415 | | Y | | 98/P | 3 | Koch,B | D |
| 7.919 | 851472 | 0.050 | 1.8 | | 39.6 x27.0 | 0.58 | Ilford HP5 | 400/27 | N | O | 001/S | 1 | Abbott,J | S |
| 7.924 | 851473 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 019/P | 1 | Sternwarte Frankfurt | T |
| 7.927 | 851474 | 0.050 | 2.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 12/P | 2 | Jones,B.W | O |
| 7.928 | 851475 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 10.00 | Kodak 2415 | | Y | T | 001/P | 1 | Berge,P.M | U |
| 7.940 | 851476 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 13/P | 2 | Jones,B.W | P |
| 7.942 | 851477 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 020/P | 1 | Sternwarte Frankfurt | R |
| 7.953 | 851478 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 13/P | 4 | Guthier,O | C |
| 7.955 | 851479 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 14/P | 2 | Jones,B.W | Q |
| 7.962 | 851480 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 14/P | 4 | Guthier,O | C |
| 7.986 | 851481 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 022/P | 1 | Sternwarte Frankfurt | V |
| 7.988 | 851482 | 0.500 | 3.5 | | 4.1 x 2.7 | 20.00 | Kodak 2415 | | Y | | 15/P | 4 | Guthier,O | C |
| 7.993 | 851483 | 0.050 | 2 | | 39.6 x27.0 | 5.00 | Kodak Tri-X | | N | | 1/P | 5 | Fischer,D | W |

NOTE A BG 25 filter used. Photograph made by F. Wilken and O. Guthier.
NOTE B (Observer's image identifier is preceded by prefix 2. Ed.)
NOTE C Photograph made by F. Wilken and O. Guthier.
NOTE D (Observer's image identifier preceded by prefix 100/. Ed.)
NOTE E Photograph made by J. Linder and B. Bottger.
NOTE F RG 645 red, 3 mm thick filter used.
NOTE G Instrument is Schmidt camera.
NOTE H Clear.
NOTE I Clear. Photograph made by Jack Fulmer and Glenn Robertson.
NOTE J Photograph made by Mimi Coleman, Ted Strange, Willits Sawyer, Charlie & Bebe Stetson, Debbie Senft, and Chip Isenhart.
NOTE K Blue W47 filter used.
NOTE L Orange W21 filter used.
NOTE M (Observer's image identifier is Agfa/3/19. Ed.)
NOTE N Some patchy cloud.
NOTE O Film roll Tri-X/4.
NOTE P Wratten 47A (blue) filter used. Film roll Tri-X/4.
NOTE Q Wratten 21 (orange) filter used. Film roll Tri-X/4.
NOTE R Photograph made by Y. Walter. Push processed to 2000 ISO.
NOTE S (Observer's image identifier is 20,1. Ed.)
NOTE T Photograph made by J. Popp. Push processed to 2000 ISO.
NOTE U Photograph made by G. Mahoux and P.M. Berge.
NOTE V Photograph made by P. Engel. Push processed to 2000 ISO.
NOTE W Push processed to 1000 ASA.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.08 | 818402 | 3.5 | M | 4C | 25 | 5 | 3.0 | 310 | 0.05 | B | | 7 | | | | Keszthelyi,S | A |
| 8.10 | 818403 | 3.3 | S | DCS 10 | | 3 | | | 0.080 | B | | 15 | 3 C | Y | 4 | Scholten,A | |
| 8.103 | 818404 | 4.2 | M | 5A | | 4 | 1.7 | 310 | 0.04 | B | | 12 | 6.1 | Y | 1 | Henshaw,C | B |
| 8.111 | 818405 | | | | 11 8 | 7 | | | 0.09 | M | 11 | 56 | 6.5 | Y | 7 | Westlund,M | |
| 8.115 | 818406 | 3.5 | S | 5A | 17 | 7 | 1.1 | 325 | 0.050 | B | | 10 | 3.5 | Y | 9 | Vanin,G | C |
| 8.146 | 818407 | 3.1 | B | AAVSO | 1.0 | 3 | 1.15 | 30 | 0.040 | B | | 10 | 5.0 | Y | 1 | Alves,A.A | D |
| 8.146 | 818408 | 3.8 | M | 5A | | | 3.0 | 275 | 0.040 | B | | 7 | 6.5 | Y | 7 | Westlund,M | |
| 8.17 | 818409 | 2.3 | M | IHW | 28 | 5 | 3.1 | 320 | | EY | | | 6.5 | Y | 6 | Granslo,B.H | E |
| 8.17 | 818410 | 2.6 | S | DCS 10 | 20 | 7 | 4.5 | | 0.080 | B | | 15 | 7.5 | Y | 3 | Wils,P | F |
| 8.18 | 818411 | 2.4 | M | IHW | 24 | 7 | 3.5 | 310 | 0.035 | B | | 7 | 6.5 | Y | 6 | Granslo,B.H | |
| 8.250 | 818412 | 3.5 | B | 160 | | 4 | 2 | 285 | 0.05 | B | | 10 | 5.0 | Y | 1 | Harris,L.A | G |
| 8.278 | 818413 | | | 5A | 27 | 6 | 1.0 | 290 | 0.07 | B | | 16 | 5.0 | Y | 3 | Taylor,M.D | H |
| 8.302 | 818414 | | B | | 29 | 8 | | 295 | 0.08 | B | | 11 | | Y | 5 | Gorski,L | |
| 8.3618 | 818415 | 2.8 | | DCS | 48 | 6 | 1.87 | 318 | | EY | | | 5.2 | | 6 | Machholz,D | |
| 8.3674 | 818416 | 3.0 | S | DCS | 40 | 7 | 1.72 | 318 | 0.080 | B | | 20 | 5.2 | | 6 | Machholz,D | |
| 8.396 | 818417 | 3.5 | M | 5A | 10 | 4 | 5 | | 0.050 | B | | 7 | 5.2 | Y | 3 | Robertson,T | |
| 8.43 | 818418 | 3.0 | S | 5B, 141 | 45 | 5 | | | 0.023 | B | | 3 | 5.6 | | | Jones,A | |
| 8.43 | 818419 | | | | | | 1.5 | | 0.080 | B | | 11 | | | | Jones,A | I |
| 8.45 | 818420 | 8.3 | V | RASNZ | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | J |
| 8.45 | 818421 | 3.1 | | SAO | 30 | | 4 | 280 | | EY | | | 5.5 | Y | 2 | Ashdown,M | K |
| 8.45 | 818422 | 2.9 | | 5A | 20 | 5 | 0.5 | | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 8.46 | 818423 | 1.9 | | 4C | | | 9 | | | EY | | | 7.0 | Y | 4 | Lovejoy,T | L |
| 8.479 | 818424 | 3.0 | S | 5A | 14 | 7 | | | 0.080 | B | | 20 | | Y | 1 | Batza,H | M |
| 8.51 | 818425 | 3.0 | B | 5B | 31 | 5 | | | | EY | | | 5.5 | Y | 5 | Bortle,J.E | |
| 8.52 | 818426 | 2.8 | B | IHW BAA | 35 | 5 | 1 | | | EY | | | | | | Green,D.W.E | N |
| 8.52 | 818427 | 2.7 | M | 5B | 23 | 6 | 6 | 335 | 0.050 | B | | 10 | 5.0 | Y | 33 | Morris,C.S | O |
| 8.521 | 818428 | 2.0 | S | 5A | | | | | | EY | | | 6.2 | Y | 1 | Seargent,D | P |
| 8.54 | 818429 | 2.9 | B | 5B | | | | | | EY | | | | Y | 5 | Bortle,J.E | Q |
| 8.54 | 818430 | 2.6 | | 5B | 33 | 6 | | | | EY | | | 5.0 | Y | 33 | Morris,C.S | |
| 8.55 | 818431 | 3.0 | | 5A | 25 | 6 | | 325 | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 8.576 | 818432 | 2.9 | S | 160,140 | | | 1 | 320 | | EY | | | 6.1 | Y | 10 | Foulkes,M | R |
| 8.590 | 818433 | 1.8 | S | 159 | | 5 | | | | EY | | | 6.5 | Y | 2 | Williams,P.F | |
| 8.590 | 818434 | | | | | 9 | 3.0 | | 0.05 | B | | 10 | 6.5 | Y | 2 | Williams,P.F | |
| 8.62 | 818435 | 2.4 | B | 5A | | | | | | EY | | | 7.0 | Y | | Clark,M.L | |
| 8.64 | 818436 | 2.8 | S | 5A | 42 | 7 | 1.1 | | 0.076 | | 8 | 15 | 7.0 | Y | | Clark,M.L | S |
| 8.65 | 818437 | 3.3 | S | 5A | 37 | 7 | 2.3 | | 0.25 | N | 5 | 38 | 7.0 | Y | | Clark,M.L | T |
| 8.67 | 818438 | 2.1 | M | 5A | 30 | 5 | | | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | |
| 8.67 | 818439 | 2.0 | | 5A | | 4 | | | | EY | | | 7 | Y | 14 | Bouma,R.J | |
| 8.69 | 818440 | 3.3 | S | 5A | | | | | 0.076 | | 8 | 15 | 6.9 | Y | | Fitzgerald,P | |
| 8.70 | 818441 | 3.4 | S | 5A | | | | | 0.25 | N | 5 | 38 | 6.9 | Y | | Fitzgerald,P | |
| 8.71 | 818442 | 2.5 | B | 5A | | 5 | | | | EY | | | 6.9 | Y | | Pearce,A | |
| 8.71 | 818443 | 2.7 | S | 5A | | 7 | | | 0.030 | B | | 8 | 6.9 | Y | | Pearce,A | |
| 8.804 | 818444 | 4.5 | B | 5A | 35 | 6 | 2 | 0 | 0.065 | B | | 20 | 5.0 | Y | 1 | McBain,J | |
| 8.809 | 818445 | 2.4 | | 5A | 30 | 3 | 1 | 315 | | EY | | | 5.5 | N | 1 | Tregaskis,T.B | U |
| 8.813 | 818446 | 2.5 | M | 5B | 35 | 8 | 4.1 | | 0.05 | B | | 10 | 6.0 | Y | 12 | Melandri,F | |
| 8.813 | 818447 | | | 5A | 4.5 | 5 | 3 | 315 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | V |
| 8.819 | 818448 | 3.5 | S | 5A | 65.0 | 5 | 6.0 | 307 | 0.08 | B | | 30 | 7.0 | Y | 7 | Campos,J | W |
| 8.825 | 818449 | 3.0 | | 5A | 75 | 4 | 4.25 | 330 | | EY | | | 7.0 | Y | 7 | Campos,J | |
| 8.854 | 818450 | 3.5 | M | 5A | 32 | 8 | 3.55 | 308 | 0.12 | C | 10 | 40 | 7 | Y | 1 | Bernabeu,M | |
| 8.875 | 818451 | 3.3 | B | 5B | 30 25 | 5 | 2 | 320 | 0.06 | B | | 15 | 5.7 | Y | 2 | Vincent,J | X |
| 8.931 | 818452 | 3.5 | M | 5A | 36 | 6 | 4.0 | 308 | 0.08 | B | | 11 | 5.4 | Y | 1 | Fleet,R.W | Y |
| 8.934 | 818453 | 3.8 | M | 5A | | | | | 0.035 | B | | 9 | 5.9 | Y | 1 | Begbie,M.J.R | |
| 8.95 | 818454 | 2.7 | S | 5B | | | | | | EY | | | 6.5 | | 17 | Shanklin,J.D | |
| 8.958 | 818455 | 3.1 | | 5B | 15 | 6 | 0.83 | | 0.08 | B | | 15 | 6.0 | Y | 2 | Dietrich,M | Z |
| 8.994 | 818456 | | | | 16.0 | 8 | 4.0 | 325 | 0.30 | N | 8.5 | 102 | 5.9 | Y | 1 | Begbie,M.J.R | a |

NOTE A 5.5 mag. nucleus.
NOTE B Gas tail 1.7 deg. at PA 310; dust tail 1.98 deg.
NOTE C Magnitude 2.8 naked eye.
NOTE D Comet quasi-circular, slightly egg-shaped. (Translated by IHW staff. Ed.)
NOTE E PA approximate.
NOTE F PA 325 to 340.
NOTE G Tail length uncertain. I estimated the magnitude comparing the comet with Epsilon Lupus and a 4.8 mag. star of the same constellation. (Epsilon Lupus = 3.4.) (Translated by IHW staff. Ed.)
NOTE H Twilight. Antoniadi III.
NOTE I Tail PA 290-325.
NOTE J Nucleus. Diffuse coma with small, bright nucleus. Straight branch of tail 1.5 deg., curved branch suspected to 3 deg. (8.0 B 11x).
NOTE K DC in 7x50 binoculars: 7. PA = 280+.
NOTE L Naked eye tail length.
NOTE M Tail not readily apparent. (Observer gave limit as 10.0. Ed.)
NOTE N Coma diameter and tail length approximate.
NOTE O Multiple tails define the shape of the fan tail. West edge of fan was less sharply defined. Tail in PA 5 was a dust plume within the fan.
NOTE P False nucleus very bright.
NOTE Q With 7x50 binoculars: huge, condensed coma with diffuse, vague boundaries. Coma's shape fan-like and very wide (greater than 90 deg. in PA). Several long bright rays evident in fan tail. Brightest is at PA 345 and 3.3 deg. long, probable gas tail at PA 320 and 4.6 deg. long is almost as bright. Further ray at PA 30 and 1.8 deg. long is much fainter. Tail's leading and trailing edges are PA 320 and 50 respectively. Tail's edges are reasonably well defined.
NOTE R Excellent.
NOTE S Tails photo'd. to 2.9 deg. and 8.3 deg. PA of 1.1 deg. tail is 69-56. PA of 1.0 deg. tail is 34-20. Instrument is catadioptric Newtonian.
NOTE T PA of 2.3 deg. tail is 346-327.
NOTE U Clear. Dawn breaking.
NOTE V Coma diameter 4-5'. Faint, wide, tenuous tail. (Observer gave limit as approximately 10. Ed.)
NOTE W Straight tail at PA 307. Curved tail at PA 332.
NOTE X 220x35 reflector. No tail. Magn. 3.0.
NOTE Y Gas tail at PA 308. Dust tail at PA 335. Type III [sic] tail at PA 57.
NOTE Z 50' tail is dust, 1.5 deg. tail is ion. (Observer indicated "A" [Argelander?]. Ed.)
NOTE a Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.109 | 831065 | 1.6 | 0.090 | M | 11 | 56 | 5 | 6.5 | 7 | Westlund,M | |
| 8.142 | 831066 | 6 | 0.040 | B | | 7 | 10 | 6.5 | 7 | Westlund,M | |
| 8.589 | 831067 | 2 | 0.065 | B | | 12 | 16 | 6.1 | 10 | Foulkes,M | A |
| 8.901 | 831068 | 1.36 | 0.12 | C | 10 | 40 | 105 | 7 | 1 | Bernabeu,M | B |
| 8.931 | 831069 | 4 | 0.08 | B | | 11 | | 5.4 | 1 | Fleet,R.W | C |
| 8.971 | 831070 | 0.32 | 0.30 | N | 8.5 | 102,212 | 37 | 5.9 | 1 | Begbie,M.J.R | D |

DATE: 8 APR 1986

DATE: 8 APR 1986

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.991 | 831071 | 3.02 | 0.035 | B | | 9 | 11 | 5.9 | 1 | Begbie,M.J.R | E |

NOTE A Preceding edge of tail at PA 315, length 2.5 deg. Central tail brightening at PA 320. Following edge tail at PA 325, length 1.6 deg. Fan tail at PA 30, length 16'. Coma visible in 3 layers of brightness: 1) central bright spot/disk surrounded by 2) inner disk approximately 5'; 3) outer coma about 24'. Coma DC = 7. Preceding edge of tail straight and distinct - longest section. North following edge ill-defined. Short faint fan visible at PA 30 away from main tail.
NOTE B Coma: 32 arc min. Tail 3 deg. 33 min. PA 308.
NOTE C Gas tail at PA 308. Dust tail at PA 355. Type III [sic] at PA 57. Tail features lost in Milky Way. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Type I tail centred at PA 255. Jet centred at PA 100. Vertex distance 6 arc min.; semi latus rectum P1 = 8 arc min., P2 = 10 arc min. For internal envelopes P1 = 2 arc min., P2 = 2 arc min. Jet is definitely less prominent than those observed in late March. Coma diameter is rapidly increasing at this stage.
NOTE E Type III tail at PA 70. Type II tail PA 320-330. Type I tail at PA 300. This was the first observation where a distinct type III tail was noted. The type II tail was a prominent, curved inner region of the dust tail. [sic]

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.004 | 851484 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 16/P | 4 | Guthier,O | A |
| 8.027 | 851485 | 0.500 | 3.5 | | 4.1 x 2.7 | 30.00 | Kodak 2415 | | Y | | 17/P | 4 | Guthier,O | B |
| 8.048 | 851486 | 0.500 | 3.5 | | 4.1 x 2.7 | 11.00 | Kodak 2415 | | Y | | 18/P | 4 | Guthier,O | A |
| 8.049 | 851487 | 0.700 | 5 | 0.140 | 2.9 x 2.0 | 60.00 | Tri-X Pro | 320/ | N | X | 6/T | 1 | Travnik,N.A.S | C |
| 8.089 | 851488 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | 3M 1000 | 1000/ | N | M | 461/P | 1 | Stolzen,P | D |
| 8.092 | 851489 | 0.035 | 2.8 | | 54.4 x37.8 | 5.00 | Ektachrome | | N | X | 1/S | 3 | Weissferdt,F | E |
| 8.094 | 851490 | 0.080 | 3.5 | | 25.4 x17.1 | 10.00 | Ektachrome | | N | X | 2/S | 3 | Weissferdt,F | E |
| 8.210 | 851491 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | C | 11/P | | Falsarella,N | |
| 8.219 | 851492 | 0.050 | 2.8 | | 39.6 x27.0 | 1.00 | Polaroid 612 | | N | X | 0/P | 5 | Carragan,W | F |
| 8.302 | 851493 | 0.050 | 2.8 | | 39.6 x27.0 | 0.50 | Polaroid 612 | | N | X | 1/P | 5 | Carragan,W | F |
| 8.342 | 851494 | 0.050 | 1.8 | | 39.6 x27.0 | 2.00 | Kodak 2415 | | Y | M | 017/P | 2 | Brutsche,E | G |
| 8.348 | 851495 | 0.050 | 1.8 | | 39.6 x27.0 | 5.00 | Kodak 2415 | | Y | M | 019/P | 2 | Brutsche,E | G |
| 8.361 | 851496 | 0.085 | 4.0 | | 23.9 x16.1 | 20.00 | 103a-O | | N | C | 8/S | 1 | Binnewies,S | |
| 8.522 | 851497 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 15.00 | Kodak 098 | | N | | 031/P | 2 | Royer,R | |
| 8.522 | 851498 | 0.105 | 2.5 | | 19.5 x13.0 | 15.00 | Fujichrome | 1600/ | N | | 4/S | 2 | Royer,R | |
| 8.558 | 851499 | 0.050 | 1.7 | | 39.6 x27.0 | 6.00 | 3M | 1000/ | N | O | 14/T | 6 | Martin,D | |
| 8.558 | 851500 | 0.050 | 1.7 | | 39.6 x27.0 | 6.00 | Kodak Tri-X | 400/ | N | O | 41/P | 6 | Martin,D | |
| 8.564 | 851501 | 0.050 | 1.7 | | 39.6 x27.0 | 8.00 | 3M | 1000/ | N | O | 15/T | 6 | Martin,D | |
| 8.564 | 851502 | 0.050 | 1.7 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | 400/ | N | O | 42/C | 6 | Martin,D | |
| 8.573 | 851503 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | 3M | 1000/ | N | O | 16/T | 6 | Martin,D | |
| 8.573 | 851504 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 43/C | 6 | Martin,D | |
| 8.608 | 851505 | 0.750 | 5 | 0.150 | 2.7 x 1.8 | 10.00 | Kodak Tri-X | 400/ | N | O | 43/N | 1 | Baagh,N | |
| 8.643 | 851506 | 0.200 | 3.5 | | 10.3 x 6.9 | 7.00 | Kodak Tri-X | 400/ | N | O | 44/N | 1 | Baagh,N | |
| 8.660 | 851507 | 0.050 | 1.7 | | 39.6 x27.0 | 2.00 | 3M | 1000/ | N | O | 17/T | 6 | Martin,D | |
| 8.664 | 851508 | 0.050 | 1.7 | | 39.6 x27.0 | 4.00 | 3M | 1000/ | N | O | 18/T | 6 | Martin,D | |
| 8.664 | 851509 | 0.050 | 1.7 | | 39.6 x27.0 | 4.00 | Kodak Tri-X | 400/ | N | O | 2/C | 6 | Martin,D | |
| 8.689 | 851510 | 0.050 | 1.7 | | 39.6 x27.0 | 8.00 | 3M | 1000/ | N | O | 19/T | 6 | Martin,D | |
| 8.689 | 851511 | 0.050 | 1.7 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | 400/ | N | O | 4/C | 6 | Martin,D | |
| 8.697 | 851512 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 5/C | 6 | Martin,D | |
| 8.697 | 851513 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | 3M | 1000/ | N | O | 20/T | 6 | Martin,D | |
| 8.706 | 851514 | 0.200 | 4.5 | | 10.3 x 6.9 | 4.00 | 3M | 1000/ | N | O | 21/T | 6 | Martin,D | |
| 8.718 | 851515 | 0.050 | 1.7 | | 39.6 x27.0 | 6.00 | Kodak Tri-X | 400/ | N | O | 8/C | 6 | Martin,D | H |
| 8.718 | 851516 | 0.200 | 4.5 | | 10.3 x 6.9 | 6.00 | 3M | 1000/ | N | O | 22/T | 6 | Martin,D | |
| 8.726 | 851517 | 0.050 | 1.7 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | 400/ | N | O | 10/C | 6 | Martin,D | H |
| 8.726 | 851518 | 0.200 | 4.5 | | 10.3 x 6.9 | 8.00 | 3M | 1000/ | N | O | 23/T | 6 | Martin,D | |
| 8.821 | 851519 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 030/P | 1 | Sternwarte Frankfurt | I |
| 8.836 | 851520 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 11/C | 5 | Cimatti,A | |
| 8.857 | 851521 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 12/C | 5 | Cimatti,A | |
| 8.862 | 851522 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 032/P | 1 | Sternwarte Frankfurt | J |
| 8.876 | 851523 | 0.050 | 1.8 | | 39.6 x27.0 | 2.00 | Kodak VR | 1000/ | N | C | 5/P | 3 | Vincent,F | |
| 8.878 | 851524 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 10.00 | Kodak 2415 | | Y | O | 1/T | 2 | Furia,S | K |
| 8.882 | 851525 | 0.609 | | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 033/P | 1 | Sternwarte Frankfurt | I |
| 8.889 | 851526 | 0.200 | 2 | | 10.3 x 6.9 | 9.00 | Kodak 2415 | | Y | S | 17/P | 2 | Dragesco,J | L |
| 8.903 | 851527 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 034/P | 1 | Sternwarte Frankfurt | M |
| 8.913 | 851528 | 0.050 | 2.8 | | 39.6 x27.0 | 8.00 | Agfa 1000 RS | 1000/ | N | T | 408/S | 2 | Jones,B.W | N |
| 8.965 | 851529 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 037/P | 1 | Sternwarte Frankfurt | O |

NOTE A Photograph made by F. Wilken and O. Guthier.
NOTE B BG 25 filter used. Photograph made by F. Wilken and O. Guthier.
NOTE C Instrument is Zeiss Tessar. Format size 88 mm x 128 mm.
NOTE D (Observer's image identifier is preceded by prefix 2. Ed.)
NOTE E (Observer lists film as 800 ASA. Ed.)
NOTE F Film ISO 20000. Photograph made by Julie and William Carragan.
NOTE G (Observer appears to have confused C and F temperature scales for developer temperatures. Ed.)
NOTE H Blue W47 filter used.
NOTE I Photograph made by H. Neumann. Push processed to 2000 ISO.
NOTE J Photograph made by H. Templin. Push processed to 2000 ISO.
NOTE K Instrument is a Schmidt camera.
NOTE L (Observer supplied nonessential notes on original report form. Ed.)
NOTE M Photograph made by P. Engel. Push processed to 2000 ISO.
NOTE N (Observer's image identifier is Agfa/4/08. Ed.)
NOTE O Photograph made by V. Heinrich. Push processed to 2000 ISO.

DATE: 9 APR 1986 DATE: 9 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.00 | 818457 | 2.6 | B | 5A | 30 | 6 | | | 0.03 | B | | 8 | 6.0 | Y | 3 | Fischer,D | A |
| 9.000 | 818458 | 2.6 | S | 5B | 40 | 7 | 4.8 | | 0.08 | B | | 20 | 5.0 | Y | 7 | Parisio,R | B |
| 9.010 | 818459 | 2.9 | M | 5A | | 6 | 3.5 | 330 | | EY | | | 5.6 | Y | 1 | Fleet,R.W | |
| 9.053 | 818460 | 2.5 | B | IHW | 33.0 | 6 | 5.5 | | 0.050 | B | | 10 | 6.2 | Y | 3 | Guthier,O | C |
| 9.08 | 818461 | 4.3 | B | 5A | | 5 | | | 0.050 | B | | 7 | | N | 4 | Jannink,D.W | D |
| 9.08 | 818462 | 2.5 | S | 5B | 25 | 6 | 5.0 | | 0.050 | B | | 10 | 7 | Y | 8 | van Loo,F.R | |
| 9.083 | 818463 | 4.2 | M | 5A, 5B | | 6 | | 290 | 0.04 | B | | 12 | 6.1 | Y | 1 | Henshaw,C | |
| 9.10 | 818464 | 4.0 | M | 4C | 15 | 5 | 3.0 | 320 | 0.05 | B | | 7 | | | | Keszthelyi,S | E |
| 9.110 | 818465 | 3.3 | B | 5B | 20 | 4 | 2.7 | | 0.063 | B | | 9 | 4.0 | Y | 5 | Kammerer,A | F |
| 9.136 | 818466 | 2.4 | B | 5B | 60 | 6 | 4.5 | 328 | | EY | | | 5.5 | Y | 8 | Linder,J | G |
| 9.136 | 818467 | | | 5B | | | 1 | 12 | | EY | | | 5.5 | Y | 8 | Linder,J | H |
| 9.17 | 818468 | 2.6 | S | DCS 10 | 20 | 6 | 4.5 | | 0.080 | B | | 15 | 7 | Y | 3 | Wils,P | |
| 9.194 | 818469 | 2.4 | B | 5A | 36 | 6 | 9.7 | 20 | | EY | | | 5.5 | Y | 7 | Bottger,B | I |
| 9.388 | 818470 | | B | | 28 | 6 | | 271 | 0.08 | B | | 11 | | Y | 5 | Gorski,L | |
| 9.396 | 818471 | 3.2 | M | 5B | 10 | 5 | 3 | | 0.050 | B | | 7 | 6.1 | Y | 3 | Robertson,T | |
| 9.403 | 818472 | | | | 13 | 5 | | | 0.15 | N | 8 | 68 | 6.1 | Y | 3 | Robertson,T | J |
| 9.4090 | 818473 | 2.8 | | DCS | 18 | 5 | 2.33 | 358 | | EY | | | 6.0 | | 6 | Machholz,D | K |
| 9.4104 | 818474 | 2.8 | S | DCS | 19 | 6 | 1.70 | 26 | 0.080 | B | | 20 | 6.0 | | 6 | Machholz,D | L |
| 9.42 | 818475 | 3.2 | B | AA | 11 | 0 | | | 0.05 | B | | 10 | | Y | 1 | Campbell,R.N | M |
| 9.479 | 818476 | 3.0 | S | 5B | 14 | 7 | | | 0.080 | B | | 20 | | Y | 1 | Batza,H | N |
| 9.48 | 818477 | 2.7 | | 5B | | 5 | 4 | 315 | | EY | | | 6.5 | Y | 34 | Morris,C.S | O |
| 9.50 | 818478 | 3.3 | B | 5A | | 4 | | | 0.050 | B | | 7 | 4.6C | Y | 1 | Matchett,V | |
| 9.51 | 818479 | 2.7 | B | IHW BAA | 35 | 5 | 5 | | | EY | | | | | | Green,D.W.E | P |
| 9.52 | 818480 | 2.8 | B | 5B | 42 | | | | | EY | | | 6.5 | Y | 5 | Bortle,J.E | |
| 9.52 | 818481 | | | | 20 | 5 | 2.5 | 323 | 0.050 | B | | 7 | 6.5 | Y | 6 | Bortle,J.E | Q |
| 9.53 | 818482 | 3.0 | | 5A | 25 | 5 | | 315 | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 9.531 | 818483 | 2.0 | S | 5A | | | | | | EY | | | 6.2 | Y | 1 | Seargent,D | |
| 9.531 | 818484 | | | | 30 | 7 | 3 | 330 | 0.08 | B | | 15 | | | | Seargent,D | R |
| 9.54 | 818485 | 1.9 | | 4C | | | | | | EY | | | 6.5 | Y | 4 | Lovejoy,T | |
| 9.54 | 818486 | 1.9 | | 4C | | | | | | EY | | | 6.5 | Y | 1 | Lovejoy,T | |
| 9.542 | 818487 | 2.4 | | 5A | 30 | 3 | 1 | 315 | | EY | | | 6 | Y | 1 | Tregaskis,T.B | S |
| 9.545 | 818488 | | | 5A | 45 | 5 | 3 | 315 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | T |
| 9.55 | 818489 | 2.1 | M | 5B | 26 | 5 | 4 | 313 | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | U |
| 9.55 | 818490 | 1.9 | | 5B | 32 | 4 | | | | EY | | | 7 | Y | 14 | Bouma,R.J | V |
| 9.587 | 818491 | 3.2 | S | 5B | 20 | | 1.3 | 310 | 0.05 | B | | 7 | 5.4 | N | 1 | Bryant,K | W |
| 9.59 | 818492 | 2.0 | B | 5A | | | 2 | 335 | | EY | | | 6 | Y | 37 | Hale,A | X |
| 9.59 | 818493 | | | | | | 2 | 335 | 0.05 | B | | 10 | 6 | Y | 37 | Hale,A | X |
| 9.62 | 818494 | 2.5 | B | 5B | | | | | | EY | | | 7.0 | Y | | Clark,M.L | |
| 9.63 | 818495 | 3.4 | S | 5B | 38 | 7 | 2.4 | | 0.25 | N | 5 | 38 | 7.0 | Y | | Clark,M.L | Y |
| 9.63 | 818496 | 3.1 | | 5A | 20 | 5 | 0.5 | 315 | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 9.71 | 818497 | 2.5 | B | 5B | 33 | 5 | 1.8 | 326 | | EY | | | 6.9 | Y | | Pearce,A | |
| 9.71 | 818498 | 2.7 | S | 5B | 20 | 7 | 1.5 | 326 | 0.030 | B | | 8 | 6.9 | Y | | Pearce,A | |
| 9.774 | 818499 | 2.8 | S | 5B | 35 | 5 | 1.2 | 320 | 0.07 | B | | 20 | 5.0 | Y | 3 | Camurri,L | Z |
| 9.823 | 818500 | 3.3 | S | 5A | 78 | 5 | 6.10 | 314 | 0.08 | B | | 30 | 7.0 | Y | 7 | Campos,J | a |
| 9.830 | 818501 | 3.0 | | 5A | 90 | 4 | 4.50 | 350 | | EY | | | 7.0 | Y | 7 | Campos,J | |
| 9.833 | 818502 | 3.3 | | 5B | 22 | 6 | 2 | | 0.05 | B | | 7 | 6.0 | Y | 2 | Dietrich,M | b |
| 9.833 | 818503 | 3.3 | B | 5B | 50 45 | | 2 | 320 | 0.06 | B | | 15 | 5.9 | Y | 2 | Vincent,J | c |
| 9.860 | 818504 | 2.6 | S | 143,160 | 54 | | 1.5 | 325 | | EY | | | 6.6 | Y | 7 | Haver,R | |
| 9.861 | 818505 | 3.0 | B | IHW | | | | | | EY | | | 6.2 | Y | 3 | Guthier,O | |
| 9.870 | 818506 | 3.4 | M | 5B | 24.9 | 7 | 2.25 | 322 | 0.12 | C | 10 | 40 | 5.0 | Y | 6 | Cifuentes,E | |
| 9.870 | 818507 | 2.5 | S | 143,160 | 45 | 3 | 1.87 | 325 | 0.05 | B | | 7 | 6.6 | Y | 7 | Haver,R | d |
| 9.88 | 818508 | 3.2 | S | 5B | | | | | | EY | | | 6.0 | | 18 | Shanklin,J.D | e |
| 9.896 | 818509 | 3.0 | M | 5B | 30 | 7 | 3.0 | | 0.05 | B | | 10 | 5.5 | Y | 12 | Melandri,F | f |
| 9.913 | 818510 | 3.3 | B | 5B | | 8 | | | | EY | | | 6.1 | Y | 2 | Abbott,J | g |
| 9.920 | 818511 | 3.5 | B | 5B | 22 | 8 | 0.9 | 318 | 0.050 | B | | 10 | 6.1 | Y | 2 | Abbott,J | h |
| 9.935 | 818512 | 3.6 | M | 5A | | | | | 0.035 | B | | 9 | 5.8 | Y | 1 | Begbie,M.J.R | |
| 9.944 | 818513 | 3.0 | M | 5B | | 6 | 1.5 | 349 | | EY | | | 5.5 | Y | 1 | Fleet,R.W | |
| 9.948 | 818514 | 3.3 | M | 5B | 29 | 5 | 4.3 | 315 | 0.08 | B | | 11 | 5.5 | Y | 1 | Fleet,R.W | i |
| 9.965 | 818515 | | | | 17.3 | 7 | 3.0 | 328 | 0.30 | N | 8.5 | 102 | 5.8 | Y | 1 | Begbie,M.J.R | j |

NOTE A Tail length = 3-4 deg. Broad fan (approx. 50 deg.)
NOTE B Tail PA 0, 310, 328.
NOTE C Tail I.
NOTE D Binocular limit is 6.
NOTE E 6 mag. nucleus.
NOTE F Comet only 4 deg. above horizon. Broad tail, brightest 330 deg. but spans to 30 deg. Extinction differences stars - comet already taken into account.
NOTE G Type I tail. Coma diameter approximate.
NOTE H Type II tail. Tail length is lower limit.
NOTE I 9.7 deg. tail length uncertain. PA for 10 deg. dist.
NOTE J Filar micrometer used for coma diameter. Central condensation dia. using filar micrometer was 1.1'.
NOTE K Fan shaped tail: PA 337 to 18.
NOTE L Fan-shaped tail: PA 337 to 75.
NOTE M Briefly clear.
NOTE N Tail not readily apparent. (Observer gave limit as 10.5. Ed.)
NOTE O Multiple tails define the shape of the fan tail.
NOTE P Coma diameter and tail length approximate.
NOTE Q With 7x50 B: huge, well condensed, roughly circular coma. Wide, bright tail extends north, centered on PA 323 deg. and 2.5 deg. in length. To its east is a great, broad glow; the full width of the tail being 100 deg.! Tail's leading and following edges as PA 310 deg. and 50 deg. respectively.
NOTE R Coma diameter and PA 330 tail length approximate.
NOTE S Faint, wide, tenuous tail. Tail PA approximate.
NOTE T Faint, wide, tenuous tail. (Observer gave limit as approximately 10. Ed.)
NOTE U Gas tail at PA 313. Broad dust fan includes other tail listings. Coma diameter approximate.
NOTE V Coma diameter approximate.
NOTE W DC = strong.
NOTE X The magnitude was measured several times throughout the night, with the brightness remaining constant. In 10x50 binoculars the two tails appeared at nearly right angles to each other, some material between them was observed in the 20 cm reflector.
NOTE Y PA of 2.4 deg. tail is 21-340.
NOTE Z Difficulty in defocusing the comparison stars to the great size of the coma.
NOTE a Straight tail at PA 314. Curved tail at PA 350.
NOTE b 2 deg. tail is dust, 3 deg. tail is ion. (Observer indicated "A" method (Argelander?). Ed.)
NOTE c Central condensation very bright.
NOTE d Center tail. See drawing. (Observer repeats note for each tail listed on original report form. Ed.)
NOTE e Cloud.
NOTE f Tail is open like a fan with an angle of about 90 deg. Tail length is for ion tail.
NOTE g Comparison stars (3.2, 4.0), (3.1, 4.0). Milky Way background.
NOTE h Comparison stars (3.2, 4.0), (3.1, 3.4). Coma too large to adequately defocus stars except by using one half of binoculars (the right). Milky Way background. Type I tail 0.9 deg. at PA 318. Type II tail 1.7 deg. long, PA 329 at 1 deg. distance; PA measured at middle of tail. Type III [sic] tail 0.3 deg. long, PA 59 at 0.5 deg. distance; distinct leading edge measured.

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NOTE i Gas tail at PA 315. Midpoint on dust tail: 1.5 deg. at PA 345. End point of dust tail: 3.6 deg. at PA 350. Type III [sic] tail at PA 67.
NOTE j Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.111 | 831072 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | A |
| 9.167 | 831073 | 0.25 | 0.20 | N | 8 | 120 | 28 | 6 | 1 | Vargas B.,A.G | B |
| 9.181 | 831074 | | 0.216 | N | 7.6 | 65,135,230 | 40 | 6.3 | 5 | Rogers,J.H | C |
| 9.328 | 831075 | 0.54 | 0.15 | N | 4 | 68 | 45 | 5.5 | 7 | Levy,D.H | D |
| 9.863 | 831076 | 1.58 | 0.12 | C | 10 | 40 | 65 | 5.0 | 6 | Cifuentes,E | E |
| 9.878 | 831077 | 3 | 0.050 | B | | 7 | 10 | 6.6 | 7 | Haver,R | F |
| 9.880 | 831078 | 1.0 | 0.050 | B | | 10 | 14 | 6.1 | 2 | Abbott,J | G |
| 9.948 | 831079 | 4 | 0.08 | B | | 11 | | 5.5 | 1 | Fleet,R.W | H |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Tail at PA 295 approx. A very diffuse coma expands around nuclear condensation. The tail is very diffuse. DC 5, coma diameter 12' approx.
NOTE C Nucleus bright, but not as outstanding as on April 6+7. Still mostly unresolved. Coma about 15' across. Broad diffuse enhancement of inner coma to PA approximately 60: not a real jet tonight.
NOTE D Scale is approximate.
NOTE E Tail 2 deg. 15', PA 322.
NOTE F Tail centers at PA 325, 345, and 65. (Drawing shows three tail branches. Ed.)
NOTE G 'Nuclear' object stellar, reddish and approximately 5 mag. Central condensation approximately 4'. Bright tail spine at PA 320 deg., approximately 16x4 arc min. Type I tail at PA 318 deg., approximately 52x8 arc min. Type II tail 12 arc min. from central condensation at PA 326 deg., width 16 arc min. (root), 60 arc min. from central condensation at PA 329 deg., width 36 arc min. (separation from type I), 98 arc min. from central condensation at PA 336 deg., width 44 arc min. (@ end). Type III tail 28 arc min. from central condensation at PA 59 deg., width 18 arc min., 32 arc min. from central condensation at PA 46 deg., width 22 arc min., 28 arc min. from central condensation at PA 33 deg., width 14 arc min., 40 arc min. from central condensation at PA 20 deg., width 16 arc min. There was Milky Way interference. The head of the comet appeared against a dark sky but the dust tail was involved with a fainter part of the Milky Way to the N. The type II, III [sic] PA's were measured at mid tail at stated distances from the central condensation (c.c.). Semi latus rectums (both), 11 arc min. Vertex distance, 10 arc min. All PA's and dimensions derived from AAVSO chart plot. A stellar object of about +5 m. was seen at the centre of the central condensation (c.c.). Reddish in colour. Not corresponding to any field star on the AAVSO charts The c.c. was observerd to be rather pearly - not quite planetary, and set virtually central in circular coma of diameter 22'. There was a bright tail spine but only marginally brighter than the surrounding material. There was 52 arc min. type I tail which was rather indistinct from the broad, curving main tail body. The type II tail was quite straight, bright relative to the coma and well defined at the edges for the first 30' or so, appearing to split into two segments at 1 deg. from the c.c. Some 1.5 deg. of type II tail visible in total before merger with the Milky Way. The distinct type III tail [sic] had the leading edge set at some 101 deg. to the type I tail. Comparable in brightness to the last third of the type II tail and thus much fainter than the coma. A sharply defined leading edge to the type III tail with a broad brush of material to the east of the type II tail and typically 20' in width. Some stratus cloud, not interfering.
NOTE H Gas tail at PA 315. Dust tail end point at PA 350. Type III [sic] at PA 67. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.006 | 851530 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Ilford HP5 | 400/27 | N | O | 010/S | 2 | Abbott,J | A |
| 9.016 | 851531 | 0.225 | 1.7 | 0.139 | 9.1 x 6.1 | 15.00 | Kodak 2415 | | Y | O | 15/P | 2 | Martinez,P | B |
| 9.020 | 851532 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 19/P | 4 | Guthier,O | C |
| 9.021 | 851533 | 0.110 | 2 | | 18.6 x12.5 | 30.00 | Fujichrome | 400/ | N | O | 3/P | 2 | Martinez,P | D |
| 9.051 | 851534 | 0.500 | 3.5 | | 4.1 x 2.7 | 44.00 | Kodak 2415 | | Y | | 20/P | 4 | Guthier,O | E |
| 9.087 | 851535 | 0.500 | 3.5 | | 4.1 x 2.7 | 21.00 | Kodak 2415 | | Y | | 21/P | 4 | Guthier,O | C |
| 9.138 | 851536 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | Kodak 2415 | | Y | | 62/P | 8 | Bottger,B | F |
| 9.140 | 851537 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 22/P | 4 | Guthier,O | C |
| 9.174 | 851538 | 0.085 | 2.4 | | 23.9 x16.1 | 20.00 | Ektachr.P800 | 800/ | N | O | 52/P | 8 | Bottger,B | G |
| 9.174 | 851539 | 0.200 | 2.8 | | 10.3 x 6.9 | 19.50 | Kodak 2415 | | Y | | 72/P | 8 | Bottger,B | G |
| 9.189 | 851540 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 2/C | 3 | Tarnutzer,A | H |
| 9.194 | 851541 | 0.050 | 4 | | 39.6 x27.0 | 20.00 | Kodak 2415 | | Y | T | 2/N | 1 | Pedersen,V.T | I |
| 9.202 | 851542 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 3/C | 3 | Tarnutzer,A | H |
| 9.206 | 851543 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | C | 12/P | | Falsarella,N | |
| 9.213 | 851544 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 4/C | 3 | Tarnutzer,A | H |
| 9.215 | 851545 | 0.050 | 4 | | 39.6 x27.0 | 10.00 | Kodak 2415 | | Y | T | 3/N | 1 | Pedersen,V.T | |
| 9.232 | 851546 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 5/C | 3 | Tarnutzer,A | H |
| 9.353 | 851547 | 0.058 | 1.4 | | 34.5 x23.4 | 0.67 | Kodak VR1000 | 1000/ | N | T | 7/C | 4 | Priester,D.C | |
| 9.354 | 851548 | 0.050 | | | 39.6 x27.0 | 0.33 | Kodak VR1000 | 1000/ | N | T | 8/C | 4 | Priester,D.C | |
| 9.356 | 851549 | 0.050 | | | 39.6 x27.0 | 0.17 | Kodak VR1000 | 1000/ | N | T | 9/C | 4 | Priester,D.C | |
| 9.358 | 851550 | 0.085 | 4.0 | | 23.9 x16.1 | 30.00 | 103a-O | | N | C | 9/S | 1 | Binnewies,S | |
| 9.360 | 851551 | 0.058 | 1.4 | | 34.5 x23.4 | 0.50 | Kodak Tri-X | | N | T | 6/C | 4 | Priester,D.C | J |
| 9.361 | 851552 | 0.058 | 1.4 | | 34.5 x23.4 | 0.25 | Kodak Tri-X | | N | T | 7/C | 4 | Priester,D.C | J |
| 9.423 | 851553 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | 3M 1000 | 1000/ | N | O | 27/N | 10 | Edberg,S.J | |
| 9.428 | 851554 | 0.050 | 2.8 | | 39.6 x27.0 | 10.00 | 3M 1000 | 1000/ | N | O | 28/N | 10 | Edberg,S.J | |
| 9.432 | 851555 | 0.050 | 2.8 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 29/N | 10 | Edberg,S.J | |
| 9.462 | 851556 | 0.300 | 4.5 | | 6.9 x 4.6 | 15.00 | Kodak Tri-X | | N | X | 119/P | 3 | Ward,A | K |
| 9.485 | 851557 | 2.000 | 20 | 0.203 | 1.0 x 0.7 | 2.00 | Kodak VR1000 | 1000/ | N | | 37/N | 1 | Persell,D | |
| 9.491 | 851558 | 0.200 | 4 | | 10.3 x 6.9 | 10.00 | 3M 1000 | 1000/ | N | O | 32/N | 10 | Edberg,S.J | |
| 9.495 | 851559 | 0.200 | 4 | | 10.3 x 6.9 | 2.50 | 3M 1000 | 1000/ | N | O | 33/N | 10 | Edberg,S.J | |
| 9.502 | 851560 | 0.105 | 2.5 | | 19.5 x13.0 | 5.00 | Fujichrome | 1600/ | N | | 5/S | | Royer,R | L |
| 9.563 | 851561 | 0.750 | 5 | 0.150 | 2.7 x 1.8 | 7.00 | 3M 1000 | 1000/ | N | O | 5/S | 1 | Haagh,N | |
| 9.571 | 851562 | 0.200 | 3.5 | | 10.3 x 6.9 | 6.00 | 3M 1000 | 1000/ | N | O | 7/S | 1 | Haagh,N | |
| 9.578 | 851563 | 0.200 | 3.5 | | 10.3 x 6.9 | 12.00 | 3M 1000 | 1000/ | N | O | 8/S | 1 | Haagh,N | |
| 9.677 | 851564 | 0.200 | | | 10.3 x 6.9 | 30.00 | Kodak | 1600/ | N | | 000/P | 2 | Ru-Hu,C | |
| 9.840 | 851565 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 046/P | 1 | Sternwarte Frankfurt | M |
| 9.854 | 851566 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 10.00 | Kodak 2415 | | Y | O | 001/T | 2 | Battaini,P | |
| 9.861 | 851567 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 6.00 | Kodak 2415 | | Y | | 101/P | 3 | Koch,B | N |
| 9.861 | 851568 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 047/P | 1 | Sternwarte Frankfurt | M |
| 9.862 | 851569 | 0.050 | 2.8 | | 39.6 x27.0 | 8.00 | Agfa 1000 RS | 1000/ | N | T | 419/S | 2 | Jones,B.W | O |
| 9.872 | 851570 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 6.00 | Kodak 2415 | | Y | | 102/P | 3 | Koch,B | N |
| 9.880 | 851571 | 0.050 | 2.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 6/P | 2 | Jones,B.W | P |
| 9.882 | 851572 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 048/P | 1 | Sternwarte Frankfurt | Q |
| 9.903 | 851573 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 049/P | 1 | Sternwarte Frankfurt | Q |
| 9.918 | 851574 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Ektachrome | 400/ | N | M | 475/P | 1 | Stolzen,P | R |
| 9.924 | 851575 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 050/P | 1 | Sternwarte Frankfurt | M |
| 9.932 | 851576 | 0.050 | 2.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 11/P | 2 | Jones,B.W | P |
| 9.944 | 851577 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 051/P | 1 | Sternwarte Frankfurt | Q |
| 9.964 | 851578 | 0.200 | 3.5 | | 10.3 x 6.9 | 15.00 | 3M 1000 | 1000/ | N | X | 5/P | 12 | Melandri,F | |
| 9.988 | 851579 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 6.00 | Kodak 2415 | | Y | | 107/P | 3 | Koch,B | N |

NOTE A (Observer's image identifier is 20, 10. Ed.)
NOTE B Instrument is Schmidt camera.
NOTE C Photograph made by F. Wilken and O. Guthier.
NOTE D Hasselblad camera used. (Probably large format, 120 size. Ed.)
NOTE E BG 25 filter used. Photograph made by F. Wilken and O. Guthier.

DATE: 9 APR 1986

NOTE F Photograph made by J. Linder and B. Bottger. Forming gas pressurized to 1.2 bar.
NOTE G Photograph made by J. Linder and B. Bottger.
NOTE H Problems with dew formation on objective.
NOTE I Wratten 21 filter used.
NOTE J Push processed to 800 ASA.
NOTE K (Observer's image identifier is 11/9. Ed.) UV filter used.
NOTE L Start time uncertain.
NOTE M Photograph made by H. Neumann. Push processed to 2000 ISO.
NOTE N (Observer's image identifier preceded by prefix 100/. Ed.)
NOTE O (Observer's image identifier is Agfa/4/19. Ed.)
NOTE P Film roll Tri-X/5.
NOTE Q Photograph made by N. Diehl. Push processed to 2000 ISO.
NOTE R (Observer's image identifier is preceded by prefix 2. Ed.)

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.256 | 870135 | 600G-O | CL | 0.135 | 1.9 | | 6.00 | Kodak 2415 | | Y | C | 404/S | 5 | Buchanan,W.T | AB |
| 9.348 | 870136 | 600G-O | CL | 0.135 | 1.9 | | 30.00 | Kodak 2415 | | Y | C | 410/S | 5 | Buchanan,W.T | BC |
| 9.415 | 870137 | 600G-O | CL | 0.050 | 1.4 | | 5.00 | 3M 1000 | 1000/31 | N | O | 26/N | 10 | Edberg,S.J | |

NOTE A (Observer's image identifier is E-124-04. Ed.)
NOTE B Comet Halley visible to naked eye.
NOTE C (Observer's image identifier is E-124-10. Ed.)

DATE: 10 APR 1986

DATE: 10 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.021 | 818516 | 3.1 | B | IHW | 45.0 | 5 | 4.5 | | 0.050 | B | | 10 | 6.2 | Y | 3 | Guthier,O | A |
| 10.028 | 818517 | 2.8 | B | 5B | 29 | 5 | 3 | 315 | | EY | | | 6.5 | Y | 3 | Hasubick,W | B |
| 10.035 | 818518 | 2.8 | B | 5B | 29 | 5 | 10 | 315 | 0.03 | B | | 8 | 6.5 | Y | 3 | Hasubick,W | B |
| 10.050 | 818519 | 3.5: | B | 5B | 22 | 4 | 2 | 345 | 0.063 | B | | 9 | 4.0 | Y | 5 | Kammerer,A | C |
| 10.066 | 818520 | 3.8 | M | 5B | 22 | 5 | 3.0 | 307 | 0.04 | B | | 8 | 5.2 | Y | 3 | Taylor,M.D | D |
| 10.076 | 818521 | 3.2 | S | 5B | 17 | 5 | 1.5 | 335 | 0.050 | B | | 10 | 3.5 | Y | 10 | Vanin,G | |
| 10.078 | 818522 | 4.4 | M | 5B | 22 | 4 | 0.85 | 315 | 0.04 | B | | 12 | 6.1 | Y | 1 | Henshaw,C | |
| 10.100 | 818523 | 2.6 | B | 5A, 5B | 30 | 7 | | | 0.03 | B | | 8 | 6.0 | Y | 3 | Fischer,D | |
| 10.10 | 818524 | 3.4 | B | 5A | | 4 | | | 0.050 | B | | 7 | | Y | 4 | Jannink,D.W | E |
| 10.111 | 818525 | 3.2 | B | 5B | | | 1.0 | | | EY | | | 6.3 | Y | 6 | Rogers,J.H | F |
| 10.111 | 818526 | 4.1 | B | 5B | 22 | 5 | 3.9 | | 0.06 | R | 8 | 15 | 5.5 | Y | 3 | Schambeck,C.M | G |
| 10.118 | 818527 | 2.1 | B | 5B | 30 | 7 | 3.9 | 315 | | EY | | | 6.0 | Y | 7 | Bottger,B | H |
| 10.12 | 818528 | 2.4 | S | 5B | 30 | 6 | | | 0.050 | B | | 10 | 7 | Y | 8 | van Loo,F.R | |
| 10.125 | 818529 | 2.6 | S | 5B | 43 | 7 | 4.9 | | 0.08 | B | | 20 | 5.5 | Y | 7 | Parisio,R | |
| 10.15 | 818530 | | | | 22 | 6 | 0.8 | 53 | 0.035 | B | | 7 | 5.0 | Y | 5 | Granslo,B.H | |
| 10.17 | 818531 | 2.4 | S | DCS 10 | 25 | 6 | 3.5 | | 0.080 | B | | 15 | 7.5 | Y | 3 | Wils,P | |
| 10.188 | 818532 | | | 5B | | | 2.5 | 315 | 0.050 | B | | 10 | 6.3 | Y | 6 | Rogers,J.H | I |
| 10.200 | 818533 | | B | | | 8 | | | 0.063 | B | | 9 | 6.0 | Y | 3 | Fischer,D | J |
| 10.206 | 818534 | 2.4 | B | 5B | 68 | 6 | 1.9 | 345 | | EY | | | 6.0 | Y | 8 | Linder,J | K |
| 10.208 | 818535 | | | | | | 1.5 | | | EY | | | 6.0 | | 3 | Martinez,C | L |
| 10.249 | 818536 | 3.4 | B | 160 | 17 | 4 | | 308 | 0.05 | B | | 20 | 5.0 | Y | 1 | da Silva,L.A.L | M |
| 10.25 | 818537 | | B | | | 5 | | | 0.04 | B | | 7 | | | | Kiselev,N | |
| 10.260 | 818538 | 4.3 | B | 5B | 5.3 | 3 | | | 0.05 | B | | 7 | 3.4C | N | 2 | Dodd,W.J | N |
| 10.317 | 818539 | | B | | 31 | 8 | | 313 | 0.08 | B | | 11 | | Y | 5 | Gorski,L | |
| 10.385 | 818540 | 4.4 | S | 5B | 36 | 7 | 1 | 10 | 0.05 | B | | 10 | 4.5C | Y | 1 | Gronek,J.D | O |
| 10.400 | 818541 | 3.4 | M | 5B | 15 | 4 | 4 | | 0.050 | B | | 7 | 5.6 | Y | 3 | Robertson,T | |
| 10.42 | 818542 | 2.8 | B | IHW BAA | | | | | | EY | | | | | | Green,D.W.E | |
| 10.46 | 818543 | 1.8 | | 4C | | 7 | 8 | | | EY | | | 7.0 | Y | 4 | Lovejoy,T | P |
| 10.464 | 818544 | 3.7 | B | 160 | | 3 | | | 0.050 | B | | 20 | 5.2 | Y | 1 | Castrillon,M.E | |
| 10.4653 | 818545 | 3.0 | | DCS | 40 | 4 | 1.42 | 2 | | EY | | | 5.9 | | 6 | Machholz,D | Q |
| 10.4688 | 818546 | 2.8 | S | DCS | 48 | 5 | 2.42 | 16 | 0.080 | B | | 20 | 5.9 | | 6 | Machholz,D | R |
| 10.49 | 818547 | 2.9 | | SAO | 30 | | 4 | 270 | | EY | | | 5.5 | Y | 2 | Ashdown,M | S |
| 10.51 | 818548 | 2.3 | M | 5B | 45 | 5 | | | | EY | | | 5.5 | Y | 5 | Keen,R | T |
| 10.55 | 818549 | 3.3 | S | 5B, 141 | 50 | 5 | | | 0.023 | B | | 3 | 5.6 | | | Jones,A | |
| 10.55 | 818550 | | | | | | 2 | | 0.078 | R | 7.5 | 30 | | | | Jones,A | U |
| 10.55 | 818551 | 3.4 | B | 5B | | 2 | | | 0.050 | B | | 7 | C | Y | 1 | Matchett,V | |
| 10.563 | 818552 | 2.0 | S | 5A | | | | | | EY | | | | | | Seargent,D | |
| 10.563 | 818553 | | | | | | | | 0.08 | B | | 15 | | | | Seargent,D | V |
| 10.569 | 818554 | 3.0 | S | 160,140 | | | 1 | 340 | | EY | | | 5.6 | Y | 11 | Foulkes,M | W |
| 10.57 | 818555 | 2.2 | | 5B | 32 | 3 | | | | EY | | | 7 | Y | 14 | Bouma,R.J | |
| 10.57 | 818556 | 2.3 | S | 5B | | 4 | | | 0.018 | B | | 2 | 7 | Y | 14 | Bouma,R.J | |
| 10.57 | 818557 | 2.9 | V | 5B, 141 | | | | | | | | | | | | Jones,A | X |
| 10.57 | 818558 | | | | | 8 | | | 0.317 | N | 5 | 86 | | | | Jones,A | Y |
| 10.57 | 818559 | 2.7 | | 5B | 25 | 5 | | | | EY | | | 6.0 | Y | 35 | Morris,C.S | |
| 10.58 | 818560 | | | | 26 | 4 | 5 | 325 | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | Z |
| 10.75 | 818561 | 3.0 | | 5B | 25 | 6 | | | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 10.76 | 818562 | | | | 28 | 4 | 4.5 | 320 | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | a |
| 10.76 | 818563 | 2.5 | B | 5B | | | | | | EY | | | 7.0 | Y | | Clark,M.L | |
| 10.76 | 818564 | 3.4 | M | 5B | | | 4.0 | | 0.05 | B | | 7 | 5.0 | Y | 3 | Suzuki,K | b |
| 10.78 | 818565 | 2.3 | S | 5B | | | | | 0.018 | B | | 2 | 7 | Y | 14 | Bouma,R.J | |
| 10.78 | 818566 | 3.4 | S | 5B | 42 | 7 | 2.6 | | 0.25 | N | 5 | 38 | 7.0 | Y | | Clark,M.L | c |
| 10.78 | 818567 | 2.5 | B | 5B | 44 | 5 | 1.9 | 42 | | EY | | | 6.9 | Y | | Pearce,A | |
| 10.78 | 818568 | 2.8 | S | 5B | 22 | 7 | | | 0.030 | B | | 8 | 6.9 | Y | | Pearce,A | |
| 10.80 | 818569 | 3.8 | M | SAO | 28 | 5 | | 325 | 0.065 | R | 8 | 16 | 5.5 | Y | 9 | Nakamura,A | d |
| 10.820 | 818570 | 3.4 | S | 5B | 60 | 5 | 7.40 | 328 | 0.08 | B | | 30 | 7.0 | Y | 7 | Campos,J | e |
| 10.826 | 818571 | 2.8 | | 5B | 120 | 4 | 4.00 | 340 | | EY | | | 7.0 | Y | 7 | Campos,J | f |
| 10.833 | 818572 | 4.0 | B | 5B | 50 | 5 | 2.5 | 340 | 0.06 | B | | 15 | 5.6 | Y | 2 | Vincent,J | g |
| 10.896 | 818573 | 3.4 | | 5B | 25 | 6 | 2 | | 0.063 | B | | 8 | 6.0 | Y | 2 | Dietrich,M | h |
| 10.904 | 818574 | 3.7 | M | 5A | | | | | 0.035 | B | | 9 | 5.8 | Y | 1 | Begbie,M.J.R | |
| 10.906 | 818575 | 3.3 | M | 5B | 28 | 7 | 1.2 | 351 | 0.12 | C | 10 | 40 | 6 | Y | 1 | Bernabeu,M | |
| 10.906 | 818576 | 3.9 | M | 5B | 30 | 5 | 6.3 | 325 | 0.08 | B | | 11 | 5.4 | Y | 1 | Fleet,R.W | i |
| 10.91 | 818577 | 2.6 | B | 5B | | | | | | EY | | | 6.3 | | 19 | Shanklin,J.D | |
| 10.910 | 818578 | 3.1 | M | 5B | | 4 | 2.9 | 338 | | EY | | | 5.4 | Y | 1 | Fleet,R.W | j |
| 10.913 | 818579 | 3.2 | M | 5B | 19.0 | 7 | 0.92 | 347 | 0.12 | C | 10 | 40 | 4.5 | Y | 6 | Cifuentes,E | |
| 10.940 | 818580 | 4.5 | M | 5B | 22 | 4 | 1.13 | 330 | 0.04 | B | | 12 | 6.1 | Y | 1 | Henshaw,C | |
| 10.948 | 818581 | | | | 20.6 | 5 | 4.5 | 315 | 0.30 | N | 8.5 | 102 | 5.8 | Y | 1 | Begbie,M.J.R | k |

NOTE A Tail I.
NOTE B Tail I - plasma.
NOTE C Altitude 4 deg.!! Tail only quite narrow; length and PA approximate. Extinction differences stars - comet already taken into account.
NOTE D 5 arc min. broad dust tail - curving. 5 arc min. diameter central condensation. Second tail PA 300 to 337.
NOTE E Even broader fan. Tail length = 2.5-4 deg.
NOTE F Binocular limit is 9.
NOTE G Tail really shorter than last night (fan); length approximate.
NOTE H 3.9 deg. tail PA 313 to 353; ion tail, curved. 3.2 deg. tail PA: eastern border of dust tail.
NOTE I PA 340 to 350.
NOTE J 2.5 deg. tail is gas (straight ray). 1.0 deg. tail is f. side of dust (90-100 deg. fan!).
NOTE K 100 deg. fan. Plasma & dust seen. Tail length = 2.5-7 deg.
NOTE L Type I tail.
NOTE M Clouds.
NOTE N Severe interference by city lights. No tail seen.
NOTE O Beg. period heavier light poll. Good see.
NOTE P Very bright. Coma diameter through 15x80 binoculars: 40'. Naked eye tail length.
NOTE Q Fan-shaped tail: PA 342 to 32.
NOTE R Fan-shaped tail: PA 327 to 64.
NOTE S DC in 7x50 binoculars: 8. PA = 270+.
NOTE T Observation from Fiji.
NOTE U Tail PA 330-352.
NOTE V Very broad fan between position angles 320 and 55.
NOTE W Cloud terminated observation.
NOTE X Bifocal spectacles - viewed stars through distance section and comet out of focus in close-up section.
NOTE Y Large diffuse coma small bright condensation, diameter about 1 arc min. Nucleus hidden?
NOTE Z Gas tail at PA 325. Broad dust fan includes other tail listings. PA 340 is approximate.
NOTE a Gas tail at PA 320. Broad dust fan includes other tail listings. PA 340 is approximate.
NOTE b Guam tour.
NOTE c PA of 2.6 tail is 41-9.
NOTE d Tail length = yes.
NOTE e Straight tail at PA 328. Curved tail at PA 355. Occasional lightning from a thunderstorm below our aircraft.
NOTE f Some lightning interference. Occasional lightning from a thunderstorm below our aircraft.
NOTE g Comp. stars Mu Lup 4.3, Pi Lup 3.9.

NOTE h 2 deg. tail is dust, 2.6 deg. tail is ion. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE i Gas tail at PA 325. Midpoint of dust tail: 1.0 deg. at PA 351. End point of dust tail: 4.3 deg. at PA 356. Type III [sic] tail at PA 68.
NOTE j Gas tail at PA 338. Dust tail at PA 19.
NOTE k Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.069 | 831080 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | A |
| 10.139 | 831081 | 0.02 | 0.216 | N | 7.6 | 65,230 | 20 | 6.3 | 6 | Rogers,J.H | B |
| 10.143 | 831082 | | 0.07 | B | | 16 | 229 | 5.4 | 3 | Taylor,M.D | C |
| 10.149 | 831083 | 2.5 | 0.050 | B | | 10 | 110 | 6.3 | 6 | Rogers,J.H | D |
| 10.196 | 831084 | 0.25 | 0.20 | N | 8 | 120 | 55 | 5 | 1 | Vargas B.,A.G | E |
| 10.576 | 831085 | 2 | 0.065 | B | | 12 | 10 | 5.6 | 11 | Foulkes,M | F |
| 10.795 | 831086 | | 0.076 | N | 7.9 | 60 | | | 1 | Freydank,E | G |
| 10.868 | 831087 | 1.36 | 0.12 | C | 10 | 40 | 179 | 7 | 1 | Bernabeu,M | H |
| 10.906 | 831088 | 4 | 0.08 | B | | 11 | | 5.4 | 1 | Fleet,R.W | I |
| 10.917 | 831089 | 0.78 | 0.12 | C | 10 | 40 | 60 | 4.5 | 6 | Cifuentes,E | J |
| 10.931 | 831090 | 2.0 | 0.050 | B | | 10 | 10 | 6.0 | 2 | Abbott,J | K |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Gas tail (newly distinct) at PA 330 deg., length 54'. Dust tail at PA about 330 deg. to 15 deg., length about 27'. Coma (bigger than before) diameter 27'. Nucleus (now little if any unresolved light - whole nucleus extended) about 6" diameter. Fan (as last night) at PA about 120 deg., length about 14". Jet (new - towards tail) at PA 330 deg., length about 9".
NOTE C At 10.188 UT dust tail 5' broad, curving from PA 325 deg. Under moments of excellent seeing fountains/jets seen with extended fanned gas tail looking striated, and 5' broad (spike) curving dust tail. Northwest side of comet appears more intense. Central condensation offset in roughly circular coma and about 5' diameter. Fountains and jets visible. With naked eye at 10.188 UT extent of tail fan is between PA 275 deg. to 337 deg. (Second drawing supplied for 10.188 UT at scale of 3'/mm. Ed.)
NOTE D Changed considerably since last night. Still a broad fan appeared - even broader, up to 90-100 deg. wide, as I got even better dark-adapted - but fan is fainter and shorter, while it has developed a distinct, long straight ray on south preceding side. The gas tail is radial to nucleus not tangential to coma. Gas tail seemed to dominate in blue filter, dust fan in yellow filter, but too faint to be certain. (Two drawings were made in observation interval, no. 1 from 0240-0255 and no. 2 at 0430. Ed.) The gas tail for (1) was 2.0 deg. at PA 315 and for (2) was 2.5 deg. at PA 315. The following edge of the dust fan for (1) was about 1.0 deg. at PA about 15 and for (2) was about 1.0 deg. at PA about 50. For no. 2, the coma was still slightly flattened transverse the line of the (gas) tail.
NOTE E Tail? at PA 95. A very interesting effect was produced by lightning from a far thunderstorm. The comet image appears with a stroboscopic effect. A coma prolongation (like a tail) was observed some times, PA 95 approx.!). The tail is more diffuse than before. DC 4; coma diameter: 12' approx.
NOTE F Preceding edge of tail at PA 340, length 1.5 deg. Following edge of tail at PA 350. Fan tail at PA 30, length 20'. Coma 40' across, DC 7. Bright central disk in coma. Faint tail visible at PA 30. Cluster north preceding.
NOTE G DC 7. Very clear dark night. Haze at (the) horizon. (Duration not indicated. Time of observation is assumed to be start time. Translated by IHW staff. Ed.)
NOTE H Coma 28 arc min. Tail 1 deg. 12 min. PA 351.
NOTE I Gas tail at PA 325. Dust tail end point at PA 356. Type III [sic] at PA 68. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE J Tail 55', PA 347.
NOTE K Central condensation approximately 5 arc min. Type I tail at PA 327 (mid tail), approximately 4 deg. 16'x12'; type II tail at 64 arc min. PA between 336 and 16, approximate width 56 arc min.; at 2 deg. PA between 348 and 20 approximate width 84 arc min.; at 3 deg. 10 min. PA between 353 and 25, approximate width 2 deg. 16 min. Type III tail [sic] at 1 deg. 4 min. PA 65 (leading edge), approximate width 54 arc min.; at 2 deg. 4 min. PA 21 (joins type II). Milky Way interference: now weak. Type II, III PA's measured at tail edges at defined distance from central condensation, i.e., (@ 64'). Tail width measured perpendicular to PA's. Semi latus rectums (both) 13 arc min. Vertex distance 13 arc min. All dimensions and PA's measured from AAVSO chart plot. The central condensation (c.c.) sat quite centrally in a circular coma of diameter 26'. The c.c. appeared pearly - not planetary. There was a long (4 deg. 16 arc min.) type I tail, quite straight but pale and narrow. Low fall-off of brightness away from the coma, and for much of the length, of comparable brightness with the type III [sic] tail wedge. The type II tail: quickly broadening and curving after the split from the western-most half being brighter than the eastern for the same distance out from the c.c. The type III tail, formed a right-angled wedge much fainter than the greater part of the type II tail. The leading edge of the type III tail was observed to be sharp and of itself brighter than the wedge, appearing as a thin 'spike'. The total angle subtended by the three tails amounted to 98 deg.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.009 | 851580 | 0.200 | 2 | | 10.3 x 6.9 | 15.00 | Kodak 2415 | | Y | S | 18/P | 2 | Dragesco,J | A |
| 10.017 | 851581 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 10.00 | Kodak 2415 | | Y | | 109/P | 3 | Koch,B | B |
| 10.024 | 851582 | 0.135 | 2.8 | | 15.2 x10.2 | 8.00 | Kodak Tri-X | | N | | 2/P | 5 | Fischer,D | C |
| 10.109 | 851583 | 0.050 | 1.7 | | 39.6 x27.0 | 5.00 | Kodak 2415 | | Y | | 67/P | 8 | Bottger,B | D |
| 10.116 | 851584 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 40.00 | Kodak 2415 | | Y | | 113/P | 3 | Koch,B | B |
| 10.120 | 851585 | 0.085 | 2.0 | | 23.9 x16.1 | 10.00 | Ektachr.P800 | 800/ | N | O | 53/P | 8 | Bottger,B | E |
| 10.130 | 851586 | 0.180 | 2.8 | | | 15.00 | Kodak Tri-X | | N | | 00/P | 5 | van Loo,F.R | F |
| 10.131 | 851587 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 7/C | 3 | Tarnutzer,A | |
| 10.137 | 851588 | 0.500 | 3.5 | | 4.1 x 2.7 | 20.00 | Kodak 2415 | | Y | | 23/P | 4 | Guthier,O | G |
| 10.139 | 851589 | 0.085 | 2.0 | | 23.9 x16.1 | 6.00 | Ektachr.P800 | 800/ | N | O | 54/P | 8 | Bottger,B | E |
| 10.149 | 851590 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 8/C | 3 | Tarnutzer,A | |
| 10.153 | 851591 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 24/P | 4 | Guthier,O | G |
| 10.159 | 851592 | 0.058 | 2 | | 34.5 x23.4 | 12.00 | Kodak 2415 | | Y | X | 9/C | 3 | Tarnutzer,A | |
| 10.173 | 851593 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 10/C | 3 | Tarnutzer,A | |
| 10.189 | 851594 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 11/C | 3 | Tarnutzer,A | |
| 10.196 | 851595 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | C | 2/P | | Falsarella,N | |
| 10.200 | 851596 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 12/C | 3 | Tarnutzer,A | |
| 10.215 | 851597 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 13/C | 3 | Tarnutzer,A | |
| 10.216 | 851598 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | C | 13/P | | Falsarella,N | |
| 10.229 | 851599 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 14/C | 3 | Tarnutzer,A | |
| 10.231 | 851600 | 0.210 | 4 | | 9.8 x 6.5 | 6.00 | Polaroid 612 | | N | X | 2/P | 6 | Carragan,W | H |
| 10.243 | 851601 | 0.135 | 2.8 | | 15.2 x10.2 | 10.00 | Kodak 2415 | | Y | M | 026/P | 3 | Brutsche,E | I |
| 10.250 | 851602 | 0.050 | 1.8 | | 39.6 x27.0 | 5.00 | Kodak 2415 | | Y | M | 027/P | 3 | Brutsche,E | I |
| 10.285 | 851603 | 0.700 | 5 | 0.140 | 2.9 x 2.0 | 90.00 | Tri-X Pro | 320/ | N | X | 7/T | 1 | Travnik,N.A.S | J |
| 10.351 | 851604 | 0.058 | 1.4 | | 34.5 x23.4 | 0.25 | Kodak Tri-X | | N | T | 10/C | 4 | Priester,D.C | K |
| 10.351 | 851605 | 0.085 | 4.0 | | 23.9 x16.1 | 30.00 | 103a-O | | N | C | 10/S | 1 | Binnewies,S | |
| 10.352 | 851606 | 0.058 | 1.4 | | 34.5 x23.4 | 0.50 | Kodak Tri-X | | N | T | 9/C | 4 | Priester,D.C | K |
| 10.354 | 851607 | 0.050 | | | 39.6 x27.0 | 0.67 | Kodak VR1000 | 1000/ | N | T | 10/C | 4 | Priester,D.C | |
| 10.354 | 851608 | 0.050 | | | 39.6 x27.0 | 0.33 | Kodak VR1000 | 1000/ | N | T | 11/C | 4 | Priester,D.C | |
| 10.355 | 851609 | 0.050 | | | 39.6 x27.0 | 0.17 | Kodak VR1000 | 1000/ | N | T | 12/C | 4 | Priester,D.C | |
| 10.356 | 851610 | 0.050 | | | 39.6 x27.0 | 0.50 | Kodak VR1000 | 1000/ | N | T | 13/C | 4 | Priester,D.C | |
| 10.409 | 851611 | 0.200 | 4 | | 10.3 x 6.9 | 5.00 | 3M 1000 | 1000/ | N | O | 37/N | 10 | Edberg,S.J | |
| 10.414 | 851612 | 0.200 | 4 | | 10.3 x 6.9 | 10.00 | 3M 1000 | 1000/ | N | O | 38/N | 10 | Edberg,S.J | |
| 10.427 | 851613 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | X | 13/P | 1 | Marafie,A.H | L |
| 10.435 | 851614 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 10.00 | Kodak 2415 | | Y | X | 14/P | 1 | Marafie,A.H | L |
| 10.447 | 851615 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 15.00 | Kodak 2415 | | Y | X | 15/P | 1 | Marafie,A.H | L |
| 10.479 | 851616 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 20.00 | Kodak 2415 | | Y | X | 16/P | 1 | Marafie,A.H | L |
| 10.489 | 851617 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 20.00 | Kodak Tri-X | 400/ | N | X | 007/P | 1 | Rosenthal,D | L |
| 10.505 | 851618 | 0.229 | 1.7 | 0.140 | 9.0 x 6.0 | 7.00 | Fuji RD 400 | 400/27 | Y | X | 004/P | 3 | Allen,M.T | |
| 10.625 | 851619 | 0.229 | 1.7 | 0.140 | 9.0 x 6.0 | 4.00 | Kodak 2415 | | Y | X | 002/P | 3 | Allen,M.T | |

DATE: 10 APR 1986

DATE: 10 APR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.637 | 851620 | 0.229 | 1.7 | 0.140 | 9.0 x 6.0 | 6.00 | Kodak 2415 | | Y | X | 003/P | 3 | Allen,M.T | |
| 10.648 | 851621 | 0.229 | 1.7 | 0.140 | 9.0 x 6.0 | 5.00 | Kodak 2415 | | Y | X | 001/P | 3 | Allen,M.T | |
| 10.735 | 851622 | 0.050 | 1.8 | | 39.6 x27.0 | 2.00 | Kodak VR | 1000/ | N | C | 6/P | 3 | Vincent,F | |
| 10.773 | 851623 | 0.050 | 1.7 | | 39.6 x27.0 | 5.00 | Kodak Tri-X | 400/ | N | O | 20/C | 7 | Martin,D | |
| 10.773 | 851624 | 0.050 | 1.7 | | 39.6 x27.0 | 5.00 | 3M | 1000/ | N | O | 24/T | 7 | Martin,D | |
| 10.779 | 851625 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 21/C | 7 | Martin,D | |
| 10.779 | 851626 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | 3M | 1000/ | N | O | 25/T | 7 | Martin,D | |
| 10.786 | 851627 | 0.050 | 1.7 | | 39.6 x27.0 | 5.00 | Kodak Tri-X | 400/ | N | O | 22/C | 7 | Martin,D | |
| 10.786 | 851628 | 0.050 | 1.7 | | 39.6 x27.0 | 5.00 | 3M | 1000/ | N | O | 26/T | 7 | Martin,D | M |
| 10.797 | 851629 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 23/C | 7 | Martin,D | |
| 10.797 | 851630 | 0.050 | 1.7 | | 39.6 x27.0 | 10.00 | 3M | 1000/ | N | O | 27/T | 7 | Martin,D | M |
| 10.804 | 851631 | 0.050 | 1.7 | | 39.6 x27.0 | 5.00 | Kodak Tri-X | 400/ | N | O | 24/C | 7 | Martin,D | |
| 10.804 | 851632 | 0.200 | 4.5 | | 10.3 x 6.9 | 5.00 | 3M | 1000/ | N | O | 28/T | 7 | Martin,D | N |
| 10.808 | 851633 | 0.240 | 4.5 | | 8.6 x 5.7 | 8.00 | Ilford HP5 | 400/27 | N | O | 207/S | 2 | Abbott,J | |
| 10.808 | 851634 | 0.050 | 1.7 | | 39.6 x27.0 | 2.00 | Kodak Tri-X | 400/ | N | O | 25/C | 7 | Martin,D | O |
| 10.808 | 851635 | 0.200 | 4.5 | | 10.3 x 6.9 | 2.00 | 3M | 1000/ | N | O | 29/T | 7 | Martin,D | N |
| 10.809 | 851636 | 0.080 | 4.5 | | 25.4 x17.1 | 20.00 | Kodak Tri-X | 400/ | N | T | 4/P | 2 | Jones,B.W | |
| 10.822 | 851637 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 053/P | 1 | Sternwarte Frankfurt | P |
| 10.825 | 851638 | 0.080 | 4.5 | | 25.4 x17.1 | 20.00 | Kodak Tri-X | 400/ | N | T | 5/P | 2 | Jones,B.W | Q |
| 10.840 | 851639 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 054/P | 1 | Sternwarte Frankfurt | R |
| 10.841 | 851640 | 0.080 | 4.5 | | 25.4 x17.1 | 20.00 | Kodak Tri-X | 400/ | N | T | 6/P | 2 | Jones,B.W | S |
| 10.859 | 851641 | 0.080 | 4.5 | | 25.4 x17.1 | 20.00 | Kodak Tri-X | 400/ | N | T | 9/P | 2 | Jones,B.W | T |
| 10.861 | 851642 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 25/P | 4 | Guthier,O | P |
| 10.874 | 851643 | 0.080 | 4.5 | | 25.4 x17.1 | 19.00 | Kodak Tri-X | 400/ | N | T | 10/P | 2 | Jones,B.W | G |
| 10.896 | 851644 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | Kodak 103a-O | | N | O | 13/C | 5 | Cimatti,A | U |
| 10.904 | 851645 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 6.00 | Kodak 2415 | | Y | | 116/P | 3 | Koch,B | |
| 10.908 | 851646 | 0.080 | 4.5 | | 25.4 x17.1 | 20.00 | Kodak Tri-X | 400/ | N | T | 11/P | 2 | Jones,B.W | B |
| 10.908 | 851647 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 057/P | 1 | Sternwarte Frankfurt | T |
| 10.910 | 851648 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 10.00 | Kodak 2415 | | Y | O | 001/T | 2 | Battaini,P | S |
| 10.918 | 851649 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Ektachrome | 1600/ | N | M | 490/P | 1 | Stolzen,P | V |
| 10.960 | 851650 | 1.800 | 6 | 0.300 | 1.1 x 0.8 | 16.00 | Kodak 2415 | | Y | | 9/P | 2 | Martinez,P | W |
| 10.983 | 851651 | 0.135 | 2.8 | | 15.2 x10.2 | 10.00 | Ektachrome | 1600/ | N | M | 494/P | 1 | Stolzen,P | |
| 10.991 | 851652 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 20.00 | Kodak 2415 | | Y | T | 009/P | 1 | Berge,P.M | W |
| 10.992 | 851653 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 50.00 | Kodak 2415 | | Y | | 118/P | 3 | Koch,B | X |
| 10.994 | 851654 | 1.800 | 6 | 0.300 | 1.1 x 0.8 | 16.00 | Kodak 2415 | | Y | | 10/P | 2 | Martinez,P | B |

NOTE A (Observer supplied nonessential notes on original report form. Ed.)
NOTE B (Observer's image identifier preceded by prefix 100/. Ed.)
NOTE C Push processed to 1000 ASA.
NOTE D Photograph made by J. Linder and B. Bottger. Forming gas pressurized to 1.2 bar.
NOTE E Photograph made by J. Linder and B. Bottger.
NOTE F Push processed to 1800 ASA. Photograph made by G. Canonaco and F.R. van Loo.
NOTE G Photograph made by F. Wilken and O. Guthier.
NOTE H Lens has zoom range of 70 to 210 mm. Film ISO 20000. Photograph made by Julie and William Carragan.
NOTE I (Observer appears to have confused C and F temperature scales for developer temperature. Ed.)
NOTE J Instrument is Zeiss Tessar. Format size 88 mm x 128 mm.
NOTE K Push processed to 800 ASA.
NOTE L Instrument is Schmidt camera.
NOTE M Blue W47 filter used.
NOTE N Orange W21 filter used.
NOTE O (Photographer's image identifier is 22, 7. Ed.)
NOTE P Thunderstorm in the west. Film roll Tri-X/6.
NOTE Q Photograph made by Y. Walter. Push processed to 2000 ISO.
NOTE R Wratten 47A (blue) filter used. Thunderstorm in the west. Film roll Tri-X/6.
NOTE S Photograph made by P. Engel. Push processed to 2000 ISO.
NOTE T Wratten 21 (orange) filter used. Thunderstorm in the west. Film roll Tri-X/6.
NOTE U Cut short because of cloud. Wratten 47A (blue) filter used. Thunderstorm in the west. Film roll Tri-X/6.
NOTE V Instrument used is Schmidt camera.
NOTE W (Observer's image identifier is preceded by prefix 2. Ed.)
NOTE X Photograph made by G. Mahoux and P.M. Berge.

DATE: 11 APR 1986 DATE: 11 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.000 | 818582 | 3.0 | M | 5B | 38 | 7 | 4.2 | | 0.05 | B | | 10 | 6.0 | Y | 12 | Melandri,F | A |
| 11.00 | 818583 | 2.8 | B | 5B | 30 | 6 | | | 0.03 | B | | 8 | 6.0 | Y | 3 | Fischer,D | B |
| 11.024 | 818584 | 2.9 | B | 5B | | | 6.5 | 325 | 0.03 | B | | 8 | 6.5 | Y | 3 | Hasubick,W | C |
| 11.024 | 818585 | | | 5B | 30 | 5 | | | 0.08 | B | | 20 | 6.5 | Y | 3 | Hasubick,W | |
| 11.024 | 818586 | 2.9 | B | 5B | | | 3.7 | 325 | | EY | | | 6.5 | Y | 3 | Hasubick,W | D |
| 11.042 | 818587 | 2.5 | S | 5B | 45 | 7 | 5.0 | | 0.08 | B | | 20 | 6.0 | Y | 7 | Parisio,R | E |
| 11.06 | 818588 | 2.7 | M | IHW | 36 | 6 | 3.7 | 347 | | EY | | | 6.0 | Y | 5 | Granslo,B.H | |
| 11.073 | 818589 | | | 5B | 23 | 5 | 1.5 | 335 | 0.050 | B | | 10 | 4.0 | Y | 11 | Vanin,G | F |
| 11.074 | 818590 | 3.1 | B | IHW | | | | | | EY | | | 6.2 | Y | 3 | Guthier,O | |
| 11.097 | 818591 | 3.4 | B | IHW | 32.5 | 6 | 6.0 | | 0.050 | B | | 10 | 6.2 | Y | 3 | Guthier,O | G |
| 11.10 | 818592 | | B | | | 6 | | | 0.063 | B | | 9 | 6.0 | Y | 3 | Fischer,D | H |
| 11.10 | 818593 | | | | 33 | 7 | 2.9 | 337 | 0.035 | B | | 7 | 6.0 | Y | 5 | Granslo,B.H | |
| 11.125 | 818594 | 3 | B | 160 | | 3 | | | 0.050 | B | | 20 | 6.4 | Y | 1 | Carello,S | |
| 11.130 | 818595 | 2.9 | B | 160 | | 3 | | | 0.050 | B | | 20 | 6.4 | Y | 1 | Lovera,A | |
| 11.167 | 818596 | 3.7 | | 161 | | | | | 0.07 | R | 15 | 40 | | Y | 2 | Moreno,G | I |
| 11.177 | 818597 | 3.2: | S | 5B | 21 | 3 | 2 | | 0.050 | B | | 10 | 4 | Y | 7 | Rogers,J.H | J |
| 11.226 | 818598 | 4.3 | B | 5B | | 3 | | | 0.03 | B | | 8 | 4.0C | Y | 2 | Giraudi,J.D | |
| 11.229 | 818599 | 2.3 | B | 5B | | 6 | 3.5 | | 0.05 | B | | 20 | 4.9 | Y | 6 | Diaz P.,E | |
| 11.233 | 818600 | 4.2 | B | 5B | | 3 | | | 0.03 | B | | 8 | 4.0C | Y | 2 | Giraudi,J.D | |
| 11.236 | 818601 | | B | | 36 | 8 | | 334 | 0.08 | B | | 11 | | Y | 5 | Gorski,L | |
| 11.237 | 818602 | 4.2 | B | 5B | | 3 | | | 0.03 | B | | 8 | 4.0C | Y | 2 | Giraudi,J.D | |
| 11.324 | 818603 | 2.5 | B | 5B | 45 | 7 | 1.5 | | 0.050 | B | | 10 | 6.0 | Y | 6 | Hodonsky,K | |
| 11.354 | 818604 | 4.4 | B | 160 | | | | | 0.080 | B | | 20 | 4.5 | Y | | Smith,D | K |
| 11.41 | 818605 | 3.3 | | SAO | 30 | | 6 | 290 | | EY | | | 6.0 | Y | 4 | Ashdown,M | L |
| 11.417 | 818606 | 2.1 | S | 5B | | | | | | EY | | | | | | Seargent,D | M |
| 11.417 | 818607 | | | | | | 3.5 | 330 | 0.08 | B | | 15 | | | | Seargent,D | N |
| 11.47 | 818608 | 2.4 | S | 5B | | 4 | | | 0.018 | B | | 2 | 7 | Y | 16 | Bouma,R.J | |
| 11.49 | 818609 | 2.3 | | 5B | 35 | 3 | | | | EY | | | 7 | Y | 16 | Bouma,R.J | |
| 11.500 | 818610 | 3.9 | B | 5B | 40 | 7 | 3.25 | 330 | 0.05 | B | | 7 | 5.4 | Y | 2 | Bembrick,C | O |
| 11.521 | 818611 | 3.7 | | 5B | 20 | 2 | | | | EY | | | 6 | Y | 1 | Tregaskis,T.B | |
| 11.53 | 818612 | 2.5 | M | 5B | 30 | 4 | 5.5 | 334 | 0.05 | B | | 10 | 7 | Y | 16 | Bouma,R.J | P |
| 11.53 | 818613 | 3.5 | B | 5B | | 2 | | | 0.050 | B | | 7 | 4.3C | Y | 1 | Matchett,V | |
| 11.556 | 818614 | | | 5B | 50 | 3 | 2.5 | 350 | 0.05 | B | | | | N | 1 | Tregaskis,T.B | Q |
| 11.58 | 818615 | | | | | | 5 | | 0.08 | B | | 15 | | N | 1 | Lovejoy,T | |
| 11.583 | 818616 | 2.8 | S | 5B | 45 | 4 | 4 | | 0.07 | B | | 10 | 6.0 | Y | 2 | Kobayashi,J | R |
| 11.62 | 818617 | 3.3 | M | SAO | 28 | 5 | 3.7 | 335 | 0.065 | R | 8 | 16 | 6.0 | Y | 9 | Nakamura,A | S |
| 11.62 | 818618 | 3.1 | | 5B | 20 | 5 | | | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 11.646 | 818619 | 2.9 | S | 160,140 | 15 | | 1 | 0 | | EY | | | 6.2 | Y | 12 | Foulkes,M | T |
| 11.65 | 818620 | 4.3 | S | AAVSO | 12 | 4 | | | 0.13 | N | 6.3 | 24 | 3.0 | Y | 1 | Hayashi,A | |
| 11.665 | 818621 | 4.2 | M | 5B | 10 | 3 | | | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | |
| 11.667 | 818622 | 3.5 | B | 5B | 20 | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 11.67 | 818623 | 3.2 | S | | 20 | 5 | | | 0.08 | B | | 11 | 5.5 | Y | 1 | Akita,I | |
| 11.67 | 818624 | 4.5 | S | AAVSO | 10 | 4 | | | 0.07 | B | | 10 | 3.0 | Y | 1 | Hayashi,A | |
| 11.67 | 818625 | 3.4 | M | 5B | | | 7.0 | | 0.05 | B | | 7 | 5.5 | Y | 3 | Suzuki,K | U |
| 11.67 | 818626 | | | 5B | 9.7 | 5 | | | 0.076 | R | 7.9 | 50 | 5.5 | Y | 3 | Suzuki,K | U |
| 11.68 | 818627 | 3.2 | | 5B | 20 | 5 | | | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 11.702 | 818628 | 3.9 | S | 5B | 12.5 | 5 | | | 0.05 | B | | 7 | 2.5 | Y | 1 | Kanai,K | |
| 11.712 | 818629 | 4.0 | M | 5B | 15 | 3 | | | 0.08 | B | | 11 | 3 | Y | 1 | Mitsuma,S | |
| 11.74 | 818630 | | | | | | 6 | 337 | 0.05 | B | | 10 | 7 | Y | 16 | Bouma,R.J | V |
| 11.75 | 818631 | 2.3 | B | 5B | | | 1.5 | 5 | | EY | | | 6.5 | Y | 38 | Hale,A | W |
| 11.75 | 818632 | | B | | | | 2 | 5 | 0.05 | B | | 10 | 6.5 | Y | 38 | Hale,A | W |
| 11.792 | 818633 | 3.0 | M | 5B | 44 | 6 | 5.2 | | 0.05 | B | | 10 | 6.0 | Y | 12 | Melandri,F | X |
| 11.81 | 818634 | 2.6 | B | 5B | | | | | | EY | | | 6.9 | Y | | Pearce,A | |
| 11.81 | 818635 | 2.9 | S | 5B | | | 6.1 | 339 | 0.030 | B | | 8 | 6.9 | Y | | Pearce,A | |
| 11.823 | 818636 | 3.5 | S | 5B | 75 | 5 | 7.5 | 340 | 0.08 | B | | 30 | 7.0 | Y | 7 | Campos,J | Y |
| 11.830 | 818637 | 3.0 | | 5B | 120 | 4 | 5.25 | 350 | | EY | | | 7.0 | Y | 7 | Campos,J | |
| 11.833 | 818638 | 3.8 | B | 5B | 50 | 5 | | | 0.06 | B | | 15 | 5.9 | Y | 1 | Vincent,J | Z |
| 11.840 | 818639 | 3.9 | M | 5B | 34 | 5 | 6.9 | 342 | 0.08 | B | | 11 | 5.5 | Y | 1 | Fleet,R.W | a |
| 11.854 | 818640 | 4.5 | B | 5B | 35 | 6 | 2 | 0 | 0.065 | B | | 20 | 6.0 | Y | 1 | McBain,J | |
| 11.875 | 818641 | 3.0 | M | 5B | 50 | 4 | | | | EY | | | 5.5 | Y | 1 | Fleet,R.W | b |
| 11.894 | 818642 | 3.8 | M | 5B | 16.1 | 6 | 0.75 | 0 | 0.12 | C | 10 | 40 | 4.5 | Y | 6 | Cifuentes,E | |
| 11.91 | 818643 | 3.0 | B | 5B | | | | | | EY | | | 5.3 | | 20 | Shanklin,J.D | |
| 11.922 | 818644 | 3.2 | M | 5B | 23 | 6 | 0.67 | 0 | 0.12 | C | 10 | 40 | 7 | Y | 1 | Bernabeu,M | |
| 11.951 | 818645 | 3.2 | B | 5B | 42 | 5 | 1.0 | 7 | | EY | | | 6.2 | Y | 2 | Abbott,J | c |
| 11.958 | 818646 | 3.8 | B | 5B | | 5 | | | 0.050 | B | | 10 | 6.2 | Y | 2 | Abbott,J | d |
| 11.982 | 818647 | 3.8 | M | 5B | | | | | 0.035 | B | | 9 | 5.9 | Y | 1 | Begbie,M.J.R | |

NOTE A I can see all the 4 deg. of tail with naked-eye. Tail length is for ion tail.
NOTE B Tail length = up to 5 deg. Again 100 deg. fan, plasma & dust.
NOTE C 2.6 deg. tail II PA 325-0. Tail I plasma; tail II gas. [sic]
NOTE D Tail I - plasma.
NOTE E Tail PA 70, 330.
NOTE F Magnitude 3.0-3.2 naked eye. [sic]
NOTE G Tail I 6.0 deg. long, tail II 2.0 deg. long.
NOTE H Tail length = up to 6 deg. Again 100 deg. fan, plasma & dust.
NOTE I (Comparison chart appears incorrect. Ed.)
NOTE J Comet seen briefly through gap in cirrus cloud. Coma diameter approximate. Less condensed before with no stellar nucleus (striking contrast to April 6+7 and even more diffuse than April 9+10). Instead, bright blob approximately 4 arc min. across in centre. Tail length approximate. Tail not properly observable but gas tail as yesterday to about 2 deg.
NOTE K Comet elevation 3 deg.
NOTE L DC in 7x50 binoculars: 8.
NOTE M False nucleus less bright.
NOTE N PA 60 tail length approximate.
NOTE O Straight gas tail; fan shaped dust tail.
NOTE P Gas tail, very intense at PA 334. Broad dust fan includes other tail listings. Dust fan PAs are approximate.
NOTE Q Tenuous tail. (Observer gave limit as approximately 10. Ed.)
NOTE R Tail PA 0-90 deg.
NOTE S 0.6 deg. tail PA 330 to 70.
NOTE T Some cloud. Excellent.
NOTE U Guam tour.
NOTE V Gas tail at PA 337. Broad dust fan includes other tail listings. Dust fan PA's are approximate.
NOTE W The two easternmost tails are probably the edges of one very broad, fan-shaped dust tail, as even 10x50 binoculars showed material between them. The tail at PA 340 deg. was clearly an ion tail and showed a pronounced broadening at the end.
NOTE X The longest side of the fan is the ion tail (5.2 deg.), the other side (dust tail) is 4.2 deg.
NOTE Y Straight tail at PA 340. Curved dust tail at PA 5.
NOTE Z 4.3 and 3.9. Tail not visible? Activity in coma (220x35) reflector.
NOTE a Gas tail at PA 342. Midpoints on dust tail: 1.9 deg. at PA 11, 4.5 deg. at PA 7. Suspected end of dust tail: 6.1 deg. at PA 14. Type III [sic] tail at PA 71.
NOTE b Leading edge of dust fan: 4.2 deg. at PA 6. Trailing edge of dust fan: 4.0 deg. at PA 53.
NOTE c Comparison stars (3.2, 4.0). Type I tail 1.0 deg. at PA 7. Type II tail 2.0 deg. long, PA 23 at 1.0 deg. distance, PA measured at middle of tail. Type III [sic] tail 1.1 deg. long, PA 115 at 1.1 deg. distance, distinct leading edge measured.

DATE: 11 APR 1986

NOTE d Comparison stars (3.2, 4.0). Tail measurements clouded out.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.049 | 831091 | | 0.125 | R | 6 | 44 | | | 4 | Guthier,O | A |
| 11.188 | 831092 | | 0.30 | N | 5.7 | 70,300 | 240 | | 1 | Pizzi,R | B |
| 11.555 | 831093 | 2.5 | 0.050 | B | | 10 | 1 | | | Tregaskis,T.B | C |
| 11.661 | 831094 | 2 | 0.065 | B | | 12 | 16 | 6.0 | 12 | Foulkes,M | D |
| 11.840 | 831095 | 4 | 0.08 | B | | 11 | | 5.5 | 1 | Fleet,R.W | E |
| 11.869 | 831096 | 1.36 | 0.12 | C | 10 | 40 | 256 | 6 | 1 | Bernabeu,M | F |
| 11.880 | 831097 | 1.28 | 0.12 | C | 10 | 40 | 75 | 4.5 | 6 | Cifuentes,E | G |

NOTE A (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B We began observing Halley on the 11th at 0230 UT with a power of 70x, and we soon noticed an anomaly in the nuclear region. We increased the power to obtain a better resolution so we switched to 300x with an Erfle eyepiece. The night was spectacularly clear and the comet stood high in the sky, due to our southerly latitude of -32 deg. 57 min. What we observed was, in our opinion, a small secondary nucleus, very close to the principal one, almost touching each other like a partially resolved binary star. This pattern was independently observed by five staff members, and some of us saw even two anomalous nuclei. To verify that these features weren't stars we observed again 4 hours later at 0630 UT and the appearance we saw then was rather similar to the earlier one, albeit looser. The features were observed as minute globules, a little fainter than the principal nucleus. Observation made by Cristo Rey College Astronomical Observatory staff and Rogelio Pizzi. (Listing data inferred from written text. No drawing submitted. Ed.)
NOTE C Drawn from memory on the following morning because of cloud. Limiting magnitude approximately mag. 10. Scale approximate.
NOTE D Narrow tail at PA 340, length 5.0 deg. Tail at PA 355 to 15, length 2 deg. 20 min. Fan tail at PA 15 to 85, length 1 deg. Coma diameter 20' DC 5. Bright central spot offset to PA 260. Very fine bright but very narrow curved tail extended towards Eta Cen. Shorter and slightly fainter tail extended from PA 355-15. These two tails were quite separate. Extending following from the central tail was a fainter fan tail out to PA 85. Span of tails >90 deg.! The appearence of the comet made the journey from Alice well worth it. It had rained all day in Alice(!!). But weather reports indicated that the edge of the rain lay just to the south. By driving south, we managed to obtain clear skies. One vehicle in our party became stuck in the sand but was dug out. The clarity of the air was excellent. Canopus was seen setting right on the horizon. Similary, Achernar was seen rising very close to the horizon.
NOTE E Gas tail at PA 342. Dust tail end point at PA 14. Type III [sic] at PA 71. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F Coma 23 arc min. Tail 40 min. PA 0.
NOTE G Tail 45', PA 0.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.003 | 851655 | 0.135 | 2.8 | | 15.2 x10.2 | 10.00 | Ektachrome | 1600/ | N | M | 497/P | 1 | Stolzen,P | A |
| 11.009 | 851656 | 0.225 | 1.7 | 0.139 | 9.1 x 6.1 | 20.00 | Kodak 2415 | | Y | O | 16/P | 1 | Farroni,G | |
| 11.074 | 851657 | 0.500 | 3.5 | | 4.1 x 2.7 | 30.00 | Kodak 2415 | | Y | | 26/P | 4 | Guthier,O | B |
| 11.085 | 851658 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Ektachrome | 1600/ | N | M | 500/P | 1 | Stolzen,P | A |
| 11.097 | 851659 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 10.00 | Kodak 2415 | | Y | | 122/P | 3 | Koch,B | C |
| 11.098 | 851660 | 0.500 | 3.5 | | 4.1 x 2.7 | 15.00 | Kodak 2415 | | Y | | 27/P | 4 | Guthier,O | B |
| 11.110 | 851661 | 0.600 | 8 | | 3.4 x 2.3 | 16.00 | Polaroid 612 | | N | X | 3/P | 5 | Carragan,W | D |
| 11.116 | 851662 | 0.050 | 2.8 | | 39.6 x27.0 | 15.00 | Kodak 2415 | | Y | T | 4/N | 1 | Pedersen,V.T | E |
| 11.132 | 851663 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 16/C | 3 | Tarnutzer,A | |
| 11.141 | 851664 | 0.200 | 4 | | 10.3 x 6.9 | 6.00 | Konica | 1600/ | N | X | 5/P | 5 | Carragan,J | F |
| 11.147 | 851665 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 17/C | 3 | Tarnutzer,A | |
| 11.155 | 851666 | 0.050 | 2.8 | | 39.6 x27.0 | 30.00 | Kodak 2415 | | Y | T | 5/N | 1 | Pedersen,V.T | G |
| 11.159 | 851667 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 18/C | 3 | Tarnutzer,A | |
| 11.162 | 851668 | 0.050 | 2.8 | | 39.6 x27.0 | 5.50 | Konica | 1600/ | N | X | 7/P | 5 | Carragan,J | F |
| 11.169 | 851669 | 1.200 | 6 | 0.200 | 1.7 x 1.1 | 17.00 | Kodak 2415 | | Y | | 13/P | 1 | Association M31 | |
| 11.170 | 851670 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 19/C | 3 | Tarnutzer,A | |
| 11.180 | 851671 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 20/C | 3 | Tarnutzer,A | |
| 11.192 | 851672 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 21/C | 3 | Tarnutzer,A | |
| 11.199 | 851673 | 0.058 | 2 | | 34.5 x23.4 | 10.00 | Kodak 2415 | | Y | X | 22/C | 3 | Tarnutzer,A | |
| 11.216 | 851674 | 0.050 | 4 | | 39.6 x27.0 | 6.08 | Kodak Tri-X | 400/27 | N | X | 011/P | | Castineiras,R.S.J | H |
| 11.222 | 851675 | 0.050 | 2 | | | 3.50 | Kodak Tri-X | 400/ | N | | 2/P | 1 | Falsarella,N | |
| 11.251 | 851676 | 0.050 | 2 | | | 3.50 | Kodak Tri-X | 400/ | N | | 1/P | 1 | Falsarella,N | |
| 11.261 | 851677 | 0.050 | 2 | | | 3.00 | Kodak Tri-X | 400/ | N | | 3/P | 1 | Falsarella,N | |
| 11.285 | 851678 | 1.80 | 6 | 0.30 | 1.1 x 0.8 | 0.17 | Kodak Tri-X | 400/27 | N | X | 13/P | | Castineiras,R.S.J | H |
| 11.287 | 851679 | 1.80 | 6 | 0.30 | 1.1 x 0.8 | 0.50 | Kodak Tri-X | 400/27 | N | X | 14/P | | Castineiras,R.S.J | H |
| 11.333 | 851680 | 0.085 | 2.8 | | 23.9 x16.1 | 30.00 | 103a-E | | N | C | 4/S | 1 | Binnewies,S | I |
| 11.333 | 851681 | 0.085 | 4.0 | | 23.9 x16.1 | 30.00 | 103a-O | | N | C | 11/S | 1 | Binnewies,S | |
| 11.333 | 851682 | 0.085 | 4.0 | | 23.9 x16.1 | 30.00 | 103a-G | | N | C | 12/S | 1 | Binnewies,S | J |
| 11.365 | 851683 | 0.085 | 4.0 | | 23.9 x16.1 | 60.00 | 103a-G | | N | C | 13/S | 1 | Binnewies,S | J |
| 11.406 | 851684 | 0.050 | 2.8 | | 39.6 x27.0 | 10.00 | 3M 1000 | 1000/ | N | O | 6/S | 1 | Haagh,N | K |
| 11.422 | 851685 | 0.200 | 3.5 | | 10.3 x 6.9 | 10.00 | 3M 1000 | 1000/ | N | O | 9/S | 1 | Haagh,N | |
| 11.482 | 851686 | 0.100 | 2.8 | | 20.4 x13.7 | 15.00 | Kodak 2415 | | Y | O | 64/S | 6 | Garradd,G | L |
| 11.502 | 851687 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 2415 | | Y | O | 65/S | 6 | Garradd,G | L |
| 11.514 | 851688 | 0.180 | 2.8 | | 11.4 x 7.6 | 15.00 | Kodak 2415 | | Y | O | 66/S | 6 | Garradd,G | L |
| 11.756 | 851689 | 0.050 | 1.8 | | 39.6 x27.0 | 2.50 | Kodak VR | 1000/ | N | C | 7/P | 3 | Vincent,F | M |
| 11.766 | 851690 | 0.180 | 2.8 | | 11.4 x 7.6 | 20.00 | Kodak 103a-O | | N | O | 14/C | 5 | Cimatti,A | |
| 11.795 | 851691 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 10.00 | Kodak 2415 | | Y | O | 001/T | 2 | Battaini,P | |
| 11.822 | 851692 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 070/P | 1 | Sternwarte Frankfurt | N |
| 11.826 | 851693 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 10.00 | Kodak 2415 | | Y | O | 002/T | 2 | Battaini,P | |
| 11.830 | 851694 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 15/C | 5 | Cimatti,A | |
| 11.840 | 851695 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 071/P | 1 | Sternwarte Frankfurt | O |
| 11.851 | 851696 | 0.200 | 2 | | 10.3 x 6.9 | 10.00 | Kodak 103a-E | | N | S | 19/P | 2 | Dragesco,J | |
| 11.861 | 851697 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 072/P | 1 | Sternwarte Frankfurt | P |
| 11.885 | 851698 | 0.225 | 1.7 | 0.139 | 9.1 x 6.1 | 20.00 | Kodak 2415 | | Y | O | 17/P | 1 | Farroni,G | |
| 11.887 | 851699 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 20.00 | Kodak 2415 | | Y | T | 011/P | 1 | Berge,P.M | Q |
| 11.901 | 851700 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 16/C | 5 | Cimatti,A | |
| 11.922 | 851701 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 17/C | 5 | Cimatti,A | |

NOTE A (Observer's image identifier is preceded by prefix 2. Ed.)
NOTE B Photograph made by F. Wilken and O. Guthier.
NOTE C (Observer's image identifier preceded by prefix 100/. Ed.)
NOTE D Film ISO 20000. Photograph made by Julie and William Carragan.
NOTE E Wratten 2B and 47A filters used.
NOTE F Photograph made by Jerry Rasmussen and Julie Carragan.
NOTE G Wratten 21 filter used.
NOTE H City lights.
NOTE I OG 590 orange, 3 mm thick filter used.
NOTE J GG 495 yellow, 3 mm thick filter used.
NOTE K UV #1A filter used.
NOTE L Temperature for hypersensitization 60-65 deg. C.
NOTE M Some patchy cloud.
NOTE N Photograph made by H. Neumann. Push processed to 2000 ISO.
NOTE O Photograph made by H. Templin. Push processed to 2000 ISO.
NOTE P Photograph made by Y. Walter. Push processed to 2000 ISO.
NOTE Q Photograph made by G. Mahoux and P.M. Berge.

DATE: 11 APR 1986 DATE: 11 APR 1986

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.186 | 870138 | 600G-O | CL | 0.135 | 1.9 | | 30.00 | Kodak 2415 | | N | C | 518/S | 5 | Buchanan,W.T | A |

NOTE A Comet Halley visible to naked eye. (Observer's image identifier is E-125-18. Ed.)

DATE: 12 APR 1986

DATE: 12 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.01 | 818648 | 4.0 | M | 3A | 20 | 6 | 4.0 | 350 | 0.05 | B | | 7 | | | | Keszthelyi,S | A |
| 12.042 | 818649 | 2.6 | B | 5B | 31 | 6 | 2.2 | 10 | | EY | | | 6.0 | Y | 7 | Bottger,B | |
| 12.063 | 818650 | | | | 17.8 | 6 | 3.2 | 30 | 0.30 | N | 8.5 | 102 | 5.9 | Y | 1 | Begbie,M.J.R | B |
| 12.083 | 818651 | | | 5B | 11 | 5 | 2.7 | | 0.03 | B | | 8 | 6.5 | Y | 3 | Hasubick,W | C |
| 12.09 | 818652 | 2.7 | M | IHW | 37 | 6 | | | | EY | | | 6.0 | Y | 5 | Granslo,B.H | D |
| 12.10 | 818653 | 2.5 | S | DCS 10 | 20 | 6 | 3.0 | 350 | 0.080 | B | | 15 | 7 | Y | 2 | Wils,P | |
| 12.11 | 818654 | | | | 38 | 7 | 2.7 | 6 | 0.035 | B | | 7 | 6.0 | Y | 5 | Granslo,B.H | D |
| 12.194 | 818655 | 4.3 | B | 5B | 7 | 5 | | | 0.06 | R | 8 | 15 | 4.5 | Y | 2 | Schambeck,C.M | |
| 12.208 | 818656 | 3.7 | B | 160,159 | | | | | 0.05 | B | | 7 | 4.8C | Y | 2 | Lupianez,B | |
| 12.285 | 818657 | 4.3 | B | 159 | | | | | 0.080 | B | | 20 | 4.5 | Y | | Smith,D | E |
| 12.29 | 818658 | 3.1 | S | 5B | 60 | 7 | 2 | 60 | 0.108 | N | 4 | 17 | 6.5 | Y | 2 | Harrington,P | |
| 12.29 | 818659 | 4 : | B | 5B | 9 | 7 | | | 0.335 | N | 4.5 | 56 | 2.3 | Y | | Kronk,G | F |
| 12.30 | 818660 | 3.1 | B | 5B | | | | | | EY | | | 6.0 | | 21 | Shanklin,J.D | |
| 12.358 | 818661 | 3.9 | B | 159 | 36 | 2 | | | 0.05 | B | | 7 | 4.0 | | 1 | Lairet,R | |
| 12.39 | 818662 | | | | | | 2.5 | | 0.08 | B | | 20 | | N | 16 | Edberg,S.J | G |
| 12.40 | 818663 | | | | | | 1.5 | 359 | | EY | | | 6.0 | Y | 6 | Keen,R | H |
| 12.43 | 818664 | 3.7 | B | 5B | | 2 | | | 0.050 | B | | 7 | 4.8C | Y | 1 | Matchett,V | |
| 12.437 | 818665 | 3.4 | S | 5B | 10 | 6 | | | 0.080 | B | | 20 | | Y | 1 | Batza,H | I |
| 12.4653 | 818666 | 2.8 | M | 5B | 40 | 6 | 10.88 | 337 | 0.05 | B | | 7 | 6.5 | Y | 17 | Cook,A.J | J |
| 12.48 | 818667 | 3.0 | M | 5B | | 5 | | | 0.050 | R | | 8 | 7.0 | Y | 36 | Morris,C.S | |
| 12.481 | 818668 | 4.1 | B | 159 | | 3 | | | 0.050 | B | | 20 | 5.0 | Y | 1 | Castrillon,M.E | |
| 12.49 | 818669 | | | | 19 | 5 | 5.3 | 335 | 0.050 | B | | 7 | 6.5 | Y | 6 | Bortle,J.E | K |
| 12.49 | 818670 | 3.0 | B | 5B | 29 | 5 | 3 | | | EY | | | 6.5 | Y | 6 | Bortle,J.E | L |
| 12.51 | 818671 | 3.3 | | 5B | 20 | 5 | | | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 12.52 | 818672 | 4.0 | B | IHW BAA | | 7 | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 12.52 | 818673 | | | | | 4 | 7.5 | 320 | 0.050 | B | | 10 | 7.0 | Y | 36 | Morris,C.S | M |
| 12.52 | 818674 | 2.5 | B | 5B | | | | | | EY | | | 6.9 | Y | | Pearce,A | |
| 12.521 | 818675 | 4.3 | B | 5B | | 3 | 0.33 | 345 | 0.108 | N | 4 | 16 | 6 | Y | 2 | Turner,N | N |
| 12.54 | 818676 | 3.3 | M | IHW BAA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 12.54 | 818677 | 3.2 | S | IHW BAA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 12.54 | 818678 | | | | | | 13 | 320 | | EY | | | 7.0 | Y | 36 | Morris,C.S | O |
| 12.552 | 818679 | 3.2 | S | 140,160 | 15 | | 0.5 | 0 | | EY | | | 6.1 | Y | 13 | Foulkes,M | |
| 12.57 | 818680 | 3.1 | B | IHW BAA | | | | | | EY | | | | | | Green,D.W.E | |
| 12.576 | 818681 | 3.6 | | 5B | 45 | 2 | 1 | | | EY | | | 6 | Y | 1 | Tregaskis,T.B | P |
| 12.58 | 818682 | 2.3 | | 5B | | 7 | 8.0 | | | EY | | | 6.5 | Y | 1 | Lovejoy,T | Q |
| 12.58 | 818683 | 3.2 | | 5B | 20 | 6 | | | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 12.583 | 818684 | 2.7 | S | 5B | 45 | 4 | 5 | | 0.07 | B | | 10 | 6.0 | Y | 2 | Kobayashi,J | R |
| 12.59 | 818685 | 2.5 | B | 5B | | | | | | EY | | | 6.3 | Y | | Clark,M.L | |
| 12.594 | 818686 | 4.4 | S | 5B | 10 | 5 | 1 | 10 | 0.080 | B | | 11 | | Y | 8 | Pryal,J | S |
| 12.60 | 818687 | 3.4 | S | 5B | 39 | 7 | 2.2 | | 0.25 | N | 5 | 38 | 6.3 | Y | | Clark,M.L | T |
| 12.630 | 818688 | 4.0 | M | 5B | 10 | 5 | 0.17 | 310 | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | |
| 12.63 | 818689 | 4.3 | S | AAVSO | 10 | 4 | | | 0.07 | B | | 10 | 3.0 | Y | 1 | Hayashi,A | |
| 12.63 | 818690 | 2.5 | M | 5B | 20 | 6 | | | 0.08 | B | | 20 | 5.0 | Y | 1 | Oka,A | |
| 12.63 | 818691 | 3.8 | S | 5B | 15 | 7 | | | 0.07 | B | | 10 | 5.0 | Y | 2 | Yasuki,M | |
| 12.639 | 818692 | 3.5 | M | 5B | 18 | 5 | | | 0.030 | B | | 8 | 4.5C | Y | 1 | Kato,T | |
| 12.642 | 818693 | 4.2 | S | 5A, 5B | 4.5 | 4 | 0.50 | 270 | 0.15 | R | 15 | 56 | 4.0 | Y | 9 | Ichikawa,K | |
| 12.663 | 818694 | 3.4 | B | 5B | 40 | | 4 | | 0.05 | B | | 7 | 6.0 | Y | 2 | Hayashi,H | |
| 12.667 | 818695 | 3.5 | B | 5B | | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 12.67 | 818696 | 3.5 | M | 5B | | | 6.0 | | 0.05 | B | | 7 | 5.5 | Y | 3 | Suzuki,K | U |
| 12.68 | 818697 | 3.5 | S | | 15 | 5 | | | 0.08 | B | | 11 | 5.0 | Y | 1 | Akita,I | |
| 12.69 | 818698 | 3.4 | M | SAO | 30 | 5 | 3.2 | 350 | 0.065 | R | 8 | 16 | 5.5 | Y | 9 | Nakamura,A | V |
| 12.73 | 818699 | 3.3 | S | 5B, 140 | 27 | | | | 0.023 | B | | 3 | | Y | | Jones,A | |
| 12.733 | 818700 | 4.5 | B | | 15 | 5 | | | 0.100 | N | 12 | 40 | 4.4 | Y | 1 | Bagla,J.S | W |
| 12.77 | 818701 | 2.5 | S | 5B | | 4 | | | 0.018 | B | | 2 | 7 | Y | 15 | Bouma,R.J | |
| 12.774 | 818702 | 4.0 | M | 5B | 30 | 5 | 4.2 | 341 | 0.08 | B | | 11 | 5.4 | Y | 1 | Fleet,R.W | X |
| 12.78 | 818703 | 2.7 | M | 5B | 28 | 5 | 3 | 345 | 0.05 | B | | 10 | 7 | Y | 15 | Bouma,R.J | Y |
| 12.785 | 818704 | 3.3 | M | 5B | 50 | 3 | 5.6 | 30 | | EY | | | 5.4 | Y | 1 | Fleet,R.W | Z |
| 12.833 | 818705 | 3.0 | M | 5B | 50 | 7 | 3.6 | | 0.05 | B | | 10 | 6.0 | Y | 12 | Melandri,F | a |
| 12.833 | 818706 | 3.6 | M | 5B | 26 | 7 | 1.0 | | 0.12 | C | 10 | 40 | 7 | Y | 1 | Bernabeu,M | b |
| 12.833 | 818707 | 3.6 | B | 5B | 30 | 5 | | | 0.105 | R | | 86 | 5.7 | Y | 2 | Vincent,J | c |
| 12.86 | 818708 | 2.8 | M | IHW BAA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 12.86 | 818709 | 3.0 | S | IHW BAA | 28 | 6 | | | 0.035 | B | | 7 | | | | Green,D.W.E | d |
| 12.861 | 818710 | | B | 5B | 32 28 | | 2.9 | 352 | 0.05 | B | | 10 | 6.3 | Y | 1 | Abbott,J | e |
| 12.864 | 818711 | 3.8 | M | 5B | 18.6 | 7 | 1.50 | | 0.12 | C | 10 | 40 | 5.0 | Y | 6 | Cifuentes,E | f |
| 12.905 | 818712 | 3.0 | S | 140 | 36 | | 2.5 | 35 | | EY | | | 6.7 | Y | 7 | Haver,R | g |
| 12.910 | 818713 | 3.2 | S | 140 | 32 | 3 | 1.53 | 345 | 0.05 | B | | 7 | 6.7 | Y | 7 | Haver,R | h |
| 12.93 | 818714 | 3.2 | B | 5B | | | | | | EY | | | 6.3 | | 22 | Shanklin,J.D | |
| 12.946 | 818715 | 3.7 | M | 5B | | | | | 0.035 | B | | 9 | 5.4 | Y | 1 | Begbie,M.J.R | |
| 12.969 | 818716 | | | | 15.4 | 6 | 2.5 | 20 | 0.30 | N | 8.5 | 102 | 5.4 | Y | 1 | Begbie,M.J.R | i |
| 12.975 | 818717 | 4.1 | M | 5B | | | | | 0.04 | B | | 12 | 6.1 | Y | 3 | Henshaw,C | |

NOTE A 6 mag. nucleus.
NOTE B Tail measurement refers to dust tail only.
NOTE C Coma diameter approximate. PA 0-45. Tail II - gas.
NOTE D Possible nucleus seen in 0.203 m Schmidt-Cass. at 222x at mag. 12.5: at 0203 UT.
NOTE E Comet elevation 6 deg.
NOTE F Tail PA 315 deg. to 0 deg. Coma diameter approximate. Comet only 5 deg. high.
NOTE G Comet skimming mountain horizon at 10000 ft. Tail length approximate.
NOTE H Observation from Fiji.
NOTE I Tail not readily apparent. (Observer gave limit as 10.5. Ed.)
NOTE J Tail 1 at PA 337. Tail 2 greatest length at PA 38; tail 2 west boundary 3.67 deg. at PA 3; south boundary 4.48 deg at PA 83.
NOTE K Strong change in tail's appearance! Large, contorted gas tail, extremely faint, traceable 5.3 deg. in PA 335. It is clearly separated from large fan-shaped, curving tail to the east. Dust tail is strongly curved to the east, its leading edge also PA 335 but curving away eastward very quickly. Broad, bright "center" of dust tail at PA 10 and trailing edge is along PA 85 and traceable 5.5 deg.
NOTE L Tail length = 3+.
NOTE M Additional tail data: 7.5 degrees in PA 72. Multiple tails define the shape of the fan tail. Tail in PA 320 was the gas tail. Tails in PAs 20 and 30 were dust plumes within the fan, which were curved toward the east. Comet was very near 3.5 mag. star.
NOTE N Coma and tail confused.
NOTE O Multiple tails define the shape of the fan tail. Tail in PA 320 was the gas tail. Tail in PA 30 was a dust plume which was curved toward the east.
NOTE P Wide, faint, tenuous tail. Length approximate.
NOTE Q Coma diameter through 15x80 binoculars: 40'.
NOTE R Tail PA 0-90 deg.
NOTE S Fading fast, short broad fan tail. (Observer gave limit as 9. Ed.)
NOTE T PA of 2.2 deg. tail is 55-31.
NOTE U Guam tour. 6.0 deg. tail is type I, 4.0 deg. tail is type II.
NOTE V 1.5 deg. tail PA 350 to 60.
NOTE W Tail not visible.

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NOTE X Gas tail at PA 341. Midpoint on dust tail (1): 1.7 deg. at PA 7. End point of dust tail (1): 3.1 deg. at PA 6. Midpoint on dust tail (2): 3.0 deg. at PA 39. End point of dust tail (2): 5.6 deg. at PA 41. Type III [sic] tail: 2.9 deg. at PA 79.
NOTE Y Gas tail, faint, at PA 345. Broad dust fan includes other tail listings.
NOTE Z Dust tail at PA 30. Type III [sic] tail at PA 84.
NOTE a The angle of the fan is about 80 deg. Tail length is for ion tail.
NOTE b (Observer lists two PA values: 333 and 27. Ed.)
NOTE c Coma smaller but brighter.
NOTE d Coma diameter approximate.
NOTE e Central cond. only, mag. 4.3. Comparison stars (3.9, 4.4). Type I tail 2.9 deg. at PA 352. Type II tail 3.6 deg. long, PA 20 at 1.3 deg. distance, PA measurment at middle of tail. Type II tail 2.0 deg. long, PA 49 at 1.0 deg. distance, very weak feature. Type III tail 2.5 deg. long at PA 74, very distinct and sharp-edged, leading edge measured.
NOTE f PA 358-359.
NOTE g Center fan-shaped tail.
NOTE h PA 345 is west tail; see drawing. West corner fan-shaped tail at PA 13, 3.30 deg. long; see drawing. PA 36 is center fan-shaped tail; see drawing. East corner fan-shaped tail at PA 59, 3.40 deg. long; see drawing. PA 81 is east tail; see drawing.
NOTE i Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.146 | 831098 | 0.25 | 0.20 | N | 8 | 120 | 30 | 6 | 1 | Vargas B.,A.G | A |
| 12.271 | 831099 | 0.53 | 0.15 | N | 4 | 68 | 60 | 3.5 | 8 | Levy,D.H | B |
| 12.481 | 831100 | 3 | 0.050 | B | | 7 | 45 | 6.5 | 17 | Cook,A.J | |
| 12.561 | 831101 | 1.35 | 0.065 | B | | 12 | 14 | 6.1 | 13 | Foulkes,M | C |
| 12.757 | 831102 | | 0.076 | N | 7.9 | 60 | | | 1 | Freydank,E | D |
| 12.774 | 831103 | 4 | 0.08 | B | | 11 | | 5.4 | 1 | Fleet,R.W | E |
| 12.844 | 831104 | 1.36 | 0.12 | C | 10 | 40 | 110 | 7 | 1 | Bernabeu,M | F |
| 12.844 | 831105 | 2.0 | 0.050 | B | | 10 | 30 | 6.3 | 1 | Abbott,J | G |
| 12.865 | 831106 | 1 | 0.12 | C | 10 | 40 | 90 | 5.0 | 6 | Cifuentes,E | H |
| 12.910 | 831107 | 3 | 0.050 | B | | 7 | 10 | 6.7 | 7 | Haver,R | I |
| 12.997 | 831108 | | 0.30 | N | 8.5 | 102,212,425 | 22 | 5.4 | 1 | Begbie,M.J.R | J |

NOTE A The coma appear very regular and diffuse DC 3 approx. Coma diameter 13' approx. The coma is very regular around the nucleus. The central coma is very diffuse an there is no a remarkable tail around coma. [sic]
NOTE B Scale is approximate.
NOTE C Preceding edge of tail (slightly more intense the rest of tail. Except for spike from coma.) at PA 330, length 1 deg 20 min. Spike (from coma) at PA 20, length 20'. Following edge of tail (extended beyond main fan) at PA 80, length 2 deg. Distinct circular coma (DC 6) with brighter spot in centre. Extending from the coma was a short spike-like feature. Coma diameter 20'. The tail itself was a broad fan. Excluding the edges, it appeared to have 3 layers of brightness. The preceding edge was slightly more intense and straight. The following edge, although not as intense as the preceding edge, was brighter than the rest of the fan and extended beyond the general fan tail - a fine sight.
NOTE D DC 7. Haze and clouds on horizon rising. (Duration not indicated. Time of observation is assumed to be start time. Translated by IHW staff. Ed.)
NOTE E Gas tail at PA 341. Dust tail end point at PA 6. Dust tail end point at PA 41. Type III [sic] at PA 79. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F Coma 26 arc min. Tail 1 deg. PA 333-27.
NOTE G Object at core of central condensation (c.c.) was stellar. C.c. approximately 4 arc min. Type I tail PA 352, approximately 172x6 arc min. Type II tail at 50 arc min. from c.c. PA between 351 and 37, approximate width 35 arc min.; at 80 arc min. from c.c. PA between 358 and 39, approximate width 50 arc min.; 2 deg. from c.c. PA between 7 and 41, approximate width 80 arc min.; at 2 deg. 40 arc min. from c.c. PA between 13 and 42, approximate width 90 arc min.; at 3 deg. 36 arc min.; from c.c. PA between 19 and 45, approximate width 1 deg. 46 arc min. Leading sector of type III tail [sic] at 16 arc min. from c.c. PA 74, approximate width 16 arc min.; at 2 deg. 44 arc min. from c.c. PA 74, approximate width 28 arc min. Type II, III [sic] PA's measured at defined distances from the central condensation, i.e., 4 @ 2 deg. from central condensation. Semi latus rectum east 18 arc min. Semi latus rectum west 14 arc min. Vertex distance 13 arc min. Possible additional narrow, curved dust tail segment was suspected between the type I and type II tails. All dimensions and PA's derived from AAVSO chart plot. There was a stellar object at the core of the central condensation (c.c.). The c.c. was well defined, appearing quite planetary and offset to the west forward of centre of the 32x28 arc min. coma. The type I tail was nearly 3 deg. in length and becoming very pale in the latter half; fainter than the type III [sic] tail at comparable distance from the c.c. The dominant type II tail was comparable with the coma brightness until the split with the type I tail (62 arc min. from the c.c.). Thereafter curving more rapidly and becoming faint. Total length some 3.5 deg. The leading sector of type III tail [sic] widening wedge some 2.5 deg. in length. Sharply defined leading edge, itself forming a 'spike' tail. The type III tail [sic] appeared at least as bright as the type I tail at comparable distance from the c.c. and similar in brightness to the mid-section of the type II tail. A possible separate dust tail segment lay between the type II and type III tail as defined but was of very low surface brightness. Total angle subtended by all tails amounted to 82 deg.
NOTE H Tail 1 deg. 30 arc min. at PA 358.
NOTE I West tail at PA 345; west corner, fan-shaped tail at PA 13; center fan-shaped tail at PA 36; east corner, fan-shaped tail at PA 59; east tail at PA 81.
NOTE J Fan at PA 180; gas tail at PA 355. Vertex distance 6 arc min.; semi latus rectums P1 = 7.8 arc min., P2 = 6.6 arc min. Elliptical inner coma major axis 8.1 arc min., minor axis 5.0 arc min. The central condensation at 425x was distinctly pear shaped. At the centre of this condensation was a 12.5 magnitude object of stellar appearance which moved together with the rest of the central condensation. The object was also noted on the night of the 10th of April. The fan appeared to 'trail' behind the condensation as it moved against the stellar background. (Two drawings are included in this listing: one made at magnifications of 102 and 212 and scale 0.30 arc min./mm and one made at a magnification of 425 and scale 0.03 arc min./mm. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.010 | 851702 | 0.200 | 2 | | 10.3 x 6.9 | 10.00 | Kodak 103a-E | | N | S | 20/P | 2 | Dragesco,J | |
| 12.016 | 851703 | 0.050 | 1.8 | | 39.6 x27.0 | 15.00 | Kodak Tri-X | 400/ | N | X | 2/P | 12 | Melandri,F | |
| 12.032 | 851704 | 0.085 | 2.0 | | 23.9 x16.1 | 12.00 | Ektachr.P800 | 800/ | N | O | 55/P | 8 | Bottger,B | A |
| 12.033 | 851705 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 5.00 | Kodak 2415 | | Y | | 1/P | 4 | Jager,M | |
| 12.037 | 851706 | 0.200 | 2 | | 10.3 x 6.9 | 13.00 | Kodak 103a-E | | N | S | 21/P | 2 | Dragesco,J | |
| 12.054 | 851707 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 2/P | 4 | Jager,M | B |
| 12.097 | 851708 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 3/P | 4 | Jager,M | |
| 12.189 | 851709 | 0.050 | 2 | | | 3.50 | Kodak Tri-X | 400/ | N | | 4/P | 1 | Falsarella,N | |
| 12.208 | 851710 | 0.058 | 1.4 | | 34.5 x23.4 | 0.42 | Fujicolor HR | 1600/ | N | X | 12/P | 3 | Rueda,N | |
| 12.218 | 851711 | 0.050 | 4 | | 39.6 x27.0 | 3.00 | Kodak Tri-X | 400/27 | N | X | 15/P | | Castineiras,R.S.J | C |
| 12.275 | 851712 | 0.050 | 2 | | | 3.00 | Kodak Tri-X | 400/ | N | | 5/P | 1 | Falsarella,N | |
| 12.313 | 851713 | 0.050 | 1.4 | | 39.6 x27.0 | 0.33 | Kodak Tri-X | 400/27 | N | X | 25/P | 1 | Garcia,A | |
| 12.403 | 851714 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 20.00 | Kodak Tri-X | 400/ | N | X | 009/P | 1 | Rosenthal,D | D |
| 12.534 | 851715 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 15.00 | Kodak IIa-D | | N | | 033/P | 7 | Royer,R | E |
| 12.544 | 851716 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 82.00 | | | N | | 7/S | 7 | Royer,R | F |
| 12.565 | 851717 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 20.00 | Kodak 098 | | N | | 032/P | 7 | Royer,R | |
| 12.565 | 851718 | 0.105 | 2.5 | | 19.5 x13.0 | 20.00 | Fujichrome | 1600/ | N | | 6/S | 7 | Royer,R | |
| 12.774 | 851719 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 18/C | 5 | Cimatti,A | |
| 12.783 | 851720 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 19/C | 5 | Cimatti,A | |
| 12.799 | 851721 | 0.050 | 1.8 | | 39.6 x27.0 | 2.00 | Kodak VR | 1000/ | N | C | 8/P | 4 | Vincent,F | G |
| 12.810 | 851722 | 0.080 | 4.5 | | 25.4 x17.1 | 16.00 | Agfa 1000 RS | 1000/ | N | T | 510/S | 2 | Jones,B.W | H |
| 12.867 | 851723 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 20/C | 5 | Cimatti,A | |
| 12.875 | 851724 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 21/C | 5 | Cimatti,A | |
| 12.903 | 851725 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 086/P | 1 | Sternwarte Frankfurt | I |
| 12.909 | 851726 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 22/C | 5 | Cimatti,A | |
| 12.910 | 851727 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 7/P | 2 | Jones,B.W | J |

DATE: 12 APR 1986

DATE: 12 APR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.923 | 851728 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 23/C | 5 | Cimatti,A | |
| 12.924 | 851729 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 087/P | 1 | Sternwarte Frankfurt | K |
| 12.925 | 851730 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 8/P | 2 | Jones,B.W | L |
| 12.939 | 851731 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 24/C | 5 | Cimatti,A | |
| 12.939 | 851732 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 9/P | 2 | Jones,B.W | M |
| 12.952 | 851733 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 12/P | 2 | Jones,B.W | J |
| 12.965 | 851734 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 25/C | 5 | Cimatti,A | |

NOTE A With Jager (Austria). Photograph made by J. Linder and B. Bottger.
NOTE B Magnitude 2.8; coma greater than 1 deg,; tails: type I greater than 5 deg. at PA 338; type II 3 deg. at PA 0; type II 1.5 deg. at PA 82.
NOTE C City lights.
NOTE D Instrument is Schmidt camera.
NOTE E Visual plate. Wr. 4 filter used.
NOTE F (Tricolor image constructed from three filtered black and white images. Duration indicates period when all three individual images were obtained. Some of the individual images are listed separately. Ed.)
NOTE G Taken during thunderstorm!
NOTE H (Observer's image identifier is Agfa/5/10. Ed.)
NOTE I Photograph made by C. Templin. Push processed to 2000 ISO.
NOTE J Distant thunderstorm in south and east. Heavy dew. Some haze or thin cloud. Film roll Tri-X/7.
NOTE K Photograph made by Y. Walter. Push processed to 2000 ISO.
NOTE L Wratten 47A (blue) filter used. Distant thunderstorm in south and east. Heavy dew. Some haze or thin cloud. Film roll Tri-X/7.
NOTE M Wratten 21 (orange) filter used. Distant thunderstorm in south and east. Heavy dew. Some haze or thin cloud. Film roll Tri-X/7.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.148 | 870139 | 600G-O | CL | 0.135 | 1.9 | | 30.00 | Kodak 2415 | | Y | C | 420/S | 5 | Buchanan,W.T | A |

NOTE A Frame is second order violet-green. Cirrus clouds. (Observer's image identifier is E-124-20A. Ed.) Comet Halley visible to naked eye.

DATE: 13 APR 1986

DATE: 13 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.003 | 818718 | 3.2 | M | 5B | 60 | | 10 | | 0.05 | B | | 7 | 4.5 | N | 6 | Gallego,J | A |
| 13.066 | 818719 | | | | 8 | 5 | | | 0.09 | M | 11 | 56 | 4.0 | Y | 8 | Westlund,M | B |
| 13.07 | 818720 | 3.8 | M | 5B | | | | | 0.040 | B | | 7 | 4.0 | Y | 8 | Westlund,M | B |
| 13.104 | 818721 | 4.0 | B | 159 | | | | 13 | 0.05 | B | | 7 | 5.8 | | 5 | Benavides,A | |
| 13.106 | 818722 | 4.0 | M | 5B | 60 | | | | 0.05 | R | 11 | 30 | | N | 4 | Mendez,J | C |
| 13.12 | 818723 | 2.7 | S | DCS 11 | | | 1.0 | 0 | | EY | | | 5 C | Y | 4 | Wils,P | |
| 13.12 | 818724 | | B | | | | 5 | | 0.04 | B | | 7 | | | | Kiselev,N | |
| 13.139 | 818725 | 3.6 | B | 159 | 28 | 2 | 0.17 | | 0.05 | B | | 7 | 4.8 | | 5 | Lairet,R | |
| 13.167 | 818726 | 4.1 | B | 5B | 13 | 5 | | | 0.06 | R | 8 | 15 | 5.0 | Y | 2 | Schambeck,C.M | |
| 13.226 | 818727 | 3.2 | B | 159 | 23 | 5 | | 338 | 0.05 | B | | 20 | 3.5 | Y | 1 | da Silva,L.A.L | D |
| 13.238 | 818728 | 3.3 | B | 139 | 7 | 2 | 0.3 | | 0.06 | R | 12 | 56 | 5.3 | Y | 1 | Onofre D.,D | E |
| 13.240 | 818729 | 4.3 | B | 140 | | | | | 0.080 | B | | 20 | 4.5 | Y | | Smith,D | F |
| 13.25 | 818730 | 3.2 | B | 5B | | | | | | EY | | | 6.5 | | 24 | Shanklin,J.D | |
| 13.27 | 818731 | 3.2 | S | 5B | 60 | 7 | 2 | 60 | 0.108 | N | 4 | 17 | 6.5 | Y | 2 | Harrington,P | |
| 13.292 | 818732 | 4.0 | B | 159 | 24 | 2 | | | 0.05 | B | | 7 | 4.3 | | 1 | Lairet,R | |
| 13.344 | 818733 | 3.8 | B | 159 | 28 | 2 | | | 0.05 | B | | 7 | 4.4 | | 1 | Lairet,R | |
| 13.395 | 818734 | 3.5 | S | 5B | 10 | 6 | | | 0.080 | B | | 20 | | Y | 1 | Batza,H | G |
| 13.396 | 818735 | | B | 159 | 24 | 2 | | | 0.05 | B | | 7 | 4.0 | | 1 | Lairet,R | |
| 13.44 | 818736 | 2.6 | M | 5B | 22 | 4 | 2.5 | 354 | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | H |
| 13.45 | 818737 | 3.3 | S | 5B, 139 | | 5 | | | 0.023 | B | | 3 | | | | Jones,A | |
| 13.45 | 818738 | 4.0 | B | 5B | | 2 | | | 0.050 | B | | 7 | 4.4C | Y | 1 | Matchett,V | |
| 13.46 | 818739 | 2.5 | M | 5B | 40 | 5 | 2.0 | 330 | | EY | | 1 | 6.0 | Y | 6 | Keen,R | I |
| 13.472 | 818740 | | | | 23 | | 1.00 | 350 | 0.108 | N | 4 | 16 | 6.5 | Y | 2 | Turner,N | |
| 13.51 | 818741 | | | 5B | 24 | 5 | 2.2 | 345 | 0.050 | B | | 7 | | | | Bortle,J.E | J |
| 13.51 | 818742 | 3.0 | B | 5B | 29 | 4 | 6 | 50 | | EY | | | 7 | Y | 7 | Bortle,J.E | K |
| 13.54 | 818743 | 2.6 | S | 5B | | 4 | | | 0.018 | B | | 2 | 7 | Y | 14 | Bouma,R.J | |
| 13.54 | 818744 | 2.5 | | 5B | | | | | | EY | | | 7 | Y | 14 | Bouma,R.J | |
| 13.54 | 818745 | 2.7 | B | 5B | 55 | 4 | | | | EY | | | 5.6 | Y | | Pearce,A | |
| 13.542 | 818746 | | | 5B | 13 | | | | 0.10 | N | 3 | 24 | | | 1 | Tregaskis,T.B | L |
| 13.542 | 818747 | 3.9 | B | 5B | | 6 | 2 | | 0.050 | B | | 10 | | | 1 | Tregaskis,T.B | M |
| 13.551 | 818748 | 2.7 | S | 5B | 50 | 5 | 6 | | 0.07 | B | | 10 | 6.0 | Y | 2 | Kobayashi,J | N |
| 13.56 | 818749 | 3.4 | | 5B | 20 | 5 | | | 0.20 | SC | 10 | 77 | 6.5 | Y | 2 | Ward,A | |
| 13.57 | 818750 | 3.1 | B | IHW BAA | 14 | 5 | 4 | | | EY | | | | | | Green,D.W.E | O |
| 13.5729 | 818751 | 2.7 | M | 5B | 27 | 6 | 6.42 | 4 | 0.05 | B | | 7 | 6.5 | Y | 18 | Cook,A.J | P |
| 13.576 | 818752 | 3.7 | S | 139,159 | 15 | | 0.5 | 0 | | EY | | | 6.5 | Y | 14 | Foulkes,M | |
| 13.597 | 818753 | 2.2: | B | 3A | | | 14 | | | EY | | | 6.0 | Y | | Thompson,G | Q |
| 13.61 | 818754 | 2.9 | M | 5B | 21 | 6 | 4 | 345 | 0.050 | B | | 10 | 6.5 | Y | 37 | Morris,C.S | R |
| 13.61 | 818755 | 2.9 | M | 5B | 21 | 5 | | | 0.050 | R | | 8 | 6.5 | Y | 37 | Morris,C.S | |
| 13.62 | 818756 | 2.9 | | 5B | | 6 | 4 | 345 | | EY | | | 6.5 | Y | 37 | Morris,C.S | S |
| 13.65 | 818757 | 3.3 | | 5B | 20 | 4 | | | 0.030 | B | | 8 | 6.5 | Y | 2 | Ward,A | |
| 13.654 | 818758 | 3.5 | S | 5B | 14.2 | 5 | 0.4 | 0 | 0.05 | B | | 7 | 2.0C | Y | 1 | Kanai,K | |
| 13.667 | 818759 | 4.0 | B | 5B | 14.2 | 5 | 0.4 | 0 | 0.05 | B | | 7 | 2.0C | Y | 1 | Kanai,K | |
| 13.69 | 818760 | 2.9 | S | 5B, 139 | 40 | 6 | | | 0.023 | B | | 3 | 6.0 | | | Jones,A | |
| 13.69 | 818761 | | | | | | 0.8 | | 0.078 | R | 7.5 | 30 | | | | Jones,A | T |
| 13.69 | 818762 | | | | 18 | | | | 0.050 | B | | 7 | | | | Jones,A | |
| 13.70 | 818763 | 9.0 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | U |
| 13.76 | 818764 | 3.0 | B | 5B | | | | | 0.018 | B | | 2 | 7 | Y | 14 | Bouma,R.J | |
| 13.76 | 818765 | 2.7 | M | 5B | | | | | 0.018 | B | | 2 | 7 | Y | 14 | Bouma,R.J | |
| 13.76 | 818766 | | | | | | 2 | 355 | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | V |
| 13.764 | 818767 | 4.0 | B | 5B | | | | | 0.108 | N | 4 | 16 | | | | Turner,N | |
| 13.785 | 818768 | 3.6 | B | 5B | 28 | 7 | 1.75 | | 0.12 | C | 10 | 40 | 8 | Y | 1 | Bernabeu,M | W |
| 13.788 | 818769 | 3.0 | | 5B | 48 | 6 | | | | EY | | | 6 | Y | 1 | Tregaskis,T.B | X |
| 13.833 | 818770 | 3.8 | B | 5B | 35 | 5 | 3 | 135 | 0.105 | R | 15 | 86 | 5.8 | Y | 2 | Vincent,J | Y |
| 13.838 | 818771 | 3.5 | M | 5B | 19.2 | 6 | | | 0.12 | C | 10 | 40 | 5.5 | Y | 6 | Cifuentes,E | Z |
| 13.851 | 818772 | 3.8 | M | 5B | 31 | 6 | 3.9 | 356 | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | a |
| 13.852 | 818773 | 4.2 | M | 3A, 5B | 12 | 6 | 0.48 | 0 | 0.04 | B | | 12 | 5.8 | Y | 4 | Henshaw,C | b |
| 13.854 | 818774 | 2.7 | M | 3A | 36 | 8 | 2.5 | | 0.05 | B | | 10 | 6.5 | Y | 12 | Melandri,F | c |
| 13.868 | 818775 | 3.1 | M | 5B | 40 | 5 | 5.4 | 51 | | EY | | | 5.6 | Y | 1 | Fleet,R.W | d |
| 13.91 | 818776 | 3.2 | B | 5B | | | | | | EY | | | 5.0 | | 25 | Shanklin,J.D | |
| 13.918 | 818777 | 3.5 | M | 5B | | | | | 0.035 | B | | 9 | 5.0 | Y | 1 | Begbie,M.J.R | |
| 13.955 | 818778 | | | | 18.2 | 6 | 6.0 | 0 | 0.30 | N | 8.5 | 102 | 5.0 | Y | 1 | Begbie,M.J.R | e |
| 13.986 | 818779 | | | | 9 | 6 | | | 0.09 | M | 11 | 56 | 3.5 | Y | 8 | Westlund,M | B |

NOTE A Very low.
NOTE B Misty sky.
NOTE C Coma diameter is lower limit. Very low.
NOTE D Clouds.
NOTE E Cirrus.
NOTE F Comet elevation 10 deg.
NOTE G Tail not readily apparent. (Observer gave limit as 10.5. Ed.)
NOTE H Gas tail at PA 354. Broad dust fan includes other tail listings.
NOTE I Broad tail from PA 280 to 10 - 90 deg. wide.
NOTE J Short, ghostly gas tail 2.2 deg. long in PA 345. Huge violently curved dust tail extends eastward at least 8 deg. Its leading edge is at PA about 345 and trailing at PA 95. Bright, dense, curving beam of light noted along dust tail's northwestern (leading) side.
NOTE K PA approximate.
NOTE L Stellar-like condensation. DC = 10. [sic] At 150x it is more diffuse.
NOTE M Mag. = Omega Cen. Not stellar-like in binocs. Tail length approximate; broad and faint to 0 deg. Faint glow extends around to 90 deg.
NOTE N Tail PA 0-90 deg.
NOTE O Coma diameter and tail length approximate.
NOTE P Tail 1 at PA 4. Tail 2 greatest length at PA 38; tail 2 west boundary 3.43 deg at PA 17, south boundary 4.85 deg at PA 100.
NOTE Q Tail possibly greater than 20 deg. long. PA 65-150.
NOTE R Tail in PA 345 is the gas tail. Dust fan tail defined by tails in PAs 30 and 90. Trailing edge of fan is straight, but leading boundary is sharply curved toward the east. Edges of fan are brighter than interior. Gas tail is much fainter.
NOTE S Additional tail data: 11.5 degrees in PA 63; 8.75 degrees in PA 75. Tail in PA 345 is a gas tail. Dust fan tail defined by tails between PA 5 and 75. Trailing edge of fan is straight, but leading boundary is strongly curved toward the east. Fan looked uniform. Gas tail much fainter.
NOTE T Tail suspected to 0.8 degrees at PA 5 degrees but only 0.5 at PA 40 deg. Tail PA 5-40.
NOTE U Nucleus.
NOTE V Gas tail at PA 355. Broad dust fan includes other tail listings.
NOTE W (Observer lists two PA values: 0 and 76. Ed.)
NOTE X Slightly brighter than Omega Cen. Hazy.
NOTE Y 4.3 and 3.9 comparison Omega Cen.
NOTE Z Tail length 1.25 to 1.5 deg. PA 348 to 87.
NOTE a Gas tail at PA 356. Midpoints on dust tail: 1.0 deg. at PA 25, 3.4 deg. at PA 43. End point of dust tail: 5.8 deg. at PA 50. Type III [sic] tail at PA 85.
NOTE b Gas tail 0.48 deg. at PA 0; dust tail 0.8 deg. at PA 80.
NOTE c The angle is about 90 deg. Tail length is for ion tail.
NOTE d Dust tail at PA 51. Type III [sic] tail at PA 83. Suspected tail at PA 60.

DATE: 13 APR 1986

NOTE e Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.003 | 831109 | | 0.050 | B | | 7 | | | 6 | Gallego,J | A |
| 13.064 | 831110 | 1.6 | 0.090 | M | 11 | 56 | 5 | 4.0 | 8 | Westlund,M | B |
| 13.095 | 831111 | | | | | | 5 | | 1 | Zanette,D | C |
| 13.401 | 831112 | | 0.15 | N | 4 | 68 | 45 | 5.5 | 9 | Levy,D.H | |
| 13.568 | 831113 | 3 | 0.050 | B | | 7 | 15 | 6.5 | 18 | Cook,A.J | |
| 13.590 | 831114 | 1.20 | 0.065 | B | | 9 | 20 | 6.5 | 14 | Foulkes,M | D |
| 13.597 | 831115 | | | | | | 20 | 6.0 | 4 | Thompson,G | E |
| 13.851 | 831116 | 4 | 0.08 | B | | 11 | | 5.6 | 1 | Fleet,R.W | F |
| 13.859 | 831117 | 1.36 | 0.12 | C | 10 | | 285 | 8 | 1 | Bernabeu,M | G |
| 13.875 | 831118 | 1.09 | 0.12 | C | 10 | 40 | 120 | 5.5 | 6 | Cifuentes,E | H |
| 13.984 | 831119 | 1.6 | 0.090 | M | 11 | 56 | 5 | 3.5 | 8 | Westlund,M | B |

NOTE A Tail very diffuse. Low in the horizon (bad seeing). Coma with structure. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE B Misty sky.
NOTE C Drawing made from a negative exposed 5 minutes on Agfapan 400 ASA, 50 mm lens. The large number of stars seen on the negative are depicted as they appear in the Atlas Coeli. The maximum magnitude estimated on the negative is approximately 8. The comet has lost its tail. Tail I appears divided in two parts. It is short and wide. Tail II is more visible in earlier observations. Now very narrow. (Translated by IHW staff. Ed.) Coma is see clearly to the tails. [sic] Scale = 12.1'/mm.
NOTE D Tail length 1 deg. 40 min. at PA 355. Tail length 1 deg. 36 min. at PA 10. Tail length 1 deg. 24 min. at PA 30. Tail length 1 deg. 36 min. at PA 40. Tail length 1 deg. 36 min. at PA 45. Spike tail length 1 deg. 24 min. at PA 85. Conditions excellent (even Uranus visible to the naked eye). A lot of detail was observed, but was difficult to draw. Tail fan-shaped over 90 deg. in PA. Brightest "tail" was westernmost one, which had a distinct west edge. Main body of tail lay between PA 355-45. Several "tails" seen here as increases of intensity. Distinct spike-tail at PA 85 deg. Very faint material between this and the main body. Coma about 15' diameter. Fainter elliptical extension (but brighter than tails) seen at PA 20 deg. approximate length 15'. Outer head about 40'.
NOTE E Naked eye observation. The main central body of the tail was definitely visible although very faintly to 14 deg. from the nucleus however there was an indication that it extended to 20 deg. It was very fan shaped near the head and easily visible in 20x80 binoculars for 4 deg. A darkening of the sky was visible between the comet's tail and the Milky Way.
NOTE F Gas tail at PA 356. Dust tail end point at PA 50. Type III [sic] at PA 85. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE G Coma 28 arc min. Tail 1 deg. 46 min. PA 0-76.
NOTE H Gas tail at PA 348, 40' long. Dust tail at PA 87, 1 deg. 15' long. Central portion at PA 12, 1 deg. 30' long.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.023 | 851735 | 0.225 | 1.7 | 0.139 | 9.1 x 6.1 | 20.00 | Kodak 2415 | | Y | O | 18/P | 1 | Farroni,G | |
| 13.029 | 851736 | 0.085 | 2 | | 23.9 x16.1 | 10.00 | Kodak 103a-E | | N | S | 22/P | 2 | Dragesco,J | |
| 13.052 | 851737 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 092/P | 1 | Sternwarte Frankfurt | A |
| 13.058 | 851738 | 0.050 | 2.8 | | 39.6 x27.0 | 60.00 | Kodak 2415 | | Y | T | 6/N | 1 | Pedersen,V.T | B |
| 13.081 | 851739 | 0.200 | 2 | | 10.3 x 6.9 | 12.00 | Kodak 103a-O | | N | S | 23/P | 2 | Dragesco,J | |
| 13.081 | 851740 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 093/P | 1 | Sternwarte Frankfurt | C |
| 13.115 | 851741 | 0.050 | 2.8 | | 39.6 x27.0 | 30.00 | Kodak 2415 | | Y | T | 7/N | 1 | Pedersen,V.T | D |
| 13.139 | 851742 | 0.050 | 2.8 | | 39.6 x27.0 | 30.00 | Kodak 2415 | | Y | T | 8/N | 1 | Pedersen,V.T | |
| 13.240 | 851743 | 0.085 | 2.8 | | 23.9 x16.1 | 30.00 | 103a-E | | N | C | 5/S | 1 | Binnewies,S | E |
| 13.251 | 851744 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | C | 14/P | | Falsarella,N | |
| 13.260 | 851745 | 0.085 | 2.0 | | 23.9 x16.1 | 90.00 | 103a-O | | N | C | 14/S | 1 | Binnewies,S | F |
| 13.315 | 851746 | 1.829 | 6 | 0.305 | 1.1 x 0.8 | 1.00 | Kodak Tri-X | 400/27 | N | | 033/N | 1 | Buso,V | |
| 13.322 | 851747 | 0.050 | 2.0 | | 39.6 x27.0 | 5.25 | Kodak Tri-X | | N | X | 2/P | 1 | Krisciunas,K | G |
| 13.425 | 851748 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 30.00 | Kodak Tri-X | 400/ | N | X | 012/P | 1 | Rosenthal,D | H |
| 13.458 | 851749 | 0.135 | 3.5 | | 15.2 x10.2 | 5.00 | Ektachr.400 | | N | X | 24/S | 1 | Tregaskis,T.B | I |
| 13.469 | 851750 | 0.135 | 3.5 | | 15.2 x10.2 | 10.00 | Ektachr.400 | | N | X | 25/S | 1 | Tregaskis,T.B | I |
| 13.475 | 851751 | 0.135 | 3.5 | | 15.2 x10.2 | 2.50 | Ektachr.400 | | N | X | 26/S | 1 | Tregaskis,T.B | I |
| 13.481 | 851752 | 0.055 | 2.8 | | 36.2 x24.6 | 2.00 | Ektachr.400 | | N | X | 27/S | 1 | Tregaskis,T.B | J |
| 13.485 | 851753 | 0.055 | 2.8 | | 36.2 x24.6 | 4.00 | Ektachr.400 | | N | X | 28/S | 1 | Tregaskis,T.B | J |
| 13.562 | 851754 | 0.105 | 2.5 | | 19.5 x13.0 | 16.00 | Fujichrome | 1600/ | N | | 9/S | 7 | Royer,R | K |
| 13.576 | 851755 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 58.00 | | | N | | 8/S | 7 | Royer,R | L |
| 13.577 | 851756 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 15.00 | Kodak IIa-D | | N | | 035/P | 7 | Royer,R | M |
| 13.577 | 851757 | 0.105 | 2.5 | | 19.5 x13.0 | 15.00 | Fujichrome | 1600/ | N | | 11/S | 7 | Royer,R | |
| 13.608 | 851758 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 20.00 | Kodak 098 | | N | | 034/P | 7 | Royer,R | N |
| 13.608 | 851759 | 0.105 | 2.5 | | 19.5 x13.0 | 20.00 | Fujichrome | 1600/ | N | | 10/S | 7 | Royer,R | |
| 13.661 | 851760 | 0.024 | 2.8 | | 73.7 x53.1 | 20.00 | Fujichrome | 1600/ | N | | 12/S | 7 | Royer,R | |
| 13.787 | 851761 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 26/C | 5 | Cimatti,A | |
| 13.796 | 851762 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 27/C | 5 | Cimatti,A | |
| 13.819 | 851763 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 094/P | 1 | Sternwarte Frankfurt | O |
| 13.861 | 851764 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 096/P | 1 | Sternwarte Frankfurt | A |
| 13.864 | 851765 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 28/C | 5 | Cimatti,A | |
| 13.882 | 851766 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 097/P | 1 | Sternwarte Frankfurt | O |
| 13.892 | 851767 | 0.180 | 2.8 | | 11.4 x 7.6 | 20.00 | Kodak 103a-O | | N | O | 29/C | 5 | Cimatti,A | |
| 13.903 | 851768 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 098/P | 1 | Sternwarte Frankfurt | A |
| 13.919 | 851769 | 0.225 | 1.7 | 0.139 | 9.1 x 6.1 | 20.00 | Kodak 2415 | | Y | O | 19/P | 1 | Farroni,G | |
| 13.921 | 851770 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 30/C | 5 | Cimatti,A | |
| 13.924 | 851771 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 099/P | 1 | Sternwarte Frankfurt | O |
| 13.944 | 851772 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 100/P | 1 | Sternwarte Frankfurt | O |
| 13.950 | 851773 | 1.800 | 6 | 0.300 | 1.1 x 0.8 | 40.00 | Fujichrome | 400/ | N | C | 11/P | 2 | Martinez,P | |
| 13.964 | 851774 | 0.500 | 3.5 | | 4.1 x 2.7 | 40.00 | Fujichrome | 400/ | N | | 12/P | 1 | Association M31 | |
| 13.986 | 851775 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 102/P | 1 | Sternwarte Frankfurt | C |
| 13.989 | 851776 | 0.240 | 4.5 | | 8.6 x 5.7 | 30.00 | Ilford HP5 | 400/27 | N | O | 503/S | 2 | Abbott,J | P |

NOTE A Photograph made by H. Neumann. Push processed to 2000 ISO.
NOTE B Wratten 2B and 47A filters used.
NOTE C Photograph made by N. Diehl. Push processed to 2000 ISO.
NOTE D Wratten 21 filter used.
NOTE E OG 590 orange, 3 mm thick filter used.
NOTE F CO+ filter used.
NOTE G Film "push" processed to ASA 800.
NOTE H Instrument is Schmidt camera.
NOTE I Push processed to 800 ASA.
NOTE J Lens aperture stopped down from f/1.2 to f/2.8. Push processed to 800 ASA.
NOTE K Exposure duration uncertain: +0 or -1 minute.
NOTE L (Tricolor image constructed from three filtered black and white images. Duration indicates period when all three individual images were obtained. Some of the individual images are listed separately. Ed.)
NOTE M Wr. 4 filter used.
NOTE N Twice as bright as Omega Centauri cluster but same angular size.
NOTE O Photograph made by Y. Walter. Push processed to 2000 ISO.
NOTE P (Observer's image identifier is 25, 3A. Ed.)

DATE: 14 APR 1986

DATE: 14 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.01 | 818780 | 2.8 | M | IHW | 33 | 5 | | | | EY | | | 5.5 | Y | 5 | Granslo,B.H | |
| 14.02 | 818781 | | | | 30 | 7 | 1.1 | 356 | 0.035 | B | | 7 | 5.5 | Y | 5 | Granslo,B.H | |
| 14.028 | 818782 | 3.7 | M | 3A | | | | | 0.040 | B | | 7 | 3.5 | Y | 8 | Westlund,M | A |
| 14.104 | 818783 | 3.8 | B | 139 | 28 | 2 | | | 0.05 | B | | 7 | 3.9 | | 1 | Lairet,R | |
| 14.125 | 818784 | | | | | 2 | | | | EY | | | 6.0 | | 3 | Martinez,C | B |
| 14.135 | 818785 | 3.7 | B | 159,139 | 20 | 4 | | | 0.05 | B | | 7 | 4.8C | Y | 2 | Lupianez,B | |
| 14.156 | 818786 | 3.8 | B | 139 | | | | | 0.05 | B | | 7 | 4.8 | | 2 | Benavides,A | |
| 14.167 | 818787 | 3.7 | B | 139 | 26 | 3 | 0.73 | 48 | 0.05 | B | | 7 | 4.2 | | 1 | Lairet,R | |
| 14.177 | 818788 | 3.6 | B | 3A | | | 0.25 | 10 | 0.035 | B | | 7 | 5.0 | Y | 1 | Stephan,C | C |
| 14.181 | 818789 | 3.5 | B | 159 | 20 | 2 | | | 0.05 | B | | 7 | 5.5C | Y | 2 | Martinez,C | |
| 14.184 | 818790 | 3.5 | B | 159 | | 2 | | | 0.05 | B | | 7 | 5.5C | Y | 3 | Martinez,C | |
| 14.210 | 818791 | 4.0 | S | 3A | 16 | 3 | 0.5 | 0 | 0.05 | B | | 7 | 3.5 | Y | 2 | House,R.R | |
| 14.215 | 818792 | 4.1 | S | 3A | 16 | 2 | 0.3 | 0 | 0.05 | B | | 10 | 3.5 | Y | 2 | House,R.R | |
| 14.229 | 818793 | 3.2 | S | 3A | 18 | 2 | | | 0.035 | B | | 7 | 3.5 | Y | 3 | Morrison,W | D |
| 14.243 | 818794 | 4.3 | B | 139 | | | | | 0.080 | B | | 20 | 4.5 | Y | | Smith,D | E |
| 14.250 | 818795 | 3.9 | B | 139 | 24 | 2 | | | 0.05 | B | | 7 | 4.2 | | 1 | Lairet,R | |
| 14.256 | 818796 | 3.5 | B | 3A | 7.9 | 6 | | | 0.05 | B | | 7 | 4.4 | Y | 3 | Dodd,W.J | F |
| 14.28 | 818797 | 3.2 | S | 5B | 60 | 7 | 1.5 | 60 | 0.05 | B | | 7 | 5.0 | Y | 2 | Harrington,P | |
| 14.333 | 818798 | 3.9 | B | 139 | 24 | 2 | | | 0.05 | B | | 7 | 4.0 | | 1 | Lairet,R | |
| 14.344 | 818799 | 4.3 | S | 3A | 36 | 6 | 0.75 | 10 | 0.05 | B | | 10 | 4.5C | Y | 1 | Gronek,J.D | G |
| 14.375 | 818800 | 4.0 | B | 139 | 24 | 2 | | | 0.05 | B | | 7 | 3.8 | | 1 | Lairet,R | |
| 14.406 | 818801 | 2.3 | S | 5B | | | 4 | 75 | | EY | | | 6.1 | Y | 1 | Seargent,D | H |
| 14.44 | 818802 | 9.5 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | I |
| 14.46 | 818803 | 2.4 | | 5B | | | | | | EY | | | 7 | Y | 14 | Bouma,R.J | |
| 14.46 | 818804 | 2.6 | M | 5B | | 5 | | | 0.018 | B | | 2 | 7 | Y | 14 | Bouma,R.J | |
| 14.46 | 818805 | 2.5 | M | 5B | 20 | 5 | 3 | 357 | 0.063 | B | | 9 | 7 | Y | 14 | Bouma,R.J | J |
| 14.48 | 818806 | 2.9 | B | 5B | | 6 | | | 0.05 | B | | 10 | 7 | Y | 14 | Bouma,R.J | |
| 14.495 | 818807 | 2.4 | S | 159 | | 3 | 2.0 | | | EY | | | 6.5 | Y | 3 | Williams,P.F | |
| 14.500 | 818808 | | | | | | 12 | | | EY | | | 6.0 | Y | 8 | Thompson,G | |
| 14.52 | 818809 | 2.9 | B | IHW BAA | 32 | 5 | 5 | | | EY | | | | | | Green,D.W.E | K |
| 14.528 | 818810 | 3.4 | | 5B | 30 | | | | | EY | | | 5.5 | N | 1 | Tregaskis,T.B | L |
| 14.53 | 818811 | | | | | | 3.67 | 355 | 0.050 | B | | 10 | 6.5 | Y | 37 | Morris,C.S | M |
| 14.54 | 818812 | 2.8 | | 5B | 38 | 6 | 3.5 | 0 | | EY | | | 6.5 | Y | 37 | Morris,C.S | N |
| 14.55 | 818813 | 2.8 | M | 5B | 19 | 5 | | | 0.050 | R | | 8 | 6.5 | Y | 37 | Morris,C.S | |
| 14.57 | 818814 | 2.9 | B | 5B | 32 | 5 | 3 | | | EY | | | 7 | Y | 7 | Bortle,J.E | |
| 14.57 | 818815 | | | | 19 | 5 | 2.0 | 0 | 0.050 | B | | 7 | | | | Bortle,J.E | O |
| 14.583 | 818816 | 3.2 | S | 3A | 9 | 6 | | | 0.080 | B | | 20 | | Y | 1 | Batza,H | P |
| 14.6146 | 818817 | 2.6 | M | 3A | 40 | 6 | 4.18 | 358 | 0.05 | B | | 7 | 6.4 | Y | 18 | Cook,A.J | Q |
| 14.62 | 818818 | 2.6 | B | 5B | | | | | | EY | | | 6.5 | Y | | Clark,M.L | |
| 14.625 | 818819 | 2.1 | S | 5B | | | 20 | 80 | | EY | | | 6.2 | Y | 1 | Seargent,D | R |
| 14.63 | 818820 | 2.1 | | 5B | | 7 | 18.0 | | | EY | | | 6.5 | Y | 1 | Lovejoy,T | S |
| 14.6736 | 818821 | 2.6 | M | 3A | 45 | 6 | 8.87 | 50 | | EY | | | 6.4 | Y | 18 | Cook,A.J | T |
| 14.70 | 818822 | 2.6 | M | 3A | | | | | | EY | | | 3.5 | Y | 7 | Keen,R | U |
| 14.71 | 818823 | 2.9 | B | IHW BAA | 35 | 5 | 5 | | | EY | | | | | | Green,D.W.E | V |
| 14.7333 | 818824 | 3.2 | S | DCS | 26 | 6 | | | 0.080 | B | | 20 | 4.6 | | 7 | Machholz,D | |
| 14.77 | 818825 | 2.3 | | 5B | | | | | | EY | | | 7 | Y | 14 | Bouma,R.J | |
| 14.77 | 818826 | 2.8 | B | 5B | | | | | 0.018 | B | | | 7 | Y | 14 | Bouma,R.J | |
| 14.772 | 818827 | 4.2 | M | 3A, 5B | 19 | 5 | 2 | 0 | 0.04 | B | | 12 | 6.3 | Y | 4 | Henshaw,C | W |
| 14.78 | 818828 | 2.5 | M | 5B | | | 3 | 3 | 0.063 | B | | 9 | 7 | Y | 14 | Bouma,R.J | X |
| 14.835 | 818829 | 3.7 | M | 3A | 19.3 | 6 | | | 0.12 | C | 10 | 40 | 5.5 | Y | 6 | Cifuentes,E | Y |
| 14.889 | 818830 | 3.5 | M | 5B | 31 | 5 | 4.3 | 4 | 0.08 | B | | 11 | 5.7 | Y | 1 | Fleet,R.W | Z |
| 14.896 | 818831 | 2.8 | M | 3A | 36 | 7 | 3.1 | | 0.05 | B | | 10 | 6.5 | Y | 12 | Melandri,F | a |
| 14.90 | 818832 | 3.8 | B | 5B | | | | | | EY | | | 4.5 | | 26 | Shanklin,J.D | |
| 14.913 | 818833 | 3.0 | M | 5B | 40 | 4 | 9.3 | 62 | | EY | | | 5.7 | Y | 1 | Fleet,R.W | b |
| 14.938 | 818834 | 3.9 | M | 5B | | | | | 0.035 | B | | 9 | 5.0 | Y | 1 | Begbie,M.J.R | |
| 14.960 | 818835 | 3.2 | S | 139 | 30 | | 2 | 60 | | EY | | | 6.5 | Y | 7 | Haver,R | c |
| 14.960 | 818836 | 3.5 | S | 139 | 28 | 4 | 1.80 | 9 | 0.05 | B | | 7 | 6.5 | Y | 7 | Haver,R | d |
| 14.962 | 818837 | | | | 20.6 | 5 | 6.0 | 20 | 0.30 | N | 8.5 | 102 | 5.0 | Y | 1 | Begbie,M.J.R | e |
| 14.962 | 818838 | 3.4 | M | 3A | | | 1.2 | 21 | 0.040 | B | | 7 | 4.0 | Y | 8 | Westlund,M | |
| 14.99 | 818839 | 2.7 | M | IHW | 32 | 6 | | | | EY | | | 6.0 | Y | 5 | Granslo,B.H | |
| 14.997 | 818840 | | | | 11 | 5 | | | 0.09 | M | 11 | 56 | 4.0 | Y | 8 | Westlund,M | |

NOTE A Misty sky.
NOTE B Head = 1.5 deg.
NOTE C Note odd PA of 10 deg. Possibly just irregular shaped extension of coma.
NOTE D Altitude 2 deg.
NOTE E Comet elevation 10 deg.
NOTE F The coma brightness fell off very gradually at the edge. It was difficult to decide where the edge was. The actual diameter may have been greater than 7.9'. There were hints of symmetrical illumination (i.e., it was not a "tail") as much as 40'-50' across!
NOTE G Last naked eye sighting. Exc. see.
NOTE H Tail length at PA 75 is lower limit (6.5 deg.); tail length at PA 30 not specified. Cloud terminated observation.
NOTE I Nucleus.
NOTE J Gas tail at PA 357. Broad dust fan includes other tail listings.
NOTE K Coma diameter and tail length approximate.
NOTE L Coma diameter approximate. Tail doubtful.
NOTE M Tail in PA 355 is gas tail. Dust fan tail defined by edges in PA 45 and 85. Gas tail was brighter than dust tail. Leading edge of the dust fan, slightly curved toward the east, was brightest part of the fan.
NOTE N Fan tail between PAs 0 and 80. Fan was uniform in brightness.
NOTE O With 7x50 B: huge bright coma seemingly circular in outline but superimposed on fan-shaped envelope of tail. At least four bright rays emit from coma! The first is actually the gas tail pointing to PA 0 deg. and 2.0 deg. long. It has a distinct kink to the west about 1 deg. from the center of the coma. The center of the dust tail is 6.5 deg. long at PA 130. The remaining three rays are part of the dust tail at PA 20, 47 deg., and 87 deg. The leading and trailing edges of the tail are at PA 10 deg. and 80 deg. The rays in the dust tail are traceable 1.0, 1.0, and 3.0 deg. (The original report form, independent of the notes, indicates there is a kinked jet 2.0 deg. long at PA 180, a jet 0.6 deg. long at PA 170, a jet 1.0 long at PA 140, and a jet 3.0 deg. long at PA 90. Ed.)
NOTE P Hazy. Close to Omega Centauri. No tail readily apparent. (Observer gave limit as 10.5. Ed.)
NOTE Q Tail 1 at PA 358. Tail 2 greatest length at PA 50; west boundary 2.3 deg at PA 23, south boundary 3.43 deg at PA 68.
NOTE R Tail in broad fan. Tail length at PA 80 is approximate.
NOTE S Vivid nucleus + bright ion tail. Naked eye tail length.
NOTE T Tail greatest length at PA 50; west boundary 5.50 deg. at PA 21, south boundary 6.62 deg. at PA 70.
NOTE U Observation from New Zealand.
NOTE V Coma diameter and tail length approximate.
NOTE W Gas tail 2 deg. at PA 0; dust tail 1.6 deg. at PA 70.
NOTE X Gas tail at PA 3. Broad dust fan includes other tail listings.
NOTE Y Tail length 1.25 to 1.92. PA 11 to 73.
NOTE Z Gas tail at PA 4. Midpoints on dust tail: 13 deg. at PA 43; 3.0 deg. at PA 53; 5.6 deg. at PA 55. End point of dust tail: 7.8 deg. at PA 57. Type III [sic] tail at PA 93.
NOTE a Tail length is for ion tail.
NOTE b Dust tail at PA 62. Type III [sic] tail at PA 86. Suspected tail at PA 70.
NOTE c Center fan-shaped tail.

DATE: 14 APR 1986

NOTE d See drawing. West corner fan-shaped tail at PA 33, 3.23 deg. long; east corner fan-shaped tail at PA 92, 3.30 deg. long.
NOTE e Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.026 | 831120 | 6 | 0.040 | B | | 7 | 5 | 3.5 | 8 | Westlund,M | A |
| 14.406 | 831121 | 0.54 | 0.15 | N | 4 | 68 | 90 | 6.0 | 9 | Levy,D.H | B |
| 14.500 | 831122 | | | | | | | 6.0 | | Thompson,G | C |
| 14.618 | 831123 | 3 | 0.050 | B | | 7 | 10 | 6.5 | 18 | Cook,A.J | |
| 14.736 | 831124 | | 0.076 | N | 7.9 | 60 | | | 1 | Freydank,E | D |
| 14.833 | 831125 | 1.25 | 0.12 | C | 10 | 40 | 60 | 5.5 | 6 | Cifuentes,E | E |
| 14.889 | 831126 | 4 | 0.08 | B | | 11 | | 5.7 | 1 | Fleet,R.W | F |
| 14.958 | 831127 | 6 | 0.040 | B | | 7 | 10 | 4.0 | 8 | Westlund,M | |
| 14.964 | 831128 | 3 | 0.050 | B | | 7 | 5 | 6.5 | 7 | Haver,R | G |
| 14.993 | 831129 | 1.6 | 0.090 | M | 11 | 56 | 10 | 4.0 | 8 | Westlund,M | |

NOTE A Misty sky.
NOTE B Scale is approximate.
NOTE C Naked eye observation. Very broad, very faint, fan-shaped tail having four slightly brighter segments - one on both the northern and southern boundaries, the brightest toward Theta Cen and another suggestion of one toward the stars k, i, g Cen (on the Norton's Atlas Map 10 reproduction used for the drawing. Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D DC 6. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Gas tail 1 deg. at PA 11. Central portion 1 deg. 55' at PA 27. Dust tail 1 deg. 15' at PA 73.
NOTE F Gas tail at PA 4. Dust tail end point at PA 57. Type III [sic] PA 93. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE G Tail at PA 9; west corner, fan-shaped tail at PA 33; east corner, fan-shaped tail at PA 92.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.049 | 851777 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 105/P | 1 | Sternwarte Frankfurt | A |
| 14.112 | 851778 | 0.050 | 2 | | | 3.50 | Kodak Tri-X | 400/ | N | | 6/P | 1 | Falsarella,N | |
| 14.123 | 851779 | 0.050 | 2 | | | 3.50 | Kodak Tri-X | 400/ | N | | 7/P | 1 | Falsarella,N | |
| 14.129 | 851780 | 0.050 | 1.8 | | | 2.10 | Kodacolor VR | 400/ | N | | 8/P | 1 | Falsarella,N | |
| 14.131 | 851781 | 0.200 | 3.5 | | 10.3 x 6.9 | 15.00 | Kodak Tri-X | 400/ | N | X | 3/P | 12 | Melandri,F | |
| 14.132 | 851782 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 109/P | 1 | Sternwarte Frankfurt | B |
| 14.135 | 851783 | 0.135 | 3.5 | | 15.2 x10.2 | 60.00 | Kodak 2415 | | Y | T | 9/N | 1 | Pedersen,V.T | C |
| 14.144 | 851784 | 0.050 | 1.8 | | | 3.50 | Kodacolor VR | 400/ | N | | 9/P | 1 | Falsarella,N | |
| 14.153 | 851785 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 110/P | 1 | Sternwarte Frankfurt | D |
| 14.161 | 851786 | 0.050 | 1.8 | | | 3.00 | Kodacolor VR | 400/ | N | | 10/P | 1 | Falsarella,N | |
| 14.164 | 851787 | 0.050 | 1.8 | | | 2.50 | Kodacolor VR | 400/ | N | | 11/P | 1 | Falsarella,N | |
| 14.166 | 851788 | 0.135 | 3.5 | | 15.2 x10.2 | 25.00 | Kodak 2415 | | Y | T | 11/N | 1 | Pedersen,V.T | |
| 14.178 | 851789 | 0.050 | 1.8 | | | 3.50 | Kodacolor VR | 400/ | N | | 12/P | 1 | Falsarella,N | |
| 14.192 | 851790 | 0.050 | 2 | | | 3.00 | Kodak Tri-X | 400/ | N | | 13/P | 1 | Falsarella,N | |
| 14.229 | 851791 | 0.050 | | | 39.6 x27.0 | 0.67 | Kodak VR1000 | 1000/ | N | T | 15/C | 5 | Priester,D.C | |
| 14.230 | 851792 | 0.050 | | | 39.6 x27.0 | 0.13 | Kodak VR1000 | 1000/ | N | T | 16/C | 5 | Priester,D.C | |
| 14.231 | 851793 | 0.050 | | | 39.6 x27.0 | 0.33 | Kodak VR1000 | 1000/ | N | T | 17/C | 5 | Priester,D.C | |
| 14.231 | 851794 | 0.050 | | | 39.6 x27.0 | 0.25 | Kodak VR1000 | 1000/ | N | T | 18/C | 5 | Priester,D.C | |
| 14.235 | 851795 | 0.058 | 1.4 | | 34.5 x23.4 | 0.50 | Kodak Tri-X | | N | T | 12/C | 5 | Priester,D.C | E |
| 14.236 | 851796 | 0.058 | 1.4 | | 34.5 x23.4 | 0.25 | Kodak Tri-X | | N | T | 13/C | 5 | Priester,D.C | F |
| 14.313 | 851797 | 0.050 | 1.4 | | 39.6 x27.0 | 0.50 | Scotch Slide | 1000/ | N | | 2/P | 2 | Gronek,J.D | |
| 14.323 | 851798 | 0.050 | 1.4 | | 39.6 x27.0 | 0.58 | Scotch Slide | 1000/ | N | | 4/S | 2 | Gronek,J.D | |
| 14.323 | 851799 | 0.050 | 1.4 | | 39.6 x27.0 | 0.50 | Scotch Slide | 1000/ | N | | 5/S | 2 | Gronek,J.D | |
| 14.344 | 851800 | 0.100 | 2.8 | | 20.4 x13.7 | 0.50 | Scotch Slide | 1000/ | N | | 10/S | 2 | Gronek,J.D | G |
| 14.402 | 851801 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 30.00 | Kodak Tri-X | 400/ | N | X | 014/P | 1 | Rosenthal,D | H |
| 14.429 | 851802 | 0.605 | 1.7 | | 3.4 x 2.3 | 15.00 | Kodak 2415 | | N | T | 3/P | 1 | Levy,A | |
| 14.439 | 851803 | 0.200 | 3.5 | | 10.3 x 6.9 | 10.00 | 3M 1000 | 1000/ | N | O | 11/S | 1 | Haagh,N | |
| 14.448 | 851804 | 0.200 | 3.5 | | 10.3 x 6.9 | 10.00 | 3M 1000 | 1000/ | N | O | 12/S | 1 | Haagh,N | |
| 14.462 | 851805 | 0.200 | 3.5 | | 10.3 x 6.9 | 20.00 | 3M 1000 | 1000/ | N | O | 13/S | 1 | Haagh,N | |
| 14.479 | 851806 | 0.180 | 2.8 | | 11.4 x 7.6 | 17.00 | Kodak 2415 | | Y | O | 67/S | 6 | Garradd,G | I |
| 14.489 | 851807 | 0.200 | 3.5 | | 10.3 x 6.9 | 20.00 | 3M 1000 | 1000/ | N | O | 14/S | 1 | Haagh,N | |
| 14.712 | 851808 | 0.050 | 1.8 | | 39.6 x27.0 | 24.00 | Agfachrome | 1000/ | N | S | 24/P | 18 | Cook,A.J | |
| 14.774 | 851809 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 31/C | 5 | Cimatti,A | |
| 14.782 | 851810 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 32/C | 5 | Cimatti,A | |
| 14.799 | 851811 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 111/P | 1 | Sternwarte Frankfurt | B |
| 14.802 | 851812 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 33/C | 5 | Cimatti,A | |
| 14.810 | 851813 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 34/C | 5 | Cimatti,A | |
| 14.819 | 851814 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 112/P | 1 | Sternwarte Frankfurt | A |
| 14.831 | 851815 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 35/C | 5 | Cimatti,A | |
| 14.840 | 851816 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 113/P | 1 | Sternwarte Frankfurt | B |
| 14.844 | 851817 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 36/C | 5 | Cimatti,A | |
| 14.855 | 851818 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 37/C | 5 | Cimatti,A | |
| 14.861 | 851819 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 114/P | 1 | Sternwarte Frankfurt | A |
| 14.866 | 851820 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 103a-O | | N | O | 38/C | 5 | Cimatti,A | |
| 14.877 | 851821 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 6.00 | Kodak 2415 | | Y | | 125/P | 3 | Koch,B | J |
| 14.882 | 851822 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 115/P | 1 | Sternwarte Frankfurt | B |
| 14.890 | 851823 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 39/C | 5 | Cimatti,A | |
| 14.893 | 851824 | 0.080 | 4.5 | | 25.4 x17.1 | 16.00 | Agfa 1000 RS | 1000/ | N | T | 619/S | 2 | Jones,B.W | K |
| 14.897 | 851825 | 0.110 | 2 | | 18.6 x12.5 | 20.00 | Fujichrome | 400/ | N | O | 4/P | 2 | Martinez,P | L |
| 14.903 | 851826 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 116/P | 1 | Sternwarte Frankfurt | A |
| 14.907 | 851827 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 40/C | 5 | Cimatti,A | |
| 14.913 | 851828 | 0.135 | 4.5 | | 15.2 x10.2 | 8.00 | Agfa 1000 RS | 1000/ | N | T | 622/S | 2 | Jones,B.W | M |
| 14.920 | 851829 | 0.225 | 1.7 | 0.139 | 9.1 x 6.1 | 20.00 | Kodak 2415 | | Y | S | 14/P | 2 | Martinez,P | |
| 14.924 | 851830 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 117/P | 1 | Sternwarte Frankfurt | B |
| 14.939 | 851831 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Ektachrome | 400/ | N | M | 516/P | 1 | Stolzen,P | N |
| 14.946 | 851832 | 0.135 | 2.8 | | 15.2 x10.2 | 5.00 | Ektachrome | 400/ | N | M | 518/P | 1 | Stolzen,P | N |
| 14.975 | 851833 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 10.00 | Kodak 2415 | | Y | | 131/P | 3 | Koch,B | J |

NOTE A Photograph made by N. Diehl. Push processed to 2000 ISO.
NOTE B Photograph made by V. Heinrich. Push processed to 2000 ISO.
NOTE C Wratten 2B and 47A filters used.
NOTE D Photograph made by P. Engel. Push processed to 2000 ISO.
NOTE E Push processed to 800 ASA.
NOTE F Start time uncertain. Push processed to 800 ASA.
NOTE G Auxiliary lens used. Original intrument characteristics are FL = 0.050, f/1.4.
NOTE H Instrument is Schmidt camera.
NOTE I Temperature for hypersensitization 60-65 deg. C.
NOTE J (Observer's image identifier preceded by prefix 100/. Ed.)
NOTE K (Observer's image identifier is Agfa/6/19. Ed.)
NOTE L Hasselblad camera used. (Probably large format, 120 size. Ed.)
NOTE M (Observer's image identifier is Agfa/6/22. Ed.) FL = 135 is an approximate setting on the zoom lens.
NOTE N (Observer's image identifier is preceded by prefix 2. Ed.)

DATE: 15 APR 1986 DATE: 15 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.00 | 818841 | | | | 30 | 6 | 1.9 | 13 | 0.035 | B | | 7 | 6.0 | Y | 5 | Granslo,B.H | |
| 15.069 | 818842 | 4.0 | B | 3A | | 6 | 1 | | 0.06 | R | 8 | 15 | 4.5 | Y | 2 | Schambeck,C.M | A |
| 15.104 | 818843 | 4.0 | B | 139 | 20 | 2 | | | 0.05 | B | | 7 | 3.8 | | 1 | Lairet,R | |
| 15.124 | 818844 | | | 3A | | 9 | | | 0.362 | N | 5 | 145 | 4.0 | Y | 1 | Stephan,C | B |
| 15.125 | 818845 | 3.7 | B | 139 | | | | | 0.05 | B | | 7 | 5.0C | Y | 2 | Lupianez,B | |
| 15.148 | 818846 | 3.0 | B | 5B, 3A | 48 | 5 | 3.4 | 13 | | EY | | | 6.0 | Y | 8 | Linder,J | C |
| 15.148 | 818847 | | | 5B, 3A | | | 1 | | | EY | | | 6.0 | Y | 8 | Linder,J | D |
| 15.169 | 818848 | 3.7 | B | 3A | | 2 | | | 0.03 | B | | 8 | 4.3C | Y | 2 | Giraudi,J.D | |
| 15.174 | 818849 | 3.6 | B | 3A | | 2 | | | 0.03 | B | | 8 | 4.3C | Y | 2 | Giraudi,J.D | |
| 15.180 | 818850 | 3.4 | B | 3A | | 2 | | | 0.03 | B | | 8 | 4.3C | Y | 2 | Giraudi,J.D | |
| 15.3361 | 818851 | 2.8 | | DCS | 50 | 6 | 4.40 | 48 | | EY | | | 5.8 | | 8 | Machholz,D | E |
| 15.378 | 818852 | 3.6 | B | 3A | | 7 | | | 0.08 | R | 6.3 | 16 | 6 | Y | 4 | Burch,J.Q | |
| 15.378 | 818853 | | | 3A | 23.0 | 7 | 1.53 | 23 | 0.08 | R | 6.3 | 19 | 6 | Y | 4 | Burch,J.Q | F |
| 15.42 | 818854 | 2.6 | M | 3A | | | | | | EY | | | 7.0 | Y | 8 | Keen,R | G |
| 15.427 | 818855 | 2.7 | S | 3A | | | | | | EY | | | 5.5C | Y | 6 | Garradd,G | |
| 15.427 | 818856 | 2.2 | S | 5B | | | 10 | | | EY | | | 6 | Y | 1 | Seargent,D | H |
| 15.478 | 818857 | 4.0 | B | 139 | | 3 | | | 0.050 | B | | 20 | 5.6 | Y | 1 | Castrillon,M.E | |
| 15.49 | 818858 | 2.6 | M | 5B | 18 | 6 | 4.5 | 18 | 0.063 | B | | 9 | 7 | Y | 14 | Bouma,R.J | I |
| 15.49 | 818859 | 2.4 | | 5B | | | | | | EY | | | 7 | Y | 14 | Bouma,R.J | |
| 15.49 | 818860 | 2.9 | B | 5B | | | | | 0.018 | B | | 2 | 7 | Y | 14 | Bouma,R.J | |
| 15.49 | 818861 | 3.7 | B | 3A | | 2 | | | 0.050 | B | | 7 | 4.6CM | Y | 1 | Matchett,V | |
| 15.495 | 818862 | 3.0 | S | 159 | | 3 | | | | EY | | | 6.5 | Y | 3 | Williams,P.F | |
| 15.50 | 818863 | 2.9 | B | 3A | 36 | 4 | 3 | | | EY | | 7 | | Y | 7 | Bortle,J.E | |
| 15.50 | 818864 | | | | 29 | 5 | 3.3 | 12 | 0.050 | B | | 7 | 7 | Y | | Bortle,J.E | J |
| 15.50 | 818865 | 3.0 | B | IHW BAA | 41 | 4 | 5 | | | EY | | | | | | Green,D.W.E | K |
| 15.52 | 818866 | | | | | | 4.75 | 18 | 0.050 | B | | 10 | 5.5 | Y | 37 | Morris,C.S | L |
| 15.52 | 818867 | 2.8 | | 5B | | | 4.83 | 15 | | EY | | | 5.5 | Y | 37 | Morris,C.S | M |
| 15.52 | 818868 | 2.8 | M | 5B | 26 | 5 | | | 0.050 | R | | 8 | 5.5 | Y | 37 | Morris,C.S | |
| 15.55 | 818869 | 2.7 | B | 3A | | | | | | EY | | | 5.9 | Y | | Clark,M.L | N |
| 15.56 | 818870 | 3.6 | S | 3A | 32 | 7 | 3.0 | 70 | 0.25 | N | 5 | 38 | 5.9 | Y | | Clark,M.L | N |
| 15.5708 | 818871 | 2.9 | M | 3A | 40 | 6 | 5.9 | 20 | 0.05 | B | | 7 | 6.4 | Y | 18 | Cook,A.J | O |
| 15.5833 | 818872 | 2.9 | M | 3A | | | 11.67 | 93 | | EY | | | 6.4 | Y | 18 | Cook,A.J | P |
| 15.6410 | 818873 | 3.0 | S | DCS | 23 | 8 | 2.63 | 35 | 0.080 | B | | 20 | 5.4 | | 7 | Machholz,D | Q |
| 15.65 | 818874 | 2.9 | B | 5B | 45 | 4 | | | | EY | | | 5.6 | Y | | Pearce,A | |
| 15.65 | 818875 | 3.0 | B | 5B | 27 | 7 | 3.0 | 20 | 0.030 | B | | 8 | 5.6 | Y | | Pearce,A | |
| 15.65 | 818876 | | | 5B | | | 4.2 | 93 | 0.030 | B | | 8 | 5.6 | Y | | Pearce,A | |
| 15.658 | 818877 | 3.0 | S | 3A | 40 | 5 | 4 | 90 | 0.07 | B | | 10 | 2.5 | Y | 1 | Kobayashi,J | |
| 15.67 | 818878 | | | | 40 | 5 | 12 | 50 | | EY | | | 7.0 | Y | 8 | Keen,R | R |
| 15.69 | 818879 | 3.1 | S | 3A, 139 | 30 | 5 | | | 0.023 | B | | 3 | 5.7 | | | Jones,A | |
| 15.69 | 818880 | | | | | 7 | 1.5 | | 0.050 | B | | 7 | | | | Jones,A | S |
| 15.69 | 818881 | | | | | | 0.7 | | 0.078 | R | 7.5 | 30 | | | | Jones,A | T |
| 15.72 | 818882 | 8.6 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | U |
| 15.73 | 818883 | 2.0 | | 5B | | | 24.5 | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | V |
| 15.750 | 818884 | 3.6 | B | 3A, 5B | 40 | 5 | 5 | 60 | 0.05 | B | | 7 | 5.3 | Y | 2 | Vincent,J | W |
| 15.79 | 818885 | 2.3 | | 5B | | 4 | | | | EY | | | 7 | Y | 15 | Bouma,R.J | |
| 15.823 | 818886 | 3.8 | M | 3A | 24 | 8 | 2.33 | | 0.12 | C | 10 | 40 | 6 | Y | 1 | Bernabeu,M | X |
| 15.853 | 818887 | 3.8 | M | 3A | 17.6 | 7 | | | 0.12 | C | 10 | 40 | 5.0 | Y | 6 | Cifuentes,E | Y |
| 15.910 | 818888 | 4.0 | M | 3A | | | | | 0.05 | B | | 12 | | Y | 2 | Tanti,T | Z |
| 15.921 | 818889 | 3.8 | M | 5B, 3A | | | | | 0.035 | B | | 9 | 6.2 | Y | 1 | Begbie,M.J.R | |
| 15.938 | 818890 | 3.7 | M | 3A | 31 | 6 | 2.8 | 31 | 0.08 | B | | 11 | 5.7 | Y | 1 | Fleet,R.W | a |
| 15.942 | 818891 | | | | | | 9.5 | 15 | 0.035 | B | | 9 | 6.2 | Y | 1 | Begbie,M.J.R | |
| 15.942 | 818892 | | | | 19.1 | 6 | | | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | |
| 15.958 | 818893 | 2.5 | M | 3A | 42 | 8 | 4.0 | | 0.05 | B | | 10 | 6.0 | Y | 12 | Melandri,F | b |
| 15.958 | 818894 | 3.1 | M | 5B | 40 | 4 | 3.5 | 39 | | EY | | | 5.7 | Y | 1 | Fleet,R.W | c |

NOTE A PA 23 to 40.
NOTE B Stellar pin point nucleus. Large diffuse coma. No tail visible.
NOTE C Type I tail.
NOTE D Type II tail broad fan. Tail length is lower limit.
NOTE E Fan-shaped tail: PA 36 to 61.
NOTE F The visual tail was very wide so I have indicated the PA and length for the edges.
NOTE G Observation from New Zealand.
NOTE H Tail length approximate.
NOTE I Gas tail at PA 18. Broad dust fan from PA 28 to 92, 4 deg. long.
NOTE J Tail distinctly changed again! Tail straighter and narrower than last night, now subtending about 45 deg. instead of 90 deg. in PA. Coma circular and larger in diameter than intersecting sides of tail, the coma seemingly superimposed on the latter. Bright center of dust tail traceable 9.0 deg. in PA 57 with leading and following edges of tail at PA 22 and 87. Gas tail extends 3.3 deg. in PA 12.
NOTE K Coma diameter and tail length approximate.
NOTE L Multiple tails define the shape of the fan tail. Edges of fan were brightest with trailing edge brighter than leading edge. No structure was visible in the dust fan.
NOTE M Multiple tails define the shape of the fan tail. The center of the dust fan was most pronounced to the NE.
NOTE N Street lights.
NOTE O Tail 1 at PA 20. Tail 2 greatest length at PA 67; north boundary 8.87 deg. at PA 42, south boundary 6.5 deg. at PA 96.
NOTE P Tail greatest length at PA 67; north boundary 7.93 deg at PA 43, south boundary 7.35 at PA 93.
NOTE Q Two tails: the first at PA 35 to 36, the second at PA 86 to 96.
NOTE R Broad tail PA 10-80.
NOTE S Perhaps segment of tail PA 85 degrees to 95 degrees influenced by group of faint stars. Tail PA 22-95.
NOTE T Broad diffuse fan. Tail PA 22-58.
NOTE U Nucleus.
NOTE V Ion tail less prominent. Naked eye tail length. Coma diameter through 15x80 binoculars: 25'.
NOTE W Comp. star Nu 3.4. Fan tail 50 deg.
NOTE X (Observer lists two PA values: 20 and 108. Ed.)
NOTE Y Tail length 2.5 to 3.5 deg. PA 33 to 66.
NOTE Z Clouds. Haze. Wind.
NOTE a Gas tail at PA 31. Midpoints on dust tail: 2.0 deg. at PA 59, 3.7 deg. at PA 60, 6.5 deg. at PA 64. End point of dust tail: 9.2 deg. at PA 68. Type III [sic] tail at PA 95.
NOTE b The angle is about 60 deg. Tail length is for ion tail.
NOTE c Dust tail (1) at PA 39. Main dust tail at PA 63. Suspected tail: 12 deg. at PA 72. Type III [sic] tail at PA 81.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.385 | 831130 | 0.54 | 0.15 | N | 4 | 68 | 30 | 6.0 | 9 | Levy,D.H | A |
| 15.574 | 831131 | 3 | 0.050 | B | | 7 | 8 | 6.5 | 18 | Cook,A.J | |
| 15.840 | 831132 | 1.36 | 0.12 | C | 10 | | 100 | 6 | 1 | Bernabeu,M | B |
| 15.849 | 831133 | 1.82 | 0.12 | C | 10 | 40 | 75 | 5.0 | 6 | Cifuentes,E | C |
| 15.938 | 831134 | 4 | 0.08 | B | | 11 | | 5.7 | 1 | Fleet,R.W | D |
| 15.978 | 831135 | 3.08 | 0.035 | B | | 9 | 16 | 6.2 | 1 | Begbie,M.J.R | E |

DATE: 15 APR 1986

DATE: 15 APR 1986

NOTE A Scale is approximate.
NOTE B Coma 24 arc min. Tail 2 deg. 20 min. PA 20-108.
NOTE C Gas tail 1 deg. 50' at PA 33. Central portion 3 deg. 30' at PA 47. Dust tail 2 deg. 30' at PA 66.
NOTE D Gas tail at PA 31. Dust tail end point at PA 68. Type III [sic] at PA 95. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Type III tail at PA 100, type I tail at PA 30. An aesthetically pleasing view, but also evidence for Halley's visual faintness. The tail is traceable for 9-10 degrees, but is very broad and fanlike. The gas tail is noticeably shorter and weaker. The effect of the Milky Way is only clear now that Halley has moved out of it. The tail is approximately 4 times longer than on the 9th April!

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.008 | 851834 | 0.225 | 1.7 | 0.139 | 9.1 x 6.1 | 20.00 | Kodak 2415 | | Y | O | 20/P | 2 | Martinez,P | A |
| 15.010 | 851835 | 0.050 | 1.8 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | 400/ | N | T | 6/P | 2 | Jones,B.W | B |
| 15.012 | 851836 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Ektachrome | 400/ | N | M | 520/P | 1 | Stolzen,P | C |
| 15.021 | 851837 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 8/P | 2 | Jones,B.W | B |
| 15.030 | 851838 | 0.050 | 1.8 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | 400/ | N | T | 10/P | 2 | Jones,B.W | B |
| 15.037 | 851839 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 7.00 | Kodak 2415 | | Y | | 101/P | | Jager,M | |
| 15.043 | 851840 | 0.135 | 2.8 | | 15.2 x10.2 | 5.00 | Ektachrome | 400/ | N | M | 521/P | 1 | Stolzen,P | C |
| 15.054 | 851841 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 25.00 | Agfa Ortho | 25/ | Y | | 102/P | | Jager,M | D |
| 15.059 | 851842 | 0.200 | 2 | | 10.3 x 6.9 | 10.00 | Kodak 103a-O | | N | S | 24/P | 2 | Dragesco,J | |
| 15.060 | 851843 | 0.080 | 4.5 | | 25.4 x17.1 | 16.00 | Agfa 1000 RS | | N | | 706/S | 2 | Jones,B.W | E |
| 15.070 | 851844 | 0.050 | 1.8 | | 39.6 x27.0 | 8.00 | Kodak Tri-X | 400/ | N | T | 11/P | 2 | Jones,B.W | B |
| 15.080 | 851845 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 12/P | 2 | Jones,B.W | B |
| 15.082 | 851846 | 0.050 | 1.8 | | 39.6 x27.0 | 5.00 | Fujichrome | 400/ | N | O | 56/P | 8 | Linder,J | F |
| 15.082 | 851847 | 0.085 | 2.0 | | 23.9 x16.1 | 5.00 | Ektachr.P800 | 800/ | N | O | 57/P | 8 | Linder,J | |
| 15.093 | 851848 | 0.200 | 2.8 | | 10.3 x 6.9 | 5.00 | Fujichrome | 400/ | N | O | 58/P | 8 | Linder,J | |
| 15.100 | 851849 | 0.135 | 3.5 | | 15.2 x10.2 | 60.00 | Kodak 2415 | | Y | T | 12/N | 1 | Pedersen,V.T | G |
| 15.112 | 851850 | 0.200 | 2.8 | | 10.3 x 6.9 | 10.00 | Fujichrome | 400/ | N | O | 59/P | 8 | Linder,J | |
| 15.129 | 851851 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Kodak Tri-X | 400/ | N | T | 14/P | 2 | Jones,B.W | H |
| 15.133 | 851852 | 0.135 | 3.5 | | 15.2 x10.2 | 30.00 | Kodak 2415 | | Y | T | 13/N | 1 | Pedersen,V.T | I |
| 15.163 | 851853 | 0.135 | 3.5 | | 15.2 x10.2 | 30.00 | Kodak 2415 | | Y | T | 14/N | 1 | Pedersen,V.T | |
| 15.188 | 851854 | 0.200 | 4 | | 10.3 x 6.9 | 30.00 | Kodak 2415 | | Y | T | 15/N | 1 | Pedersen,V.T | |
| 15.212 | 851855 | 0.150 | 3.8 | | 13.7 x 9.1 | 10.00 | Fuji | 1600/ | N | X | 4/P | 1 | Lamb,J.F | |
| 15.309 | 851856 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 4.00 | Kodak 2415 | | Y | S | 17/P | 3 | Yen,B | J |
| 15.344 | 851857 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 30.00 | Kodak Tri-X | 400/ | N | X | 015/P | 1 | Rosenthal,D | A |
| 15.419 | 851858 | 0.180 | 2.8 | | 11.4 x 7.6 | 15.00 | Kodak 2415 | | Y | O | 68/S | 6 | Garradd,G | K |
| 15.453 | 851859 | 0.200 | 3.5 | | 10.3 x 6.9 | 30.00 | Kodak 2415 | | N | O | 45/N | 1 | Haagh,N | |
| 15.490 | 851860 | 0.750 | 5 | 0.150 | 2.7 x 1.8 | 20.00 | Kodak 2415 | | N | | 46/N | 1 | Haagh,N | |
| 15.605 | 851861 | 0.229 | 1.7 | 0.140 | 9.0 x 6.0 | 1.00 | 3M 1000 | 1000/31 | N | X | 005/P | 4 | Allen,M.T | |
| 15.610 | 851862 | 0.229 | 1.7 | 0.140 | 9.0 x 6.0 | 2.00 | 3M 1000 | 1000/31 | N | X | 006/P | 4 | Allen,M.T | |
| 15.619 | 851863 | 0.229 | 1.7 | 0.140 | 9.0 x 6.0 | 4.00 | 3M 1000 | 1000/31 | N | X | 007/P | 4 | Allen,M.T | |
| 15.670 | 851864 | 0.229 | 1.7 | 0.140 | 9.0 x 6.0 | 8.00 | 3M 1000 | 1000/31 | N | X | 008/P | 4 | Allen,M.T | |
| 15.799 | 851865 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 41/C | 5 | Cimatti,A | |
| 15.810 | 851866 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 42/C | 5 | Cimatti,A | |
| 15.818 | 851867 | 0.180 | 2.8 | | 11.4 x 7.6 | 8.00 | Kodak 103a-O | | N | O | 43/C | 5 | Cimatti,A | |
| 15.820 | 851868 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 119/P | 1 | Sternwarte Frankfurt | L |
| 15.831 | 851869 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 44/C | 5 | Cimatti,A | |
| 15.840 | 851870 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 120/P | 1 | Sternwarte Frankfurt | M |
| 15.841 | 851871 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 45/C | 5 | Cimatti,A | |
| 15.851 | 851872 | 0.200 | 2 | | 10.3 x 6.9 | 10.00 | Kodak Tri-X | 400/ | N | S | 25/P | 2 | Dragesco,J | |
| 15.858 | 851873 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 46/C | 5 | Cimatti,A | |
| 15.861 | 851874 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 121/P | 1 | Sternwarte Frankfurt | L |
| 15.876 | 851875 | 0.225 | 1.7 | 0.139 | 9.1 x 6.1 | 20.00 | Kodak 2415 | | Y | O | 021/P | 1 | Bonnet,M.C | A |
| 15.878 | 851876 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 47/C | 5 | Cimatti,A | |
| 15.882 | 851877 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 122/P | 1 | Sternwarte Frankfurt | M |
| 15.888 | 851878 | 0.050 | 1.8 | | 39.6 x27.0 | 6.00 | Ilford HP5 | 400/27 | N | O | 508/P | 2 | Abbott,J | N |
| 15.889 | 851879 | 0.180 | 2.8 | | 11.4 x 7.6 | 12.00 | Kodak 103a-O | | N | O | 48/C | 5 | Cimatti,A | |
| 15.903 | 851880 | 0.608 | 6 | | 3.4 x 2.3 | 20.00 | Agfa 1000 RS | | N | M | 123/P | 1 | Sternwarte Frankfurt | L |
| 15.935 | 851881 | 0.608 | 6 | | 3.4 x 2.3 | 28.00 | Agfa 1000 RS | | N | M | 124/P | 1 | Sternwarte Frankfurt | M |
| 15.949 | 851882 | 0.240 | 4.5 | | 8.6 x 5.7 | 16.00 | Ilford HP5 | 400/27 | N | O | 513/P | 2 | Abbott,J | O |
| 15.962 | 851883 | 0.050 | 1.8 | | 39.6 x27.0 | 10.00 | Agfapan XL | 1600/ | N | X | 4/P | 12 | Melandri,F | |
| 15.970 | 851884 | 0.608 | 6 | | 3.4 x 2.3 | 40.00 | Agfa 1000 RS | | N | M | 125/P | 1 | Sternwarte Frankfurt | M |

NOTE A Instrument is Schmidt camera.
NOTE B Small amount of cloud and haze, but heavy condensation, so this set interlaced with T70 with 1000RS, to dry lenses in car boot. Film roll Tri-X/8.
NOTE C (Observer's image identifier is preceded by prefix 2. Ed.)
NOTE D Magnitude 2.5.
NOTE E Slight haze on lens at end of exposure. Film push processed to 2000 ISO. (Observer's image identifier is Agfa/7/6. Ed.)
NOTE F Start time approximate.
NOTE G Wratten 2B and 47A filters used.
NOTE H M83 in field of view. Small amount of cloud and haze, but heavy condensation, so this set interlaced with T70 with 1000RS, to dry lenses in car boot. Film roll Tri-X/8.
NOTE I Wratten 21 filter used.
NOTE J (Observer's image identifier is 6. Ed.) Instrument is Schmidt camera.
NOTE K Cloud drifted through field, illuminated by city lights. Temperature for hypersensitization 60-65 deg. C.
NOTE L Photograph made by N. Diehl. Push processed to 2000 ISO.
NOTE M Photograph made by P. Engel. Push processed to 2000 ISO.
NOTE N (Observer's image identifier is 25, 8A. Ed.)
NOTE O (Observer's image identifier is 25, 13A. Ed.)

DATE: 16 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.02 | 818895 | 3.1: | M | IHW | 25 | 6 | | | 0.035 | B | | 7 | 4.5 | Y | 5 | Granslo,B.H | A |
| 16.090 | 818896 | 3.2 | B | 139 | | 5 | | | 0.05 | B | | 20 | 5.0 | Y | 1 | da Silva,L.A.L | |
| 16.134 | 818897 | 3.7: | | 3A | | | | | | EY | | | 5.0 | N | 1 | Levai,R | B |
| 16.156 | 818898 | 4.0 | B | 3A | | 7 | | | 0.06 | R | 8 | 15 | 4.0 | Y | 2 | Schambeck,C.M | |
| 16.167 | 818899 | 3.2 | B | AAVSO | 60 | 3 | 1.5 | 45 | 0.04 | B | | 10 | 5.2 | Y | 2 | Alves,A.A | |
| 16.201 | 818900 | 3.1 | B | 139 | | | | | 0.05 | B | | 7 | 5 | | 2 | Galli,A | |
| 16.42 | 818901 | 2.8 | M | 3A | | | 11 | 60 | | EY | | | 6.5 | Y | 9 | Keen,R | C |
| 16.425 | 818902 | 1.9 | S | 159 | | 3 | | | | EY | | | 6.5 | Y | 3 | Williams,P.F | |
| 16.4424 | 818903 | 2.8 | | DCS | 55 | 5 | 2.70 | 59 | | EY | | | 6.2 | | 9 | Machholz,D | D |
| 16.451 | 818904 | 3.8 | | 3A | 30 | 3 | | | | EY | | | 5 | N | 1 | Tregaskis,T.B | A |
| 16.453 | 818905 | | | 3A | 15 | 9 | | | 0.15 | N | 8 | 64 | | N | 1 | Tregaskis,T.B | E |
| 16.48 | 818906 | 2.4 | B | 3A | | | 4 | 35 | | EY | | | 5.5 | Y | 39 | Hale,A | F |
| 16.48 | 818907 | | | | | | 4.5 | 35 | 0.05 | B | | 10 | 5.5 | Y | 39 | Hale,A | F |
| 16.500 | 818908 | 3.0 | S | 3A | 12 | 8 | 2 | 240 | 0.080 | B | | 20 | | Y | 1 | Batza,H | G |
| 16.517 | 818909 | 2.5 | S | 3A | | | 15.5 | 60 | | EY | | | | | | Seargent,D | |
| 16.521 | 818910 | | | | 30 | | 15 | | | EY | | | 6.0 | Y | | Thompson,G | |
| 16.56 | 818911 | 2.5 | | 5B | | 4 | 10 | 62 | | EY | | | 6.5 | Y | 17 | Bouma,R.J | H |
| 16.57 | 818912 | 2.7 | M | 5B | 15 | 6 | 4 | 34 | 0.05 | B | | 10 | 6.5 | Y | 17 | Bouma,R.J | I |
| 16.57 | 818913 | 3.0 | B | 5B | | 4 | | | | EY | | | 5.6 | Y | | Pearce,A | |
| 16.57 | 818914 | 3.0 | S | | 15 | 6 | | | 0.05 | B | | 10 | 3.5 | Y | 1 | Uda,K | |
| 16.59 | 818915 | 3.0 | B | IHW BAA | 46 | 4 | | | | EY | | | | | | Green,D.W.E | A |
| 16.59 | 818916 | | | | 13 | 5 | 6.0 | | 0.050 | B | | 10 | 5.5 | Y | 33 | Morris,C.S | |
| 16.59 | 818917 | 4.1 | S | 3A | 15 | 6 | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Yasuki,M | |
| 16.60 | 818918 | 3.3 | M | 3A | | | 2.0 | | 0.05 | B | | 7 | 4.0M | Y | 1 | Suzuki,K | |
| 16.60 | 818919 | | | 3A | 7.5 | 3 | | | 0.25 | | 4.2 | 88 | 4.0M | Y | 1 | Suzuki,K | J |
| 16.61 | 818920 | | | | 19 | 5 | 3.2 | | 0.050 | B | | 7 | | | | Bortle,J.E | K |
| 16.61 | 818921 | 3.1 | B | 3B | 36 | 4 | | | | EY | | | 5.5 | Y | 5 | Bortle,J.E | |
| 16.625 | 818922 | 3.7 | B | 3A | 17 | | | | 0.035 | B | | 7 | | N | 1 | Okada,M | |
| 16.66 | 818923 | 4.1 | M | 3A | 13.4 | 5 | | | 0.080 | B | | 11 | 3.5 | Y | 2 | Watanabe,N | |
| 16.663 | 818924 | 3.7 | B | 3A | 21 | 6 | 4 | | 0.070 | B | | 10 | 6.0 | Y | 4 | Nakamura,Y | |
| 16.67 | 818925 | 3.1 | S | 3A, 139 | 22 | 5 | | | 0.023 | B | | 3 | 5.1 | | | Jones,A | |
| 16.67 | 818926 | | | | 16 | 7 | 0.5 | | 0.050 | B | | 7 | | | | Jones,A | L |
| 16.71 | 818927 | 9.5 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | M |
| 16.78 | 818928 | 4.2 | B | M | 15 | 9 | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 16.858 | 818929 | 3.7 | M | 3A | 30 | 6 | 3.2 | 37 | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | N |
| 16.861 | 818930 | 3.2 | M | 3A | 40 | 4 | 5.7 | 69 | | EY | | | 5.6 | Y | 1 | Fleet,R.W | |
| 16.87 | 818931 | 4.0 | M | 3A | 10 | 3 | | | 0.05 | B | | 7 | | | | Keszthelyi,S | O |
| 16.8771 | 818932 | 3.8 | B | 3A | 35 | 6 | 3 | 100 | 0.05 | B | | 7 | 5.1 | Y | 2 | Vincent,J | P |
| 16.905 | 818933 | 3.2 | S | 139 | 30 | | 3.0 | 75 | | EY | | | 6.6 | Y | 7 | Haver,R | Q |
| 16.910 | 818934 | 3.3 | S | 139 | 26 | 4 | 3.27 | 38 | 0.05 | B | | 7 | 6.6 | Y | 7 | Haver,R | R |
| 16.941 | 818935 | 4.0 | M | 3A | 18 | 7 | | 45 | 0.089 | R | 5.5 | 18 | 5.5 | N | 1 | Ventura,F | S |
| 16.943 | 818936 | 3.4 | B | 139 | 8 | 2 | 0.8 | 130 | 0.06 | R | 12 | 56 | 5.7 | Y | 1 | Onofre D.,D | |
| 16.99 | 818937 | 2.8 | M | IHW | 30 | 6 | | | | EY | | | 5.5 | Y | 5 | Granslo,B.H | |

NOTE A Coma diameter approximate.
NOTE B Observation with my naked eye.
NOTE C New Zealand.
NOTE D Fan-shaped tail: PA 41 to 77.
NOTE E Almost stellar-like condensation. Through cloud. (Observer gave limit as approximately 11.5. Ed.)
NOTE F Some local light pollution, but effects on observation probably negligible.
NOTE G (Observer gave limit as 11.0. Ed.)
NOTE H Dust tail. Tail length exceeds value given.
NOTE I Gas tail at PA 34. Broad dust fan from PA 43 to 94, 4 deg. long.
NOTE J Meter. (Coma diameter. Ed.) Instrument is Wright-Schmidt.
NOTE K Tail increasingly more cone-shaped, edges at PA 45 and 95. Tail's southern edge brighter and can be traced further than northern (perhaps really a long jet-like feature).
NOTE L Tail strongest PA 35 degrees to 75 degrees, suspected PA 75 degrees to 105 degrees in binoculars of 2.3 cm and 5.0 cm.
NOTE M Nucleus.
NOTE N Gas tail at PA 37. Midpoint on dust tail: 2.5 deg. at PA 65. End point of dust tail: 5.7 deg. at PA 69. Type III [sic] tail at PA 100.
NOTE O Moon!
NOTE P Fan tail 60 deg. included angles. Centre PA 100.
NOTE Q Center fan-shaped tail.
NOTE R See drawing. West corner fan-shaped tail at PA 54, 4.47 deg. long; east corner fan-shaped tail at PA 93, 4.40 deg. long.
NOTE S The coma appears definitely bluish-white and the fuzzy central condensation is orange-yellow.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.002 | 831136 | 0.20 | 0.30 | N | 8.5 | 102,212 | 23 | 6.2 | 1 | Begbie,M.J.R | A |
| 16.057 | 831137 | | | | | | 5 | | 1 | Zanette,D | B |
| 16.358 | 831138 | 0.54 | 0.15 | N | 4 | 68 | 30 | 6.0 | 9 | Levy,D.H | C |
| 16.458 | 831139 | | 0.080 | B | | 20 | | 6.0 | 3 | Thompson,G | D |
| 16.858 | 831140 | 4 | 0.08 | B | | 11 | | 5.6 | 1 | Fleet,R.W | E |
| 16.867 | 831141 | 0.97 | 0.050 | B | | 7 | 13 | 4.0 | 7 | Keszthelyi,S | |
| 16.910 | 831142 | 3 | 0.050 | B | | 7 | 10 | 6.6 | 7 | Haver,R | F |

NOTE A Gas tail at PA 350-15. Fan centred at PA 180. Vertex distance 5 arc min.; semi latus rectums P1 = 6.2 arc min., P2 = 12.8 arc min. Diffuse, broad fan near central condensation. A short spike of material is slightly brighter and lies within the gas tail.
NOTE B Drawing made from a negative exposed 5 minutes on Agfapan 400 ASA, 50 mm lens. The large number of stars seen on the negative are depicted as they appear in the Atlas Coeli. The maximum magnitude estimated on the negative is approximately 8. There are now three tails which have recovered a little in length. Tail I is short and wide; tail II is long and narrow; tail III is short and narrow; coma it see clearly to the tails. [sic] (Translated by IHW staff. Ed.) Scale = 12.1'/mm.
NOTE C Scale is approximate.
NOTE D (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Gas tail at PA 37. Dust tail end point at PA 69. Type III [sic] at PA 100. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE F Tail at PA 38; west corner, fan-shaped tail at PA 54; east corner, fan-shaped tail at PA 93.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.087 | 851885 | 0.135 | 2.8 | | 15.2 x10.2 | 10.00 | Ektachrome | 400/ | N | M | 524/P | 1 | Stolzen,P | A |
| 16.168 | 851886 | 0.135 | 3.5 | | 15.2 x10.2 | 24.00 | Kodak 2415 | | Y | T | 16/N | 1 | Pedersen,V.T | |
| 16.271 | 851887 | 0.050 | 1.8 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | | 1/S | 1 | Madenberg,J | |
| 16.452 | 851888 | 0.050 | | | 39.6 x27.0 | 0.68 | | | N | | 0/P | 1 | Muller,R.D | B |
| 16.459 | 851889 | 0.050 | | | 39.6 x27.0 | 0.88 | | | N | | 00/P | 1 | Muller,R.D | B |
| 16.525 | 851890 | 0.180 | 2.8 | | 11.4 x 7.6 | 17.00 | Kodak 2415 | | Y | O | 69/S | 6 | Garradd,G | C |

DATE: 16 APR 1986

DATE: 16 APR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.885 | 851891 | 0.225 | 1.7 | 0.139 | 9.1 x 6.1 | 20.00 | Kodak 2415 | | Y | O | 022/P | 1 | Bonnet,M.C | D |

NOTE A (Observer's image identifier is preceded by prefix 2. Ed.)
NOTE B (Camera lens focal length estimated by Editor from submitted prints. Lens f/ uncertain. Ed.)
NOTE C Temperature for hypersensitization 60-65 deg. C.
NOTE D Instrument is Schmidt camera.

DATE: 17 APR 1986

DATE: 17 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.00 | 818938 | | | | 25 | 7 | 1.7 | 32 | 0.035 | B | | 7 | 5.5 | Y | 5 | Granslo,B.H | |
| 17.02 | 818939 | 3.3 | B | 3A | | | | | | EY | | | 6.0 | | 27 | Shanklin,J.D | |
| 17.042 | 818940 | 3.7 | B | 3A | 17 | 5 | 1.6 | | 0.06 | R | 8 | 15 | 5.5M | Y | 4 | Schambeck,C.M | A |
| 17.09 | 818941 | 3.9 | M | 3A | | | | | 0.040 | B | | 7 | 4.0 | Y | 8 | Westlund,M | |
| 17.090 | 818942 | | | | 8 | 5 | | | 0.09 | M | 11 | 56 | 4.0 | Y | 8 | Westlund,M | |
| 17.122 | 818943 | 3.5 | B | 138 | 24 | 6 | | | 0.05 | B | | 20 | 5.0 | Y | 1 | da Silva,L.A.L | |
| 17.215 | 818944 | 3.3 | B | 139 | | | | | 0.05 | B | | 7 | 5.5 | | 2 | Galli,A | |
| 17.222 | 818945 | 3.1 | B | 139 | | | | | 0.05 | B | | 7 | 5.5 | | 2 | Galli,A | |
| 17.410 | 818946 | 2.7 | S | 159 | | 3 | | | | EY | | | 6.0 | Y | 3 | Williams,P.F | B |
| 17.448 | 818947 | 2.8 | S | 3A | | | | | | EY | | | M | N | 1 | Seargent,D | |
| 17.45 | 818948 | 3.0 | S | 3A, 138 | 33 | 6 | | | 0.023 | B | | 3 | 5.8 | | | Jones,A | C |
| 17.45 | 818949 | | | | | 6 | 1.3 | | 0.050 | B | | 7 | | | | Jones,A | D |
| 17.45 | 818950 | | | | | 8 | | | 0.078 | R | 7.5 | 30 | | | | Jones,A | |
| 17.47 | 818951 | 3.7 | B | 3A | | 2 | | | 0.050 | B | | 7 | 4.6CM | Y | 1 | Matchett,V | |
| 17.54 | 818952 | 2.3 | | 5B | | | 18.0 | | | EY | | | 6.7 | Y | 1 | Lovejoy,T | E |
| 17.56 | 818953 | 3.0 | B | 5B | | 4 | | | | EY | | | | | | Pearce,A | |
| 17.61 | 818954 | 3.1 | B | IHW BAA | | | | | | EY | | | | | | Green,D.W.E | |
| 17.70 | 818955 | 3.0 | B | 3A | | | | | | EY | | | 6.9 | Y | | Clark,M.L | |
| 17.72 | 818956 | 3.3 | S | 3A | 35 | 7 | | | 0.076 | | 8 | 15 | 6.9 | Y | | Clark,M.L | |
| 17.73 | 818957 | 3.6 | S | 3A | 30 | 7 | 8.1 | | 0.25 | N | 5 | 38 | 6.9 | Y | | Clark,M.L | F |
| 17.81 | 818958 | 4.4 | B | M | 13 | 9 | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 17.84 | 818959 | 4.2 | M | 3A | 12 | 2 | 0.3 | 310 | 0.05 | B | | 7 | | | | Keszthelyi,S | G |
| 17.965 | 818960 | 3.5 | B | 139 | 8 | 2 | 1 | 130 | 0.06 | R | 12 | 56 | 5.7 | Y | 1 | Onofre D.,D | |

NOTE A 1.6 deg. tail: ion tail western border, PA 28-109. 2.2 deg. tail: dust tail eastern border. Both tails not separated.
NOTE B Tail north edge 14 deg. long at PA 67, tail south edge 7 deg. long at PA 85.
NOTE C Moonglow fading NW.
NOTE D Tail suspected 3.8 deg. Tail PA 65-93.
NOTE E Naked eye tail length.
NOTE F PA of 8.1 deg. tail is 79-70.
NOTE G Moon!

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.087 | 831143 | 1.6 | 0.090 | M | 11 | 56 | 10 | 4.0 | 8 | Westlund,M | |
| 17.161 | 831144 | 0.25 | 0.20 | N | 8 | 120 | 45 | 6 | 1 | Vargas B.,A.G | A |
| 17.842 | 831145 | 0.93 | 0.106 | R | 5.7 | 24 | 26 | 5.0 | 8 | Keszthelyi,S | |

NOTE A Tail at PA 87 approx.; tail at PA 0 approx. Tail is very bright and remarkable, but there is a diffuse and open tail "B" in drawing. There is a more remarkable tail than before. The tail appear very wide, I estimate 110 deg. wide approx. DC 6; coma diameter: 12' approx.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.060 | 851892 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 5.00 | Kodak 2415 | | Y | | 4/P | 4 | Jager,M | A |
| 17.189 | 851893 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | C | 15/P | | Falsarella,N | |
| 17.193 | 851894 | 0.135 | 3.5 | | 15.2 x10.2 | 35.00 | Kodak 2415 | | Y | T | 17/N | 1 | Pedersen,V.T | |
| 17.933 | 851895 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 20.50 | Kodak 2415 | | Y | T | 020/P | 1 | Berge,P.M | B |

NOTE A Magnitude 3.0.
NOTE B Photograph made by G. Mahoux and P.M. Berge.

DATE: 18 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.067 | 818961 | 3.9 | M | 3A | | | | | 0.035 | B | | 9 | 5.0M | Y | 1 | Begbie,M.J.R | |
| 18.087 | 818962 | 3.5 | B | 138 | 50 | 4 | | | 0.05 | B | | 20 | 4.5 | Y | 1 | da Silva,L.A.L | A |
| 18.113 | 818963 | | | | 13.5 | 6 | | 60 | 0.30 | N | 8.5 | 102 | 5.0M | Y | 1 | Begbie,M.J.R | B |
| 18.13 | 818964 | 3.7 | B | 3A | | | | | | EY | | | 6.5 | | 28 | Shanklin,J.D | |
| 18.156 | 818965 | 5.4 | S | 3A | 3.0 | 8 | | | 0.203 | N | 6 | 101 | 4.9M | Y | 1 | Hudak,D.M | |
| 18.167 | 818966 | 3.6 | B | 139, 3B | 20 | | 1 | 67 | 0.040 | B | | 8 | 5.6 | Y | 1 | Levai,R | C |
| 18.175 | 818967 | 3.4 | S | 3A | 20 | 4 | | | 0.05 | B | | 7 | 5 M | Y | 2 | House,R.R | D |
| 18.176 | 818968 | 3.8 | S | 3A | 23 | 4 | 0.27 | 40 | 0.035 | B | | 7 | 4.5 | Y | 3 | Morrison,W | E |
| 18.212 | 818969 | 2.8 | B | 3A | 5.9 | 3 | | | 0.140 | SN | 3.6 | 28 | 2.1 | Y | 1 | Rousom,J | F |
| 18.220 | 818970 | 3.2 | S | 3A | 23 | 4 | | | 0.05 | B | | 7 | 5 M | Y | 2 | House,R.R | G |
| 18.220 | 818971 | 3.5 | S | 3A | 15 | 3 | | | 0.05 | B | | 10 | 5 M | Y | 2 | House,R.R | H |
| 18.222 | 818972 | 2.8 | B | 3A | 4 | 3 | | | 0.127 | SC | 10 | 50 | 2.1 | Y | 1 | Rousom,J | F |
| 18.281 | 818973 | 4.5 | S | 3A | 33 | 5 | | | 0.05 | B | | 10 | 3.5MC | Y | 1 | Gronek,J.D | I |
| 18.38 | 818974 | 2.7 | M | 3A | | | | | | EY | | | 5.0 | Y | 10 | Keen,R | J |
| 18.42 | 818975 | 3.1 | S | 3A, 138 | 18 | 5 | | | 0.023 | B | | 3 | 5.1 | | | Jones,A | K |
| 18.42 | 818976 | | | | | | 2 | | 0.050 | B | | 7 | | | | Jones,A | L |
| 18.42 | 818977 | 9.1 | V | | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | M |
| 18.58 | 818978 | 2.9 | B | IHW BAA | 46 | 3 | 10 | | | EY | | | | | | Green,D.W.E | N |
| 18.58 | 818979 | 3.2 | M | 3A, 5B | 18 | 5 | 11.5 | 65 | 0.050 | B | | 10 | 5.5 | Y | 33 | Morris,C.S | |
| 18.59 | 818980 | 3.0 | S | 3B | 48 | 4 | 12.5 | 90 | | EY | | | 5.5 | Y | 5 | Bortle,J.E | |
| 18.59 | 818981 | | | | 17 | 5 | 5 | | 0.050 | B | | 7 | | | | Bortle,J.E | O |
| 18.59 | 818982 | 3.0 | | 3A, 5B | | 4 | 17 | 65 | | EY | | | 5.5 | Y | 33 | Morris,C.S | |
| 18.620 | 818983 | 2.7 | S | 159 | | 3 | | | | EY | | | 6.5 | Y | 3 | Williams,P.F | |
| 18.625 | 818984 | 2.8 | S | 3A | | | 23 | 65 | | EY | | | 6.3 | Y | 1 | Seargent,D | P |
| 18.67 | 818985 | 2.4 | | 5B | | 3 | 20 | | | EY | | | 6.5 | Y | 18 | Bouma,R.J | Q |
| 18.67 | 818986 | 2.6 | M | 5B | 17 | 5 | 3.5 | 45 | 0.05 | B | | 10 | 6.5 | Y | 18 | Bouma,R.J | R |
| 18.67 | 818987 | 2.5 | | 5B | | | 22.5 | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | S |
| 18.674 | 818988 | 5.3 | B | | 6 | 4 | | | 0.060 | R | 16 | 50 | 5.1 | Y | 1 | Bagla,J.S | |
| 18.674 | 818989 | | | | 30 | | 20 | | | EY | | | 6.5 | Y | | Thompson,G | T |
| 18.704 | 818990 | 2.7 | S | 3A | | | 20 | | | EY | | | 6.5 | Y | 2 | Garradd,G | U |
| 18.73 | 818991 | 3.1 | B | 3A | | | | | | EY | | | 6.7 | Y | | Clark,M.L | V |
| 18.74 | 818992 | 3.0 | B | 3A | 30 | 5 | 16 | 85 | | EY | | | 6.0 | Y | 10 | Keen,R | J |
| 18.750 | 818993 | 2.9 | B | 3A | | 6 | 5.0 | | 0.05 | B | | 7 | 6.0 | Y | 4 | Bembrick,C | W |
| 18.75 | 818994 | 3.6 | S | 3A | 28 | 7 | 6.4 | | 0.25 | N | 5 | 38 | 6.7 | Y | | Clark,M.L | X |
| 18.8958 | 818995 | 4.3 | B | 3A, 3B | 5 | 6 | | | 0.05 | B | | 10 | 5.4MC | Y | 2 | Franciosi,C | |
| 18.90 | 818996 | 3.7 | B | 3A | | | | | | EY | | | 5.5 | | 29 | Shanklin,J.D | |
| 18.976 | 818997 | 4.2 | M | 3A | | | | | 0.040 | B | | 7 | 4.5M | Y | 8 | Westlund,M | |
| 18.976 | 818998 | 4.2 | M | 3A | 10 | 4 | | | 0.09 | M | 11 | 56 | 4.5M | Y | 8 | Westlund,M | |

NOTE A Moon 50%+.
NOTE B Tail measurement refers to dust tail only.
NOTE C Magnitude estimate uncertainty +/-0.2 mag.
NOTE D Naked eye with averted vision only.
NOTE E Comet altitude 10 deg., comparison stars' altitudes 12 deg., comet's uncorrected magnitude is 3.9.
NOTE F In horizon haze. Nucleus fuzzy.
NOTE G Oval shaped coma. Coma diameter is major axis.
NOTE H Fan shaped coma. Coma diameter is major axis.
NOTE I Exc. see. 1st 1/4 moon.
NOTE J New Zealand.
NOTE K Moon 9 days.
NOTE L Tail suspected to 3.5 deg. Tail PA 70-100.
NOTE M Nucleus.
NOTE N Coma diameter approximate.
NOTE O Tail now quite normal in shape; long relatively narrow, with only slightly diverging sides - very much different in appearance from just a few days ago. Tail's edges at PA 69 deg. and 105 deg. but appears much narrower than this to the unaided eye, with which the tail is traceable 12.5 deg. and appears parabolic in shape. With 7x50 B tail length = 5+.
NOTE P Fan angle approximately 10 deg.
NOTE Q Long, broad dust tail spans PA 65-100.
NOTE R PA approximate.
NOTE S Naked eye tail length.
NOTE T See sketch. PA 70 100. [sic]
NOTE U Very broad tail.
NOTE V Tails photo'd. to 10.6 deg and 6.4 deg.
NOTE W PA 70 to 100.
NOTE X PA of 6.4 deg. tail is 98-65.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.672 | 831146 | | | | | | 15 | 6.0 | 5 | Thompson,G | A |
| 18.701 | 831147 | | 0.076 | N | 7.9 | 60 | | | 1 | Freydank,E | B |
| 18.974 | 831148 | 1.6 | 0.090 | M | 11 | 56 | 5 | 4.5 | 8 | Westlund,M | C |

NOTE A Naked eye observation. Northerly edge of tail extended to Pi Hya, southern edge to Upsilon (1) Cen. Tail now noticeably less fan-shaped than on earlier days.
NOTE B DC 6. Moonlight. Star of approximately magnitude 4.3 visible. (Duration not indicated. Time of observation is assumed to be start time. Translated by IHW staff. Ed.)
NOTE C Disturbing lights: moon.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.134 | 851896 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | 3M 1000 | 1000/ | N | M | 545/P | 1 | Stolzen,P | A |
| 18.141 | 851897 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Agfachrome | 1000/ | N | M | 547/P | 1 | Stolzen,P | A |
| 18.168 | 851898 | 0.050 | 2 | | | 3.50 | Kodak Tri-X | 400/ | N | | 14/P | 1 | Falsarella,N | |
| 18.196 | 851899 | 0.050 | 2 | | | 3.50 | Kodak Tri-X | 400/ | N | | 15/P | 1 | Falsarella,N | |
| 18.690 | 851900 | 0.085 | 2.4 | | 23.9 x16.1 | 20.00 | Kodak 2415 | | Y | O | 70/S | 2 | Garradd,G | B |

NOTE A (Observer's image identifier is preceded by prefix 2. Ed.)
NOTE B Lens aperture stopped down from f/2.0 to f/2.4.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.083 | 818999 | 3.9 | B | 137 | 15 | | | | 0.040 | B | | 8 | 5.2 | Y | 1 | Levai,R | A |
| 19.092 | 819000 | 3.5 | M | 3B | 25 | 3 | 0.6 | 323 | 0.05 | B | | 7 | 3.5MC | Y | 2 | DeYoung,J.A | |
| 19.108 | 819001 | 4.2 | B | 138 | 20 | 2 | | | 0.05 | B | | 7 | 4.0 | | 1 | Lairet,R | |
| 19.125 | 819002 | 4.4 | M | 3B | | | | | 0.035 | B | | 7 | 4.0CM | Y | 3 | Allen,E | |
| 19.139 | 819003 | 5.2 | S | 3B | 2.9 | 8 | | | 0.203 | N | 6 | 101 | 4.8M | Y | 1 | Hudak,D.M | |
| 19.146 | 819004 | 4.1 | S | 138 | | | | 65 | 0.05 | B | | 7 | 4.8 | | 5 | Benavides,A | |
| 19.149 | 819005 | 3.5 | S | 138 | 24 | 3 | | 49 | 0.05 | B | | 20 | 4.5 | Y | 1 | da Silva,L.A.L | B |
| 19.15 | 819006 | 3.2: | M | IHW | | 5 | | | | EY | | | 5.0 | Y | 5 | Granslo,B.H | |
| 19.170 | 819007 | 3.1 | S | 3A | 20 | 5 | | | 0.05 | B | | 7 | 4.5M | Y | 2 | House,R.R | C |
| 19.333 | 819008 | 4.7 | S | 3B | | 5 | | | 0.203 | SC | 10 | 80 | 3.5MC | Y | 1 | Gronek,J.D | D |
| 19.372 | 819009 | 3.5 | B | 3B | 35 | 5 | 1 | 90 | 0.05 | B | | 10 | | N | 1 | Tregaskis,T.B | E |
| 19.42 | 819010 | 3.2 | M | 3B | | | | | | EY | | | 5.0 | Y | 11 | Keen,R | F |
| 19.46 | 819011 | | | | | | 10 | | | EY | | | 5.3M | N | 1 | Lovejoy,T | G |
| 19.48 | 819012 | 3.2 | B | IHW BAA | 46 | 3 | | | | EY | | | | | | Green,D.W.E | H |
| 19.61 | 819013 | 3.2 | B | 3A | | | | | | EY | | | 5.2 | Y | | Clark,M.L | I |
| 19.62 | 819014 | 3.8 | S | 3A | 21 | 7 | 3.2 | | 0.25 | N | 5 | 38 | 5.2 | Y | | Clark,M.L | J |
| 19.656 | 819015 | 3.0 | S | 3A | | | 13 | 85 | | EY | | | 6.1 | Y | 1 | Seargent,D | K |
| 19.666 | 819016 | 3.0 | S | 3B | 14 | 8 | 3 | | 0.080 | B | | 20 | | Y | 2 | Batza,H | L |
| 19.68 | 819017 | 2.7 | | 5B | | 3 | 23 | 80 | | EY | | | 6.5 | Y | 19 | Bouma,R.J | M |
| 19.69 | 819018 | 3.0 | B | 3B | | | 17 | 85 | | EY | | | 6.5 | Y | 11 | Keen,R | F |
| 19.70 | 819019 | 3.0 | M | 3A | 20 | 4 | | | 0.05 | B | | 10 | 6.5 | Y | 19 | Bouma,R.J | N |
| 19.70 | 819020 | 3.2 | B | 3A | | | | | | EY | | | 6.5 | Y | 19 | Bouma,R.J | O |
| 19.700 | 819021 | 2.7 | S | 159 | | 3 | | | | EY | | | 6.0 | Y | 3 | Williams,P.F | |
| 19.708 | 819022 | 2.7 | S | 3A | | | 22 | | | EY | | | 6.5 | Y | 2 | Garradd,G | P |
| 19.708 | 819023 | 3 : | B | 3B | 30 | | 25 | | | EY | | | 6.5 | Y | | Thompson,G | Q |
| 19.861 | 819024 | 3.4 | M | 3B | | 3 | | | | EY | | | 5.0M | Y | 1 | Fleet,R.W | |
| 19.865 | 819025 | 4.5 | M | 3B | 22 | 6 | 3.5 | 81 | 0.08 | B | | 11 | 5.0M | Y | 1 | Fleet,R.W | R |
| 19.872 | 819026 | 4.4 | M | 3B | | 7 | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | S |
| 19.90 | 819027 | 3.8 | B | 3A | | | | | | EY | | | 5.0 | | 30 | Shanklin,J.D | |
| 19.90 | 819028 | 4.9 | B | 3B | | | | | 0.08 | B | | 20 | 5.0 | | 30 | Shanklin,J.D | T |
| 19.900 | 819029 | 3.7 | S | 139 | 24 | | 1.0 | 80 | | EY | | | 6.3 | Y | 7 | Haver,R | U |
| 19.903 | 819030 | 4.3 | M | 3B | 14.5 | 8 | | | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | V |
| 19.905 | 819031 | 3.9 | S | 139 | 24 | 5 | | | 0.05 | B | | 7 | 6.3 | Y | 7 | Haver,R | W |
| 19.920 | 819032 | 3.5 | M | 3B | 90 | 4 | 5 | | 0.08 | R | 15 | 43 | 4.5 | Y | 6 | Gallego,J | X |
| 19.9270 | 819033 | 4.3 | B | 3B | 3 | 7 | | | 0.05 | B | | 10 | 4.5CM | Y | 2 | Franciosi,C | Y |
| 19.938 | 819034 | 3.0: | B | 3B | 45 | | | | 0.13 | N | 5.5 | 36 | | N | 1 | Pedraz,S | Z |
| 19.952 | 819035 | 4.1 | B | 3B | 14 | 5 | 0.5 | | 0.050 | B | | 7 | 5.0M | N | 9 | Linder,J | a |

NOTE A Magnitude estimate uncertainty +/-0.2 mag.
NOTE B Moon 66%+.
NOTE C Naked eye with averted vision only.
NOTE D Exc. see.
NOTE E Tail faint and wide. PA approximate. Thin cloud, gibbous moon. Just visible to naked eye.
NOTE F New Zealand.
NOTE G Naked eye tail length.
NOTE H Coma diameter approximate.
NOTE I Moon up.
NOTE J Moon up. PA of 3.2 deg. tail is 100-71.
NOTE K Tail narrower.
NOTE L Saw tail with naked eye. (Observer gives limit as 11.5. Ed.)
NOTE M Long broad dust tail. PAs approximate. Chart 3A also used for comparison stars.
NOTE N Dust fan from PA 79 to 107.
NOTE O Naked eye Bobrovnikoff estimate possible without wearing my glasses!
NOTE P Very broad tail.
NOTE Q PA 78 93. [sic]
NOTE R Midpoint on dust tail: 1.8 deg. at PA 73. End point of dust tail: 3.5 deg. at PA 81. Type III [sic] tail at PA 108.
NOTE S Seeing good, transparency excellent. Moon.
NOTE T Magnitude of central condensation.
NOTE U Center fan-shaped tail.
NOTE V Bright moon. The centre of the bright condensation appears definitely star-like.
NOTE W See drawing. West corner fan-shaped tail at PA 63, 2.67 deg. long; east corner fan-shaped tail at PA 95, 2.43 deg. long.
NOTE X Moon.
NOTE Y Central condensation nucleus. [sic]
NOTE Z Coma diameter approximate. Moon.
NOTE a Type I tail. Tail length approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.677 | 831149 | | 0.076 | N | 7.9 | 60 | | | | Freydank,E | A |
| 19.708 | 831150 | | | | | | | 6.0 | 6 | Thompson,G | B |
| 19.865 | 831151 | 4 | 0.08 | B | | 11 | | 5.0 | 1 | Fleet,R.W | C |
| 19.920 | 831152 | | 0.080 | R | | 43 | | | 6 | Gallego,J | D |
| 19.938 | 831153 | 1 | 0.08 | R | 15 | 42,100 | 60 | 4.5 | 6 | Cardiel,N | E |

NOTE A DC 5. Bright moonlit night, 2/8 cumulus. (Duration not indicated. Time of observation is assumed to be start time. Translated by IHW staff. Ed.)
NOTE B Naked eye observation. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Dust tail end point at PA 81. Type III [sic] at PA 108. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Broad envelope. The nucleus seems to be double. The faint "piece" to the ENE (but not sure). 11 days moon. The contrast in the drawing is exaggerated. (Duration not indicated. Time of observation is assumed to be end time. Drawing data inferred from magnitude report form. Ed.)
NOTE E The two semi latus rectums seem equal. Visible at naked eye. Coma diameter 10'; envelope diam.: 1 deg. 30', diffuse. Tail PA 50. Moon 11 days. With 7x50 binocs., is visible a broad faint tail >4 deg. [sic] At 100x with the telescope, the "false nucleus" appear double. [sic]

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.197 | 851901 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 0.50 | Kodak 2415 | | Y | X | 263/P | 1 | Sabia,J.D | A |
| 19.271 | 851902 | 2.000 | 10 | 0.200 | 1.0 x 0.7 | 0.50 | Scotch 1000 | 1000/ | N | S | 16/S | 1 | Gronek,J.D | B |
| 19.718 | 851903 | 0.085 | 2.4 | | 23.9 x16.1 | 20.83 | Kodak 2415 | | Y | O | 71/S | 2 | Garradd,G | C |
| 19.752 | 851904 | 0.180 | 2.8 | | 11.4 x 7.6 | 20.00 | Kodak 2415 | | Y | O | 72/S | 2 | Garradd,G | D |

NOTE A 10 day old moon in sky. Moonlight interfered with the observation. Photograph made by J. Kamichitis and J.D. Sabia.
NOTE B Moonlight and city lights interfered with the observation.
NOTE C Lens aperture stopped down from f/2.0 to f/2.4.
NOTE D Temperature for hypersensitization 60-65 deg. C.

DATE: 20 APR 1986

DATE: 20 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.000 | 819036 | 4.6 | S | 3B | | 7 | 1.8 | | 0.15 | B | | 25 | 5.0 | Y | 3 | Parisio,R | A |
| 20.076 | 819037 | 3.6: | B | 138 | | 3 | | | 0.05 | B | | 20 | 4.0 | Y | 1 | da Silva,L.A.L | B |
| 20.1903 | 819038 | 4.8 | S | DCS | 9 | 7 | | | 0.080 | B | | 20 | 4.4 | | 3 | Machholz,D | C |
| 20.208 | 819039 | 4.1 | B | 137 | | | | | 0.040 | B | | 8 | 4.7 | Y | 1 | Levai,R | D |
| 20.24 | 819040 | 3.3 | M | 3A | | | | | 0.050 | B | | 10 | 3.5MC | Y | 9 | Morris,C.S | |
| 20.30 | 819041 | 3.5 | B | | | | | | | EY | | | 5 M | Y | 11 | Hale,A | E |
| 20.30 | 819042 | | | | | | 2 | 55 | 0.05 | B | | 10 | 5 M | | 11 | Hale,A | E |
| 20.44 | 819043 | 3.3 | B | IHW BAA | 46 | 4 | | | | EY | | | | | | Green,D.W.E | F |
| 20.45 | 819044 | 4.1 | M | 3B | 30 | | | | 0.080 | B | | 11 | 3 M | N | 2 | Watanabe,N | G |
| 20.49 | 819045 | 4.4 | S | 3B | 10 | 7 | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Yasuki,M | |
| 20.708 | 819046 | 3.4 | S | 3B | 23 | | 9 | 80 | | EY | | | 6 | Y | 1 | Seargent,D | H |
| 20.708 | 819047 | | | | 30 | | 20 | | | EY | | | 6.5 | Y | 7 | Thompson,G | I |
| 20.71 | 819048 | 2.9 | | 3A | | 3 | 17 | 95 | | EY | | | 6.5 | Y | 20 | Bouma,R.J | J |
| 20.71 | 819049 | 3.1 | M | 3A | | 4 | 2.5 | 64 | 0.05 | B | | 10 | 6.5 | Y | 20 | Bouma,R.J | K |
| 20.71 | 819050 | 3.4 | B | 3A | 20 | | | | 0.05 | B | | 10 | 6.5 | Y | 20 | Bouma,R.J | F |
| 20.729 | 819051 | 2.9 | S | 3B | | | 17 | | | EY | | | 6.5 | Y | 2 | Garradd,G | L |
| 20.73 | 819052 | 3.3 | B | 3A | | | | | | EY | | | 6.8 | Y | | Clark,M.L | M |
| 20.75 | 819053 | 3.7 | S | 3A | 26 | 7 | 6.1 | | 0.25 | N | 5 | 38 | 6.8 | Y | | Clark,M.L | N |
| 20.833 | 819054 | 4.9 | S | 3B | 8 | 5 | | | 0.080 | B | | 10 | M | | 1 | Mikuz,H | O |
| 20.833 | 819055 | 4.2 | M | 3B | | 7 | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | P |
| 20.844 | 819056 | 3.8 | M | 3B | 28 | 7 | | | 0.030 | B | | 8 | 3.0M | Y | 1 | Villa,M | |
| 20.88 | 819057 | 3.8 | B | 3B | | | | | | EY | | | 4.8 | | 31 | Shanklin,J.D | |
| 20.926 | 819058 | 4.4 | M | 3B | 10 | 6 | 2.4 | 90 | 0.04 | B | | 12 | 5.2 | N | 4 | Henshaw,C | Q |

NOTE A Tail PA 35, 130.
NOTE B Moonlight and cirrus.
NOTE C 77% moon 53 deg. away. Coma irregular in shape.
NOTE D Magnitude estimate uncertainty +/-0.2 mag.
NOTE E Observation affected by waxing gibbous moon. A very broad dust fan observed with the 20 cm reflector.
NOTE F Coma diameter approximate.
NOTE G Coma diameter uncertain.
NOTE H Nucleus stellar in 15x80 binoculars. Tail PA 80 15 deg. long? Tail at PA 100 length approximate.
NOTE I PA 75 97. [sic]
NOTE J Dust tail. PA value approximate.
NOTE K Gas tail at PA 64. Broad dust fan from PA 78 to 108.
NOTE L Very broad tail.
NOTE M Comet low.
NOTE N Dust tail only; PA of tail is 102-76. Tail photo'd. to 7.6 deg.
NOTE O Excellent conditions. Strong moonlight.
NOTE P Transparency excellent. Moon.
NOTE Q Moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.260 | 831154 | 0.54 | 0.41 | N | 5 | 64 | 30 | 4.5 | 1 | Levy,D.H | A |
| 20.701 | 831155 | | 0.076 | N | 7.9 | 81 | | | 1 | Freydank,E | B |
| 20.708 | 831156 | | | | | | | 6.0 | 7 | Thompson,G | C |

NOTE A Scale is approximate.
NOTE B DC 5. Bright moonlight. Comet not as visible with naked eye. Star visible within 3'. (Duration not indicated. Time of observation is assumed to be start time. Translated by IHW staff. Ed.)
NOTE C Naked eye observation. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.147 | 851905 | 0.210 | 4 | | 9.8 x 6.5 | 3.00 | Fuji | 200/ | N | X | 3/P | 1 | Searles,M | A |
| 20.700 | 851906 | 0.085 | 2.4 | | 23.9 x16.1 | 21.50 | Kodak 2415 | | Y | O | 73/S | 2 | Garradd,G | B |
| 20.745 | 851907 | 0.180 | 2.8 | | 11.4 x 7.6 | 25.00 | Kodak 2415 | | Y | O | 74/S | 2 | Garradd,G | C |

NOTE A Photograph made by J. Tuten and M. Searles.
NOTE B Lens aperture stopped down from f/2.0 to f/2.4.
NOTE C Temperature for hypersensitization 60-65 deg. C.

DATE: 21 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.063 | 819059 | 4.0 | B | 137 | 15 | | | | 0.05 | B | | 7 | 5.0CM | Y | 2 | Martinez,C | |
| 21.066 | 819060 | 4.1 | B | 137 | 15 | | | | 0.05 | B | | 7 | 5.0CM | Y | 2 | Martinez,C | |
| 21.104 | 819061 | 4.1 | B | 138,113 | | 3 | | | 0.05 | B | | 10 | 4.0 | Y | 1 | Harris,L.A | A |
| 21.113 | 819062 | 4.2 | B | 3B | | 2 | | | 0.03 | B | | 8 | 4.7MC | Y | 2 | Giraudi,J.D | |
| 21.119 | 819063 | 4.3 | B | 3B | | 2 | | | 0.03 | B | | 8 | 4.7CM | Y | 2 | Giraudi,J.D | |
| 21.124 | 819064 | 4.0 | B | 3B | | 2 | | | 0.03 | B | | 8 | 4.7CM | Y | 2 | Giraudi,J.D | |
| 21.198 | 819065 | 4.5 | M | 3B | | 3 | | | 0.08 | B | | 11 | 3.5 | Y | 1 | Kemble,L.J | B |
| 21.2104 | 819066 | 4.3 | S | DCS | 10 | 6 | | | 0.080 | B | | 20 | 4.4 | | 3 | Machholz,D | C |
| 21.229 | 819067 | 4.8 | S | 3B | 32 | 5 | | | 0.05 | B | | 10 | 3 MC | Y | 1 | Gronek,J.D | D |
| 21.24 | 819068 | 3.2 | M | 3A, 3B | 11 | 4 | | | 0.050 | B | | 10 | 3.5MC | Y | 9 | Morris,C.S | |
| 21.35 | 819069 | 3.4 | B | IHW BAA | 46 | 3 | | | | EY | | | | | | Green,D.W.E | E |
| 21.38 | 819070 | 2.7 | | 5B | | | 5 | | | EY | | | 5.5M | N | 1 | Lovejoy,T | F |
| 21.39 | 819071 | 3.6 | S | 3B, 137 | 24 | 4 | | | 0.023 | B | | 3 | 4.7 | | | Jones,A | G |
| 21.39 | 819072 | | | | 11 | 7 | | | 0.078 | R | 7.5 | 30 | | | | Jones,A | H |
| 21.40 | 819073 | 8.0 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | I |
| 21.44 | 819074 | 5.2 | B | 3B | | | | | 0.050 | B | | 7 | CM | Y | 1 | Matchett,V | |
| 21.67 | 819075 | 3.4 | S | 3B, 137 | 35 | 5 | | | 0.023 | B | | 3 | 5.4 | | | Jones,A | |
| 21.67 | 819076 | | | | | | 0.8 | | 0.078 | R | 7.5 | 30 | | | | Jones,A | J |
| 21.719 | 819077 | 3.5: | B | 3B | | | 16 | | | EY | | | 6.0 | Y | 7 | Thompson,G | K |
| 21.72 | 819078 | 3.5 | B | 3A | 20 | 4 | | | 0.05 | B | | 10 | 5.5 | Y | 20 | Bouma,R.J | E |
| 21.72 | 819079 | 3.4 | B | 3A | | | | | | EY | | | 6.8 | Y | | Clark,M.L | L |
| 21.73 | 819080 | 3.0 | | 3A/B | | 3 | 14 | 90 | | EY | | | 5.5 | Y | 20 | Bouma,R.J | M |
| 21.73 | 819081 | 3.8 | S | 3A | 24 | 7 | 6.9 | | 0.25 | N | 5 | 38 | 6.8 | Y | | Clark,M.L | N |
| 21.830 | 819082 | 4.2 | M | 3B | | 7 | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | O |
| 21.917 | 819083 | | | 3B | 27 | 7 | | | 0.030 | B | | 8 | 2.5M | Y | 1 | Villa,M | |
| 21.994 | 819084 | 3.3 | B | 137 | | 3 | | | 0.05 | B | | 20 | 3.5 | N | 1 | da Silva,L.A.L | P |

NOTE A After several nights of clouds, at 2100 UT it has cleared a little in the area of the comet. Although the moon is a quarter crescent at the zenith, Halley was observed naked eye. (Translated by IHW staff. Ed.)
NOTE B This was my third and best observation since the comet returned above my horizon, (lat. 51 deg., 12 min.). Moonlight and some light haze interfered but the comet suprisingly clear. [sic] No tail noticed. Coma diameter 2-3'.
NOTE C 86% moon 40 deg. away. Coma irregular in shape.
NOTE D Exc. see.
NOTE E Coma diameter approximate.
NOTE F Naked eye tail length.
NOTE G Moon 12 days.
NOTE H Tail not seen for certain.
NOTE I Nucleus.
NOTE J Tail suspected to 1.8 deg. Tail PA 85-110.
NOTE K PA 72 90. [sic]
NOTE L Comet low.
NOTE M PA value approximate.
NOTE N PA of tail is 104-82.
NOTE O Transparency excellent. Moon.
NOTE P Moonlight and clouds.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.219 | 831157 | 0.54 | 0.41 | N | 5 | 64 | 30 | 4.5 | 1 | Levy,D.H | A |
| 21.420 | 831158 | 0.08 | 0.30 | N | 5 | 330 | | 5.0 | 2 | Thompson,G | B |
| 21.719 | 831159 | | | | | | | 6.0 | | Thompson,G | C |
| 21.792 | 831160 | | 0.076 | N | 7.9 | 60 | | | 1 | Freydank,E | D |

NOTE A Scale is approximate.
NOTE B Note the broad faint ray to the north, the dagger like ray to the south. The star-like nucleus was not visible at all tonight being surrounded by a featureless plateau of brightness (inner coma) as seen under high magnification. Appended is a drawing by R. Bouma at 1015 UT. Both drawings done independently without collaboration. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Naked eye observation. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D DC 7. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.749 | 851908 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 6.00 | Kodak 098 | | N | | 036/P | 8 | Royer,R |
| 21.749 | 851910 | 0.105 | 2.5 | | 19.5 x13.0 | 6.00 | Fujichrome | 1600/ | N | | 13/S | | Royer,R |
| 21.759 | 851909 | 0.050 | 1.7 | | 39.6 x27.0 | 25.00 | Fuji HR | 1600/ | N | | 421/P | 11 | Thompson,G |

DATE: 22 APR 1986

DATE: 22 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.010 | 819085 | 3.7 | B | BAA | 30 | 3 | | | 0.040 | B | | 10 | 4.0 | Y | 1 | Alves,A.A | |
| 22.090 | 819086 | 4.1 | B | 137 | 12 | | 0.7 | 90 | 0.040 | B | | 8 | 5.2 | Y | 1 | Levai,R | A |
| 22.155 | 819087 | 4.7 | B | 137 | | | | | 0.05 | B | | 7 | 5.2 | | 2 | Galli,A | |
| 22.158 | 819088 | 4.8 | B | 137 | | | | | 0.05 | B | | 7 | 5.2 | | 2 | Galli,A | |
| 22.23 | 819089 | 5.5 | B | 3B | 6.3 | 3 | | | 0.154 | N | 8.0 | 68 | 3.5 | Y | | Kronk,G | B |
| 22.2410 | 819090 | 3.9 | S | DCS | 15 | 4 | | | 0.080 | B | | 20 | 4.6 | | 3 | Machholz,D | C |
| 22.37 | 819091 | 3.5 | B | IHW BAA | | | | | | EY | | | | | | Green,D.W.E | |
| 22.43 | 819092 | 3.4 | S | IHW BAA | 30 | 3 | | | 0.035 | B | | 7 | | | | Green,D.W.E | D |
| 22.431 | 819093 | 3.7 | B | 3B | 15 | 3 | | 45 | 0.05 | B | | 10 | | N | 1 | Tregaskis,T.B | E |
| 22.46 | 819094 | 2.9 | | 5B | | 6 | 2 | | | EY | | | 4.5M | N | 1 | Lovejoy,T | F |
| 22.49 | 819095 | 5.1 | B | 3B | | | | | 0.050 | B | | 7 | CM | N | 1 | Matchett,V | |
| 22.542 | 819096 | 4.5 | S | 113 | 8 | 4 | 0.67 | 250 | 0.1 | N | 10 | 40 | 4.0 | Y | 1 | Ichikawa,K | |
| 22.57 | 819097 | 4.6 | S | 3B | 10 | 6 | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Yasuki,M | |
| 22.892 | 819098 | 4.4 | M | 3B | 20 | 5 | 1.7 | 75 | 0.08 | B | | 11 | 4.6M | Y | 1 | Fleet,R.W | G |
| 22.896 | 819099 | 4.3 | | 3B | | | | | | EY | | | 4.6M | Y | 1 | Fleet,R.W | |

NOTE A Magnitude estimate uncertainty +/-0.2 mag.
NOTE B Moon 30 deg. away.
NOTE C 93% moon 32 deg. away. Coma irregular in shape.
NOTE D Coma diameter approximate.
NOTE E Tail doubtful. Clear and windy. Bright moon. (Observer gave limit as approximately 7.5. Ed.)
NOTE F Naked eye tail length.
NOTE G Gas tail at PA 75. Dust tail at PA 97.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.281 | 831161 | 0.52 | 0.20 | N | 7 | 79 | 30 | 4 | 1 | Levy,D.H | A |
| 22.468 | 831162 | 0.08 | 0.30 | N | 5 | 330 | | 4.5 | 2 | Thompson,G | B |
| 22.892 | 831163 | 4 | 0.08 | B | | 11 | | 4.6 | 1 | Fleet,R.W | C |

NOTE A Scale is approximate.
NOTE B Note the ejections running N/S from the nucleus. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Gas tail at PA 75. Dust tail at PA 97. Suspected tail at PA 100. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 23 APR 1986

DATE: 23 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.085 | 819100 | 4.6 | S | 3B | 10 | 3 | | | 0.05 | B | | 10 | 4.5M | Y | 3 | House,R.R | |
| 23.138 | 819101 | 3.3 | B | 137 | | 4 | | | 0.05 | B | | 20 | 3.5 | Y | 1 | da Silva,L.A.L | A |
| 23.40 | 819102 | 3.9 | S | 3B, 137 | | 6 | | | 0.023 | B | | 3 | | | | Jones,A | B |
| 23.51 | 819103 | 4.7 | S | AAVSO | 8 | 4 | | | 0.07 | B | | 10 | 4.5M | Y | 1 | Hayashi,A | |
| 23.52 | 819104 | 3.5 | M | 3B | | | | | 0.05 | B | | 7 | 4.0M | Y | 1 | Suzuki,K | |
| 23.53 | 819105 | 4.4 | S | AAVSO | 10 | 4 | | | 0.13 | N | 6.3 | 24 | 4.5M | Y | 1 | Hayashi,A | |
| 23.531 | 819106 | 4.8 | M | 3B | 13 | 4 | | | 0.08 | B | | 11 | 3 M | Y | 1 | Mitsuma,S | |
| 23.531 | 819107 | | | | | | | | 0.16 | N | 6.3 | 31 | 3 M | Y | 1 | Mitsuma,S | C |
| 23.533 | 819108 | 4.0 | S | 3B | 12 | 5 | 0.58 | 90 | 0.07 | B | | 10 | 5.0 | Y | 1 | Kobayashi,J | |
| 23.558 | 819109 | 4.6 | S | 113 | 11.0 | 5 | | | 0.05 | B | | 7 | 3.0M | N | 1 | Kanai,K | |
| 23.958 | 819110 | 6.7 | S | 3B, 130 | 1 | 3 | | | 0.114 | N | 7.9 | 23 | 4.0M | Y | 1 | Di Meglio,F | |

NOTE A Moonlight.
NOTE B Moon 14 days. Comet a faint, fuzzy path.
NOTE C m2 = 9.0.

DATE: 24 APR 1986

DATE: 24 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.000 | 819111 | | | | | 3 | | | | EY | | | 6.5 | Y | 3 | Williams,P.F | A |
| 24.100 | 819112 | 4.6 | S | 3B | 16 | | | | 0.035 | B | | 7 | 4.0M | N | 3 | Morrison,W | |
| 24.125 | 819113 | 4.6 | S | 3B | 11 | 2 | | | 0.05 | B | | 10 | 4.5M | Y | 3 | House,R.R | |
| 24.20 | 819114 | 4.9 | S | 3B | 5.0 | 4 | | | 0.080 | B | | 11 | 5.0 | Y | 2 | Spratt,C.E | B |
| 24.36 | 819115 | 3.5 | S | IHW BAA | | 5 | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 24.44 | 819116 | 3.5 | B | IHW BAA | | | | | | EY | | | | | | Green,D.W.E | |
| 24.500 | 819117 | 3.5 | S | 3B | 14 | | 25 | 88 | | EY | | | | Y | 1 | Seargent,D | C |
| 24.51 | 819118 | 3.2 | | 3A/B | | 3 | 35 | 92 | | EY | | | 6.5 | Y | 21 | Bouma,R.J | D |
| 24.51 | 819119 | 3.5 | B | 3B | | | | | | EY | | | 6.7 | Y | | Clark,M.L | E |
| 24.51 | 819120 | 4.7 | B | 3B | | | | | 0.050 | B | | 7 | 5.1C | N | 1 | Matchett,V | |
| 24.51 | 819121 | 3.5 | M | 3B | | | | | 0.05 | B | | 7 | 4.5 | Y | 1 | Suzuki,K | |
| 24.51 | 819122 | | | 3B | 5.9 | 4 | | | 0.25 | | 4.2 | 88 | 4.5 | Y | 1 | Suzuki,K | F |
| 24.513 | 819123 | | | | | | 25 | | | EY | | | 6.0 | Y | 9 | Thompson,G | G |
| 24.52 | 819124 | 4.0 | S | 3B | 18 | 7 | 28.9 | | 0.25 | N | 5 | 38 | 6.7 | Y | | Clark,M.L | H |
| 24.52 | 819125 | 3.5 | | A | | 7 | 42 | | | EY | | | 6.5 | Y | 1 | Lovejoy,T | I |
| 24.52 | 819126 | 4.0 | | | 30 | 5 | 2 | | 0.12 | B | | 20 | 5.5 | Y | 1 | Washi,S | J |
| 24.524 | 819127 | 6.5 | S | 3B | 10 | 5 | | | 0.153 | N | 8.6 | 52 | 4.0 | Y | 1 | Iwaki,Y | K |
| 24.524 | 819128 | 5.7 | M | 113 | 6 | 6 | | | 0.10 | N | 10 | 55 | 4.0CM | Y | 1 | Kato,T | L |
| 24.53 | 819129 | 3.3 | M | 3B | | | 15 | 90 | | EY | | | 5.0 | Y | 12 | Keen,R | E |
| 24.53 | 819130 | 3.6 | B | IHW BAA | 28 | 4 | 26 | 90 | | EY | | | | | | Green,D.W.E | M |
| 24.53 | 819131 | 3.5 | M | 3B | 15 | 5 | 1 | 80 | 0.08 | B | | 20 | 5.5 | Y | 2 | Oka,A | N |
| 24.53 | 819132 | 3.5 | B | | | | 28 | | | EY | | | 6.3 | Y | | Pearce,A | |
| 24.531 | 819133 | 3.0 | B | 113 | | 6 | 8.0 | 90 | 0.05 | B | | 7 | 5.6 | Y | 2 | Bembrick,C | O |
| 24.540 | 819134 | 4.9 | M | 113 | 14 | 6 | | | 0.030 | B | | 8 | 4.5C | Y | 1 | Kato,T | |
| 24.54 | 819135 | 4.3 | M | 3B, 113 | 20 | 6 | 2 | 90 | 0.080 | B | | 11 | 3 | Y | 1 | Watanabe,N | P |
| 24.54 | 819136 | 4.8 | S | 3B | 12 | 6 | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Yasuki,M | |
| 24.541 | 819137 | 3.2 | S | 113 | 12 | 7 | 4 | | 0.080 | B | | 20 | | Y | 1 | Batza,H | Q |
| 24.542 | 819138 | 3.9: | | 3B | | | 1 | 90 | | EY | | | | Y | 8 | Tregaskis,T.B | R |
| 24.542 | 819139 | | | 3B | | | 2 | 90 | 0.10 | N | 6 | 24 | | Y | 8 | Tregaskis,T.B | S |
| 24.542 | 819140 | | | 3B | 30 | | 3 | 90 | 0.05 | B | | 10 | | | | Tregaskis,T.B | T |
| 24.545 | 819141 | 4.3 | S | 3B | 25 | 4 | 5 | 90 | 0.07 | B | | 10 | 3.5 | Y | 1 | Kobayashi,J | |
| 24.55 | 819142 | 4.1 | M | AAVSO | 16 | 5 | 0.7 | 70 | 0.065 | R | 8 | 16 | 4.5 | Y | 5 | Nakamura,A | |
| 24.556 | 819143 | 4.5 | M | 113 | | 3 | | | 0.15 | N | 5 | 45 | 5.5 | N | | Kusumi,E | U |
| 24.56 | 819144 | 3.8 | B | 3A/B | | 5 | | | 0.05 | B | | 10 | 6.5 | Y | 21 | Bouma,R.J | |
| 24.56 | 819145 | 4.5 | B | | 30 | 7 | | | 0.05 | B | | 10 | 3.5 | Y | 1 | Uda,K | |
| 24.737 | 819146 | 4.9 | M | 3B | 10 | 6 | | | 0.04 | B | | 12 | 4.5 | N | 4 | Henshaw,C | V |
| 24.813 | 819147 | 4.7 | M | AAVSO | 3 | 5 | | | 0.156 | N | 10 | 54 | 4.5 | | | Kosa-Kiss,A | |
| 24.840 | 819148 | 5.2 | S | 3B | 14 | 6 | | | 0.08 | B | | 10 | 4.0M | Y | 1 | Znasik,M | W |
| 24.861 | 819149 | 5.0: | S | 113 | 12 | 3 | | | 0.08 | B | | 15 | 3.0M | Y | 1 | Hurst,G.M | |

NOTE A Tail north edge 28 deg. long at PA 89, tail south edge 28 deg. long at PA 97.
NOTE B Hint of tail.
NOTE C During lunar ecl.
NOTE D Dust tail. Observations during lunar eclipse.
NOTE E During total lunar eclipse.
NOTE F Meter. (Coma diameter. Ed.) Instrument is Wright-Schmidt.
NOTE G Tail quite visible 20x80 binoculars. PA 87 95. [sic]
NOTE H Tail photo'd. to 24 deg. PA of tail is 110-88.
NOTE I Impressive to naked eye. Naked eye tail length. Lunar eclipse.
NOTE J (Observer indicated "Y" method. Ed.)
NOTE K Eclipse. (Translated by IHW staff. Ed.)
NOTE L Haze.
NOTE M Coma diameter approximate.
NOTE N Can't see moon (eclipse). (Translated by IHW staff. Ed.)
NOTE O Suspect as much as 12 deg. tail.
NOTE P Coma diameter uncertain.
NOTE Q Moon in eclipse. (Observer gave limit as 10.5. Ed.)
NOTE R Tail faint and broad. Coma diameter exceeds Omega Centauri. During total lunar eclipse.
NOTE S Tail faint, fairly narrow. Head passed in front of 6 mag. star. (Observer gave limit as approximately 11.5. Ed.)
NOTE T Coma diameter is lower limit. Tail fairly broad.
NOTE U Observer gives coma diameter as 5 deg. 65 on original report form. Ed.
NOTE V Full moon.
NOTE W Moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.219 | 831164 | 0.53 | 0.41 | N | 5 | 64 | 90 | 4 | 1 | Levy,D.H | A |
| 24.514 | 831165 | | | | | | | 6.0 | | Thompson,G | B |

NOTE A Scale is approximate.
NOTE B Naked eye observation. The first 15 degrees of tail could be readily seen with direct vision. In 20x80 binoculars the nucleus appeared at western edge of an egg shaped inner coma. (Two drawings supplied. Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.523 | 851911 | 0.180 | 2.8 | | 11.4 x 7.6 | 8.00 | Kodak 2415 | | Y | O | 75/S | 5 | Garradd,G | A |
| 24.523 | 851912 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 15.00 | Kodak 098 | | N | | 038/P | 9 | Royer,R | B |
| 24.523 | 851913 | 0.105 | 2.5 | | 19.5 x13.0 | 15.00 | Fujichrome | 1600/ | N | | 14/S | 9 | Royer,R | |
| 24.535 | 851914 | 0.024 | 2.8 | | 73.7 x53.1 | 20.00 | Kodak 2415 | | Y | O | 76/S | 5 | Garradd,G | C |
| 24.540 | 851915 | 0.508 | 5 | 0.100 | 4.1 x 2.7 | 15.00 | Kodak IIa-D | | N | | 037/P | 9 | Royer,R | D |
| 24.550 | 851916 | 0.050 | 1.4 | | 39.6 x27.0 | 5.00 | Fujichrome | 1600/ | N | | 15/S | 9 | Royer,R | |
| 24.552 | 851917 | 0.180 | 2.8 | | 11.4 x 7.6 | 21.00 | Kodak 2415 | | Y | O | 77/S | 5 | Garradd,G | A |
| 24.564 | 851918 | 0.085 | 2.0 | | 23.9 x16.1 | 5.50 | Kodak 2415 | | Y | O | 78/S | 5 | Garradd,G | E |

NOTE A Film was excessively hypered (70 deg. C), causing severe fogging.
NOTE B Comet equal in brightness to Omega Cen. cluster. 3.9 mag.
NOTE C Film excessively hypered (65-70 deg. C), causing severe fogging.
NOTE D Wr. 4 filter used.
NOTE E Film excessively hypered, causing severe fogging.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.073 | 819150 | 5.0 | M | 3B | | 6 | | | 0.035 | B | | 7 | 2.5C | Y | 1 | Allen,E | |
| 25.078 | 819151 | 4.7 | S | 3B | 18 | | | | 0.035 | B | | 7 | 4 M | N | 3 | Morrison,W | |
| 25.101 | 819152 | 5.2 | S | 3B | 3.2 | 8 | | | 0.203 | N | 6 | 101 | 4.5M | Y | 1 | Hudak,D.M | |
| 25.110 | 819153 | 4.7 | S | 3B | 11 | 7 | | | 0.05 | B | | 10 | 5 M | Y | 3 | House,R.R | A |
| 25.38 | 819154 | 4.0 | B | 3B | | | | | 0.030 | B | | 8 | 4.5M | N | 22 | Bouma,R.J | |
| 25.40 | 819155 | 4.0 | | A | | | | | | EY | | | 6.0M | Y | 1 | Lovejoy,T | B |
| 25.466 | 819156 | 5.6 | M | 113 | 6 | 5 | | | 0.10 | N | 10 | 55 | 3.5M | Y | 1 | Kato,T | |
| 25.474 | 819157 | 5.1 | M | 113 | 14 | 5 | | | 0.030 | B | | 8 | 3.5M | Y | 1 | Kato,T | |
| 25.516 | 819158 | 4.9 | B | 3B | | | | | 0.05 | B | | 16 | 3.3CM | Y | 1 | Giraudi,J.D | C |
| 25.75 | 819159 | 4.8 | S | AAVSO | 20 | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 25.75 | 819160 | 5.2 | B | E | 26 | | | | 0.11 | N | | | | | | Krylov,A | |
| 25.75 | 819161 | 5.0 | B | E | 20 | | | | 0.11 | B | | | | | | Kasirin,I | |
| 25.75 | 819162 | 5.0 | B | E | | | | | | EY | | | | | | Belyaev,D | |
| 25.75 | 819163 | 5.0 | V | E | | | | | | EY | | | | | | Misuhin,A | |
| 25.75 | 819164 | 4.9 | V | E | | | | | | EY | | | | | | Paschenko,A | |
| 25.75 | 819165 | 5.4 | B | E | 28 | | | | 0.08 | B | | 8 | | | | Maylisov,P | |
| 25.75 | 819166 | 4.9 | B | E | 21 | | | | 0.08 | B | | | | | | Bukotkin,A | |
| 25.809 | 819167 | 4.7 | M | 3B | 40 | 7 | | | 0.05 | B | | 12 | | Y | 1 | Tanti,T | D |
| 25.819 | 819168 | 4.6 | M | CZ | 18 | 3 | | | 0.080 | B | | 10 | 4 | Y | 1 | Bilek,V | |
| 25.819 | 819169 | 4.3 | | 3B | | | | | | EY | | | 4.6M | Y | 1 | Fleet,R.W | |
| 25.819 | 819170 | 4.7 | M | AAVSO | 10 | 6 | | | 0.156 | N | 10 | 54 | 5.3 | | | Kosa-Kiss,A | E |
| 25.819 | 819171 | 5.1 | M | CZ | | 5 | | | 0.08 | B | | 10 | 4.5C | N | 1 | Rapavy,P | |
| 25.827 | 819172 | 4.8 | M | 3B | | | | | 0.035 | B | | 9 | 5.0M | Y | 1 | Begbie,M.J.R | |
| 25.83 | 819173 | 4.8 | B | AAVSO | 20 | 5 | | | 0.11 | B | | 20 | | | | Chernis,K | |
| 25.833 | 819174 | 5.0 | S | 3B | 25 | 4 | | | 0.08 | B | | 10 | 4.2 | Y | 1 | Znasik,M | F |
| 25.837 | 819175 | 5.3 | S | 113 | 13 | 4 | | | 0.05 | B | | 10 | 4.5CM | N | 1 | Menichetti,R | G |
| 25.844 | 819176 | 5.0 | M | 3B | 17 | 5 | 1.5 | 76 | 0.08 | B | | 11 | 4.7M | Y | 1 | Fleet,R.W | H |
| 25.864 | 819177 | | | | 12 | 4 | | | 0.08 | B | | 15 | 3.2C | Y | 1 | Hurst,G.M | |
| 25.865 | 819178 | 5.3 | B | 113 | 30 | 4 | | | 0.07 | B | | 10 | 5.0 | Y | 5 | Deconinck,M | |
| 25.867 | 819179 | 4.8 | S | 113 | 10 | 4 | | | 0.05 | B | | 10 | 3.2C | Y | 1 | Hurst,G.M | |
| 25.868 | 819180 | 5.1 | S | 3B | 15 | 5 | | | 0.050 | B | | 7 | M | | 1 | Mikuz,H | I |
| 25.869 | 819181 | | | | 7.6 | 5 | 2.5 | 85 | 0.30 | N | 8.5 | 102 | 5.0M | Y | 1 | Begbie,M.J.R | J |
| 25.878 | 819182 | 4.8 | M | 113 | 30 | 5 | 0.25 | 40 | 0.050 | B | | 7 | 6.0 | Y | 1 | Stott,D | |
| 25.878 | 819183 | 6.3 | M | CZ | 10 | | | | | | | | M | | 1 | Silhan,J | K |
| 25.882 | 819184 | 6.4 | M | CZ | 17 | 3 | | | 0.10 | B | | 25 | 4.2 | | | Hajek,P | |
| 25.885 | 819185 | 5.3 | S | 113 | 8 | 6 | | | 0.065 | B | | 12 | 4.5 | Y | 1 | Foulkes,M | L |
| 25.89 | 819186 | 4.4 | B | 3B | | | | | | EY | | | 5.7 | | 32 | Shanklin,J.D | G |
| 25.89 | 819187 | 4.8 | S | 3B | | | | | 0.05 | B | | 7 | 5.7 | | 32 | Shanklin,J.D | G |
| 25.958 | 819188 | 4.9 | B | 3B | | 5 | | | 0.05 | B | | 7 | 4.1C | Y | 2 | Lupianez,B | |

NOTE A m2 = 6.4.
NOTE B Tail length = hint naked eye.
NOTE C Intense full moon. (Translated by IHW staff. Ed.)
NOTE D Moon.
NOTE E Comet: naked eye.
NOTE F Cirrus.
NOTE G Haze.
NOTE H Suspected gas tail at PA 76. Midpoint of dust tail: 1.7 deg. at PA 105. End point of dust tail: 2.8 deg. at PA 106.
NOTE I Clouds passing occasionally.
NOTE J Tail measurement refers to dust tail only.
NOTE K Limit around 2? Stars in Corvus invisible.
NOTE L Hazy.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.049 | 831166 | 3.0 | 0.229 | R | 10 | 45 | 22 | 6.0 | 1 | Nowak,G.T | A |
| 25.113 | 831167 | 0.38 | 0.318 | N | 8 | 75 | 72 | | 1 | Hathaway,W | |
| 25.844 | 831168 | 4 | 0.08 | B | | 11 | | 4.7 | 1 | Fleet,R.W | B |
| 25.889 | 831169 | 1.94 | 0.065 | B | | 12 | 10 | 4.5 | 1 | Foulkes,M | C |

NOTE A Dust tail at PA 225, gas tail at PA 330.
NOTE B Suspected gas tail at PA 76. Dust tail end point at PA 106. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Non circular coma, brighter central spot offset in direction of PA approximately 210 deg. Coma broader towards PA 45 deg.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.527 | 851919 | 0.035 | 2.8 | | 54.4 x37.8 | 7.00 | 3M 1000 | 1000/ | N | | 1/S | 1 | Robertson,G | A |
| 25.534 | 851920 | 0.035 | 2.8 | | 54.4 x37.8 | 7.00 | 3M 1000 | 1000/ | N | | 3/S | 1 | Robertson,G | B |
| 25.556 | 851921 | 0.100 | 2.8 | | 20.4 x13.7 | 10.00 | 3M 1000 | 1000/ | N | | 9/S | 1 | Robertson,G | C |

NOTE A (Photographer's image identifier is 1-2A. Ed.) Total lunar eclipse (exposure 5 sec. on moon, then 7 min. on comet), comet Halley and constellation Corvus in same frame. Clear.
NOTE B (Photographer's image identifier is 2A-3. Ed.) Total lunar eclipse (exposure 5 sec. on moon, then 7 min. on comet), comet Halley and constellation Corvus in same frame. Clear.
NOTE C (Observer's image identifier is 8A-9. Ed.) Comet Halley and tail as seen during total lunar eclipse (40 deg. away) over Christchurch, N.Z. Clear.

DATE: 26 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.083 | 819189 | 4.7 | B | 113 | 8 | | | | 0.040 | B | | 8 | 4.7 | Y | 1 | Levai,R | A |
| 26.087 | 819190 | 4.8 | S | 3B | 4.4 | 7 | 0.67 | 120 | 0.152 | N | 5.5 | 69 | 4.5 | Y | 1 | Hudak,D.M | B |
| 26.095 | 819191 | 4.7 | S | 3B | 11 | 5 | | | 0.05 | B | | 7 | 4.5C | Y | 3 | House,R.R | |
| 26.112 | 819192 | 3.0 | B | 3B | 6.6 | 3 | | | 0.140 | SC | 3.6 | 28 | 2.6 | Y | 1 | Rousom,J | C |
| 26.2146 | 819193 | 3.9 | S | DCS | 17 | 5 | | | 0.080 | B | | 20 | 4.6 | | 3 | Machholz,D | D |
| 26.229 | 819194 | 5.4 | S | 3B | 32 | 4 | | | 0.05 | B | | 10 | 3.5MC | Y | 1 | Gronek,J.D | E |
| 26.333 | 819195 | 4.6 | S | M/P | 12 | 3 | | | 0.050 | B | | 10 | 3.0 | | | Witte,F | F |
| 26.354 | 819196 | 3.8 | S | 3B | | 12 | | 100 | | EY | | | 5.5M | Y | 1 | Seargent,D | G |
| 26.40 | 819197 | 3.7 | | A | | 20 | | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | H |
| 26.656 | 819198 | 4.9 | M | 3B | 10 | 6 | 1.5 | 100 | 0.04 | B | | 12 | 5.2 | N | 4 | Henshaw,C | I |
| 26.726 | 819199 | 5.3 | M | 3B | 17 | 5 | 2.5 | 86 | 0.08 | B | | 11 | 5.7 | Y | 1 | Fleet,R.W | J |
| 26.729 | 819200 | | | | | 9 | | 101 | | EY | | | 5.7 | Y | 1 | Fleet,R.W | K |
| 26.74 | 819201 | 5.3 | B | E | 24 | | | | 0.11 | B | | 20 | | | | Krylov,A | |
| 26.74 | 819202 | 5.0 | B | E | 20 | | | | 0.06 | R | | | | | | Kurtsov,S | |
| 26.74 | 819203 | 5.2 | B | E | 20 | | | | 0.08 | B | | 8 | | | | Oskin,E | |
| 26.74 | 819204 | 5.1 | B | E | 20 | | | | | EY | | | | | | Maksimov,S | |
| 26.74 | 819205 | 5.1 | V | E | | | | | | EY | | | | | | Paschenko,A | |
| 26.74 | 819206 | 4.9 | B | E | 20 | | | | 0.08 | B | | 8 | | | | Tatarnikov,A | |
| 26.74 | 819207 | 5.1 | B | E | 20 | | | | 0.08 | B | | 8 | | | | Filimonchev,S | |
| 26.74 | 819208 | 5.0 | B | E | 20 | | | | 0.08 | B | | 8 | | | | Maylisov,P | |
| 26.74 | 819209 | 5.1 | V | E | 20 | | | | | EY | | | | | | Bukotkin,A | |
| 26.74 | 819210 | 4.9 | B | AAVSO | 20 | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 26.750 | 819211 | 4.3 | B | 3B | 23 | 6 | 6 | | 0.05 | B | | 7 | 5.2 | Y | 2 | Vincent,J | L |
| 26.795 | 819212 | 4.8: | B | 113 | 5 3 | 4 | | | 0.050 | B | | 10 | 4.5 | Y | 1 | Laszlo,A | |
| 26.809 | 819213 | 4.8 | M | 3B | 31 | 6 | | | 0.05 | B | | 12 | 4 | Y | 1 | Tanti,T | M |
| 26.81 | 819214 | 5.2 | B | M | | 3 | 0.7 | 260 | 0.11 | N | | 30 | | | | Yurchenko,Yu | |
| 26.823 | 819215 | 5.1 | M | 113 | | 5 | | | 0.06 | R | 4.5 | 10 | 4.0M | Y | 1 | Chodorowski,F | N |
| 26.833 | 819216 | | | | 12 | 5 | | | 0.064 | R | 12 | 32 | 4.0M | Y | 1 | Chodorowski,F | N |
| 26.833 | 819217 | | S | 112 | 6.2 | 6 | | | 0.090 | R | 14 | 46 | 4.5 | Y | 2 | Birth,G | O |
| 26.844 | 819218 | 5.1 | B | 3B | 16 | 4 | | | 0.05 | B | | 7 | 4.5 | Y | 2 | Paradowski,M | N |
| 26.847 | 819219 | 5.3 | S | 3B | 22 | 5 | | | 0.08 | B | | 10 | 4.4 | Y | 1 | Znasik,M | P |
| 26.85 | 819220 | 4.6 | B | AAVSO | 20 | 5 | | | 0.11 | B | | 20 | | | | Chernis,K | |
| 26.854 | 819221 | 3.9 | B | CZ | 16 10 | 5 | | | 0.10 | O | | 25 | 4.0C | Y | 1 | Micek,I | |
| 26.875 | 819222 | 4.2 | B | 3B | 50 | | 5 | | 0.05 | B | | 7 | | Y | 1 | Pedraz,S | Q |
| 26.88 | 819223 | 4.4 | B | 3B | | | | | | EY | | | 5.1 | | 33 | Shanklin,J.D | R |
| 26.88 | 819224 | 4.8 | S | 3B | | | | | 0.05 | B | | 7 | 5.1 | | 33 | Shanklin,J.D | R |
| 26.882 | 819225 | 5.2 | M | 3B | | | | | 0.035 | B | | 9 | 5.3M | Y | 1 | Begbie,M.J.R | |
| 26.89 | 819226 | 5.3 | S | 3B | | | | | 0.08 | B | | 20 | 5.1 | | 33 | Shanklin,J.D | S |
| 26.896 | 819227 | | | | 5 | | | | 0.064 | R | 12 | 32 | 3.0M | Y | 1 | Chodorowski,F | N |
| 26.910 | 819228 | 5.2 | B | 113 | | | | | 0.030 | B | | 8 | 4.5 | Y | 4 | Li Causi,G | |
| 26.910 | 819229 | | | | 9 | 5 | 0.58 | 106 | 0.076 | N | 9.2 | 70 | | | | Li Causi,G | T |
| 26.917 | 819230 | | | | 6.2 | 5 | 3.0 | 90 | 0.30 | N | 8.5 | 102 | 5.3M | Y | 1 | Begbie,M.J.R | U |
| 26.917 | 819231 | 4.0 | M | 3B | 60 | 4 | 7.0 | | 0.08 | R | 15 | 50 | 5.5 | Y | 6 | Gallego,J | V |
| 26.986 | 819232 | 5.6 | B | 113,112 | 15 | 2 | | | 0.05 | R | 8 | 7 | 5.0CM | Y | 1 | Martinez,C | |
| 26.998 | 819233 | 3.9 | B | 113 | | 5 | | | 0.05 | B | | 20 | 4.5 | Y | 1 | da Silva,L.A.L | W |

NOTE A Magnitude estimate uncertainty +/-0.3 mag.
NOTE B Tail length and PA approximate.
NOTE C Heavy haze. Nucleus fuzzy.
NOTE D Coma irregular in shape.
NOTE E Wan. gib. moon. Good see.
NOTE F Somewhat hazy. (Translated by IHW staff. Ed.)
NOTE G Sky light due to rising moon.
NOTE H Naked eye tail length.
NOTE I Moon.
NOTE J Gas tail at PA 86. Midpoint on dust tail: 4.6 deg. at PA 99. End point of dust tail: 8.7 deg. at PA 99. Type III [sic] tail at PA 106.
NOTE K Ended by cloud.
NOTE L 30 deg. fan tail.
NOTE M Seeing good, transparency fair. Haze. Clouds. Wind.
NOTE N Clouds.
NOTE O Extinction.
NOTE P Cirrus.
NOTE Q Two tails, see drawing. Tail length is lower limit.
NOTE R Haze.
NOTE S Haze, broad tail.
NOTE T PA computed by a callipered eye-piece. [sic] Second tail length and PA approximate.
NOTE U Tail measurement refers to dust tail only.
NOTE V Two tails.
NOTE W Moonlight.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.240 | 831170 | 0.53 | 0.41 | N | 5 | 64 | 90 | 5 | 1 | Levy,D.H | A |
| 26.726 | 831171 | 4 | 0.08 | B | | 11 | | 5.7 | 1 | Fleet,R.W | B |
| 26.840 | 831172 | 0.2 | 0.050 | B | | 7 | 10 | 5.1 | 3 | Piccinini,M | C |
| 26.875 | 831173 | | 0.05 | B | | 7 | | | 1 | Pedraz,S | D |
| 26.896 | 831174 | 3 | 0.05 | B | | 7 | 30 | 5.5 | 7 | Cardiel,N | E |

NOTE A Scale is approximate.
NOTE B Gas tail at PA 86. Dust tail end point at PA 99. Type III [sic] at PA 106. Tail probably longer but observation ended by cloud. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C City lights interfered with the observation. Tail at PA 90 deg. Vertex distance = 3', semi latus rectum P1 = 3', P2 = 3'.
NOTE D Field: 7 deg. Two tails clearly visible, broads. Coma (but not the tail) visible at naked eye. Coma 50' diam. Tail 5 deg. length. (Duration not indicated. Time of observation is assumed to be end time. Ed.)
NOTE E Tail: 5 deg at PA 50. The tail is narrow but far from the coma, it grow. [sic]

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.074 | 870140 | 600G-O | CL | 0.135 | 1.9 | | 30.00 | Kodak 2415 | | Y | C | 230/S | 1 | Buchanan,W.T | A |

NOTE A (Observer's image identifier is E-122-30. Ed.) Comet Halley visible to naked eye.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.021 | 819234 | 4.9 | B | 113 | 10 | | | | 0.040 | B | | 8 | 5.1 | Y | 1 | Levai,R | A |
| 27.069 | 819235 | 5.3 | S | 3B | 4.4 | 7 | 0.50 | 100 | 0.203 | N | 6 | 101 | 4.7 | Y | 1 | Hudak,D.M | B |
| 27.094 | 819236 | 5.7 | M | 3B | | | 2.0 | 100 | 0.050 | B | | 10 | 5.2 | Y | 1 | Smith,A | C |
| 27.096 | 819237 | 4.7 | S | 3B | 17 | 4 | | | 0.035 | B | | 7 | 5.5 | Y | 3 | Morrison,W | |
| 27.104 | 819238 | 6.2 | B | 113 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | |
| 27.115 | 819239 | 5.2 | M | 3B | 10.1 | | 2.17 | 110 | 0.152 | N | 5 | 19 | 5.2 | Y | 1 | Smith,A | D |
| 27.118 | 819240 | 4.9 | B | 3B | 18 15 | 3 | 3.0 | 110 | 0.05 | B | | 10 | 6.5 | Y | 1 | Hays Jr,R.H | |
| 27.125 | 819241 | 4.8 | B | 3B | 10 | 6 | 0.5 | | 0.15 | N | 8 | 60 | 5.5 | Y | 4 | Gilchrist,D.K | E |
| 27.146 | 819242 | 5.5 | B | 113 | 20.5 | 6 | | | 0.050 | B | | 7 | 4.0C | Y | 1 | Will,M | |
| 27.165 | 819243 | 5.2 | S | 3B | 8 | 3 | | | 0.05 | B | | 7 | 4.5C | Y | 3 | House,R.R | |
| 27.165 | 819244 | 5.1 | S | 3B | 11 | 4 | | | 0.05 | B | | 10 | 4.5C | Y | 3 | House,R.R | |
| 27.172 | 819245 | 4.9 | B | 3B | 8.3 | 1 | | | 0.05 | B | | 7 | 4.1C | Y | 1 | Dodd,W.J | F |
| 27.178 | 819246 | 5.6 | B | 3B | | 7 | | | 0.08 | B | | 11 | 4.5 | Y | 1 | Gorski,L | |
| 27.198 | 819247 | 4.9 | | 3B | | 4 | 3.5 | | | EY | | | | Y | 7 | Edberg,S.J | G |
| 27.20 | 819248 | 4.3: | B | IHW BAA | 60 | | | | | EY | | | | | | Green,D.W.E | H |
| 27.20 | 819249 | 4.4 | S | IHW BAA | 24 | 5 | | | 0.035 | B | | 7 | | | | Green,D.W.E | H |
| 27.20 | 819250 | 4.4 | M | 3B | 16 | 4 | 5 | 90 | 0.050 | B | | 10 | 5.5C | Y | 13 | Morris,C.S | |
| 27.21 | 819251 | 4.3 | | 3B | | | 5 | 90 | | EY | | | 5.5C | Y | 13 | Morris,C.S | |
| 27.2194 | 819252 | 4.1 | | DCS | 14 | 3 | | | | EY | | | 5.6 | | 10 | Machholz,D | |
| 27.2208 | 819253 | 4.3 | S | DCS | 20 | 6 | 0.82 | 105 | 0.080 | B | | 20 | 5.6 | | 10 | Machholz,D | |
| 27.229 | 819254 | 6 | S | 3B | 30 | 4 | | | 0.05 | B | | 10 | 3 MC | Y | 1 | Gronek,J.D | I |
| 27.229 | 819255 | 5.3 | B | 3B | | | | | 0.05 | B | | 7 | 4.4C | Y | 2 | Lupianez,B | |
| 27.2292 | 819256 | | | | 20 | 6 | | | | EY | | | 6.0 | Y | 19 | Cook,A.J | J |
| 27.2396 | 819257 | 4.3 | M | 3B | 22 | 6 | 11.30 | 105 | 0.05 | B | | 7 | 6.0 | Y | 19 | Cook,A.J | K |
| 27.347 | 819258 | 4.7 | S | TIRION | 16 | 3 | | | 0.050 | B | | 15 | 3.6 | | | Witte,F | |
| 27.361 | 819259 | 4.9 | S | TIRION | 15 | 3 | | | 0.080 | R | 4.5 | 14 | 3.8 | | | Witte,F | L |
| 27.365 | 819260 | 4.2 | S | 3B | | | 12 | 100 | | EY | | | 6 | Y | 1 | Seargent,D | |
| 27.382 | 819261 | | | | | | 15 | | | EY | | | 6.0C | Y | 8 | Garradd,G | |
| 27.40 | 819262 | 4.9 | S | 3B, 113 | | 1 | | | 0.023 | B | | 3 | 5.1 | | | Jones,A | M |
| 27.40 | 819263 | | | | 12 | 3 | | | 0.050 | B | | 7 | | | | Jones,A | |
| 27.41 | 819264 | 9.6 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | N |
| 27.417 | 819265 | | | | | | 22 | | | EY | | | 6.0 | Y | 8 | Thompson,G | O |
| 27.729 | 819266 | 4.8 | S | 3B | 16 | 5 | 2.25 | 107 | 0.13 | R | 4 | 21 | 5.5 | Y | 1 | Campos,J | |
| 27.753 | 819267 | 4.6 | S | 3B | 25 | 5 | 2.00 | 105 | 0.08 | B | | 30 | 5.5 | Y | 1 | Campos,J | |
| 27.76 | 819268 | 5.3 | B | E | 25 | | | | 0.11 | B | | 20 | | | | Krylov,A | |
| 27.76 | 819269 | 5.2 | B | E | 17 | | | | 0.08 | B | | 8 | | | | Kasirin,I | |
| 27.76 | 819270 | 5.2 | B | E | | | | | | EY | | | | | | Belyaev,D | |
| 27.76 | 819271 | 5.0 | B | E | 15 | | | | 0.11 | B | | 20 | | | | Maksimov,S | |
| 27.76 | 819272 | 5.2 | B | E | 18 | | | | 0.08 | B | | | | | | Misuhin,A | |
| 27.76 | 819273 | 5.0 | V | E | | | | | 0.08 | B | | | | | | Paschenko,A | |
| 27.76 | 819274 | 5.1 | V | E | 18 | | | | 0.08 | B | | | | | | Tatarnikov,A | |
| 27.76 | 819275 | 5.0 | V | E | 19 | | | | 0.08 | B | | | | | | Filimonchev,S | |
| 27.76 | 819276 | 5.1 | B | E | | | | | 0.08 | B | | 8 | | | | Ivanov,V | |
| 27.76 | 819277 | 5.1 | B | M | 19 | | | | 0.08 | B | | 8 | | | | Maylisov,P | |
| 27.76 | 819278 | 5.0 | B | M | 19 | | | | | | | | | | | Bukotkin,A | |
| 27.76 | 819279 | 5.1 | B | AAVSO | 20 | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 27.763 | 819280 | 4.5 | M | 3B | | 4 | 12 | 102 | | EY | | | 5.6 | Y | 1 | Fleet,R.W | |
| 27.764 | 819281 | 4.0 | | 3B | 60 | 4 | 3.00 | 100 | | EY | | | 5.5 | Y | 1 | Campos,J | |
| 27.767 | 819282 | 5.1 | M | 3B | 18 | 6 | 3.0 | 97 | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | P |
| 27.78 | 819283 | 5.5 | B | M | | 4 | | | 0.05 | B | | 7 | | | | Mamedov,V | |
| 27.816 | 819284 | 4.9 | M | AAVSO | 7 | 4 | | | 0.156 | N | 10 | 54 | 4.0 | | | Kosa-Kiss,A | |
| 27.816 | 819285 | 5.2 | M | CZ | 15 | 5 | | | 0.08 | B | | 10 | 4.5C | N | 1 | Rapavy,P | |
| 27.816 | 819286 | 6.2 | M | CZ | 15 | 7 | | | 0.10 | B | | 25 | | | 1 | Silhan,J | Q |
| 27.826 | 819287 | 5.1 | S | 3B | 25 | 4 | | | 0.08 | B | | 10 | 4.0 | Y | 1 | Znasik,M | R |
| 27.837 | 819288 | 6.1 | M | CZ | 20 | 6 | | | 0.055 | R | 6 | 12 | | | 1 | Silhan,J | Q |
| 27.844 | 819289 | 4.9 | B | 3B | | 4 | | | 0.05 | B | | 7 | 5 | Y | 2 | Paradowski,M | |
| 27.861 | 819290 | | | | 14 | 4 | | | 0.08 | B | | 15 | 2.0C | Y | 1 | Hurst,G.M | |
| 27.868 | 819291 | 4.9 | S | 113 | 14 | 4 | | | 0.05 | B | | 10 | 2.0C | Y | 1 | Hurst,G.M | |
| 27.875 | 819292 | 6.0 | B | 113 | 15 | 3 | | | 0.035 | B | | 7 | 5.0C | N | 1 | Sciezor,T | S |
| 27.88 | 819293 | 4.7 | B | 3B | | | | | | EY | | | 5.5 | | 34 | Shanklin,J.D | T |
| 27.882 | 819294 | 4.6 | M | 113 | | 5 | 0.25 | 10 | 0.050 | B | | 7 | 5.7 | Y | 1 | Stott,D | |
| 27.896 | 819295 | 5.5 | M | 113 | | | | | 0.06 | R | 4.5 | 10 | 4.0 | Y | 1 | Chodorowski,F | |
| 27.899 | 819296 | | | | 10 | 5 | | | 0.064 | R | 12 | 32 | 4.0 | Y | 1 | Chodorowski,F | |
| 27.938 | 819297 | 6.1 | S | 113 | | 4 | | | 0.070 | B | | 16 | 4.1C | Y | 1 | Taylor,M.D | U |
| 27.941 | 819298 | 4.9 | B | AAVSO | 18 | 3 | 0.5 | 90 | 0.115 | N | 7.8 | 30 | 5.5 | Y | 1 | Alves,A.A | V |
| 27.965 | 819299 | 5.1 | B | 113 | | | 0.83 | 75 | 0.05 | B | | 7 | 5.7C | Y | 2 | Martinez,C | |
| 27.98 | 819300 | 4.9 | B | AAVSO | | | 5.4 | | 0.04 | B | | 7 | | | | Kiselev,N | |

NOTE A Magnitude estimate uncertainty +/-0.2 mag.
NOTE B Tail length and PA approximate.
NOTE C Seeing conditions very good.
NOTE D Newtonian RFT.
NOTE E Coma diameter and tail length are rough estimations.
NOTE F Coma was slightly elliptical; long dimension recorded. No tail seen.
NOTE G Tail length approximate.
NOTE H Coma diameter approximate.
NOTE I Wan. gib. moon. Fair see. High thin clouds.
NOTE J Tail north boundary 12.17 deg. at PA 93; south boundary 13.03 at PA 107.
NOTE K Tail greatest length at PA 105; north boundary 5.05 deg. at PA 88, south boundary 10.48 deg. at PA 113.
NOTE L Tail length = "ansatz". [sic]
NOTE M Moon 18 days. Drifting clouds.
NOTE N Nucleus. Small nucleus - condensation not very bright.
NOTE O PA 95 125. [sic]
NOTE P Gas tail at PA 97. Midpoint on dust tail: 8.5 deg. at PA 102. End point of dust tail: 12.7 deg. at PA 102. Type III [sic] tail at PA 110.
NOTE Q Limit around 2? Stars in Corvus invisible.
NOTE R Cirrus.
NOTE S Thin fog above horizon.
NOTE T Cloud.
NOTE U Haze, low. Antoniadi III.
NOTE V Comet visible at first sight. (Translated by IHW staff. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.149 | 831175 | 0.5 | 0.13 | SC | 10 | 32,120 | 20 | 6.5 | 1 | Hays Jr,R.H | A |
| 27.198 | 831176 | 0.53 | 0.41 | N | 5 | 64 | 90 | 5 | 1 | Levy,D.H | B |
| 27.241 | 831177 | 3 | 0.050 | B | | 7 | 5 | 6.0 | 19 | Cook,A.J | C |
| 27.417 | 831178 | | | | | | | 6.0 | | Thompson,G | D |
| 27.767 | 831179 | 4 | 0.08 | B | | 11 | | 5.6 | 1 | Fleet,R.W | E |

DATE: 27 APR 1986

DATE: 27 APR 1986

NOTE A Dim fan or jet at PA 225. This was my first view of Halley since my Texas trip. Comet in general is more diffuse than it was in March. Tail more fan-shaped, apparently the gas tail is gone and only the dust one is left. Comet seems to be a quieter object than it was in March. 'Nucleus' is quite prominent and looked to be slightly sunward of center of coma.
NOTE B Scale is approximate.
NOTE C Some high cloud interference.
NOTE D Naked eye observation. (Duration not indicated. Time of observation is assumed to be an approximate start time. Ed.)
NOTE E Gas tail at PA 97. Dust tail end point at PA 102. Type III [sic] at PA 110. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.070 | 851922 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 0.50 | Kodak 2415 | | Y | X | 264/P | 1 | Sabia,J.D | A |
| 27.087 | 851923 | 0.200 | 4 | | 10.3 x 6.9 | 10.00 | Kodak Tri-X | 400/ | N | M | 2/P | 1 | Laroche,Y | |
| 27.142 | 851924 | 0.050 | 4 | | 39.6 x27.0 | 0.67 | Kodak Tri-X | 400/27 | N | X | 016/P | | Castineiras,R.S.J | B |
| 27.224 | 851925 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 18/P | 3 | Yen,B | C |
| 27.381 | 851926 | 0.055 | 2.8 | | 36.2 x24.6 | 20.83 | Kodak 2415 | | Y | O | 79/S | 8 | Garradd,G | D |
| 27.394 | 851927 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Kodak 2415 | | Y | O | 80/S | 8 | Garradd,G | E |
| 27.843 | 851928 | 0.300 | 4 | | 6.9 x 4.6 | 5.00 | Fotopan HL | 400/27 | N | O | 9/P | 1 | Slusarczyk,J | |

NOTE A Layer of hazy clouds is evident in photograph. Photograph made by J. Kamichitis and J.D. Sabia.
NOTE B Moonlights. [sic] City lights.
NOTE C (Observer's image identifier is 12. Ed.) Instrument is Schmidt camera.
NOTE D Film excessively hypered (65-70 deg. C), causing severe fogging.
NOTE E Film was excessively hypered (70 deg. C), causing severe fogging.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.083 | 870141 | 600G-O | CL | 0.135 | 1.9 | | 30.00 | Kodak 2415 | | Y | C | 235/S | 3 | Buchanan,W.T | AB |
| 27.101 | 870142 | 600G-O | CL | 0.135 | 1.9 | | 20.00 | Kodak 2415 | | Y | C | 236/S | 3 | Buchanan,W.T | BC |

NOTE A (Observer's image identifier is E-122-35. Ed.)
NOTE B Comet Halley visible to naked eye.
NOTE C (Observer's image identifier is E-122-36. Ed.)

DATE: 28 APR 1986 DATE: 28 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.002 | 819301 | 4.3 | M | 3B, 113 | 10 | 3 | | | 0.05 | B | | 7 | 3.1 | Y | 2 | DeYoung,J.A | |
| 28.05 | 819302 | 4.6 | S | 3B | 45 | 7 | 2 | 70 | 0.203 | N | 7 | 54 | 5.0 | Y | 1 | Harrington,P | A |
| 28.056 | 819303 | 5.2 | S | 3B | | | | | 0.035 | B | | 7 | 4.8 | Y | 4 | Hudak,D.M | |
| 28.056 | 819304 | 5.1 | B | 113 | | | | | 0.05 | B | | 7 | 5.3CM | Y | 2 | Martinez,C | |
| 28.059 | 819305 | 4.9 | B | 113 | | | | | 0.05 | B | | 7 | 5.3CM | Y | 2 | Martinez,C | |
| 28.06 | 819306 | 4.5 | B | 3B | 12 | 5 | 4.3 | 100 | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 28.06 | 819307 | 4.1 | S | 3B | 30 | 3 | | | | EY | | | 6 | Y | 1 | Bortle,J.E | |
| 28.06 | 819308 | 4.0 | S | 3B | 20 | 4 | | | 0.050 | R | 3 | 6 | 6 | Y | 1 | Bortle,J.E | B |
| 28.066 | 819309 | 4.8 | B | 3B | 6.3 | 4 | | | 0.127 | SC | 10 | 50 | 2.6 | Y | 1 | Rousom,J | C |
| 28.076 | 819310 | 4.0 | S | 3B | 4.4 | 5 | | | 0.08 | R | 11 | 39 | 4.1C | N | 1 | Graves,D | D |
| 28.095 | 819311 | 5.1 | S | 3B | 17 11 | 5 | | | 0.05 | B | | 10 | 5 C | Y | 3 | House,R.R | E |
| 28.095 | 819312 | 5.1 | S | 3B | | 6 | | | 0.05 | B | | 7 | 5 C | Y | 3 | House,R.R | |
| 28.112 | 819313 | 4.9 | S | 3B | 17 | | 0.37 | 95 | 0.035 | B | | 7 | 5.5 | Y | 3 | Morrison,W | |
| 28.139 | 819314 | 4.9 | M | 3B | 18.4 | 7 | 6.0 | 104 | 0.05 | B | | 12 | 6.4 | Y | 1 | Knight,S | |
| 28.139 | 819315 | 4.6 | B | 3B | | | 2.0 | | | EY | | | 6.4 | Y | 1 | Knight,S | |
| 28.139 | 819316 | 9.9 | | V HYA | | | | | 0.152 | N | 6 | 101 | 6.4 | Y | 1 | Knight,S | F |
| 28.144 | 819317 | 3.9 | B | 113 | | 3 | | | 0.05 | B | | 20 | 4.5 | Y | 1 | da Silva,L.A.L | G |
| 28.146 | 819318 | 5.2 | B | 3B | | | | | 0.05 | B | | 7 | 4.5C | Y | 2 | Lupianez,B | |
| 28.18 | 819319 | 4.9 | M | 3B | | | 2 | 90 | 0.05 | B | | 10 | 5.5C | Y | 31 | Hale,A | H |
| 28.18 | 819320 | 4.9 | B | 3B | | | | | | EY | | | 5.5C | Y | 31 | Hale,A | H |
| 28.2014 | 819321 | 4.3 | M | 3B | 20 | 6 | 38.43 | 103 | | EY | | | 6.4 | Y | 20 | Cook,A.J | I |
| 28.21 | 819322 | 4.9: | | 3B | | | 12 | | | EY | | | | Y | 7 | Edberg,S.J | J |
| 28.21 | 819323 | 5.3 | B | 113 | 16 | 7 | | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 28.22 | 819324 | | B | 113 | 10.2 | 8 | 0.62 | 96 | 0.154 | N | 8.0 | 68 | | Y | | Kronk,G | |
| 28.22 | 819325 | 4.3 | M | 3B | 16 | 4 | 13 | 95 | 0.050 | B | | 10 | 6.0 | Y | 16 | Morris,C.S | K |
| 28.2278 | 819326 | 4.6 | S | DCS | 9 | 8 | 0.63 | 103 | 0.254 | N | 3.8 | 32 | 5.8 | | 1 | Machholz,D | |
| 28.2292 | 819327 | 4.3 | | DCS | 12 | 6 | 0.60 | 103 | | EY | | | 5.8 | | 1 | Machholz,D | |
| 28.23 | 819328 | 3.8 | M | 3B | | | 5 | 85 | | EY | | | 6.0 | Y | 13 | Keen,R | L |
| 28.2327 | 819329 | 4.6 | S | DCS | 11 | 7 | 1.01 | 103 | 0.080 | B | | 20 | 5.8 | | 1 | Machholz,D | |
| 28.2333 | 819330 | 4.3 | M | 3B | 26 | | 20.87 | | 0.05 | B | | 7 | 6.4 | Y | 20 | Cook,A.J | M |
| 28.24 | 819331 | 4.3 | | 3B | | | 11 | 73 | | EY | | | 6.0 | Y | 16 | Morris,C.S | K |
| 28.292 | 819332 | 5.5 | S | 3B | 34 | 4 | | | 0.05 | B | | 10 | 4 C | Y | 1 | Gronek,J.D | N |
| 28.343 | 819333 | 5.1: | S | TIRION | 15 | 2 | | | 0.050 | B | | 15 | 2.5 | | | Witte,F | O |
| 28.406 | 819334 | 4.8 | B | 3B | | 4 | 2 | 100 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | P |
| 28.406 | 819335 | | | 3B | 9 | 5 | 1.17 | 100 | 0.10 | N | 6 | 24 | | Y | 1 | Tregaskis,T.B | Q |
| 28.406 | 819336 | | | 3B | | | 1 | | | EY | | | 5.5 | Y | 1 | Tregaskis,T.B | R |
| 28.41 | 819337 | 4.0 | | A | | | 14 | | | EY | | | 6.2 | Y | 1 | Lovejoy,T | S |
| 28.448 | 819338 | 5.1 | B | 3B | 15 | 3 | | | 0.05 | B | | 7 | 4.0 | Y | 1 | Hayashi,H | |
| 28.473 | 819339 | 5.0 | M | 113 | 27 | 6 | | | 0.030 | B | | 8 | 4.0C | Y | 1 | Kato,T | |
| 28.479 | 819340 | 5.0 | B | 3B | | | | | 0.035 | B | | 7 | | N | 1 | Okada,M | |
| 28.505 | 819341 | 4.5 | S | 3B | 15 | 4 | 1 | 90 | 0.07 | B | | 10 | 3.0 | Y | 1 | Kobayashi,J | |
| 28.51 | 819342 | 5.0 | S | 3B | 12 | 6 | | | 0.07 | B | | 10 | 4.0 | Y | 1 | Yasuki,M | |
| 28.542 | 819343 | 5.2 | B | 3B | | | | | 0.07 | B | | 10 | 4.9 | Y | 1 | Date,M | |
| 28.61 | 819344 | 3.8 | B | | | | | | | EY | | | 5.5 | Y | | Pearce,A | |
| 28.718 | 819345 | 5.0 | B | 113 | 30 | 2 | 5 | 200 | 0.065 | B | | 20 | 4.3 | Y | 1 | McBain,J | T |
| 28.76 | 819346 | 5.3 | B | M | 8 | 2 | 0.7 | 263 | 0.11 | N | | 30 | | | | Yurchenko,Yu | |
| 28.768 | 819347 | 5.4 | M | 3B | | | | | 0.035 | B | | 9 | 6.4 | Y | 1 | Begbie,M.J.R | |
| 28.778 | 819348 | | | | 9.4 | 6 | 5.0 | 100 | 0.30 | N | 8.5 | 102 | 6.4 | Y | 1 | Begbie,M.J.R | U |
| 28.78 | 819349 | 5.4 | B | E | 24 | | | | 0.11 | B | | 20 | | | | Krylov,A | |
| 28.78 | 819350 | 5.2 | B | E | 18 | | | | 0.08 | B | | 8 | | | | Kasirin,I | |
| 28.78 | 819351 | 4.9 | B | E | 21 | | | | | EY | | | | | | Kurtsov,S | |
| 28.78 | 819352 | 5.0 | B | E | 22 | | | | 0.08 | B | | 8 | | | | Oskin,E | |
| 28.78 | 819353 | 5.2 | B | E | | | | | 0.08 | R | | | | | | Belyaev,D | |
| 28.78 | 819354 | 5.0 | B | E | 20 | | | | | EY | | | | | | Maksimov,S | |
| 28.78 | 819355 | 5.2 | B | E | 18 | | | | 0.08 | R | | | | | | Misuhin,A | |
| 28.78 | 819356 | 5.1 | B | E | 21 | | | | | EY | | | | | | Tatarnikov,A | |
| 28.78 | 819357 | 5.1 | B | E | 20 | | | | | EY | | | | | | Filimonchev,S | |
| 28.78 | 819358 | 5.2 | V | E | | | | | | EY | | | | | | Ivanov,V | |
| 28.78 | 819359 | 4.9 | B | M | 25 | | | | 0.08 | B | | 8 | | | | Maylisov,P | |
| 28.78 | 819360 | 5.1 | V | M | 20 | | | | | EY | | | | | | Bukotkin,A | |
| 28.78 | 819361 | 4.8 | B | AAVSO | 25 | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 28.79 | 819362 | 4.3 | B | E | 20 | 5 | 1.5 | 98 | 0.05 | B | | 7 | | | | Mormil,V | |
| 28.802 | 819363 | 4.8 | S | 3B | 20 | 5 | 2.50 | 105 | 0.08 | B | | 30 | 5.2 | Y | 1 | Campos,J | |
| 28.807 | 819364 | 6.0 | S | 112 | | | | | 0.05 | B | | 7 | | Y | 1 | Dziura,W | V |
| 28.81 | 819365 | 5.3 | B | M | 10 | 4 | | | 0.05 | B | | 7 | | | | Kolomeyets,S | |
| 28.813 | 819366 | 4.3 | | 3B | 60 | 4 | 0.5 | 100 | | EY | | | 5.2 | Y | 1 | Campos,J | |
| 28.823 | 819367 | 4.9 | M | 3B | 25 | 6 | 1.5 | 100 | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | W |
| 28.833 | 819368 | 4.9 | M | 113 | 20 | 5 | | 50 | 0.089 | R | 5.5 | 18 | 5.1 | N | 1 | Ventura,F | X |
| 28.840 | 819369 | 5.8 | B | 113 | 14 | 4 | | | 0.066 | R | 15.2 | 28 | 5.0 | Y | 1 | Gora,D | |
| 28.85 | 819370 | 5.4 | B | M | 10 | 4 | | | 0.07 | N | 8 | 33 | | | | Pashko,D | |
| 28.854 | 819371 | 6.0 | B | | 5 | | | | 0.080 | R | 6.2 | 50 | 4.0 | Y | 1 | Pfitzner,E | |
| 28.854 | 819372 | 5.0 | M | 3B | 21 | 6 | | | 0.07 | B | | 20 | 5.5 | Y | 1 | Tanti,T | Y |
| 28.868 | 819373 | 6.3 | M | CZ | | 5 | | | 0.05 | B | | 7 | | | 1 | Silhan,J | Z |
| 28.87 | 819374 | 5.3 | B | 113 | 15 | 4 | | | 0.050 | B | | 10 | 5.5 | Y | 1 | Ward,A | |
| 28.88 | 819375 | 4.3 | B | 3B | | | | | | EY | | | 5.5 | | 35 | Shanklin,J.D | a |
| 28.882 | 819376 | 4.9 | B | AAVSO | 18 | 3 | 0.5 | 90 | 0.115 | N | 7.8 | 30 | 5.9 | Y | 1 | Alves,A.A | |
| 28.882 | 819377 | 5.4 | B | 3B | | 4 | | | 0.090 | N | 7 | 26 | 3.0 | Y | 1 | Vohla,F | |
| 28.910 | 819378 | 5.4 | S | 113 | 21 | 5 | 0.15 | 40 | 0.070 | B | | 16 | 4.5C | Y | 1 | Taylor,M.D | b |
| 28.972 | 819379 | 5.5 | B | 113,112 | | | | | 0.05 | B | | 7 | 5.5C | Y | 1 | Martinez,C | |
| 28.979 | 819380 | 5.7 | B | 113,112 | | | | | 0.05 | R | 8 | 7 | 5.5C | Y | 1 | Martinez,C | |
| 28.98 | 819381 | 4.8 | B | AAVSO | | | 5 | | 0.04 | B | | 7 | | | | Kiselev,N | |

NOTE A Also used 7x50.
NOTE B With 32 cm Newtonian using 68x: circular coma with diffuse boundaries showing relatively little condensation toward the center. However, at its heart is an essentially stellar nucleus of blue-white color, surrounded by a very small, dense haze of bright material. Nucleus and condensation no more than 5" in diameter using 170x.
NOTE C Haze. Nucleus fuzzy with brighter center.
NOTE D Urban lights, nuclear pin point with averted vision.
NOTE E Naked eye with averted vision only.
NOTE F Stellar condensation magnitude. Chart 112 also used.
NOTE G Moonlight.
NOTE H Some interference from local light pollution (street lights). Also possibility of some very thin cirrus in sky. Magnitude estimate is probably trustworthy but tail length estimate appears much too small in light of other observers' estimates at the same time (plus my own subsequent estimates).
NOTE I Tail greatest length at PA 103, north boundary 37.50 at PA 97, south boundary 36.57 deg. at PA 109.
NOTE J Tail length is lower limit.
NOTE K Multiple tails define the shape of the fan tail.
NOTE L Observation from Tahiti.
NOTE M Tail north boundary at PA 92, south boundary at PA 108.
NOTE N Beg. lesser light pol. Good see.
NOTE O Very difficult. (Translated by IHW staff. Ed.)

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NOTE P N. f. a 6 mag. star. Broken cloud. (Observer gave limit as approximately 10. Ed.)
NOTE Q Broken cloud. (Observer gave limit as approximately 11.5. Ed.)
NOTE R Broken cloud.
NOTE S Naked eye tail length. Coma diameter through 15x80 binoculars: 20'.
NOTE T (PA value appears to be incorrect. Ed.)
NOTE U Antitail in PA 280. Tail measurement refers to dust tail only.
NOTE V Clouds, fog.
NOTE W Seeing good, transparency good/excellent. Clouds.
NOTE X PA uncertain. The coma is large, round and bluish gray in colour.
NOTE Y Seeing good, transparency good/excellent.
NOTE Z Limit around 2? Stars in Corvus invisible. Thick mist.
NOTE a Brief gap in cloud.
NOTE b Antoniadi III. Nearly circular central condensation offset from centre. Suspected 10 arc min. tail fan, PA 0-76.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.077 | 831180 | 0.33 | 0.204 | N | 8 | 58,271 | 40 | 4.5 | 1 | Robinson,P.C | A |
| 28.109 | 831181 | | 0.080 | B | | 20 | 15 | | 5 | Arpin,P | B |
| 28.219 | 831182 | | 0.41 | N | | 64 | 30 | 6.5 | 1 | Levy,D.H | |
| 28.237 | 831183 | 3 | 0.050 | B | | 7 | 10 | 6.4 | 20 | Cook,A.J | |

NOTE A Hood at PA 270; dust tail at PA 125; dust tail at PA 315. The "hood" was a small (1.3') area just west of stellar central condensation which had a triangular or parabolic shape opening west. The apparent jet at PA 320 is a flaw in the drawing - not observed. The coma was broader southwest than northeast by 3 to 1. 6.6' vs. 2.3'. City lights interferred with the observation.
NOTE B Tail very faint. Best seen by averted vision.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.086 | 851929 | 0.200 | 4 | | 10.3 x 6.9 | 10.00 | Kodak 2415 | | Y | M | 3/P | 1 | Laroche,Y | |
| 28.213 | 851930 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 15.00 | Kodak Tri-X | | N | M | 24/P | 1 | Webb,R | A |
| 28.213 | 851931 | 0.200 | 4 | | 10.3 x 6.9 | 15.00 | Kodak Tri-X | | N | M | 25/P | 1 | Webb,R | B |
| 28.231 | 851932 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 19/P | 3 | Yen,B | C |
| 28.255 | 851933 | 0.050 | 1.8 | | 39.6 x27.0 | 10.00 | Agfachrome | 1000/ | N | S | 25/P | 20 | Cook,A.J | D |
| 28.389 | 851934 | 0.180 | 2.8 | | 11.4 x 7.6 | 19.00 | Kodak 2415 | | Y | O | 81/S | 2 | Garradd,G | E |
| 28.407 | 851935 | 0.055 | 2.0 | | 36.2 x24.6 | 20.00 | Kodak 2415 | | Y | O | 82/S | 2 | Garradd,G | F |
| 28.868 | 851936 | 0.300 | 4 | | 6.9 x 4.6 | 7.00 | Fotopan HL | 400/27 | N | O | 10/P | 1 | Slusarczyk,J | |
| 28.924 | 851937 | 1.200 | 7 | 0.17 | 1.7 x 1.1 | 30.00 | Kodak IIa-F | | N | M | 12/P | 1 | Ridley,H.B | G |

NOTE A Guiding/error. [sic] Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE B Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE C (Observer's image identifier is 18. Ed.) Instrument is Schmidt camera.
NOTE D This picture may help support claims made by visual observers of a tail length of 20 deg. or greater on that date.
NOTE E Film was excessively hypered (70 deg. C), causing severe fogging.
NOTE F Film excessively hypered (65-70 deg. C), causing severe fogging. Lens aperture stopped down from f/1.2 to f/2.0.
NOTE G (Observer's image identifier is preceded by prefix ZB. Ed.) Instrument uses photographic plates.

DATE: 29 APR 1986

DATE: 29 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.05 | 819382 | 4.6 | B | IHW BAA | | | | | | EY | | | | | | Green,D.W.E | |
| 29.06 | 819383 | 5.2 | B | IHW BAA | 20 | 5 | 3.5 | | 0.035 | B | | 7 | | | | Green,D.W.E | A |
| 29.07 | 819384 | 4.4 | S | IHW BAA | 20 | 5 | 3.5 | | 0.035 | B | | 7 | | | | Green,D.W.E | A |
| 29.073 | 819385 | 5.5 | B | 113 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | |
| 29.08 | 819386 | 4.3 | S | 3B | 15 | 4 | | | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 29.08 | 819387 | 4.2 | S | 3B | 43 | | | | | EY | | | 6 | Y | 1 | Bortle,J.E | |
| 29.08 | 819388 | | | | 12 | 3 | 6.0 | 100 | 0.050 | B | | 7 | 6 | Y | 1 | Bortle,J.E | |
| 29.08 | 819389 | 4.6 | B | 3B | | | | | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 29.08 | 819390 | | | | 12 | | | | 0.317 | N | 6 | 55 | 6 | Y | 1 | Bortle,J.E | B |
| 29.092 | 819391 | 5.1 | S | 3B | 14 | 4 | 1.2 | 100 | 0.035 | B | | 7 | 6.0 | Y | 3 | Morrison,W | |
| 29.094 | 819392 | 4.8 | M | 113 | | | 2.33 | 100 | 0.050 | B | | 10 | 5.4 | Y | 1 | Smith,A | C |
| 29.097 | 819393 | 5.0 | B | 112 | | 3 | 1.5 | 137 | 0.05 | B | | 10 | 5.2 | Y | 1 | Harris,L.A | D |
| 29.099 | 819394 | 3.9 | B | 113 | | 3 | | 97 | 0.05 | B | | 20 | 5.0 | Y | 1 | da Silva,L.A.L | E |
| 29.102 | 819395 | 5.3 | M | 113 | | | 1.50 | 100 | 0.152 | N | 5 | 29 | 5.4 | Y | 1 | Smith,A | F |
| 29.111 | 819396 | 4.8 | B | 3B | | 9 | | | 0.08 | B | | 11 | 5.2 | Y | 6 | Gorski,L | |
| 29.125 | 819397 | 5.2 | B | 112 | 16 | 2 | | | 0.05 | B | | 7 | 3.9 | | 1 | Lairet,R | |
| 29.125 | 819398 | 4.9 | B | 113 | 15.8 | 5 | 0.37 | 270 | 0.050 | B | | 7 | 4.5C | Y | 1 | Will,M | G |
| 29.142 | 819399 | 5.2 | B | 113 | | 4 | | | 0.050 | B | | 20 | 6.4 | Y | 1 | Carello,S | |
| 29.188 | 819400 | | | | 10.9 | 5 | 0.58 | 270 | 0.050 | R | 12 | 24 | 4.5C | Y | 1 | Will,M | G |
| 29.208 | 819401 | 4.5 | M | 113 | | 6 | 2.5 | 100 | 0.279 | SC | 10 | 166 | 5 | Y | 1 | Kemble,L.J | H |
| 29.22 | 819402 | 4.4 | | 3B | | 4 | 30 | 80 | | EY | | | 6.0 | Y | 16 | Morris,C.S | I |
| 29.24 | 819403 | 4.4 | M | 3B | 17 | 5 | | | 0.050 | B | | 10 | 6.0 | Y | 16 | Morris,C.S | |
| 29.26 | 819404 | 4.5 | M | 3B | 15 | 5 | | | 0.080 | B | | 20 | 6.0 | Y | 16 | Morris,C.S | |
| 29.2653 | 819405 | | | | 20 | | | | | EY | | | 6.3 | Y | 3 | Cook,A.J | J |
| 29.31 | 819406 | 4.0 | M | 3B | | | 10 | 95 | | EY | | | 6.5 | Y | 14 | Keen,R | K |
| 29.354 | 819407 | 5.3: | S | TIRION | 17 | 3 | | | 0.050 | B | | 10 | 2.8 | | | Witte,F | L |
| 29.36 | 819408 | 4.3 | S | 3B, 113 | 23 | 5 | | | 0.023 | B | | 3 | | | | Jones,A | |
| 29.36 | 819409 | | | | | | 1.4 | | 0.050 | B | | 7 | 5.9 | | | Jones,A | M |
| 29.37 | 819410 | 8.9 | V | SAO | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | N |
| 29.375 | 819411 | 4.6 | S | 3B | | | 5 | 105 | | EY | | | 6.1 | Y | 1 | Seargent,D | O |
| 29.410 | 819412 | 4.8 | B | 3B | 50 | 4 | 3 | 100 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | P |
| 29.410 | 819413 | 4.8 | | 3B | | | 0.5 | 100 | | EY | | | 5.5 | Y | 1 | Tregaskis,T.B | Q |
| 29.42 | 819414 | 4.2 | | A | | | 5 | | | EY | | | 6.3 | Y | 1 | Lovejoy,T | R |
| 29.458 | 819415 | 4.3 | S | 3B | | | 15 | | | EY | | | 6.0 | Y | 2 | Garradd,G | |
| 29.467 | 819416 | 4.5 | S | 3B | 15 | 4 | 2 | 90 | 0.07 | B | | 10 | 2.5 | Y | 1 | Kobayashi,J | |
| 29.476 | 819417 | 5.3 | B | 113 | | 3 | | | 0.050 | B | | 20 | 6.2 | Y | 1 | Castrillon,M.E | |
| 29.480 | 819418 | 5.0 | M | 113 | 22 | 6 | | | 0.030 | B | | 8 | 4.5C | Y | 1 | Kato,T | |
| 29.48 | 819419 | 4.5 | | | 15 | 6 | 1 | | 0.12 | B | | 20 | 5.8 | Y | 1 | Washi,S | S |
| 29.485 | 819420 | | | 3B | 35 | 6 | | 100 | 0.10 | N | | 24 | | | 1 | Tregaskis,T.B | T |
| 29.490 | 819421 | 5.3 | B | 3B | | | | | 0.07 | B | | 10 | 4.1 | Y | 1 | Date,M | |
| 29.493 | 819422 | 5.3 | B | 113,112 | 15 | 3 | 1 | | 0.05 | B | | 7 | 4.0 | Y | 1 | Hayashi,H | |
| 29.494 | 819423 | 5.1 | S | 113 | 12.9 | 5 | | | 0.05 | B | | 7 | 3.0 | N | 1 | Kanai,K | |
| 29.500 | 819424 | 4.9 | B | 3B | | | 0.7 | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 29.50 | 819425 | 5.0 | S | 3B | 12 | 6 | | | 0.07 | B | | 10 | 4.0 | Y | 1 | Yasuki,M | |
| 29.51 | 819426 | 4.7 | S | AAVSO | 10 | 4 | | | 0.07 | B | | 10 | 4.5 | Y | 1 | Hayashi,A | |
| 29.524 | 819427 | 4.6 | M | 112,113 | 17 | 4 | 2 | 100 | 0.08 | B | | 11 | 6 | Y | 4 | Mitsuma,S | |
| 29.53 | 819428 | 3.8 | M | 3B | 15 | 6 | 0.5 | 90 | 0.08 | B | | 20 | 5.0C | Y | 1 | Oka,A | |
| 29.53 | 819429 | 7 : | | | 5 | 5 | | | 0.15 | N | 6 | 23 | 3 | Y | 7 | Tanikawa,M | |
| 29.53 | 819430 | 4.5 | B | | 30 | 7 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Uda,K | |
| 29.54 | 819431 | 4.4 | M | 3B, 113 | 16.0 | 6 | 5 | 130 | 0.080 | B | | 11 | 5 | Y | 2 | Watanabe,N | U |
| 29.562 | 819432 | 4.0 | S | 113 | 9 | 6 | 2.0 | | 0.080 | B | | 20 | | Y | 1 | Batza,H | V |
| 29.563 | 819433 | 5.0 | B | 113 | 15 | 5 | 3 | | 0.070 | B | | 10 | 5.5 | Y | 1 | Nakamura,Y | |
| 29.61 | 819434 | 3.8 | B | 113 | | | | | | EY | | | 6.1 | Y | | Clark,M.L | |
| 29.62 | 819435 | 3.9 | S | 113 | | | | | 0.03 | R | | 6 | 6.1 | Y | | Clark,M.L | |
| 29.62 | 819436 | 4.3 | S | 113 | 16 | 7 | 3.3 | | 0.25 | N | 5 | 38 | 6.1 | Y | | Clark,M.L | W |
| 29.71 | 819437 | | | | 8 | 5 | | | 0.20 | N | 7 | 80 | | | | Rudakov,G | |
| 29.75 | 819438 | 5.4 | B | M | | 4 | | | 0.05 | B | | 7 | | | | Mamedov,V | |
| 29.75 | 819439 | 5.7 | B | M | 10 | | 0.4 | | 0.04 | B | | 12 | | | | Rudenko,S | |
| 29.77 | 819440 | 5.5 | B | E | 22 | | | | 0.11 | B | | 20 | | | | Krylov,A | |
| 29.77 | 819441 | 5.4 | B | E | | | | | 0.11 | B | | 20 | | | | Kasirin,I | |
| 29.77 | 819442 | 5.4 | V | E | 23 | | | | | EY | | | | | | Kurtsov,S | |
| 29.77 | 819443 | 5.3 | B | E | 23 | | | | 0.08 | B | | 8 | | | | Oskin,E | |
| 29.77 | 819444 | 5.4 | B | E | | | | | 0.11 | B | | 20 | | | | Belyaev,D | |
| 29.77 | 819445 | 5.2 | B | E | | | | | 0.08 | B | | 8 | | | | Navalihin,M | |
| 29.77 | 819446 | 5.0 | B | E | 20 | | | | 0.08 | B | | 8 | | | | Maksimov,S | |
| 29.77 | 819447 | 5.4 | B | E | 17 | | | | 0.11 | B | | 20 | | | | Misuhin,A | |
| 29.77 | 819448 | 5.2 | B | E | | | | | | EY | | | | | | Paschenko,A | |
| 29.77 | 819449 | 5.2 | B | E | | | | | 0.08 | B | | 8 | | | | Tatarnikov,A | |
| 29.77 | 819450 | 5.3 | V | E | | | | | | EY | | | | | | Filimonchev,S | |
| 29.77 | 819451 | 5.3 | B | E | 18 | | | | 0.08 | B | | 8 | | | | Maylisov,P | |
| 29.77 | 819452 | 5.2 | V | E | 20 | | | | | EY | | | | | | Bukotkin,A | |
| 29.77 | 819453 | 5.2 | B | AAVSO | 20 | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 29.78 | 819454 | 5.6 | B | M | 12 | | | | | EY | | | | | | Rudenko,S | |
| 29.79 | 819455 | 4.4 | B | E | 20 | 5 | 3 | 100 | 0.05 | B | | 7 | | | | Mormil,V | |
| 29.791 | 819456 | 5.4 | M | 3B | | | | | 0.035 | B | | 9 | 6.4 | Y | 1 | Begbie,M.J.R | |
| 29.799 | 819457 | | | | 11.1 | 5 | 6.0 | 100 | 0.30 | N | 8.5 | 102 | 6.4 | Y | 1 | Begbie,M.J.R | X |
| 29.802 | 819458 | 4.9 | M | 113 | 30 | 6 | | | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | Y |
| 29.806 | 819459 | 5.2 | M | 3B | 17 | 5 | 6.1 | 107 | 0.08 | B | | 11 | 5.2 | Y | 2 | Fleet,R.W | Z |
| 29.809 | 819460 | 4.4 | M | 3B | | 3 | 0.6 | 102 | | EY | | | 5.2 | Y | 2 | Fleet,R.W | |
| 29.81 | 819461 | 5.1 | B | E | 6 | 1 | 0.1 | 190 | 0.05 | B | | 7 | | | | Kolomeyets,S | |
| 29.81 | 819462 | 5.2 | B | E | 6 | 1 | 0.1 | 190 | 0.07 | N | 8 | 33 | | | | Pashko,D | |
| 29.81 | 819463 | 5.3 | B | E | 7 | 3 | 0.6 | 268 | 0.11 | N | | 30 | | | | Yurchenko,Yu | |
| 29.819 | 819464 | 5.4 | S | 3B | 17 | 5 | | | 0.08 | B | | 10 | 4.0 | Y | 1 | Znasik,M | |
| 29.823 | 819465 | 6.0 | S | 112 | | | | | 0.05 | B | | 7 | | Y | 1 | Dziura,W | |
| 29.823 | 819466 | 6.0 | M | CZ | | 4 | | | 0.055 | R | 6 | 12 | | | 1 | Silhan,J | a |
| 29.833 | 819467 | 5.0 | M | 112 | 15 | 5 | 0.5 | 100 | 0.089 | R | 5.5 | 18 | 5.2 | N | 1 | Ventura,F | |
| 29.840 | 819468 | 5.9 | B | 113 | 16 | 4 | | | 0.066 | R | 15.2 | 28 | 4.0 | Y | 1 | Gora,D | |
| 29.844 | 819469 | 5.0 | B | 3B | | 4 | | | 0.05 | B | | 7 | 5 | Y | 2 | Paradowski,M | |
| 29.85 | 819470 | 5.2 | | 113 | 15 | 4 | | | 0.050 | B | | 10 | 5 | Y | 1 | Ward,A | |
| 29.854 | 819471 | 5.2 | M | CZ | | 4 | | | 0.06 | B | | 12 | 3.0 | Y | 3 | Rapavy,P | |
| 29.86 | 819472 | 5.0 | B | AAVSO | | | 1 | 115 | 0.11 | B | | 20 | | | | Chernis,K | |
| 29.875 | 819473 | 5.0 | | 3B | | | | | 0.030 | B | | 8 | 4.0 | Y | 2 | Kieltyka,G | |
| 29.875 | 819474 | 5.8 | M | CZ | 25 | 4 | | | 0.05 | B | | 7 | | | 1 | Silhan,J | |
| 29.882 | 819475 | 4.9 | M | CZ | 20 | | | | 0.05 | B | | 7 | | | 1 | Kucera,P | |
| 29.882 | 819476 | 4.7 | S | 3B | 18.0 11.0 | 5 | 0.10 | 86 | 0.050 | B | | 10 | 4.5 | Y | 3 | Abbott,J | b |
| 29.888 | 819477 | 5.0 | S | 112 | 17 | 5 | | | 0.05 | B | | 10 | 3.2 | Y | 1 | Burst,G.M | |
| 29.893 | 819478 | | | | 17 | 5 | 0.42 | 98 | 0.08 | B | | 15 | 3.2 | Y | 1 | Burst,G.M | c |
| 29.90 | 819479 | 3.9 | B | 3B | | | | | | EY | | | 6.0 | | 36 | Shanklin,J.D | d |
| 29.90 | 819480 | 4.5 | S | 3B | | | | | 0.05 | B | | 7 | 6.0 | | 36 | Shanklin,J.D | e |
| 29.91 | 819481 | 6.0 | B | DCS 12 | | 3 | | | 0.080 | B | | 15 | 5 C | N | 1 | Keijmel,P.C | |
| 29.923 | 819482 | 4.7 | M | 3B | | 5 | 0.17 | 10 | 0.050 | B | | 7 | 6.0 | Y | 1 | Stott,D | |

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| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.941 | 819483 | 5.1 | S | 3B, 112 | 12 | 2 | 0.4 | 80 | 0.050 | B | | 10 | 5.3 | N | 2 | Rogers,J.H | f |
| 29.978 | 819484 | 5.1 | B | 113 | | 3 | 2.33 | | 0.050 | B | | 20 | 6.4 | Y | 1 | Lovera,A | |

NOTE A Coma diameter and tail length approximate.
NOTE B Circular, only slightly condensed coma containing a sharp, tight, very small condensation which appears almost stellar at times. Condensation well under 60" in diameter.
NOTE C Beautiful sight.
NOTE D With this magnitude 5.0, Halley ceased to be visible in my locality. The night was clear, without moon.
NOTE E Moonlight.
NOTE F Seeing good.
NOTE G (PA value may have been incorrectly determined. Ed.)
NOTE H Comet about 19 deg. elevation at my latitude; found with coordinates in bright twilight at about 0350 UT; then with binoculars in late twilight; observed for quite some time; even glimpsed with averted vision, naked eye about 0530 UT; tail followed out to almost 3 deg. with binocs. and then by sweeping with telescope. Coma diameter 7-8'.
NOTE I Multiple tails define the shape of the fan tail.
NOTE J Tail north boundary 30 deg. at PA 100, south boundary 16 deg. at PA 106.
NOTE K Observation from Tahiti.
NOTE L Hazy, very difficult. (Translated by IHW staff. Ed.)
NOTE M Tail PA 85-104.
NOTE N Nucleus. Small nucleus surrounded by bright condensation.
NOTE O Tail length approximate.
NOTE P Clear. (Observer gave limit as approximately 10. Ed.)
NOTE Q PA approximate.
NOTE R Naked eye tail length; lower limit.
NOTE S (Observer indicated "Y" method. Ed.)
NOTE T Hard to define tail; faint and broad.
NOTE U Chart 112 also used.
NOTE V Moonlight. (Observer gave limit as 10.5. Ed.)
NOTE W PA of tail is 107-98.
NOTE X Antitail in PA 270. Tail measurement refers to dust tail only.
NOTE Y Seeing good, transparency excellent/good. Clouds.
NOTE Z Midpoint on tail: 2.9 deg. at PA 106. End point of tail: 6.1 deg. at PA 107.
NOTE a Mist.
NOTE b Comparison stars (4.1, 5.1), (4.5, 5.2). The coma's long axis was oriented along PA 109-289. The northern "tail-lobe" was 0.10 deg. long at PA 86. The southern "tail-lobe" was 0.03 deg. long at PA 152.
NOTE c 0.42 deg. tail is broad 5' width tail. 0.20 deg. tail length is approximate; tail suspected only.
NOTE d Cloud.
NOTE e Tail 10 degrees wide.
NOTE f Coma slightly pear-shaped; no nucleus. Tail suspected; length and PA approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.118 | 831184 | 1.32 | 0.050 | B | | 7 | 20 | 4.5 | 1 | Will,M | A |
| 29.18 | 831185 | 0.72 | 0.050 | R | 12 | 24 | 26 | 4.5 | 1 | Will,M | B |
| 29.53 | 831186 | 1.39 | 0.15 | N | 6 | 23 | 14 | 3 | 7 | Tanikawa,M | |
| 29.806 | 831187 | 4 | 0.08 | B | | 11 | | 5.2 | 2 | Fleet,R.W | C |
| 29.840 | 831188 | 0.28 | 0.30 | N | 8.5 | 102,212 | 22 | 6.4 | 1 | Begbie,M.J.R | D |
| 29.865 | 831189 | 0.08 | 0.125 | N | 5.8 | 24, 28, 40 | 10 | 3.5 | 1 | Riccabone,G | E |

NOTE A The coma of the comet has three concentric zones of brightness. Zone 3 seems to parallel some of the tail in magnitude and nebulosity. Zone 2 is brighter and more intense in visual texture. Zone 1 is best described as a sudden peak in the brightness of the coma at its center and cannot be accurately measured in angular size. The tail is of a conical shape overall. However, a brighter "strip-like" patch appears in the center region of the tail and extends the entire length of the tail of comet Halley. Inner coma 6.58'; outer coma 15.80'; tail 22.38' at PA 270. Dark adapted.
NOTE B The tail appeared to be cone shaped and symmetric in its overall shape. Note the slight curvature along the outer boundary of the cone shaped tail. A dark lane, (actually white in the drawing) labeled no. 1, runs the length of the tail and is slightly visible to the eye just displaced from the center region of the tail, in the tail's northern half. Two other dark lanes are present in the northern sector. Labeled no. 2 and no. 3 they were not nearly as visible as no. 1. Two stars were observed in the tail and the one near the vertex or end of the tail was the brighter. Coma diameter 10.91'; inner coma diameter 3.60'; tail length 34.91' at PA 270. Dark lanes 1, 2, & 3 also at PA 270. Dark adapted.
NOTE C Tail end point at PA 107. Suspected tail at PA 95. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Anti-tail centered on PA 280. Extended fan centered on PA 330. Vertex distance 5.5 arc min.; semi latus rectums P1 = 6.9 arc min., P2 = 6.4 arc min. Antitail = 11 arc min. from central condensation. [sic] An antitail, with a faint spike near its centre was observed. A second, possibly associated feature, a fan-like extension to the coma was also seen but was less prominent.
NOTE E Intense city lights interfered with the observation. Magnifications of 60 and 80 also used. Two drawings included.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.024 | 851938 | 0.135 | 2.8 | | 15.2 x10.2 | 8.00 | Kodak 2415 | | Y | C | 601/S | 2 | Buchanan,W.T | A |
| 29.077 | 851939 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 3.00 | Kodak 2415 | | Y | S | 1/P | 1 | Dilsizian,R | |
| 29.111 | 851940 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 2.50 | Kodak 2415 | | Y | X | 265/P | 1 | Sabia,J.D | B |
| 29.131 | 851941 | 0.210 | 4 | | 9.8 x 6.5 | 18.00 | Polaroid 612 | | N | X | 4/P | 2 | Carragan,W | C |
| 29.178 | 851942 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 5.00 | Kodak 2415 | | Y | X | 266/P | 1 | Sabia,J.D | B |
| 29.197 | 851943 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | 3M 1000 | 1000/ | N | O | 2/N | 7 | Edberg,S.J | |
| 29.197 | 851944 | 0.200 | 4 | | 10.3 x 6.9 | 10.00 | Kodak Tri-X | 400/ | N | O | 15/C | 7 | Edberg,S.J | |
| 29.204 | 851945 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/ | N | O | 3/N | 7 | Edberg,S.J | |
| 29.204 | 851946 | 0.200 | 4 | | 10.3 x 6.9 | 5.00 | Kodak Tri-X | 400/ | N | O | 16/C | 7 | Edberg,S.J | |
| 29.207 | 851947 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | 3M 1000 | 1000/ | N | O | 4/N | 7 | Edberg,S.J | |
| 29.207 | 851948 | 0.200 | 4 | | 10.3 x 6.9 | 1.00 | Kodak Tri-X | 400/ | N | O | 17/C | 7 | Edberg,S.J | |
| 29.217 | 851949 | 0.500 | 8 | | 4.1 x 2.7 | 5.00 | Kodak Tri-X | 400/27 | N | X | 034/P | 1 | Bro,M | |
| 29.219 | 851950 | 0.200 | 4 | | 10.3 x 6.9 | 4.50 | 3M 1000 | 1000/ | N | O | 5/N | 7 | Edberg,S.J | |
| 29.219 | 851951 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 4.50 | Ektachrome | 400/ | N | O | 3/N | 7 | Edberg,S.J | |
| 29.219 | 851952 | 0.050 | 2.8 | | 39.6 x27.0 | 4.50 | Kodak Tri-X | 400/ | N | O | 18/C | 7 | Edberg,S.J | |
| 29.223 | 851953 | 0.200 | 4 | | 10.3 x 6.9 | 5.00 | 3M 1000 | 1000/ | N | O | 6/N | 7 | Edberg,S.J | |
| 29.223 | 851954 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | Ektachrome | 400/ | N | O | 4/N | 7 | Edberg,S.J | |
| 29.223 | 851955 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | Kodak Tri-X | 400/ | N | O | 19/C | 7 | Edberg,S.J | |
| 29.224 | 851956 | 0.500 | 8 | | 4.1 x 2.7 | 5.00 | Kodak Tri-X | 400/27 | N | X | 035/P | 1 | Bro,M | |
| 29.225 | 851957 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 18.00 | Kodak Tri-X | | N | M | 27/P | 1 | Webb,R | D |
| 29.228 | 851958 | 0.200 | 4 | | 10.3 x 6.9 | 10.00 | 3M 1000 | 1000/ | N | O | 7/N | 7 | Edberg,S.J | |
| 29.228 | 851959 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | Ektachrome | 400/ | N | O | 5/N | 7 | Edberg,S.J | |
| 29.228 | 851960 | 0.050 | 2.8 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 20/C | 7 | Edberg,S.J | |
| 29.232 | 851961 | 0.200 | 4 | | 10.3 x 6.9 | 1.00 | 3M 1000 | 1000/ | N | O | 8/N | 7 | Edberg,S.J | |
| 29.232 | 851962 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | Ektachrome | 400/ | N | O | 6/N | 7 | Edberg,S.J | |
| 29.232 | 851963 | 0.050 | 2.8 | | 39.6 x27.0 | 1.00 | Kodak Tri-X | 400/ | N | O | 21/C | 7 | Edberg,S.J | |
| 29.241 | 851964 | 0.050 | 2.8 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 9/N | 7 | Edberg,S.J | |
| 29.241 | 851965 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | Kodak Tri-X | 400/ | N | O | 22/C | 7 | Edberg,S.J | |
| 29.241 | 851966 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 20/P | 3 | Yen,B | E |
| 29.242 | 851967 | 0.050 | 2.8 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 10/N | 7 | Edberg,S.J | |
| 29.243 | 851968 | 0.050 | 2.8 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 11/N | 7 | Edberg,S.J | F |

DATE: 29 APR 1986 DATE: 29 APR 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.244 | 851969 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | Kodak Tri-X | 400/ | N | O | 23/C | 7 | Edberg,S.J | |
| 29.249 | 851970 | 0.080 | 4 | | 25.4 x17.1 | 5.00 | Kodak Tri-X | 400/27 | N | X | 033/P | 1 | Bro,M | G |
| 29.252 | 851971 | 0.050 | 2.8 | | 39.6 x27.0 | 10.00 | 3M 1000 | 1000/ | N | O | 12/N | 7 | Edberg,S.J | H |
| 29.252 | 851972 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | Kodak Tri-X | 400/ | N | O | 24/C | 7 | Edberg,S.J | |
| 29.259 | 851973 | 0.050 | 2.8 | | 39.6 x27.0 | 5.00 | 3M 1000 | 1000/ | N | O | 13/N | 7 | Edberg,S.J | H |
| 29.259 | 851974 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | Kodak Tri-X | 400/ | N | O | 25/C | 7 | Edberg,S.J | |
| 29.447 | 851975 | 0.135 | 3.5 | | 15.2 x10.2 | 20.00 | Ektachr.400 | | N | X | 29/S | 1 | Tregaskis,T.B | I |
| 29.458 | 851976 | 0.135 | 3.5 | | 15.2 x10.2 | 10.00 | Ektachr.400 | | N | X | 30/S | 1 | Tregaskis,T.B | I |
| 29.464 | 851977 | 0.085 | 2.4 | | 23.9 x16.1 | 27.00 | Kodak 2415 | | Y | O | 83/S | 2 | Garradd,G | J |
| 29.464 | 851978 | 0.135 | 3.5 | | 15.2 x10.2 | 5.00 | Ektachr.400 | | N | X | 31/S | 1 | Tregaskis,T.B | I |
| 29.469 | 851979 | 0.055 | 1.2 | | 36.2 x24.6 | 2.00 | Ektachr.400 | | N | X | 32/S | 1 | Tregaskis,T.B | I |
| 29.473 | 851980 | 0.055 | 2.8 | | 36.2 x24.6 | 8.00 | Ektachr.400 | | N | X | 33/S | 1 | Tregaskis,T.B | K |
| 29.479 | 851981 | 0.055 | 4 | | 36.2 x24.6 | 8.00 | Ektachr.400 | | N | X | 34/S | 1 | Tregaskis,T.B | L |
| 29.484 | 851982 | 0.180 | 2.8 | | 11.4 x 7.6 | 20.00 | Kodak 2415 | | Y | O | 84/S | 2 | Garradd,G | M |

NOTE A (Observer's image identifier is P-126-01. Ed.)
NOTE B Photograph made by J. Kamichitis and J.D. Sabia.
NOTE C Lens has zoom range of 70 to 210 mm. Film ISO 20000. Photograph made by Julie and William Carragan.
NOTE D Windy. Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE E (Observer's image identifier is 24. Ed.) Instrument is Schmidt camera.
NOTE F Start time and exposure duration uncertain.
NOTE G Zoom lens 80-210 mm f/3.8-4 used at 80 mm f/4.
NOTE H Start time and exposure duration uncertain.
NOTE I Push processed to 800 ASA.
NOTE J Lens aperture stopped down from f/2.0 to f/2.4. Film excessively hypered, causing severe fogging.
NOTE K Lens aperture stopped down from f/1.2 to f/2.8. Push processed to 800 ASA.
NOTE L Lens aperture stopped down from f/1.2 to f/4. Push processed to 800 ASA.
NOTE M Film was excessively hypered (70 deg. C), causing severe fogging.

DATE: 30 APR 1986

DATE: 30 APR 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | m1 | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.05 | 819485 | 4.4: | B | IHW BAA | | | | | | EY | | | | | | Green,D.W.E | |
| 30.05 | 819486 | 4.1 | S | IHW BAA | 36 | 3 | | | 0.035 | B | | 7 | | | | Green,D.W.E | A |
| 30.052 | 819487 | 5.0 | B | 113 | 9 | | | | 0.040 | B | | 8 | 5.3 | Y | 1 | Levai,R | B |
| 30.059 | 819488 | 5.2 | S | 3B | | | | | 0.035 | B | | 7 | 4.9 | Y | 4 | Hudak,D.M | |
| 30.059 | 819489 | 4.7 | M | 113,112 | 10 | 4 | 0.6 | 93 | 0.05 | B | | 7 | 3.1 | Y | 1 | DeYoung,J.A | |
| 30.063 | 819490 | 5.3 | B | 3B | | | | | 0.05 | B | | 7 | 4.5C | Y | 2 | Lupianez,B | |
| 30.072 | 819491 | 4.2 | B | 112 | 4.5 | 1 | 0.7 | 125 | 0.06 | R | 12 | 56 | 5.5 | Y | 1 | Onofre D.,D | |
| 30.073 | 819492 | 3.9 | B | 112 | | 6 | | 110 | 0.05 | B | | 20 | 5.0 | Y | 1 | da Silva,L.A.L | |
| 30.073 | 819493 | 5.2 | M | 112 | | | 2.00 | 90 | 0.050 | B | | 10 | 5.2 | Y | 1 | Smith,A | |
| 30.083 | 819494 | 5.3 | B | 112 | | | | | 0.080 | B | | 20 | 4.8 | Y | | Smith,D | |
| 30.102 | 819495 | 5.2 | B | 3B | | 7 | | | 0.08 | B | | 11 | 5.4 | Y | 6 | Gorski,L | |
| 30.104 | 819496 | 5.1 | B | AAVSO | 18 | 3 | | | 0.040 | B | | 10 | 5.2 | Y | 1 | Alves,A.A | |
| 30.106 | 819497 | 5.3 | B | 3B | 8.3 | 1 | | | 0.05 | B | | 7 | 4.1C | Y | 1 | Dodd,W.J | C |
| 30.135 | 819498 | 5.4 | S | 112 | 8 | 4 | | | 0.05 | B | | 7 | 5 C | Y | 3 | House,R.R | |
| 30.139 | 819499 | 5.0 | B | 113,112 | 18.0 | 5 | | | 0.050 | B | | 7 | 4.5C | Y | 1 | Will,M | |
| 30.16 | 819500 | 5.5 | B | 112 | 12 | 4 | | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 30.16 | 819501 | 5.7 | B | 112 | 6.6 | 6 | | 102 | 0.335 | N | 4.5 | 56 | | Y | | Kronk,G | D |
| 30.210 | 819502 | 5.4 | B | 3B | | 1 | | | 0.03 | B | | 8 | 3.1CM | Y | 2 | Giraudi,J.D | E |
| 30.21 | 819503 | 4.9 | S | 3B | 6.0 | 4 | | | 0.080 | B | | 11 | 5.0 | Y | 2 | Spratt,C.E | F |
| 30.22 | 819504 | 4.6 | M | 3B | 21 | 4 | 18 | 85 | 0.050 | B | | 10 | 6.0 | Y | 16 | Morris,C.S | |
| 30.2208 | 819505 | 4.7 | S | DCS | 18 | 4 | 0.30 | 89 | 0.080 | B | | 20 | 5.4 | | 3 | Machholz,D | |
| 30.226 | 819506 | 5.7 | B | 3B | | 1 | | | 0.03 | B | | 8 | 3.1CM | Y | 2 | Giraudi,J.D | E |
| 30.23 | 819507 | 4.6 | | 3B | | 3 | 30 | 95 | | EY | | | 6.0 | Y | 16 | Morris,C.S | |
| 30.31 | 819508 | 4.6 | B | 3B | | | 25 | 95 | | EY | | | 6 | Y | 19 | Hale,A | G |
| 30.31 | 819509 | 4.7 | M | 3B | | | | | 0.05 | B | | 10 | 6 | Y | 19 | Hale,A | G |
| 30.340 | 819510 | 5.4: | S | TIRION | 14 | 3 | | | 0.050 | B | | 15 | 2.5 | | | Witte,F | H |
| 30.35 | 819511 | 4.6 | S | 113 | 30 | 3 | | | 0.023 | B | | 3 | | | | Jones,A | |
| 30.35 | 819512 | | | | 20 | 5 | 3 | | 0.050 | B | | 7 | 5.9 | | | Jones,A | I |
| 30.35 | 819513 | | | | 7 | 8 | | | 0.317 | N | 5 | 86 | | | | Jones,A | J |
| 30.403 | 819514 | 4.5 | | 3B | | | 18 | | | EY | | | 6.0 | Y | 2 | Garradd,G | |
| 30.455 | 819515 | 5.0: | B | 3B | 20 | 4 | 4 | | 0.035 | B | | 7 | 5.5 | Y | 7 | Gomez,A | K |
| 30.458 | 819516 | 4.6 | S | 3B | | | 5 | 100 | | EY | | | 6.1 | Y | 1 | Seargent,D | L |
| 30.465 | 819517 | 5.2 | S | 3B | 3.8 | 3 | | | 0.12 | N | 6 | 36 | 2.0C | Y | 1 | Kishi,A | |
| 30.472 | 819518 | 4.7 | S | 113 | 14.4 | 5 | | | 0.05 | B | | 7 | 4.0 | N | 1 | Kanai,K | |
| 30.476 | 819519 | 5.5 | B | 113 | 14.4 | 5 | | | 0.05 | B | | 7 | 4.0 | N | 1 | Kanai,K | |
| 30.48 | 819520 | 5.4 | S | 112 | | 3 | | | 0.065 | R | 7.7 | 16 | 3.0 | N | 1 | Momose,M | |
| 30.486 | 819521 | 4.9 | M | 112,113 | 13 | 4 | 0.50 | | 0.08 | B | | 11 | 4.5 | Y | 1 | Mitsuma,S | M |
| 30.486 | 819522 | | | | | | | | 0.16 | N | 6.3 | 31 | 4.5 | Y | 1 | Mitsuma,S | N |
| 30.49 | 819523 | 4.8 | S | AAVSO | 12 | 4 | | | 0.07 | B | | 10 | 4.5 | Y | 1 | Hayashi,A | |
| 30.50 | 819524 | 4.7 | S | AAVSO | 15 | 5 | | | 0.13 | N | 6.3 | 24 | 4.5 | Y | 1 | Hayashi,A | |
| 30.712 | 819525 | 5.5 | B | 112 | 20 | 1 | 3 | 200 | 0.065 | B | | 20 | 5.5 | Y | 1 | McBain,J | O |
| 30.78 | 819526 | 4.8: | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 30.78 | 819527 | 5.8 | B | E | 6 | | | | 0.04 | B | | 12 | | | | Rudenko,S | |
| 30.78 | 819528 | 5.5 | B | E | | | | | 0.08 | B | | | | | | Belyaev,D | |
| 30.78 | 819529 | 5.5 | B | E | 17 | | | | 0.08 | B | | | | | | Misuhin,A | |
| 30.78 | 819530 | 5.5 | B | E | | 5 | | | 0.08 | B | | 8 | | | | Ivanov,V | |
| 30.78 | 819531 | 5.3 | B | AAVSO | 20 | | | | 0.08 | B | | 8 | | | | Golubev,V | |
| 30.78 | 819532 | 5.6 | V | E | 20 | | | | | EY | | | | | | Bukotkin,A | |
| 30.79 | 819533 | 5.9 | B | M | 10 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 30.79 | 819534 | 4.7 | B | E | 15 | 5 | 1.5 | 110 | 0.05 | B | | 7 | | | | Mormil,V | |
| 30.792 | 819535 | 5.5 | M | 113 | | | | | 0.035 | B | | 9 | 6.4 | Y | 1 | Begbie,M.J.R | |
| 30.80 | 819536 | 5.3 | | 113 | 15 | 4 | | | 0.050 | B | | 10 | 5 | Y | 1 | Ward,A | |
| 30.807 | 819537 | | | | 8.3 | 5 | 5.0 | 92 | 0.30 | N | 8.5 | 102 | 6.4 | Y | 1 | Begbie,M.J.R | P |
| 30.823 | 819538 | 6.5 | M | 3B, 113 | 45 | 3 | | | 0.067 | R | 12 | 60 | 5.5 | Y | 1 | Kosinski,J | Q |
| 30.837 | 819539 | 5.6 | S | 3B | 17 | 4 | | | 0.08 | B | | 10 | 4.2 | Y | 1 | Znasik,M | |
| 30.843 | 819540 | | | 112 | 14 | 1 | | | 0.080 | R | 6.2 | 31 | 2.5CT | N | 2 | Richert,M | |
| 30.847 | 819541 | 5.4 | | 113 | | | | | | EY | | | 5.5 | Y | 1 | Chodorowski,F | R |
| 30.849 | 819542 | 5.0 | S | 112 | | 5 | | | 0.080 | B | | 15 | 3.5 | Y | 1 | Korth,S | S |
| 30.851 | 819543 | 5.3 | M | 113 | | | | | 0.06 | R | 4.5 | 10 | 5.5 | Y | 1 | Chodorowski,F | R |
| 30.854 | 819544 | 5.7 | B | 112 | 11 | 4 | | | 0.05 | B | | 10 | 4.5C | Y | 1 | Menichetti,R | |
| 30.854 | 819545 | | | | 10 | 5 | | | 0.064 | R | 12 | 32 | 5.5 | Y | 1 | Chodorowski,F | R |
| 30.854 | 819546 | 6.0 | B | | 15 | 3 | | | 0.050 | B | | 10 | 4.5 | Y | 1 | Linke,H | |
| 30.854 | 819547 | 5.8 | M | CZ | 10 | 4 | | | 0.05 | B | | | | | 1 | Silhan,J | T |
| 30.86 | 819548 | 5.2 | B | AAVSO | 20 | 5 | 1 | 113 | 0.11 | B | | 20 | | | | Chernis,K | |
| 30.861 | 819549 | 4.4 | M | 112 | 38 | 7 | | | 0.030 | B | | 8 | 5.0 | Y | 14 | Villa,M | |
| 30.87 | 819550 | 5.5 | B | DCS 13 | 25 | 3 | | | 0.063 | B | | 8 | 5 C | N | 1 | Geenen,J.J | |
| 30.87 | 819551 | 6.2 | B | DCS 12 | | 3 | | | 0.080 | B | | 15 | 5 C | N | 1 | Keijmel,P.C | |
| 30.875 | 819552 | 5.2 | M | CZ | | 3 | | | 0.08 | B | | 10 | 3.0C | Y | 1 | Rapavy,P | |
| 30.88 | 819553 | 6.0 | B | 3B | | 5 | | | 0.080 | B | | 20 | | Y | 1 | Jannink,D.W | U |
| 30.88 | 819554 | 6.2 | S | DCS 13 | | 2 | | | 0.080 | B | | 15 | 3 C | N | 1 | Scholten,A | |
| 30.88 | 819555 | 4.8 | S | 112 | 20 | 6 | 0.5 | | 0.100 | B | | 14 | 4.5 | Y | 1 | van Loo,F.R | |
| 30.90 | 819556 | 3.9 | S | 3B | 18 | 6 | 1.5 | | 0.060 | B | | 12 | 6 | Y | 3 | van de Weg,R.L.W | V |
| 30.90 | 819557 | 4.2 | B | 3B | 18 | 6 | 1.5 | | 0.060 | B | | 12 | 6 | Y | 3 | van de Weg,R.L.W | V |
| 30.906 | 819558 | 5.7 | B | SAO,IHW | 7.2 | 3 | | | 0.125 | R | 6 | 35 | 2.0 | Y | 1 | Guthier,O | |
| 30.907 | 819559 | 4.8: | S | 112 | 6 | 4 | | | 0.152 | N | 5 | 44 | 3.8 | Y | 2 | Moeller,M | W |
| 30.920 | 819560 | 4.9 | S | 113 | 12 | 3 | | 90 | 0.08 | B | | 11 | 4 | Y | 1 | Gainsford,M.J | X |
| 30.927 | 819561 | 5.0 | S | 113 | | 4 | | 130 | 0.25 | N | 6 | 60 | 4 | Y | 1 | Gainsford,M.J | Y |
| 30.931 | 819562 | 4.8 | M | 3B | 12 | 5 | | | 0.050 | B | | 7 | | Y | 1 | Mikuz,H | Z |
| 30.938 | 819563 | 5.3 | B | AAVSO | 12 | 2 | | | 0.040 | B | | 10 | 5.2 | Y | 1 | Alves,A.A | |
| 30.993 | 819564 | 5.6 | B | 112 | | 2 | | | 0.05 | R | 8 | 7 | 5.5C | Y | 1 | Martinez,C | a |

NOTE A Coma diameter approximate.
NOTE B Magnitude estimate uncertainty +/-0.2 mag.
NOTE C Only used two comparison stars for magnitude estimate. No tail seen.
NOTE D Tail fanned to PA 65 deg.
NOTE E At the limit of visibility in this instrument. (Translated by IHW staff. Ed.)
NOTE F Hint of tail.
NOTE G Naked-eye tail is very long but is extremely faint. Difficult to tell where tail ends and sky begins.
NOTE H Very difficult. (Translated by IHW staff. Ed.)
NOTE I Tail PA 95-110.
NOTE J Condensation about 2' diameter.
NOTE K Wind. Coma diameter exceeds 20 arc min.; tail length approximate.
NOTE L Cloud.
NOTE M Tail PA 95 to 100.
NOTE N 10>.
NOTE O (PA value appears to be incorrect. Ed.)
NOTE P Antitail in PA 280. Tail measurement refers to dust tail only.
NOTE Q Chart 112 also used.
NOTE R Very clear sky.
NOTE S Coma diameter 8-10 arc min.
NOTE T Mist.

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NOTE U Binocular limit is 7.5.
NOTE V Tail length is lower limit. PA 95 to 115.
NOTE W Coma diameter approximate. Hazy.
NOTE X Haze. Coma diameter 12'+.
NOTE Y Haze. Coma dia. = "large".
NOTE Z Good cond.
NOTE a At 23:55 T.U. with another comparison stars mag = 5.7. [sic]

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.123 | 831190 | 0.25 | 0.20 | N | 8 | 120 | 25 | 6 | 1 | Vargas B.,A.G | A |
| 30.156 | 831191 | 4 | 0.050 | B | | 10 | 32 | 5.0 | 2 | Robinson,P.C | B |
| 30.836 | 831192 | | 0.30 | N | 8.5 | 102,212,425 | 18 | 6.4 | 1 | Begbie,M.J.R | C |
| 30.858 | 831193 | 0.08 | 0.36 | SC | 11 | 325 | 10 | 3.5 | 1 | Korth,S | D |
| 30.869 | 831194 | 0.09 | 0.125 | N | 5.8 | 24, 28, 40 | 37 | 3.5 | 4 | Riccabone,G | E |

NOTE A DC 5; coma diameter: 7.5' approx. The coma diameter appear a little oval, with its major axis at PA 50 approx. It will be a illusion caused by the bright tail and the star near the zone. [sic] A remarkable tail central division was observed.
NOTE B Dust tail at PA 90-105; this main tail had straight, well defined edges and was very long (>100 deg.)! It went to the Oph. Milky Way. Ray at PA 100; the ray originated just NE of the center of coma and then ran along southern border of main tail as in drawing. Tail at PAs 0 (80'), 5 (180'), and 10 (280'), tail curved gracefully northward to 3 deg. length. Fan at PAs 180 (16'), 145 (80') to 100; fan was very dim. The tails were all plotted on a star chart at the site for best accuracy. Zodiacal light interfered with the observation. (Additional drawings supplied made using naked eye. Ed.)
NOTE C Antitail centred on PA 270. Extended fan centred on PA 330. Nuclear fan centred on PA 240. Jet centred on PA 200. Nuclear fan centred on PA 350. Vertex distance = 4.2 arc min., semi latus rectums P1 = 5.9 arc min., P2 = 5.2 arc min. Antitail = 11.6 arc min. from central condensation. The antitail is slightly fainter, as is the extended fan. A deal of activity [sic] is apparent in the central condensation with two fans and one jet quite prominent. An unusual dark strip is apparent in the tail as if there is no tail material there. (Two drawings are included in this listing: one made at magnifications of 102, 212, and 425 and scale 0.33 arc min./mm and one made at a magnification of 425 and scale 0.09 arc min./mm. Ed.)
NOTE D Jet 3-4" long at PA 180.
NOTE E Magnifications of 60 and 80 also used. Two drawings included. City lights and twilight interfered with the observation.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.064 | 851983 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 2.50 | Kodak 2415 | | Y | S | 2/P | 1 | Dilsizian,R | |
| 30.201 | 851984 | 0.540 | 1.8 | 0.30 | 3.8 x 2.5 | 20.00 | Kodak 2415 | | N | X | 01/P | 1 | Emerson,G | A |
| 30.252 | 851985 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 21/P | 3 | Yen,B | B |
| 30.398 | 851986 | 0.085 | 2.4 | | 23.9 x16.1 | 20.00 | Kodak 2415 | | Y | O | 85/S | 2 | Garradd,G | C |
| 30.446 | 851987 | 0.055 | 2.8 | | 36.2 x24.6 | 22.50 | Kodak 2415 | | Y | O | 87/S | 2 | Garradd,G | D |
| 30.469 | 851988 | 0.180 | 2.8 | | 11.4 x 7.6 | 22.00 | Kodak 2415 | | Y | O | 86/S | 2 | Garradd,G | E |

NOTE A (Observer's image identifier is 1986043001. Ed.)
NOTE B (Observer's image identifier is 26. Ed.) Instrument is Schmidt camera.
NOTE C Film excessively hypered, causing severe fogging. Lens aperture was stopped down from f/2.0 to f/2.4.
NOTE D Film excessively hypered (65-70 deg. C), causing severe fogging.
NOTE E Film was excessively hypered (65-70 deg. C), causing severe fogging.

DATE: 1 MAY 1986 DATE: 1 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.034 | 819565 | 3.9 | B | 112 | | 5 | | 109 | 0.05 | B | | 20 | 4.5 | Y | 1 | da Silva,L.A.L | |
| 1.059 | 819566 | 5.5 | B | 3B | | 7 | 0.5 | 100 | 0.035 | B | | 7 | 5.2 | Y | 1 | Stephan,C | A |
| 1.10 | 819567 | 4.9 | B | 113 | | | | | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 1.10 | 819568 | 4.7 | S | 113 | 12 | 5 | 4.5 | 105 | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 1.10 | 819569 | | | | 18 | 5 | 5.0 | 105 | 0.050 | B | | 7 | | | | Bortle,J.E | |
| 1.116 | 819570 | 5.3 | M | 3B | | | | | 0.035 | B | | 7 | 4.0C | Y | 1 | Allen,E | |
| 1.135 | 819571 | 5.4 | B | AAVSO | 12 | 2 | 0.4 | 90 | 0.115 | N | 7.8 | 30 | 5.2 | Y | 1 | Alves,A.A | |
| 1.357 | 819572 | 5.5 | S | TIRION | 13 | 4 | 1.3 | | 0.050 | B | | 15 | 4.5 | | | Witte,F | B |
| 1.38 | 819573 | 4.9 | S | 113 | | | | | 0.023 | B | | 3 | 5.2 | Y | | Jones,A | |
| 1.38 | 819574 | | | | | 4 | 1 | | 0.050 | B | | 7 | | | | Jones,A | C |
| 1.385 | 819575 | | S | TIRION | 16 | 5 | | | 0.150 | M | 15 | 56 | 4.5 | | | Witte,F | |
| 1.406 | 819576 | 4.7 | S | 3B | | | | | | EY | | | 6.1 | Y | 1 | Seargent,D | |
| 1.406 | 819577 | | | | | | 3.5 | 100 | 0.08 | B | | 15 | | | | Seargent,D | |
| 1.413 | 819578 | 5.6 | S | TIRION | 18 | 5 | 1.1 | | 0.050 | B | | 10 | 4.3 | | | Witte,F | |
| 1.74 | 819579 | 6 | B | M | | | | | | EY | | | | | | Rudenko,S | |
| 1.75 | 819580 | | | | 5 | 5 | | | 0.20 | N | | 80 | | | | Rudenko,S | |
| 1.76 | 819581 | 5.9 | B | M | | 5 | 0.6 | 117 | 0.04 | B | | 12 | | | | Rudenko,S | |
| 1.76 | 819582 | 7.0 | B | M | | | | | 0.10 | R | | | | | | Poroshin,A | |
| 1.77 | 819583 | 5.2 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 1.78 | 819584 | 5.2 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 1.785 | 819585 | 5.8 | M | 112 | 12 | 6 | 4.4 | 110 | 0.04 | B | | 12 | 6.2 | Y | 4 | Henshaw,C | D |
| 1.795 | 819586 | 5.7 | M | 113 | | | | | 0.035 | B | | 9 | 6.4 | Y | 1 | Begbie,M.J.R | |
| 1.802 | 819587 | | | | 7.1 | 6 | 3.2 | 105 | 0.30 | N | 8.5 | 102 | 6.4 | Y | 1 | Begbie,M.J.R | E |
| 1.813 | 819588 | 5.2 | M | 112 | 9.5 | 4 | | | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | |
| 1.819 | 819589 | 5.9 | S | 3B | 24 | 4 | | | 0.06 | B | | 12 | 4.9 | Y | 1 | Znasik,M | |
| 1.819 | 819590 | 5.6 | M | 112 | | | | | 0.06 | R | 4.5 | 10 | 6.0 | Y | 1 | Chodorowski,F | |
| 1.823 | 819591 | | | 112 | | 3 | | | 0.064 | R | 6.3 | 20 | 3.0TC | N | 1 | Maciejewski,W | |
| 1.828 | 819592 | 5.7 | M | AAVSO | 5 | 4 | | | 0.156 | N | 10 | 54 | 6.2 | | | Kosa-Kiss,A | F |
| 1.83 | 819593 | 5.7 | B | M | 5 | 4 | 0.5 | 272 | 0.11 | N | | 30 | | | | Yurchenko,Yu | |
| 1.833 | 819594 | 5.7 | S | 112 | 11 | 4 | | | 0.13 | N | 5.5 | 36 | 5 C | Y | 1 | Menichetti,R | |
| 1.833 | 819595 | 5.8 | S | 3B | 28 | 5 | | | 0.08 | B | | 10 | 4.9 | Y | 1 | Znasik,M | |
| 1.837 | 819596 | 4.4 | B | CZ | 15 10 | 5 | | | 0.10 | O | | 25 | 4.5C | Y | 1 | Micek,I | |
| 1.840 | 819597 | 5.5 | | 112 | | | | | | EY | | | 6.0 | Y | 1 | Chodorowski,F | |
| 1.840 | 819598 | 5.8 | | | | | | | 0.080 | B | | 15 | 2 | Y | 1 | Nagele,A | G |
| 1.840 | 819599 | 5.6 | B | 112 | 6 | 7 | 0.5 | 40 | 0.050 | B | | 12 | 3.0 | Y | 1 | Mosch,J | |
| 1.842 | 819600 | 6.0 | B | 112 | 14 | 4 | | | 0.066 | R | 15.2 | 28 | 5.5 | Y | 1 | Gora,D | |
| 1.8437 | 819601 | 5.7 | B | 112 | 15 | 7 | | 80 | 0.080 | B | | 11 | 4.5C | N | | Brogioni,A | H |
| 1.844 | 819602 | 5.3 | S | 112 | 18 | 6 | 1.9 | 115 | 0.08 | B | | 30 | 5.5 | Y | 1 | Campos,J | I |
| 1.844 | 819603 | | | | 12 | 5 | | | 0.064 | R | 12 | 32 | 6.0 | Y | 1 | Chodorowski,F | |
| 1.844 | 819604 | 5.4 | M | 112 | 18 12 | 6 | 0.5 | 136 | 0.08 | B | | 11 | 5.5 | Y | 1 | Gubo,E | |
| 1.844 | 819605 | 5.5 | B | 112 | 7.8 | 4 | | | 0.10 | B | | 14 | 4.0 | Y | 1 | Hasubick,W | |
| 1.844 | 819606 | 5.5 | B | 112 | | | | | 0.03 | B | | 8 | 4.0 | Y | 1 | Hasubick,W | |
| 1.844 | 819607 | 6.5 | M | 112 | 45 | 3 | | | 0.067 | R | 12 | 60 | 6.0 | Y | 1 | Kosinski,J | |
| 1.844 | 819608 | 5.7 | B | 112 | 16 | 6 | 0.5 | | 0.050 | B | | 10 | 5.5C | N | 1 | Richert,M | |
| 1.844 | 819609 | 5.6 | M | CZ | 20 | 4 | | | 0.05 | B | | 7 | | | 1 | Silhan,J | |
| 1.847 | 819610 | 5.7 | S | 112 | 11 | 3 | | | 0.05 | B | | 10 | 5 C | Y | 1 | Menichetti,R | |
| 1.847 | 819611 | 5.2 | S | 3B | 20 | 6 | | | 0.11 | R | 11 | 36 | 4.9 | Y | 1 | Znasik,M | |
| 1.847 | 819612 | 5.7 | B | CZ | 6 | 4 | | | 0.10 | B | | 25 | 5.1 | Y | 2 | Brancik,K | J |
| 1.847 | 819613 | 4.9 | S | 112 | 29.3 | 5 | | | 0.050 | B | | 7 | 5.8 | Y | 1 | Meozzi,D | |
| 1.85 | 819614 | 6.1 | B | M | 18 | 0 | | | 0.03 | B | 8 | 18 | | | | Drapun,I | |
| 1.854 | 819615 | 6.1 | B | | 13 | 3 | | | 0.050 | B | | 10 | 5.0 | Y | 1 | Linke,H | |
| 1.854 | 819616 | 6.5 | | 112? | 9 | 3 | | | 0.175 | R | 15 | 43 | 3.0C | Y | 1 | Marx,E | K |
| 1.854 | 819617 | 4.5 | S | 112 | 15 | 6 | 3 | 100 | 0.152 | N | 5 | 44 | 5.0 | Y | 2 | Moeller,M | |
| 1.854 | 819618 | 6.5 | B | 112 | 8 | 3 | | | 0.080 | R | 6.2 | 50 | 4.5 | Y | 1 | Pfitzner,E | |
| 1.857 | 819619 | 6.2 | B | 112 | | 5 | | | 0.06 | R | 8 | 15 | 4.5 | Y | 1 | Schambeck,C.M | |
| 1.858 | 819620 | | | 112 | 15 | 6 | | | 0.150 | R | 15 | 56 | 5.5C | Y | 1 | Richert,M | |
| 1.858 | 819621 | 5.2 | B | 112 | 6.5 | 5 | | | 0.08 | R | 15 | 39 | 5.2C | Y | 1 | Szulc,M | |
| 1.868 | 819622 | 4.2 | S | 112 | 26 | 6 | 2 | 100 | 0.050 | B | | 7 | 5.0 | Y | 2 | Moeller,M | |
| 1.87 | 819623 | 4.3 | S | DCS 12 | 22 | 4 | 1 | 90 | 0.040 | B | | 7 | 6 | Y | 6 | Bus,E.P | L |
| 1.87 | 819624 | 4.6 | B | DCS 12 | | | | | 0.040 | B | | 7 | 6 | Y | 6 | Bus,E.P | |
| 1.87 | 819625 | 5.2 | B | 112 | | 3 | | | 0.050 | B | | 10 | 3 C | N | 1 | Roos,M.C | |
| 1.87 | 819626 | 5.0 | S | DCS1213 | 10 | 6 | | | 0.050 | B | | 10 | 5.5T | Y | 1 | van der Laan,T.A | M |
| 1.875 | 819627 | 4.5 | M | 112 | 35 | 7 | | | 0.030 | B | | 8 | 4.5 | Y | 14 | Villa,M | |
| 1.875 | 819628 | 4.1 | B | | 10 5 | 7 | 7 | 210 | 0.030 | B | | 8 | 6.0 | Y | 1 | Winkler,R | N |
| 1.878 | 819629 | 5.2 | B | 112 | 5 | 3 | | | 0.063 | R | 13 | 34 | 4.0C | Y | 1 | Bauer,H.-P | |
| 1.88 | 819630 | 5.2 | B | 3B | | | | | | EY | | | 6.5 | | 37 | Shanklin,J.D | |
| 1.88 | 819631 | 5.5 | S | 3B | | | | | 0.05 | B | | 7 | 6.5 | | 37 | Shanklin,J.D | O |
| 1.88 | 819632 | 5.7 | S | 3B | | | | | 0.08 | B | | 20 | 6.5 | | 37 | Shanklin,J.D | |
| 1.883 | 819633 | 5.5 | B | | 5.5 | 4 | | | 0.200 | N | 7.2 | 36 | 4.5 | Y | 1 | Lipski,P | |
| 1.885 | 819634 | 5.8 | M | 112 | | | | | 0.06 | R | 4.5 | 10 | 6.0 | Y | 1 | Chodorowski,F | |
| 1.885 | 819635 | 5.0 | B | 112 | | 4 | | | 0.05 | B | | 7 | 5 | Y | 2 | Paradowski,M | |
| 1.885 | 819636 | 5.2: | M | 112 | 8 | 2 | | | 0.09 | M | 11 | 56 | 3.5 | Y | 9 | Westlund,M | P |
| 1.886 | 819637 | 5.0 | S | 112 | 13 | 4 | | | 0.05 | B | | 10 | 2.0 | Y | 1 | Hurst,G.M | |
| 1.888 | 819638 | | | | 13 | 4 | | | 0.08 | B | | 15 | 2.0 | Y | 1 | Hurst,G.M | |
| 1.889 | 819639 | | | | 21 | 4 | | | 0.064 | R | 6.3 | 25 | 5 | Y | 2 | Paradowski,M | |
| 1.889 | 819640 | 5.8 | M | CZ | 15 | 3 | | | 0.055 | R | 6 | 12 | | | 1 | Silhan,J | |
| 1.89 | 819641 | 6.2 | S | DCS 13 | 10 | 7 | | | 0.080 | B | | 15 | 4 CT | Y | 2 | Zanstra,W.T | |
| 1.89 | 819642 | 4.8 | B | 112 | 12 | 5 | | | 0.050 | B | | 7 | 5.0 | Y | 2 | Merlin,J.-C | |
| 1.892 | 819643 | | | | 10 | 5 | | | 0.064 | R | 12 | 32 | 6.0 | Y | 1 | Chodorowski,F | |
| 1.896 | 819644 | 5.9 | B | CZ | | 3 | | | 0.03 | B | | 6 | 5 | | 1 | Vaclik,F | |
| 1.896 | 819645 | 4.9 | B | 112 | 17 | 6 | 10 | | 0.05 | B | | 7 | 5.9 | Y | 3 | Vincent,J | Q |
| 1.90 | 819646 | 4.2 | S | 3B | 17 | 5 | 1.0 | 100 | 0.060 | B | | 12 | 5.5 | Y | 3 | van de Weg,R.L.W | R |
| 1.90 | 819647 | 4.5 | B | 3B | 17 | 5 | 1.0 | 100 | 0.060 | B | | 12 | 5.5 | Y | 3 | van de Weg,R.L.W | R |
| 1.910 | 819648 | 5.3 | B | 113,112 | 8 | | | | 0.040 | B | | 8 | 5.2 | Y | 1 | Levai,R | S |
| 1.91 | 819649 | 6.3 | S | DCS 13 | 20 | 3 | | | 0.080 | B | | 15 | 4.5C | Y | 1 | Scholten,A | M |
| 1.9131 | 819650 | 5.4 | S | 112 | | 3 | | | 0.080 | B | | 15 | 3.5C | Y | | Giuntoli,M | |
| 1.92 | 819651 | 4.8 | S | 112 | 10 | 5 | | | 0.050 | B | | 10 | 2 | N | 1 | van Loo,F.R | |
| 1.924 | 819652 | 5.2 | M | CZ | | 4 | | | 0.08 | B | | 10 | 4.0C | Y | 1 | Rapavy,P | |
| 1.931 | 819653 | 5.2 | M | 112 | | | 5.2 | 102 | | EY | | | 6.2 | Y | 3 | Fleet,R.W | T |
| 1.938 | 819654 | 5.4 | M | 112 | 22 | 5 | 16.4 | 106 | 0.08 | B | | 11 | 6.2 | Y | 3 | Fleet,R.W | U |
| 1.94 | 819655 | 4.7: | S | IHW | 13 | 5 | | | 0.035 | B | | 7 | 4.0 | Y | 2 | Granslo,B.H | |
| 1.951 | 819656 | 5.0 | | 112 | 8 | 5 | | | 0.08 | B | | 15 | 4.2 | Y | 1 | Dietrich,M | V |

NOTE A 1/2 deg. tail in 7x35's - not visible a few days earlier. Still naked eye.
NOTE B Very clear. (Translated by IHW staff. Ed.)
NOTE C Tail PA 92-108.
NOTE D Sequence BAA VSS, U Hya.
NOTE E Tail measurement refers to dust tail only.
NOTE F Comet: naked eye.
NOTE G (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are SAO 156372, 156271.
NOTE H I perceive detail. (Roughly translated by IHW staff. Ed.)

DATE: 1 MAY 1986

NOTE I Broad fan shape tail; PA 96 to 115.
NOTE J Too great a coma - stars not defocused enough.
NOTE K Comparison stars SAO 156271, 156375. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE L Coma diameter and PA approximate.
NOTE M Coma diameter approximate.
NOTE N (PA value may have been incorrectly determined. Ed.)
NOTE O Tail 12 degrees wide.
NOTE P Uncertain because of low altitude.
NOTE Q PA 95/105.
NOTE R Tail length is lower limit.
NOTE S Magnitude estimate uncertainty +/-0.2 mag.
NOTE T Suspected tail at PA 104.
NOTE U Midpoint in dust tail: 8.7 deg. at PA 104. End point of dust tail: 16.4 deg. at PA 106. Type III [sic] tail: 1.5 deg. at PA 107.
NOTE V Misty. (Translated by IHW staff. Observer indicated "A" method [Argelander?]. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.083 | 831195 | 0.83 | 0.152 | N | 8 | 38 | | 5.8 | 1 | Cuthill,L | A |
| 1.107 | 831196 | 0.25 | 0.20 | N | 8 | 120 | 27 | 5 | 1 | Vargas B.,A.G | B |
| 1.819 | 831197 | | 0.314 | R | 15.9 | 210 | | 4.5 | 1 | Freydank,H | C |
| 1.865 | 831198 | 2.5 | 0.05 | B | 8 | 10 | 10 | 5 | 1 | Menichetti,R | |
| 1.884 | 831199 | 1.6 | 0.090 | M | 11 | 56 | 5 | 3.5 | 9 | Westlund,M | D |
| 1.938 | 831200 | 4 | 0.08 | B | | 11 | | 6.2 | 3 | Fleet,R.W | E |

NOTE A Coma DC = 6. Tail at PA 150-110 gas. [sic] Axis of head at PA 310. A diffuse coma shows a fairly strong intensity at the center. Coma size 4 arc min. Magnitude estimated to be 5.4 using 10x50 binoculars (Morris method).
NOTE B Tail's arms at PA 205 and 250 approx. The tail appear with two arms. The tail is more visible than in April 30 observing by binocular (7x50) the tail length will appear almost 4 deg. [sic] DC 5; coma diameter: 7.6' approx.
NOTE C DC 3. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Low altitude.
NOTE E Dust tail end point at PA 106. Type III [sic] at PA 107. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.115 | 851989 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 0.33 | Kodak 2415 | | Y | X | 267/P | 1 | Sabia,J.D | A |
| 1.834 | 851990 | 0.058 | 2 | | 34.5 x23.4 | 2.00 | HL | 400/27 | N | | 76/S | 1 | Chodorowski,F | B |
| 1.841 | 851991 | 0.058 | 2 | | 34.5 x23.4 | 2.00 | HL | 400/27 | N | | 78/S | 1 | Chodorowski,F | C |
| 1.859 | 851992 | 0.058 | 2 | | 34.5 x23.4 | 15.00 | HL | 400/27 | N | | 80/S | 1 | Chodorowski,F | D |
| 1.872 | 851993 | 0.050 | 4.0 | | 39.6 x27.0 | 20.00 | ORWO NP 27 | 400/27 | N | S | 20/P | | Paul,E | |
| 1.885 | 851994 | 0.050 | 2.8 | | 39.6 x27.0 | 10.00 | ORWO NP 27 | 400/27 | N | S | 22/P | | Paul,E | |
| 1.899 | 851995 | 0.135 | 2.8 | | 15.2 x10.2 | 10.00 | ORWO NP 27 | 400/27 | N | S | 28/P | | Paul,E | |
| 1.948 | 851996 | 0.300 | 4 | | 6.9 x 4.6 | 15.00 | Ektachrome | 400/27 | N | X | 1/P | 2 | Lucius,D | |
| 1.967 | 851997 | 0.300 | 4 | | 6.9 x 4.6 | 15.00 | Ektachrome | 400/27 | N | X | 2/P | 2 | Lucius,D | |

NOTE A Taken through a break in clouds. Photograph made by J. Kamichitis and J.D. Sabia.
NOTE B (Observer's image identifier is 7/76/77. Ed.)
NOTE C (Observer's image identifier is 8/78/79. Ed.)
NOTE D (Observer's image identifier is 9/80/81. Ed.)

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.216 | 870143 | 300G-N | R | 0.485 | | 0.088 | 10.00 | 3M 1000 | 1000/31 | N | O | 17/N | 5 | Edberg,S.J |

DATE: 2 MAY 1986

DATE: 2 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.000 | 819657 | 5.6 | B | 112 | | | | | | 0.05 | B | | 7 | 5.0C | Y | 2 | Martinez,C | |
| 2.010 | 819658 | 5.5 | B | AAVSO | 0.2 | | 2 | | | 0.04 | B | | 10 | 5.2 | Y | 1 | Allen,E | |
| 2.010 | 819659 | 5.5 | B | AAVSO | 12 | | 2 | | | 0.040 | B | | 10 | 5.2 | Y | 1 | Alves,A.A | |
| 2.010 | 819660 | 5.5 | B | 112 | 5.5 | | 5 | | | 0.05 | B | | 20 | 4.1C | Y | 7 | Diaz P.,E | |
| 2.022 | 819661 | 4.7 | B | 112 | | | 4 | | 116 | 0.05 | B | | 20 | 4.5 | Y | 1 | da Silva,L.A.L | |
| 2.049 | 819662 | 5.2 | S | 3B | | | | | | 0.035 | B | | 7 | 4.1T | Y | 4 | Hudak,D.M | |
| 2.083 | 819663 | 5.5 | B | 3B | | | | | | 0.05 | B | | 7 | 4.5C | Y | 2 | Lupianez,B | |
| 2.125 | 819664 | 5.3 | B | 112 | 24.1 | | 4 | 0.67 | 260 | 0.050 | B | | 7 | 4.5C | Y | 1 | Will,M | A |
| 2.13 | 819665 | 5.5 | B | 112 | 11 | | 3 | | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 2.134 | 819666 | 5.3 | B | 112 | | | 7 | | | 0.08 | B | | 11 | 5.4 | Y | 6 | Gorski,L | |
| 2.146 | 819667 | 5.6 | B | 112 | 12 | | 2 | | | 0.05 | B | | 7 | 4.2 | | 1 | Lairet,R | |
| 2.15 | 819668 | 5.8 | B | 112 | 6.0 | | 5 | 0.5 | 85 | 0.335 | N | 4.5 | 56 | | Y | | Kronk,G | |
| 2.151 | 819669 | 5.3 | B | 112 | | | 1 | | | 0.03 | B | | 8 | 3.1C | Y | 2 | Giraudi,J.D | B |
| 2.156 | 819670 | 5.6 | B | 112 | | | 1 | | | 0.03 | B | | 8 | 3.1C | Y | 2 | Giraudi,J.D | B |
| 2.158 | 819671 | 5.5 | B | 112 | | | 1 | | | 0.03 | B | | 8 | 3.1C | Y | 2 | Giraudi,J.D | B |
| 2.165 | 819672 | 4.5 | B | 112 | 4 | | 1 | | | 0.06 | R | 12 | 56 | 5.3 | Y | 1 | Onofre D.,D | |
| 2.19 | 819673 | 4.7 | M | 3B | 15 | | 5 | 9 | 100 | 0.050 | B | | 10 | 5.5 | Y | 7 | Morris,C.S | |
| 2.20 | 819674 | 4.7 | M | 3B | 15 | | 4 | | | 0.080 | B | | 20 | 5.5 | Y | 7 | Morris,C.S | |
| 2.21 | 819675 | 4.7 | | 3B | | | | | | | EY | | | 5.5 | Y | 7 | Morris,C.S | |
| 2.333 | 819676 | 5.5 | S | 112,132 | 2 | | 3 | | | 0.114 | N | 7.9 | 23 | 4.5C | Y | 1 | Di Meglio,F | |
| 2.364 | 819677 | 5.8 | S | TIRION | 12 | | 4 | 0.4 | | 0.050 | B | | 15 | 4.5 | | | Witte,F | |
| 2.368 | 819678 | 5.2 | B | 112 | 20 | | 4 | 2 | 95 | 0.05 | B | | 10 | | N | 1 | Tregaskis,T.B | C |
| 2.368 | 819679 | 5.2 | | | 30 | | | | | | EY | | | 5.5 | N | 1 | Tregaskis,T.B | D |
| 2.40 | 819680 | 5.0 | S | 113 | 40 | | 3 | | | 0.023 | B | | 3 | 5.9 | | | Jones,A | |
| 2.40 | 819681 | | | | | | 4 | 1 | | 0.050 | B | | 7 | | | | Jones,A | E |
| 2.42 | 819682 | 10 | V | | | | | | | 0.317 | N | 5 | 86 | | | | Jones,A | F |
| 2.492 | 819683 | 4.9 | S | 3B | | | | | | | EY | | | 6.0 | Y | 16 | Garradd,G | |
| 2.494 | 819684 | | | | | | | 10 | | 0.05 | B | | 7 | | | | Garradd,G | |
| 2.562 | 819685 | 4.5 | S | 112 | 7 | | 5 | 2 | | 0.080 | B | | 20 | | Y | 1 | Batza,H | G |
| 2.57 | 819686 | 5.8 | B | M | 4 | | 0 | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 2.58 | 819687 | 5.5 | M | 112 | 16.2 | | 4 | | | 0.080 | B | | 11 | 3 | Y | 2 | Watanabe,N | |
| 2.69 | 819688 | 5.2 | B | AAVSO | | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 2.75 | 819689 | 4.9 | B | E | 10 | | 5 | 1 | | 0.05 | B | | 7 | | | | Mormil,V | |
| 2.81 | 819690 | 8.0 | S | SAO 96 | 3 | | | | | 0.205 | N | 6 | 80 | 5.0 | Y | 1 | Germann,R | |
| 2.81 | 819691 | 4.8 | B | E | 20 | | 5 | 5 | 105 | 0.05 | B | | 7 | | | | Mormil,V | |
| 2.81 | 819692 | 5.8 | B | M | 4 | | 4 | 0.5 | 272 | 0.11 | N | | 30 | | | | Yurchenko,Yu | |
| 2.813 | 819693 | 6.3 | M | CZ | 30 | 20 | 3 | 0.2 | 90 | 0.035 | B | | 7 | 5.0T | Y | 1 | Hroch,F | H |
| 2.813 | 819694 | 5.7 | M | CZ | 15 | | 5 | | | 0.05 | B | | 7 | 4.7 | | 3 | Pravec,P | |
| 2.823 | 819695 | 4.9 | B | CZ | 11 | 9 | 5 | | | 0.10 | O | | 25 | 4.5C | Y | 1 | Micek,I | |
| 2.823 | 819696 | 5.1 | B | 112 | | | 4 | | | 0.064 | R | 6.3 | 10 | 6 | Y | 2 | Paradowski,M | |
| 2.826 | 819697 | 5.6 | M | AAVSO | 22 | | 4 | 1.8 | 105 | 0.156 | N | 10 | 54 | 7.0 | | | Kosa-Kiss,A | I |
| 2.826 | 819698 | 5.6 | M | CZ | 25 | | 3 | | | 0.03 | B | | 8 | | | 1 | Silhan,J | |
| 2.826 | 819699 | 5.3 | M | 112 | | | 3 | | | 0.089 | R | 5.5 | 18 | 4.0 | N | 1 | Ventura,F | J |
| 2.830 | 819700 | 4.7 | M | 112 | 37 | | 7 | | | 0.030 | B | | 8 | 5.0 | Y | 14 | Villa,M | |
| 2.833 | 819701 | 5.9 | S | 112 | 22 | | 5 | 0.7 | 58 | 0.06 | B | | 12 | 5.0 | Y | 1 | Znasik,M | |
| 2.833 | 819702 | 4.7 | B | 112 | 17 | | 5 | 14.4 | | 0.05 | B | | 7 | 5.9 | Y | 3 | Vincent,J | K |
| 2.840 | 819703 | 5.9 | S | 112 | 26 | | 5 | 0.7 | 58 | 0.08 | B | | 10 | 5.0 | Y | 1 | Znasik,M | |
| 2.840 | 819704 | 5.9 | M | 112 | | | | | | | | | 25 | 4.5 | N | 1 | Fabricius,J | |
| 2.840 | 819705 | 6.3 | B | 112 | 13 | | 3 | | | 0.066 | R | 15.2 | 28 | 5.5 | Y | 1 | Gora,D | |
| 2.840 | 819706 | 5.7 | B | 112 | 10 | 6 | 7 | 0.5 | 40 | 0.050 | B | | 12 | 4.0 | Y | 1 | Mosch,J | |
| 2.844 | 819707 | 5.4 | M | 112 | 22 | | 6 | 1.9 | 97 | 0.08 | B | | 11 | 6.2 | Y | 3 | Fleet,R.W | L |
| 2.844 | 819708 | 5.3 | M | 112 | 15 | | 7 | | | 0.050 | B | | 7 | | Y | 1 | Mikuz,H | M |
| 2.844 | 819709 | 6.2 | B | CZ | | | 3 | | | 0.03 | B | | 6 | 5 | | 1 | Vaclik,F | |
| 2.844 | 819710 | 5.6 | B | 112 | 4.5 | | 4 | | | 0.090 | N | 7 | 26 | 4.5 | Y | 1 | Vobla,F | |
| 2.845 | 819711 | 5.4 | B | 112 | | | | | | 0.050 | B | | 10 | 6.5 | Y | 1 | Slusarczyk,J | |
| 2.847 | 819712 | 5.1 | M | 112 | | | | 7.8 | 104 | | EY | | | 6.2 | Y | 3 | Fleet,R.W | N |
| 2.847 | 819713 | 5.6 | B | 112 | 4.7 | | 3 | | | 0.10 | B | | 14 | 4.0 | Y | 1 | Hasubick,W | |
| 2.847 | 819714 | 5.6 | B | 112 | | | | | | 0.03 | B | | 8 | 4.0 | Y | 1 | Hasubick,W | |
| 2.847 | 819715 | 5.9 | B | 112 | 11 | | 3 | | | 0.064 | R | 6.3 | 20 | 3.5C | | 1 | Maciejewski,W | |
| 2.85 | 819716 | 6.0 | B | M | | | | | | 0.03 | R | 8 | 18 | | | | Drapun,I | |
| 2.85 | 819717 | 5.3 | B | AAVSO | 20 | | 5 | 0.8 | 113 | 0.11 | B | | 20 | | | | Chernis,K | |
| 2.854 | 819718 | 6.0 | B | 112 | 10 | | 4 | | | 0.030 | B | | 8 | 3 C | N | 2 | Adamoli,G | |
| 2.854 | 819719 | 6.0 | B | 112 | 5 | | 6 | | | 0.067 | R | 12 | 53 | 5.5C | N | 1 | Sciezor,T | O |
| 2.854 | 819720 | 5.7 | B | CZ | 6 | | | | | 0.02 | B | | 3 | 5.2 | | 1 | Brancik,K | |
| 2.854 | 819721 | 6.4 | M | 112 | 45 | | 3 | | | 0.067 | R | 12 | 60 | 6.2 | Y | 1 | Kosinski,J | |
| 2.854 | 819722 | 4.9 | B | 112 | | | | | | 0.030 | B | | 8 | 4.0 | Y | 2 | Kieltyka,G | |
| 2.854 | 819723 | 6.2 | B | | 13 | | 3 | | | 0.050 | B | | 10 | 5.0 | Y | 1 | Linke,H | |
| 2.854 | 819724 | 5.5 | S | CZ | 9 | | 3 | | | 0.10 | B | | 25 | 5.0 | Y | 1 | Polak,J | P |
| 2.857 | 819725 | 5.0 | S | 112 | 26 | | 5 | | | 0.050 | B | | 7 | 5.8 | Y | 1 | Meozzi,D | |
| 2.858 | 819726 | 6.0 | B | 112 | 20 | | 6 | | | 0.035 | B | | 7 | 5.5C | N | 1 | Sciezor,T | O |
| 2.858 | 819727 | 5.7 | M | 112 | | | | | | 0.06 | R | 4.5 | 10 | 4.5 | Y | 1 | Chodorowski,F | |
| 2.858 | 819728 | 6.2 | B | 112 | 42 | | 3 | | | 0.067 | R | 12 | 60 | 6.0 | Y | 1 | Nieborek,T | |
| 2.858 | 819729 | 4.7 | B | 112 | | | 5 | | 310 | 0.030 | B | | 8 | 5.0 | Y | 1 | Moskal,W | Q |
| 2.858 | 819730 | 5.5 | B | 112 | 5.8 | | 5 | | | 0.08 | R | 15 | 39 | 5.2C | Y | 1 | Szulc,M | |
| 2.86 | 819731 | 5.5 | | 113 | 15 | | 3 | | | 0.050 | B | | 10 | 5 | Y | 1 | Ward,A | |
| 2.861 | 819732 | | | 112 | | | 5 | | | 0.064 | R | 12.5 | 30 | 4.0 | Y | 2 | Kieltyka,G | |
| 2.861 | 819733 | 6.3 | B | 112 | 7 | | 4 | | | 0.080 | R | 6.2 | 50 | 6.0 | Y | 1 | Pfitzner,E | |
| 2.861 | 819734 | 5.3 | M | CZ | 15 | | 4 | | | 0.06 | B | | 12 | 4.5C | Y | 1 | Rapavy,P | R |
| 2.865 | 819735 | 5.5 | B | 112 | 5 | | 3 | | | 0.063 | R | 13 | 34 | 4.0C | Y | 1 | Bauer,H.-P | |
| 2.865 | 819736 | | | | 8 | | 5 | | | 0.064 | R | 12 | 32 | 4.5 | Y | 1 | Chodorowski,F | |
| 2.865 | 819737 | 5 | B | 112 | 4 | 3 | 5 | | | 0.050 | B | | 10 | 4.9C | Y | 1 | Laszlo,A | |
| 2.865 | 819738 | 5.4 | M | CZ | 30 | | 3 | | | 0.05 | B | | 7 | | | 1 | Silhan,J | |
| 2.868 | 819739 | 5.9 | S | 112 | | | 5 | | | | B | | 10 | 4.5 | Y | 2 | Hirth,G | S |
| 2.868 | 819740 | 6.6 | | 112? | 8 | | 3 | | | 0.175 | R | 15 | 43 | 3.5C | Y | 1 | Marx,H | T |
| 2.868 | 819741 | 5.6: | M | 112 | 6 | | 3 | | | 0.09 | M | 11 | 56 | 3.0T | Y | 9 | Westlund,M | U |
| 2.869 | 819742 | 5.5 | S | CZ | 40 | | 9 | | | | EY | | | 5.7 | Y | 1 | Hroch,F | V |
| 2.872 | 819743 | 5.6 | B | 112 | 18 | 17 | 4 | | | 0.090 | N | 7 | 40 | 4.5 | Y | 1 | Kopplin,J | |
| 2.873 | 819744 | 5.4 | M | CZ | 20 | | 6 | 0.7 | 105 | 0.035 | B | | 7 | 5.8 | Y | 1 | Hroch,F | W |
| 2.875 | 819745 | 5.2 | B | 112 | | | | | | 0.050 | B | | 10 | 6.5 | Y | 1 | Trebacz,A | |
| 2.876 | 819746 | 5.6 | M | CZ | 14.0 | | 6 | | | 0.060 | B | | 20 | 5.5 | Y | 1 | Barak,R | |
| 2.878 | 819747 | 5.7 | B | | | | 3 | | | 0.080 | R | 6.2 | 12 | 4.5 | Y | 1 | Lieder,F | |
| 2.885 | 819748 | | | | 4.5 | | 3 | | | 0.130 | N | 8 | 40 | 4.5 | Y | 1 | Lieder,F | |
| 2.885 | 819749 | 4.3 | B | | 9 | 5 | 6 | 6 | 211 | 0.030 | B | | 8 | 6.0 | Y | 1 | Winkler,R | A |
| 2.89 | 819750 | 6.0 | S | 3B | | | | | | 0.08 | B | | 20 | 6.0 | | 38 | Shanklin,J.D | |
| 2.89 | 819751 | 5.3 | B | 3B | | | | | | | EY | | | 6.5 | | 38 | Shanklin,J.D | |
| 2.89 | 819752 | 5.6 | S | 3B | | | | | | 0.05 | B | | 7 | 6.5 | | 38 | Shanklin,J.D | |
| 2.89 | 819753 | 4.7 | B | 112 | 12 | | 4 | 2.00 | 103 | 0.050 | B | | 7 | 5.5 | Y | 2 | Merlin,J.-C | |
| 2.896 | 819754 | 5.4 | S | 112 | 15 | | 6 | 2.75 | 126 | 0.13 | R | 4 | 21 | 5.4 | Y | 1 | Campos,J | X |
| 2.896 | 819755 | 5.1 | B | 112 | | | 4 | | | 0.05 | B | | 7 | 6 | Y | 2 | Paradowski,M | |
| 2.898 | 819756 | 4.6 | S | 112 | 23 | | 7 | 2.5 | 100 | 0.152 | N | 5 | 44 | 4.6 | Y | 2 | Moeller,M | Y |
| 2.90 | 819757 | 6.2 | B | DCS 13 | | | 3 | | | 0.080 | B | | 15 | 5 C | N | 1 | Keijmel,P.C | |

DATE: 2 MAY 1986

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.905 | 819758 | 5.4 | M | CZ | 20 | 5 | | | 0.05 | B | | 7 | | | 1 | Kucera,P | |
| 2.912 | 819759 | 5.7 | B | 112 | 19 | | | | 0.050 | B | | 10 | 5.0C | N | 1 | Richert,M | |
| 2.93 | 819760 | 4.9: | S | IHW | 11 | 4 | | | 0.035 | B | | 7 | 4.0 | Y | 1 | Granslo,B.H | |
| 2.938 | 819761 | 5.0 | | 112 | 6 | 4 | | | 0.08 | B | | 15 | 3.8 | Y | 1 | Dietrich,M | Z |
| 2.958 | 819762 | 6.3 | B | 113,112 | | | | | 0.05 | R | 8 | 7 | 5.0C | Y | 1 | Martinez,C | |
| 2.98 | 819763 | 5.4 | B | AAVSO | | | 5.3 | | 0.04 | B | | 7 | | | | Kiselev,N | |

NOTE A (PA value may have been incorrectly determined. Ed.)
NOTE B At the limit of visibility in this instrument. (Translated by IHW staff. Ed.)
NOTE C PA approximate. Clear. (Observer gave limit as approximately 10. Ed.)
NOTE D Coma diameter approximate.
NOTE E Tail PA 92-105.
NOTE F Nucleus. Reference star BD -16 3141. Diffuse coma, gradually brighter towards small, bright nucleus, (31.7 N 86x).
NOTE G (Observer gave limit as 11.0. Ed.)
NOTE H Estimated magnitude uncertainty +/-0.3. Coma diameter determined by comparison with a pair of stars. Measurement from a plot yields 25x10 arc min.
NOTE I Comet: naked eye.
NOTE J Strong mist.
NOTE K PA 95/105.
NOTE L Gas tail at PA 97. Midpoint of dust tail: 7.7 deg. at PA 106. End point of dust tail: 18.8 deg. at PA 106. Type III [sic] tail at PA 108.
NOTE M Good cond.
NOTE N Suspected tail at PA 108.
NOTE O Very clear skies.
NOTE P Magnitude estimate uncertainty +/-0.5 mag.
NOTE Q Short tail, faintly visible, barely visible antitail.
NOTE R Coma diameter uncertain.
NOTE S Lights, misty.
NOTE T Comparison stars SAO 156271, 156295. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE U Uncertain because of low altitude.
NOTE V Coma diameter determined by comparison with a pair of stars. Measurement from a plot yields 30 arc min. Magnitude determined with and without glasses -0.75D.
NOTE W Estimated magnitude uncertainty +/-0.2. Coma diameter determined by comparison with a pair of stars. Measurment from a plot yields 30x20 arc min.
NOTE X Broad tail from PA 98 to 126.
NOTE Y Hazy.
NOTE Z Misty. (Translated by IHW staff. Observer indicated "A" method [Argelander?]. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.118 | 831201 | 1.61 | 0.050 | B | | 7 | 20 | 4.5 | 1 | Will,M | A |
| 2.826 | 831202 | | 0.050 | B | | 7 | | 7.0 | | Kosa-Kiss,A | B |
| 2.844 | 831203 | 4 | 0.08 | B | | 11 | | 6.2 | 3 | Fleet,R.W | C |
| 2.865 | 831204 | 1.6 | 0.090 | M | 11 | 56 | 10 | 3.0 | 9 | Westlund,M | D |
| 2.889 | 831205 | 0.08 | 0.40 | N | 5 | 81,170,254 | 20 | 5.5 | 2 | Merlin,J.-C | E |

NOTE A Tail at PA 260. The coma reveals three concentric zones of brightness. Zone 3 exhibits a similar nebulous tone to that of the central tail region. Zone 2 is more luminous and intense. Zone 1 is the brightest region in the coma. Half as big as zone 2, on this particular night zone 1 was larger than its "dot-like" appearance two nights before. The tail is conical in shape with boundaries that curve slightly toward the vertex or end of the tail. A long thin "strip-like" patch appears in the central region of the tail and extends the length of the entire tail. This portion is the most intense part of the tail. Outer coma diameter 24.12'; inner coma diameter 10.46'; tail length 40.21'. Dark adapted.
NOTE B Coma diameter 22', DC = 4. Tail 1.8 deg. at PA 105. Total magnitude 5.6. Schematic drawing. (Duration not indicated. Time of observation is end time. Ed.)
NOTE C Gas tail at PA 97. Dust tail end point at PA 106. Type III [sic] at PA 108. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Low altitude. Disturbing lights: twilight.
NOTE E Tail at PA 69; tail at PA 114, large and diffuse (dust tail?); tail at PA 142, large and diffuse (dust tail?); jet at PA 195, short and bright; jet at PA 265, nearly sunward; jet at PA 278; jet at PA 340. Fan-shaped structure between jets at PA 278 and PA 340.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.274 | 851998 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | S | 22/P | 3 | Yen,B | A |
| 2.833 | 851999 | 0.300 | 4 | | 6.9 x 4.6 | 10.00 | Fotopan EL | 400/27 | N | O | 11/P | 1 | Slusarczyk,J | |
| 2.855 | 852000 | 0.600 | 5 | 0.120 | 3.4 x 2.3 | 31.00 | ORWO NP 27 | 400/27 | N | | 10/P | | Kohler,N | |
| 2.859 | 852001 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 20.00 | Kodak Tri-X | 400/27 | N | O | 20/T | 1 | Mikuz,H | B |
| 2.876 | 852002 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 21.00 | Kodak Tri-X | 400/27 | N | O | 21/T | 1 | Mikuz,H | B |
| 2.902 | 852003 | 0.300 | 4 | | 6.9 x 4.6 | 15.00 | Ektachrome | 400/27 | N | X | 3/P | 2 | Lucius,D | |
| 2.922 | 852004 | 0.050 | 1.8 | | 39.6 x27.0 | 15.00 | Ektachrome | 64/19 | N | X | 4/P | 2 | Lucius,D | |
| 2.955 | 852005 | 0.300 | 4 | | 6.9 x 4.6 | 10.00 | Ektachrome | 400/27 | N | X | 5/P | 2 | Lucius,D | |

NOTE A (Observer's image identifier is 36. Ed.) Instrument is Schmidt camera.
NOTE B Weather conditions good.

DATE: 3 MAY 1986

DATE: 3 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.07 | 819764 | 5.4 | B | 112 | | | | | 0.050 | B | | 10 | | | | Bortle,J.E | |
| 3.07 | 819765 | 5.0 | S | 112 | | | | | | EY | | | | | | Bortle,J.E | |
| 3.07 | 819766 | 5.1 | S | 112 | 12 | 5 | | | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 3.07 | 819767 | | | | 12 | 4 | 4.7 | 110 | 0.050 | B | | 7 | | | | Bortle,J.E | |
| 3.076 | 819768 | 4.5 | S | 112 | 3.9 | 3 | | | 0.08 | R | 11 | 39 | 4.1C | N | 1 | Graves,D | A |
| 3.094 | 819769 | 5.6 | B | 112 | | | | | 0.080 | B | | 20 | 5.4 | Y | | Smith,D | |
| 3.101 | 819770 | 4.7 | B | 112 | 4 | 1 | | | 0.06 | R | 12 | 56 | 5.3 | Y | 1 | Opofre D.,D | B |
| 3.104 | 819771 | 5.8 | B | AAVSO | 0.2 | 2 | | | 0.04 | B | | 10 | 5.0 | Y | 1 | Allen,E | |
| 3.104 | 819772 | 5.8 | B | AAVSO | 12 | 2 | | | 0.040 | B | | 10 | 5.2 | Y | 1 | Alves,A.A | |
| 3.11 | 819773 | 5.8 | B | 112 | | | | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 3.118 | 819774 | 5.3 | M | 112 | | | 2.00 | 105 | 0.050 | B | | 10 | 4.9 | Y | 1 | Smith,A | C |
| 3.12 | 819775 | 4.6 | M | IHW BAA | 15 | 4 | | | 0.035 | B | | 7 | | | | Green,D.W.E | D |
| 3.12 | 819776 | 4.5 | S | IHW BAA | 15 | 4 | | | 0.035 | B | | 7 | | | | Green,D.W.E | D |
| 3.125 | 819777 | 5.5 | B | 112 | 13.9 | 5 | 0.30 | 262 | 0.050 | B | | 7 | 4.1C | Y | 1 | Will,M | E |
| 3.13 | 819778 | 4.6 | B | IHW BAA | 20 | 0 | | | | EY | | | | | | Green,D.W.E | D |
| 3.140 | 819779 | 5.4 | S | 112 | 11 | 3 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | House,R.R | |
| 3.153 | 819780 | 5.0 | B | 112 | 25 | 7 | 0.5 | | 0.20 | SC | 10 | 77 | 5.5 | Y | 1 | Hodonsky,K | |
| 3.160 | 819781 | 4.7 | B | 112 | 6.5 | 4 | 0.04 | 280 | 0.127 | SC | 10 | 50 | 2.6 | N | 1 | Rousom,J | F |
| 3.167 | 819782 | 5.3 | S | 3B | | | | | 0.035 | B | | 7 | 4 | N | 4 | Hudak,D.M | |
| 3.167 | 819783 | 5.8 | S | 112 | 34 | 3 | | | 0.05 | B | | 10 | 4 C | Y | 1 | Gronek,J.D | G |
| 3.167 | 819784 | 5.6 | B | 112 | 13 | 3 | 2.0 | 115 | 0.05 | B | | 10 | 6.5 | Y | 1 | Hays Jr,R.H | |
| 3.167 | 819785 | | | | 10.2 | 5 | 0.60 | 262 | 0.050 | R | 12 | 24 | 4.1C | Y | 1 | Will,M | E |
| 3.188 | 819786 | 5.4 | S | 112 | 75 50 | 2 | | 110 | 0.080 | B | | 11 | 4.3C | Y | 1 | Bailey,G | H |
| 3.2083 | 819787 | 5.4 | S | 112 | 15 | 6 | 6.5 | 101 | | EY | | | 6.3 | Y | 3 | Cook,A.J | |
| 3.22 | 819788 | 5.6 | B | 112 | 8 | 3 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | I |
| 3.22 | 819789 | | | | 31 | 3 | | | | EY | | | 6.0 | Y | 1 | Jacobson,E | |
| 3.2236 | 819790 | 5.4 | M | 112 | 15 | 6 | 7.5 | 100 | 0.05 | B | | 7 | 6.3 | Y | 3 | Cook,A.J | |
| 3.23 | 819791 | 4.8 | M | 112 | 15 | 5 | 10 | 100 | 0.050 | B | | 10 | 6.5 | Y | 3 | Morris,C.S | |
| 3.24 | 819792 | | | | | | 19 | 100 | | EY | | | 6.5 | Y | 3 | Morris,C.S | J |
| 3.25 | 819793 | | | | | | | | 0.445 | N | 4.5 | 224 | 6.5 | Y | 3 | Morris,C.S | K |
| 3.31 | 819794 | 4.9 | M | 3B | | | | | 0.05 | B | | 10 | 6.5 | Y | 18 | Hale,A | L |
| 3.31 | 819795 | | | | | | 19 | 90 | | EY | | | 6.5 | Y | 18 | Hale,A | L |
| 3.35 | 819796 | 4.8 | S | BETACRA | | 7 | 7.0 | | | EY | | | 6.3 | | 1 | Lovejoy,T | |
| 3.361 | 819797 | 6.0: | S | TIRION | 10 | 5 | 0.37 | | 0.050 | B | | 15 | 3.7 | | | Witte,F | |
| 3.37 | 819798 | 9.8 | V | | | 7 | | | 0.317 | N | 5 | 86 | | | | Jones,A | M |
| 3.375 | 819799 | 5.2 | B | 112 | 15 | | | | 0.03 | R | | 8 | | Y | 1 | Tregaskis,T.B | N |
| 3.385 | 819800 | 6.2: | S | TIRION | 8 | 5 | 0.33 | | 0.150 | M | 15 | 56 | 3.5 | | | Witte,F | |
| 3.423 | 819801 | 5.6 | B | 112 | 15 | 4 | 2 | 95 | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | O |
| 3.423 | 819802 | | | 112 | 11 | | | 100 | 0.10 | N | 6 | 24 | | Y | 1 | Tregaskis,T.B | P |
| 3.423 | 819803 | | | 112 | | 8 | | | 0.15 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | Q |
| 3.45 | 819804 | 5.1 | S | 112 | 26 | 3 | | | 0.023 | B | | 3 | | | | Jones,A | |
| 3.45 | 819805 | | | | | 5 | 1 | | 0.050 | B | | 7 | | | | Jones,A | R |
| 3.465 | 819806 | 5.6 | M | 112 | 7.2 | 6 | 1.5 | 85 | 0.2 | C | 10 | 50 | 6.0 | Y | 10 | Ichikawa,K | |
| 3.469 | 819807 | 5.4 | S | 112 | 12 | | 1.2 | 90 | 0.05 | B | | 7 | 5.4 | Y | 1 | Bryant,K | S |
| 3.500 | 819808 | 5.2 | S | 3B, 112 | | | | | | EY | | | 6.1 | Y | 1 | Seargent,D | T |
| 3.500 | 819809 | | | | | | 3 | 105 | 0.08 | B | | 15 | | | | Seargent,D | |
| 3.58 | 819810 | 7 : | | | 5 | 5 | | | 0.15 | N | 6 | 23 | 4 | Y | 5 | Tanikawa,M | |
| 3.70 | 819811 | 5.6 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 3.73 | 819812 | 6.4 | B | M | 5 | 0 | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 3.755 | 819813 | 4.6 | S | 112 | 18 | | 2.5 | 105 | | EY | | | 6.1 | Y | 7 | Haver,R | |
| 3.755 | 819814 | 4.9 | S | 112 | 14 | 4 | 3.73 | 105 | 0.05 | B | | 7 | 6.1 | Y | 7 | Haver,R | U |
| 3.78 | 819815 | 5.6 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 3.802 | 819816 | 5.9 | M | 112 | | | | | 0.035 | B | | 9 | 6.2 | Y | 1 | Begbie,M.J.R | |
| 3.802 | 819817 | 6.6 | S | 112 | 8.2 | 8 | | | | B | | 10 | 4.5 | Y | 2 | Hirth,G | |
| 3.82 | 819818 | 6.5 | B | M | 18 | 4 | | | 0.08 | B | | 40 | | | | Palko,Yu | |
| 3.823 | 819819 | 5.8 | M | AAVSO | 12 | 5 | 1.0 | 70 | 0.156 | N | 10 | 54 | 6.8 | | | Kosa-Kiss,A | V |
| 3.823 | 819820 | 4.8 | M | 112 | 25 | 8 | | | 0.030 | B | | 8 | 5.0 | Y | 14 | Villa,M | |
| 3.825 | 819821 | | | | 8.4 | 4 | 3.0 | 100 | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | W |
| 3.826 | 819822 | 6.1 | B | 112 | 10.1 | 3 | | | 0.08 | B | | 20 | 5 | Y | 1 | Gigli,P | X |
| 3.826 | 819823 | 6.2 | M | 112 | | | | | 0.100 | B | | 25 | 4.5 | N | 1 | Fabricius,J | |
| 3.830 | 819824 | 6.2 | M | 112 | | | | | 0.06 | R | 4.5 | 10 | 4.5 | Y | 1 | Chodorowski,F | |
| 3.83 | 819825 | 6.5 | B | M | 18 | 0 | | | 0.03 | R | 8 | 18 | | | | Drapun,I | |
| 3.833 | 819826 | | | | 15 | 5 | | | 0.064 | R | 12 | 32 | 5.0 | Y | 1 | Chodorowski,F | |
| 3.833 | 819827 | 5.8 | B | 112 | 4.5 | 4 | | | 0.056 | B | | 8 | 5.5 | Y | 1 | Koch,V | |
| 3.837 | 819828 | 6.0 | M | CZ | 10 | 3 | 0.5 | 110 | 0.035 | B | | 7 | 4.5 | Y | 1 | Hroch,F | Y |
| 3.837 | 819829 | 5.7 | M | CZ | 10 | 2 | | | 0.05 | B | | 7 | | | 1 | Kucera,P | |
| 3.840 | 819830 | 5.6 | M | CZ | 16.0 | 6 | | | 0.060 | B | | 20 | 6 | Y | 1 | Barak,R | |
| 3.840 | 819831 | 4.8 | B | 112 | | 4 | | 310 | 0.064 | R | 12 | 60 | 4.0 | Y | 1 | Moskal,W | Z |
| 3.840 | 819832 | 5.3 | M | 112 | | 4 | | | 0.08 | B | | 10 | 4.1C | Y | 1 | Posa,O | a |
| 3.844 | 819833 | 6.4 | B | 112 | 12 | 3 | | | 0.07 | B | | 10 | 5.6 | Y | 6 | Deconinck,M | b |
| 3.844 | 819834 | 6.3 | B | 112 | 42 | 3 | | | 0.067 | R | 12 | 60 | 6.0 | Y | 1 | Nieborek,T | |
| 3.844 | 819835 | 5.3 | M | 112 | 15 | 4 | | | 0.15 | N | 4 | 37 | 4.1C | Y | 1 | Posa,O | a |
| 3.845 | 819836 | 5.3 | S | 112 | 22 | 4 | | | 0.080 | B | | 20 | 5.6 | Y | 1 | Meozzi,D | |
| 3.845 | 819837 | 5.4 | M | 112 | | 3 | | | 0.06 | B | | 12 | 4.1C | Y | 1 | Posa,O | a |
| 3.847 | 819838 | 6.2 | B | 112 | 11 | 5 | | | 0.035 | B | | 7 | 5.0C | N | 1 | Sciezor,T | c |
| 3.847 | 819839 | 5.3 | M | 112 | | 5 | | | 0.08 | B | | 10 | 4.1 | Y | 1 | Csomos,G | d |
| 3.847 | 819840 | 5.1 | B | CZ | 12 9 | 5 | | | 0.10 | O | | 25 | 4.5C | Y | 1 | Micek,I | |
| 3.847 | 819841 | 5.7 | S | 112 | 9 | 4 | | | 0.06 | R | 8 | 15 | 4.5 | Y | 1 | Schambeck,C.M | |
| 3.849 | 819842 | 5.4 | M | 112 | | 5 | | | 0.15 | N | 4 | 37 | 4.1 | Y | 1 | Csomos,G | d |
| 3.850 | 819843 | 5.3 | M | 112 | | 4 | | | 0.06 | B | | 12 | 4.1 | Y | 1 | Csomos,G | d |
| 3.850 | 819844 | 5.9 | B | 112 | 10 6 | 7 | | | 0.050 | B | | 12 | 3.0 | Y | 1 | Mosch,J | |
| 3.854 | 819845 | 6.3 | B | | 13 | 2 | | | 0.050 | B | | 10 | 4.5 | Y | 1 | Linke,H | |
| 3.854 | 819846 | 5.9 | M | CZ | 15 | 4 | | | 0.05 | B | | 7 | | | 1 | Silhan,J | e |
| 3.861 | 819847 | 6.4 | S | CZ | 10 | 2 | | | 0.05 | R | 10 | 13 | 5.0 | Y | 1 | Polak,J | f |
| 3.861 | 819848 | | | 112 | 13 | 4 | | | 0.080 | R | 6.2 | 20 | 3.5C | Y | 2 | Richert,M | |
| 3.865 | 819849 | 6.5 | M | 112 | 45 | 3 | | | 0.067 | R | 12 | 60 | 6.0 | Y | 1 | Kosinski,J | |
| 3.865 | 819850 | 6.3 | B | 112 | 7 | 4 | | | 0.080 | R | 6.2 | 50 | 6.0 | Y | 1 | Pfitzner,E | |
| 3.865 | 819851 | 6.0 | M | CZ | 12 | 4 | | | 0.03 | B | | 8 | | | 1 | Silhan,J | |
| 3.865 | 819852 | 5.7 | B | 112 | 5.2 | 4 | | | 0.08 | R | 15 | 39 | 4.5C | Y | 1 | Szulc,M | |
| 3.868 | 819853 | 5.6 | M | CZ | 10 | 0 | | | 0.05 | B | | 7 | | | 1 | Kucera,P | |
| 3.875 | 819854 | 5.6 | S | 112 | 14 | 7 | | | 0.050 | B | | 7 | | Y | 1 | Mikuz,H | g |
| 3.875 | 819855 | 4.9 | S | 112 | 20 | 7 | 2 | 100 | 0.152 | N | 5 | 44 | 4.5 | Y | 2 | Moeller,M | |
| 3.881 | 819856 | 5.9 | B | 112 | 6.0 | 4 | | | 0.080 | B | | 20 | 5.5 | Y | 1 | Koch,B.O | |
| 3.882 | 819857 | 5.2 | S | 112 | 15 | 4 | | | 0.05 | B | | 10 | 2.5 | Y | 1 | Hurst,G.M | |
| 3.884 | 819858 | | | | 15 | 4 | | | 0.08 | B | | 15 | 2.5 | Y | 1 | Hurst,G.M | h |
| 3.885 | 819859 | 4.9 | M | 3B | | 5 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Stott,D | |
| 3.885 | 819860 | 5.7: | M | 112 | 6 | 2 | | | 0.09 | M | 11 | 56 | 3.0 | Y | 9 | Westlund,M | i |
| 3.885 | 819861 | 4.3 | B | | 9 5 | 5 | 5 | 212 | 0.030 | B | | 8 | 6.0 | Y | 1 | Winkler,R | E |
| 3.889 | 819862 | 6.2 | S | 112 | 7.0 | 4 | 0.07 | 90 | 0.070 | B | | 16 | 4.1C | Y | 1 | Taylor,M.D | j |
| 3.889 | 819863 | 5.6 | M | CZ | 12 | 5 | | | 0.10 | B | | 25 | 5.0C | Y | 1 | Rapavy,P | |
| 3.896 | 819864 | 5.8 | B | | 5.0 | 4 | | | 0.110 | R | 6.8 | 19 | 4.5C | Y | 1 | Lipski,P | |

DATE: 3 MAY 1986 DATE 3 MAY 1986

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.899 | 819865 | 5.5 | M | CZ | | 4 | | | 0.06 | B | | 12 | 5.0C | Y | 1 | Rapavy,P | |
| 3.899 | 819866 | 6.2 | M | CZ | 15 | 3 | | | 0.055 | R | 6 | 12 | | | 1 | Silhan,J | |
| 3.906 | 819867 | 5.4 | M | CZ | | 4 | | | 0.08 | B | | 10 | 5.0C | Y | 1 | Rapavy,P | |
| 3.917 | 819868 | 5.6 | S | 112 | 8.5 | 5 | | 90 | 0.25 | N | 6 | 60 | 4.1 | Y | 1 | Gainsford,M.J | k |
| 3.925 | 819869 | 5.7 | S | 112 | | | | | 0.08 | B | | 11 | 4.1 | Y | 1 | Gainsford,M.J | l |
| 3.927 | 819870 | 5.1 | B | 112 | | 4 | | | 0.05 | B | | 7 | 4.5 | Y | 2 | Paradowski,M | |
| 3.997 | 819871 | 4.7 | B | 112 | | 5 | | | 0.05 | B | | 20 | 4.5 | Y | 1 | da Silva,L.A.L | |

NOTE A Diffuse coma.
NOTE B Cirrus.
NOTE C Seeing average.
NOTE D Coma diameter approximate.
NOTE E (PA value may have been incorrectly determined. Ed.)
NOTE F Light haze. Nucleus stellar. (PA value appears incorrect. Ed.)
NOTE G Exc. see.
NOTE H Recovered. Couldn't tell if tail or extended coma.
NOTE I Condensation.
NOTE J Tail suspected out to 25 degrees.
NOTE K Bright sector was seen coming from the central condensation between PAs 340: and 240:.
NOTE L Naked-eye magnitude estimate difficult due to proximity of comet to 3rd magnitude star (Nu Hydrae). The naked-eye tail is again very long but extremely faint.
NOTE M Nucleus. Diffuse coma, strongly condensed about small nucleus.
NOTE N Coma diameter approximate. Clear. (Observer gave limit as approximately 9. Ed.)
NOTE O Clear. (Observer gave limit as approximately 10. Ed.)
NOTE P Tail fairly narrow and faint. Faint stellar-like nucleus.
NOTE Q Nucleus not so stellar-like.
NOTE R Tail PA 92-103.
NOTE S DC = strong.
NOTE T Near bright star.
NOTE U Center tail, see drawing.
NOTE V Comet: naked eye.
NOTE W Tail measurement refers to dust tail only.
NOTE X Serene, without wind.
NOTE Y Estimated magnitude uncertainty +/-0.4. Coma diameter determined by comparison with a pair of stars. Measurement from a plot yields 10 arc min.
NOTE Z Bad weather, tail barely visible.
NOTE a Coma dia. = elipt. [sic]. Tail length indeterm.
NOTE b Star nu verry light. [sic]
NOTE c Thin fog.
NOTE d Coma elliptical.
NOTE e Mist.
NOTE f Magnitude estimate uncertainty +/-0.3 mag.
NOTE g Possible very thin cirrus clouds.
NOTE h Comet near bright star.
NOTE i Uncertain because of low altitude. Cirrus.
NOTE j Antoniadi III-IV. Haze.
NOTE k Coma diameter 8.5'+.
NOTE l Coma dia. = "large".

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.118 | 831206 | 1.07 | 0.050 | B | | 7 | 20 | 4.1 | 1 | Will,M | A |
| 3.160 | 831207 | 0.68 | 0.050 | R | 12 | 24 | 20 | 4.1 | 1 | Will,M | B |
| 3.175 | 831208 | 0.5 | 0.13 | SC | 10 | 32,120 | 15 | 6.5 | 1 | Hays Jr,R.H | C |
| 3.227 | 831209 | 3 | 0.050 | B | | 7 | 10 | 6.3 | 3 | Cook,A.J | |
| 3.755 | 831210 | 3 | 0.050 | B | | 7 | 5 | 6.1 | 7 | Haver,R | D |
| 3.835 | 831211 | | 0.30 | N | 8.5 | 102,212,425 | 34 | 6.2 | 1 | Bégbie,M.J.R | E |
| 3.882 | 831212 | 1.6 | 0.090 | M | 11 | 56 | 10 | 3.0 | 9 | Westlund,M | F |

NOTE A The coma of the comet has three concentric zones of brightness. Zone 3, the most nebulous part of the coma, is a good deal more intense than the tail of comet Halley this evening. Zone 2 is still brighter and the glow peaks out at a point in the center of the coma called zone 1. The tail is cone shaped, very diffuse showing no detail. Coma diameter 13.91'; inner coma diameter 7.49'; tail length 18.18' at PA 262. Dark adapted.
NOTE B The general purpose of this sketch was to observe detail in the tail of comet Halley. Overall the tail seems to be less luminous than the outer reaches of the coma. Bifurcation was observed in the tail's structure. The northern branch is shown to be slightly longer than its southern counterpart. Note that a star can be seen through one of the branches, the northern branch. This star is greater in brightness than magnitude 9.5 according to AAVSO Star Atlas chart 112. Coma diameter 10.23'; tail length 36.13' at PA 262.
NOTE C Quiet comet. 'Nucleus' not as prominent as on Apr. 26/27.
NOTE D Tail center at PA 105.
NOTE E Fans at variable PAs. Tail spine at PA 80. Vertex distance 4.2 arc min.; semi latus rectums P1 = 4.7 arc min., P2 = 3.2 arc min. At 425x - faint streamers were observed that moved out from the central condensation and then flowed backward into the tail. Two fans also appeared to behave similarly. A relatively bright and thin spine of material flowed away from the central condensation into the tail. The tail at 102x was narrow, but prominent. (Two drawings are included in this listing: one made at magnifications of 102 and 425 and scale 0.25 arc min./mm and one at a magnification of 425 and scale of 0.07 arc min./mm. There is no reference to a magnification 212 except on the coversheet. Ed.)
NOTE F Low altitude, cirrus.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.091 | 852006 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 4.00 | Kodak 2415 | | Y | S | 3/P | 1 | Dilsizian,R | |
| 3.173 | 852007 | 0.200 | 3.5 | | 10.3 x 6.9 | 10.00 | Ektachrome | 400/ | N | T | 759/S | 2 | Woidyla,B | A |
| 3.195 | 852008 | 0.200 | 3.5 | | 10.3 x 6.9 | 11.50 | Ektachrome | 400/ | N | T | 762/S | 2 | Woidyla,B | A |
| 3.205 | 852009 | 0.135 | 2.8 | | 15.2 x10.2 | 8.50 | Kodak 2415 | | Y | C | 617/S | 2 | Buchanan,W.T | B |
| 3.232 | 852010 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | S | 23/P | 3 | Yen,B | C |
| 3.234 | 852011 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | 3M 1000 | 1000/ | N | O | 19/N | 2 | Edberg,S.J | |
| 3.234 | 852012 | 0.050 | 2 | | 39.6 x27.0 | 1.00 | Ektachrome | 400/ | N | O | 7/N | 2 | Edberg,S.J | |
| 3.234 | 852013 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | Kodak Tri-X | 400/ | N | O | 27/C | 2 | Edberg,S.J | |
| 3.238 | 852014 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/ | N | O | 20/N | 2 | Edberg,S.J | |
| 3.238 | 852015 | 0.050 | 2 | | 39.6 x27.0 | 10.00 | Ektachrome | 400/ | N | O | 8/N | 2 | Edberg,S.J | |
| 3.238 | 852016 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | Kodak Tri-X | 400/ | N | O | 28/C | 2 | Edberg,S.J | |
| 3.245 | 852017 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | 3M 1000 | 1000/ | N | O | 21/N | 2 | Edberg,S.J | |
| 3.245 | 852018 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | Kodak Tri-X | 400/ | N | O | 29/C | 2 | Edberg,S.J | |
| 3.259 | 852019 | 0.050 | 2 | | 39.6 x27.0 | 10.00 | 3M 1000 | 1000/ | N | O | 22/N | 2 | Edberg,S.J | |
| 3.259 | 852020 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | Ektachrome | 400/ | N | O | 10/N | 2 | Edberg,S.J | |
| 3.259 | 852021 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | Kodak Tri-X | 400/ | N | O | 30/C | 2 | Edberg,S.J | |
| 3.280 | 852022 | 0.050 | 2 | | 39.6 x27.0 | 20.00 | Ektachrome | 400/ | N | O | 11/N | 2 | Edberg,S.J | |
| 3.280 | 852023 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 20.00 | Kodak Tri-X | 400/ | N | O | 31/C | 2 | Edberg,S.J | |
| 3.400 | 852024 | 0.135 | 3.5 | | 15.2 x10.2 | 5.00 | Ektachr.400 | | N | X | 35/S | 1 | Tregaskis,T.B | D |
| 3.407 | 852025 | 0.135 | 3.5 | | 15.2 x10.2 | 10.00 | Ektachr.400 | | N | X | 36/S | 1 | Tregaskis,T.B | D |
| 3.419 | 852026 | 0.135 | 3.5 | | 15.2 x10.2 | 20.00 | Ektachr.400 | | N | X | 37/S | 1 | Tregaskis,T.B | D |

DATE: 3 MAY 1986

DATE: 3 MAY 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.845 | 852027 | 0.058 | 2 | | 34.5 x23.4 | 5.00 | HL | 400/27 | N | | 28/S | 1 | Chodorowski,F | E |
| 3.850 | 852028 | 0.300 | 4 | | 6.9 x 4.6 | 20.00 | Fotopan HL | 400/27 | N | O | 12/P | 1 | Slusarczyk,J | |
| 3.897 | 852029 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 2.00 | Kodak 2415 | | Y | | 23/P | 1 | Conrad,R | F |
| 3.935 | 852030 | 0.300 | 4 | | 6.9 x 4.6 | 15.00 | Ektachrome | 400/27 | N | X | 6/P | 2 | Lucius,D | |
| 3.946 | 852031 | 0.300 | 4 | | 6.9 x 4.6 | 10.00 | Ektachrome | 400/27 | N | X | 7/P | 2 | Lucius,D | |

NOTE A (Observer's image identifier is preceded by prefix 1. Ed.)
NOTE B (Observer's image identifier is F-126-17. Ed.)
NOTE C (Observer's image identifier is 1. Ed.) Instrument is Schmidt camera.
NOTE D Push processed to 800 ASA.
NOTE E (Observer's image identifier is 12/28. Ed.)
NOTE F City lights interfered with the observation; Vienna, from room.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.239 | 870144 | 600G-O | CL | 0.135 | 2.8 | | 18.00 | Kodak 2415 | | Y | | 618/S | 2 | Buchanan,W.T | A |

NOTE A Frame has light from passing vehicle. (Observer's image identifier is E-126-18. Ed.) Comet Halley just below naked eye visibility.

DATE: 4 MAY 1986 DATE: 4 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.00 | 819872 | 5.6 | B | AAVSO | | | 5 | | 0.04 | B | | 7 | | | | Kiselev,N | |
| 4.021 | 819873 | 4.9 | B | 112 | | | | | 0.05 | R | 8 | 7 | 5.5 | Y | 2 | Villegas,S | |
| 4.031 | 819874 | 6.4 | S | 112 | | | | | 0.05 | R | 8 | 7 | 5.5C | Y | 1 | Martinez,C | |
| 4.059 | 819875 | 6.1 | B | AAVSO | 0.2 | 2 | | | 0.04 | B | | 10 | 5.2 | Y | 1 | Allen,E | |
| 4.059 | 819876 | 6.1 | B | AAVSO | 12 | 2 | | | 0.040 | B | | 10 | 4.5 | Y | 1 | Alves,A.A | |
| 4.066 | 819877 | 5.3 | S | 112 | 5.0 | 6 | | | 0.203 | N | 6 | 101 | 4.9 | Y | 1 | Hudak,D.M | |
| 4.076 | 819878 | 4.5 | S | 112 | 3.6 | 3 | | | 0.08 | R | 11 | 39 | 4.1C | N | 1 | Graves,D | A |
| 4.08 | 819879 | 5.1 | S | 112,113 | 12 | 4 | 2.3 | 113 | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 4.08 | 819880 | | | | 14 | 4 | 3.0 | 113 | 0.050 | B | | 7 | | | | Bortle,J.E | B |
| 4.090 | 819881 | 5.9 | S | 112 | 12 | | | | 0.035 | B | | 7 | 6.0 | Y | 3 | Morrison,W | |
| 4.090 | 819882 | 5.0 | B | 112 | 8.4 | 3 | | | 0.127 | SC | 10 | 50 | 4.4 | Y | 1 | Rousom,J | C |
| 4.094 | 819883 | 5.9 | B | 112 | | | | | 0.080 | B | | 20 | 5.5 | Y | | Smith,D | |
| 4.11 | 819884 | 5.8 | B | 112 | 15 | 5 | | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 4.115 | 819885 | 5.9 | B | 112 | | 6 | | | 0.08 | B | | 11 | 5.2 | Y | 6 | Gorski,L | |
| 4.121 | 819886 | 5.5 | B | 112 | 9.3 | 1 | | | 0.05 | B | | 7 | 4.9C | Y | 4 | Dodd,W.J | D |
| 4.128 | 819887 | 5.1 | M | 112,113 | 13 | 5 | 6.0 | 102 | 0.05 | B | | 7 | 5.1 | Y | 5 | DeYoung,J.A | E |
| 4.128 | 819888 | 5.9 | B | 112 | 13.0 | 4 | 0.18 | 256 | 0.050 | B | | 7 | 4.5C | Y | 1 | Will,M | F |
| 4.146 | 819889 | 5.8 | B | 112 | 13 | 3 | 1.6 | 120 | 0.05 | B | | 10 | 6.5 | Y | 1 | Hays Jr,R.H | |
| 4.15 | 819890 | 4.8 | S | IHW BAA | 15 | 4 | | | 0.035 | B | | 7 | | | | Green,D.W.E | G |
| 4.165 | 819891 | 5.8 | S | 112 | 9 | 4 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | House,R.R | |
| 4.169 | 819892 | 4.7 | B | 112 | | 3 | | | 0.05 | B | | 20 | 6.0 | Y | 4 | da Silva,L.A.L | |
| 4.17 | 819893 | 4.9 | M | 112 | | | | | 0.050 | B | | 10 | 4.0C | Y | 38 | Morris,C.S | |
| 4.177 | 819894 | 5.5 | B | 112 | 5 | 6 | 0.25 | | 0.15 | N | 8 | 60 | 5.0 | Y | 4 | Gilchrist,D.K | H |
| 4.188 | 819895 | 5.9 | S | 112 | 34 | 3 | | | 0.05 | B | | 10 | 4 C | Y | 1 | Gronek,J.D | I |
| 4.19 | 819896 | 5.1 | B | 112 | 9 | 3 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | J |
| 4.19 | 819897 | | | | 34 | 3 | | | | EY | | | 6.0 | Y | 1 | Jacobson,E | |
| 4.208 | 819898 | 5.8 | S | 112 | 6 | 3 | 0.5 | 285 | 0.080 | B | | 11 | | Y | 1 | Pryal,J | K |
| 4.21 | 819899 | 5.2 | S | 113 | 5.5 | 3 | | | 0.080 | B | | 11 | 5.8 | Y | 2 | Spratt,C.E | L |
| 4.211 | 819900 | 6.3 | B | AAVSO | 0.2 | 2 | | | 0.115 | N | | 30 | 4.0 | Y | 1 | Allen,E | |
| 4.2493 | 819901 | 5.1 | S | DCS | 10 | 5 | | | 0.080 | B | | 20 | 5.0 | | 3 | Machholz,D | |
| 4.375 | 819902 | 5.6 | S | 112 | 5 | 3 | 1 | | 0.080 | B | | 20 | | Y | 1 | Batza,H | M |
| 4.381 | 819903 | 6.5: | S | TIRION | 10 | 6 | | | 0.200 | C | 15 | 75 | 3.9 | | | Witte,F | N |
| 4.41 | 819904 | 5.1 | S | 112 | 25 | 3 | | | 0.023 | B | | 3 | 5.9 | | | Jones,A | |
| 4.41 | 819905 | | | | | 4 | | | 0.050 | B | | 7 | | | | Jones,A | |
| 4.41 | 819906 | | | | | | | | 0.078 | R | 7.5 | 30 | | | | Jones,A | O |
| 4.451 | 819907 | 5.7 | M | 112 | 8.2 | 6 | 0.83 | 85 | 0.2 | C | 10 | 50 | 6.0 | Y | 3 | Ichikawa,K | |
| 4.47 | 819908 | 5.6 | S | 3B | 10 | 6 | | | 0.07 | B | | 10 | 3.5 | Y | 1 | Yasuki,M | |
| 4.484 | 819909 | 5.4 | S | 112 | 11.2 | 4 | | | 0.05 | B | | 7 | 3.0 | N | 1 | Kanai,K | |
| 4.486 | 819910 | 5.7 | M | 112 | 12 | 5 | 0.67 | 105 | 0.08 | B | | 11 | 5.5 | Y | 4 | Mitsuma,S | |
| 4.500 | 819911 | 5.5 | B | 112 | | | | | 0.05 | B | | 7 | 5.5 | Y | 2 | Hayashi,H | |
| 4.52 | 819912 | 5.1 | S | 112 | | 3 | | | 0.04 | B | | 7 | 4.5 | N | 3 | Momose,M | |
| 4.522 | 819913 | 6.3 | M | 112 | 7 | 5 | | | 0.10 | N | 10 | 55 | 4.0C | Y | 1 | Kato,T | |
| 4.528 | 819914 | 6.1 | S | 112 | 6.7 | 5 | | | 0.15 | N | 6 | 28 | 2.5 | N | 1 | Kanai,K | |
| 4.54 | 819915 | 5.3 | M | 112 | 14.1 | 5 | 1 | 130 | 0.080 | B | | 11 | 4 | Y | 2 | Watanabe,N | |
| 4.572 | 819916 | 5.6 | B | 112 | 15 | 4 | 1 | 100 | 0.05 | B | | | | N | 1 | Tregaskis,T.B | P |
| 4.575 | 819917 | 5.4 | | 112 | 20 | | | | | EY | | | 6 | Y | 1 | Tregaskis,T.B | Q |
| 4.611 | 819918 | 5.4 | S | 112 | 10 | | | | 0.05 | B | | 7 | 4.9 | N | 1 | Bryant,K | R |
| 4.70 | 819919 | 5.6 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 4.715 | 819920 | 5.7 | M | 112 | 13 | 4 | 3.9 | 107 | 0.08 | B | | 11 | 5.3 | Y | 4 | Fleet,R.W | S |
| 4.72 | 819921 | 5.8 | B | M | | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 4.76 | 819922 | 8.0 | B | M | | | | | 0.10 | R | | | | | | Poroshin,A | |
| 4.81 | 819923 | 7 | B | M | 12 | 5 | | | 0.08 | B | | 40 | | | | Palko,Yu | |
| 4.813 | 819924 | 5.6 | B | 113 | | | | | 0.050 | B | | 10 | 6.5 | Y | 1 | Trebacz,A | |
| 4.821 | 819925 | 5.7 | M | AAVSO | 7 | 5 | 0.7 | 70 | 0.156 | N | 10 | 54 | 6.7 | | | Kosa-Kiss,A | T |
| 4.830 | 819926 | 5.5: | M | CZ | 10 | 4 | | | 0.080 | B | | 10 | 4 | Y | 1 | Bilek,V | |
| 4.830 | 819927 | 5.3 | M | 112 | | 5 | | | 0.08 | B | | 10 | 5.2C | Y | 1 | Posa,O | U |
| 4.83 | 819928 | 6.5: | B | M | 18 | 0 | | | 0.03 | R | 6 | 8 | | | | Drapun,I | |
| 4.833 | 819929 | 5.4 | M | 112 | | 4 | | | 0.08 | B | | 10 | 5.2 | Y | 1 | Csomos,G | V |
| 4.833 | 819930 | 5.3 | M | 112 | 15 | 4 | | | 0.15 | N | 4 | 37 | 5.2C | Y | 1 | Posa,O | U |
| 4.834 | 819931 | 5.5 | M | 112 | | | | | 0.035 | B | | 9 | 6.4 | Y | 1 | Begbie,M.J.R | |
| 4.835 | 819932 | 5.3 | M | 112 | | 4 | | | 0.15 | N | 4 | 37 | 5.2 | Y | 1 | Csomos,G | V |
| 4.835 | 819933 | 5.4 | M | 112 | | 4 | | | 0.06 | B | | 12 | 5.2C | Y | 1 | Posa,O | U |
| 4.837 | 819934 | 5.4 | M | 112 | | 4 | | | 0.06 | B | | 12 | 5.2 | Y | 1 | Csomos,G | V |
| 4.837 | 819935 | 5.3 | M | 112 | 10 | 5 | | | 0.15 | | 15 | 56 | 5.2C | Y | 1 | Posa,O | W |
| 4.842 | 819936 | 6.4 | B | 112 | 11 | 3 | | | 0.066 | R | 15.2 | 28 | 5.5 | Y | 1 | Gora,D | |
| 4.844 | 819937 | 6.2 | S | 112 | 22 | 5 | | | 0.08 | B | | 10 | 4.4 | Y | 1 | Znasik,M | |
| 4.844 | 819938 | 5.9 | B | 112 | 5.0 | 4 | | | 0.08 | R | 15 | 39 | 4.5C | Y | 1 | Szulc,M | |
| 4.846 | 819939 | | | | 10.1 | 5 | 3.7 | 108 | 0.30 | N | 8.5 | 102 | 6.4 | Y | 1 | Begbie,M.J.R | X |
| 4.847 | 819940 | 5.8 | S | 112 | 20 | 6 | | | 0.11 | R | 11 | 36 | 4.4 | Y | 1 | Znasik,M | |
| 4.847 | 819941 | 5.2 | B | 112 | 3 | 4 | | | 0.050 | B | | 10 | 4.9 | Y | 1 | Laszlo,A | |
| 4.847 | 819942 | 5.2 | B | CZ | 12 | 4 | | | 0.10 | O | | 25 | 4.0C | Y | 1 | Micek,I | |
| 4.849 | 819943 | 5.7 | M | CZ | 12.0 | 6 | | | 0.060 | B | | 20 | 5.7 | Y | 1 | Barak,R | |
| 4.851 | 819944 | 5.6 | S | 112 | | 4 | | | 0.06 | R | 8 | 15 | 4.5 | Y | 1 | Schambeck,C.M | |
| 4.854 | 819945 | 6.4 | B | 112 | 6 | 5 | | | 0.050 | R | 5.6 | 19 | 5.5C | N | 1 | Sciezor,T | Y |
| 4.854 | 819946 | 6.6 | M | 112 | 43 | 3 | | | 0.067 | R | 12 | 60 | 6.0 | Y | 1 | Kosinski,J | |
| 4.854 | 819947 | 5.9 | B | SAO | 9.6 | 4 | | | 0.125 | R | 6 | 35 | 3.0 | Y | 1 | Guthier,O | |
| 4.854 | 819948 | 5.4 | M | 112 | 15 | 6 | | | 0.050 | B | | 7 | | Y | 1 | Mikuz,H | Z |
| 4.858 | 819949 | 6.4 | B | 112 | 12 | 5 | | | 0.035 | B | | 7 | 5.5C | N | 1 | Sciezor,T | Y |
| 4.858 | 819950 | 6.4 | M | 112 | | | | | 0.06 | R | 4.5 | 10 | 5.0 | Y | 1 | Chodorowski,F | |
| 4.865 | 819951 | | | | 15 | 5 | | | 0.064 | R | 12 | 32 | 5.0 | Y | 1 | Chodorowski,F | |
| 4.872 | 819952 | 6.0 | M | CZ | 10 | 3 | 0.3 | | 0.035 | B | | 7 | 4.0C | Y | 1 | Broch,F | a |
| 4.8750 | 819953 | 5.2 | S | 112 | 10 | 5 | | | 0.080 | B | | 15 | 4.0 | Y | 1 | Korth,S | |
| 4.875 | 819954 | 5.1 | B | 112 | | 4 | | | 0.064 | R | 6.3 | 10 | 6 | Y | 2 | Paradowski,M | |
| 4.882 | 819955 | 6.0: | M | 112 | 5 | 3 | | | 0.09 | M | 11 | 56 | 3.5 | Y | 9 | Westlund,M | b |
| 4.888 | 819956 | 5.8 | B | | 5.0 | 4 | | | 0.110 | R | 6.8 | 47 | 4.5 | Y | 1 | Lipski,P | |
| 4.892 | 819957 | 5.6 | B | 112 | | | | | 0.050 | B | | 10 | 6.5 | Y | 1 | Slusarczyk,J | |
| 4.906 | 819958 | 5.1 | B | 112 | | 4 | | | 0.05 | B | | 7 | 5 | Y | 2 | Paradowski,M | |
| 4.927 | 819959 | 6.3 | B | AAVSO | 12 | 2 | | | 0.115 | N | | 30 | 4.0 | Y | 1 | Alves,A.A | |
| 4.941 | 819960 | 5.6 | M | CZ | | 3 | | | 0.06 | B | | 12 | 4.0C | Y | 1 | Rapavy,P | |
| 4.948 | 819961 | 5.6 | M | CZ | 9 | 3 | | | 0.10 | B | | 25 | 4.0C | Y | 1 | Rapavy,P | |

NOTE A Diffuse coma.
NOTE B With 31.7 cm Newtonian using 55x: coma appears slightly elliptical, major axis NNE to SSW. Bright knot of material situated significantly WNW of center. Using 110x there is a very strong suggestion of a large, complex system of rays or jets which fills the entire coma. This same impression is to be had at 170x with the rays in the long axis of the coma being certain but not sharp enough to draw. It appears that two rays extend toward the SSW and one goes NNE but there are certainly others that are less clearly seen. The comet's nuclear region is composed of a small knot of bright material containing a minute, stellar feature which is very faint.
NOTE C Very hazy. Nucleus fuzzy.
NOTE D Mild interference by city lights. No tail seen.
NOTE E Ion tail at PA 102, edge of dust tail at PA 115.

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NOTE F (PA value may have been incorrectly determined. Ed.)
NOTE G Coma diameter approximate.
NOTE H Coma diameter and tail length are rough estimations.
NOTE I Exc. see.
NOTE J Condensation.
NOTE K Very transparent faint broad tail. (Observer gave limit as 9. Ed.)
NOTE L Hint of tail. DC approximate.
NOTE M (Observer gave limit as 11.0. Ed.)
NOTE N Coma diameter approximate. Somewhat cloudy, very difficult. (Translated by IHW staff. Ed.)
NOTE O Short, narrow, wispy tail.
NOTE P Tail faint. Very clear. (Observer gave limit as approximately 10. Ed.)
NOTE Q Coma diameter approximate. Very clear.
NOTE R Some haze and light pollution. DC = strong.
NOTE S Midpoint on tail: 2.7 deg. at PA 105. End point of tail: 3.9 deg. at PA 107.
NOTE T Comet: naked eye.
NOTE U Coma dia. = elipt. [sic]
NOTE V Coma elliptical.
NOTE W Instrument is Coude refractor. Coma dia. = elipt. [sic]
NOTE X Tail measurement refers to dust tail only.
NOTE Y Very good weather.
NOTE Z Very thin cirrus clouds!
NOTE a Estimated magnitude uncertainty +/-0.2. Coma diameter determined by comparison with a pair of stars. Measurement from a plot yields 15 arc min.
NOTE b Uncertain because of low altitude.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.094 | 831213 | 0.40 | 0.204 | N | 8 | 58,130 | 30 | 4.5 | 1 | Robinson,P.C | A |
| 4.122 | 831214 | 1.00 | 0.050 | B | | 7 | 19 | 4.5 | 1 | Will,M | B |
| 4.715 | 831215 | 4 | 0.08 | B | | 11 | | 5.3 | 4 | Fleet,R.W | C |
| 4.857 | 831216 | 0.08 | 0.36 | SC | 11 | 325 | 7 | 4.0 | 1 | Korth,S | D |
| 4.877 | 831217 | 1.6 | 0.090 | M | 11 | 56 | 15 | 3.5 | 9 | Westlund,M | E |

NOTE A Gas tail at PA 110; dust tail at PA 110-130; hooded border at PAs 140 (62.8'), 175 (17.6'), 260 (6.0'), 340 (9.6'), and 20 (34.8'); half hood at PA 355 (35.6') to 275 (6.0') (end). Slightly stellar central condensation. Coma mainly round. Half hood was very hard to see. I judge this drawing as highly accurate since it was done at scope on preplotted stars. Also, my ability to observe has been improving each time. City lights interfered with the observations.
NOTE B The coma can be divided into two concentric zones. The outer zone is of a dimmer more nebulous tone than the inner zone. The tail is almost nonexistent, or barely visible. It gives the impression of being cone shaped. The 3rd magnitude star Nu Hydrae situated at the tip of the tail may have served to hide or at least dim comet Halley's tail with its brilliance. Coma diameter 12.96'; inner coma diameter 2.74'; tail length 10.97' at PA 256.
NOTE C Tail end point at PA 107. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D ? at about PA 145, very diffuse; ? at about PA 0, very diffuse. Condensation slightly elongated; the comet passed very near to the star south of it in the drawing, but it didn't occult it nor a magnitude decrease has been observed.
NOTE E Low altitude.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.088 | 852032 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 4.00 | Kodak 2415 | | Y | S | 4/P | 1 | Dilsizian,R | |
| 4.094 | 852033 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 25.00 | Kodak 2415 | | Y | S | 2/C | 1 | Chester,G.R | A |
| 4.101 | 852034 | 0.135 | 2.8 | | 15.2 x10.2 | 15.00 | Kodak 2415 | | Y | C | 622/S | 3 | Buchanan,W.T | B |
| 4.124 | 852035 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 30.00 | Kodak 2415 | | Y | S | 3/C | 1 | Chester,G.R | C |
| 4.132 | 852036 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 2.50 | Kodak 2415 | | Y | X | 268/P | 1 | Sabia,J.D | D |
| 4.145 | 852037 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 25.00 | Kodak 2415 | | Y | S | 4/C | 1 | Chester,G.R | E |
| 4.166 | 852038 | 0.200 | 3.5 | | 10.3 x 6.9 | 8.50 | Fujichrome | 400/ | N | T | 772/S | 2 | Woidyla,B | F |
| 4.172 | 852039 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 20.00 | Kodak 2415 | | Y | S | 5/C | 1 | Chester,G.R | G |
| 4.180 | 852040 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 270/P | 1 | Sabia,J.D | H |
| 4.194 | 852041 | 0.200 | 3.5 | | 10.3 x 6.9 | 9.00 | Fujichrome | 400/ | N | T | 776/S | 2 | Woidyla,B | F |
| 4.201 | 852042 | 0.200 | 3.5 | | 10.3 x 6.9 | 10.00 | Fujichrome | 400/ | N | T | 774/S | 2 | Woidyla,B | F |
| 4.219 | 852043 | 0.300 | 5.6 | | 6.9 x 4.6 | 10.00 | Ektachrome | 400/ | N | T | 763/S | 2 | Woidyla,B | F |
| 4.224 | 852044 | 0.200 | 3.5 | | 10.3 x 6.9 | 6.50 | Fuji | 400/ | N | | 19/S | | Pryal,J | |
| 4.230 | 852045 | 0.180 | 2.8 | | 11.4 x 7.6 | 10.00 | Fujichrome P | 1600/ | N | | 12/S | 1 | Sanford,J | |
| 4.235 | 852046 | 0.180 | 2.8 | | 11.4 x 7.6 | 6.00 | Fujichrome P | 1600/ | N | | 13/S | 1 | Sanford,J | |
| 4.241 | 852047 | 0.180 | 2.8 | | 11.4 x 7.6 | 5.00 | Fujichrome P | 1600/ | N | | 14/S | 1 | Sanford,J | |
| 4.844 | 852048 | 0.300 | 4 | | 6.9 x 4.6 | 30.00 | Fotopan HL | 400/27 | N | O | 13/P | 1 | Slusarczyk,J | |
| 4.858 | 852049 | 0.058 | 2.8 | | 34.5 x23.4 | 20.00 | HL | 400/27 | N | | 48/S | 1 | Chodorowski,F | I |
| 4.861 | 852050 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 4.00 | Kodak 2415 | | Y | | 24/P | 1 | Conrad,R | J |

NOTE A (Observer's image identifier is 2A. Ed.)
NOTE B (Observer's image identifier is F-126-22. Ed.)
NOTE C (Observer's image identifier is 3A. Ed.)
NOTE D Photograph made by J. Kamichitis and J.D. Sabia.
NOTE E (Observer's image identifier is 4A. Ed.)
NOTE F (Observer's image identifier is preceded by prefix 1. Ed.)
NOTE G (Observer's image identifier is 5A. Ed.)
NOTE H Anti-tail suspected on negative, very short and stubby. Photograph made by J. Kamichitis and J.D. Sabia.
NOTE I (Observer's image identifier is 18/48. Ed.)
NOTE J City lights interfered with the observation; Vienna, from room.

SUB-NETWORK: SPECTROSCOPY

| Date(UT) | AON# | Config | Ins | FL | f/ | Ap | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.168 | 870145 | 600G-O | CL | 0.135 | 1.9 | | 31.00 | Kodak 2415 | | Y | | 626/S | 3 | Buchanan,W.T | A |

NOTE A (Observer's image identifier is E-126-26. Ed.) Comet Halley just below naked eye visibility.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.035 | 819962 | 5.9 | B | 112 | 7 | | | | 0.040 | B | | 8 | 4.9 | Y | 1 | Levai,R | A |
| 5.073 | 819963 | 5.4 | S | 112 | | | | | 0.035 | B | | 7 | 4.7 | Y | 4 | Hudak,D.M | |
| 5.073 | 819964 | 6.0 | B | 112 | | 6 | | | 0.035 | B | | 7 | 4.0 | Y | 1 | Stephan,C | B |
| 5.12 | 819965 | 4.9 | S | IHW BAA | 15 | 4 | | | 0.035 | B | | 7 | | | | Green,D.W.E | C |
| 5.131 | 819966 | 5.9 | B | 112 | | 5 | | | 0.08 | B | | 11 | 5.4 | Y | 6 | Gorski,L | |
| 5.153 | 819967 | 5.7 | B | 112 | 19.4 | 4 | 0.34 | 257 | 0.050 | B | | 7 | 4.9C | Y | 1 | Will,M | D |
| 5.18 | 819968 | 4.9 | M | 112 | | | | | 0.050 | B | | 10 | 4.0C | Y | 9 | Morris,C.S | |
| 5.19 | 819969 | 4.9 | B | 112 | 11 | 4 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | E |
| 5.19 | 819970 | | | | 34 | 4 | | | | EY | | | 6.0 | Y | 1 | Jacobson,E | |
| 5.29 | 819971 | 6.8 | B | M | 1 | 0 | 2 | | 0.05 | B | | 30 | | | | Trost,D | |
| 5.2917 | 819972 | 5.4 | M | 112 | 12 | 5 | | | 0.05 | B | | 7 | 6.0 | Y | 2 | Cook,A.J | F |
| 5.31 | 819973 | 4.2 | M | 112 | 40 | 3 | 6 | 95 | | EY | | | 6.0 | Y | 13 | Keen,R | G |
| 5.31 | 819974 | 5.1 | M | 112 | | | | | 0.05 | B | | 10 | 6 | Y | 3 | Hale,A | |
| 5.31 | 819975 | 5.1 | B | 112 | | | 15 | 105 | | EY | | | 6 | Y | 3 | Hale,A | |
| 5.340 | 819976 | 5.6 | B | 112 | | 3 | 1.6 | 100 | 0.050 | B | | 7 | 5.9 | Y | 3 | Krisciunas,K | H |
| 5.35 | 819977 | 5.0 | S | N HYA | 12 | | 7.5 | 114 | | EY | | | 6.0 | N | 1 | Lovejoy,T | |
| 5.364 | 819978 | 6.8: | S | TIRION | 7 | 7 | | | 0.050 | B | | 15 | 2.8 | | | Witte,F | I |
| 5.49 | 819979 | 5.7 | M | 112 | 10.7 | 5 | | | 0.080 | B | | 11 | 3 | Y | 2 | Watanabe,N | |
| 5.49 | 819980 | 5.7 | S | 112 | 10 | 6 | | | 0.07 | B | | 10 | 3.0 | Y | 1 | Yasuki,M | |
| 5.499 | 819981 | 6.4 | M | 112 | 6 | 5 | 0.2 | 90 | 0.10 | N | 10 | 55 | 4.5C | Y | 1 | Kato,T | |
| 5.500 | 819982 | 5.0 | S | 112 | | | | | | EY | | | 6 | Y | 1 | Seargent,D | |
| 5.500 | 819983 | | | | 12 | 4 | 2 | 105 | 0.08 | B | | 15 | | | | Seargent,D | |
| 5.503 | 819984 | 5.6 | M | 112 | 9 | 5 | | | 0.030 | B | | 8 | 4.5C | Y | 1 | Kato,T | |
| 5.510 | 819985 | 5.4 | S | 112 | 20 | 5 | 3 | 90 | 0.07 | B | | 10 | 3.5 | Y | 1 | Kobayashi,J | |
| 5.51 | 819986 | 5.0 | M | AAVSO | 15 | 5 | | 80 | 0.065 | R | 8 | 16 | 5.0 | Y | 5 | Nakamura,A | J |
| 5.703 | 819987 | 5.8 | M | 112 | 10 | 6 | 3.5 | 110 | 0.04 | B | | 12 | 6.2 | Y | 4 | Henshaw,C | |
| 5.708 | 819988 | 5.7 | M | 112 | 12 | 5 | 5.4 | 109 | 0.08 | B | | 11 | 5.3 | Y | 4 | Fleet,R.W | K |
| 5.712 | 819989 | 5.2 | | 112 | | | | | | EY | | | 5.3 | Y | 4 | Fleet,R.W | |
| 5.75 | 819990 | | | | 12 | | | | | EY | | | | | | Rudenko,S | |
| 5.758 | 819991 | 7.9 | M | 88 | | | | | 0.035 | B | | 9 | 6.5 | Y | 1 | Begbie,M.J.R | |
| 5.77 | 819992 | 6 | B | M | | 5 | 0.6 | 111 | 0.04 | B | | 12 | | | | Rudenko,S | |
| 5.799 | 819993 | 5.5 | M | 112 | 10 | 4 | | | 0.08 | B | | 10 | 4.1C | Y | 1 | Posa,O | |
| 5.819 | 819994 | 5.0 | B | 112 | | | | | 0.030 | B | | 8 | 4.0C | Y | 2 | Kieltyka,G | |
| 5.82 | 819995 | 6.7 | B | M | | 5 | | | 0.08 | B | | 40 | | | | Palko,Yu | |
| 5.823 | 819996 | 5.2 | M | 112 | | 5 | | | 0.05 | B | | 12 | 3.5 | Y | 1 | Tanti,T | L |
| 5.826 | 819997 | 6.0 | S | 112 | 24 | 5 | | | 0.08 | B | | 10 | 4.7 | Y | 1 | Znasik,M | |
| 5.826 | 819998 | | | | | 5 | | | 0.064 | R | 12.5 | 30 | 4.0C | Y | 2 | Kieltyka,G | |
| 5.826 | 819999 | 6.2 | M | CZ | 10 | 5 | | | 0.05 | B | | 7 | | | 1 | Silhan,J | |
| 5.830 | 820000 | 5.7 | M | CZ | 10 | 4 | | | 0.080 | B | | 10 | 5.0 | Y | 1 | Bilek,V | |
| 5.833 | 820001 | 5.6 | M | CZ | 10 | 5 | | | 0.050 | B | | 7 | 5.0 | Y | 1 | Bilek,V | |
| 5.833 | 820002 | 6.5 | M | CZ | 30 | 3 | | | 0.035 | B | | 7 | 5.0T | Y | 1 | Hroch,F | M |
| 5.833 | 820003 | 5.7 | M | CZ | 15 | 3 | | | 0.05 | B | | 7 | | | 1 | Kucera,P | |
| 5.833 | 820004 | 5.6: | B | 112 | 3 | 3 | | | 0.050 | B | | 10 | 4.9C | N | 1 | Laszlo,A | |
| 5.837 | 820005 | 6.4 | M | CZ | 15 | 5 | | | 0.05 | B | | 7 | | | 1 | Silhan,J | |
| 5.840 | 820006 | 5.9 | S | 112 | 18 | 6 | | | 0.11 | R | 11 | 36 | 4.7 | Y | 1 | Znasik,M | |
| 5.844 | 820007 | 6.1 | B | CZ | 10 | 3 | | | 0.05 | R | 10 | 13 | 4.5 | Y | 1 | Polak,J | N |
| 5.847 | 820008 | 5.8 | S | 112 | 11 | 3 | | | 0.05 | B | | 10 | 4.5C | Y | 1 | Menichetti,R | |
| 5.85 | 820009 | 5.2 | B | 112 | 12 | 4 | 0.50 | 83 | 0.050 | B | | 7 | 5.5 | Y | 2 | Merlin,J.-C | |
| 5.85 | 820010 | 6.6: | B | M | 19 | 0 | | | 0.03 | R | 6 | 8 | | | | Drapun,I | |
| 5.85 | 820011 | 5.5 | B | AAVSO | 12 | 4 | 0.5 | 113 | 0.05 | B | | 7 | | | | Chernis,K | |
| 5.851 | 820012 | 6.5 | B | 112 | 10 | 2 | | | 0.066 | R | 15.2 | 28 | 5.0 | Y | 1 | Gora,D | |
| 5.854 | 820013 | 6.6 | M | 112 | 41 | 3 | | | 0.067 | R | 12 | 60 | 6.0 | Y | 1 | Kosinski,J | |
| 5.856 | 820014 | 5.8 | B | CZ | 10 | 6 | | | 0.060 | B | | 20 | 5.5 | Y | 1 | Barak,R | |
| 5.858 | 820015 | 6.2 | B | CZ | 6 | 5 | | | 0.04 | B | | 7 | 5.0 | | 1 | Brancik,K | |
| 5.861 | 820016 | 5.5 | S | 112 | 13 | 6 | 1.50 | 106 | 0.13 | R | 4 | 21 | 5.2 | Y | 1 | Campos,J | |
| 5.861 | 820017 | 5.9 | B | 112 | 5.0 | 4 | | | 0.08 | R | 15 | 39 | 4.1C | Y | 1 | Szulc,M | |
| 5.866 | 820018 | 5.7 | B | 112 | | | | | 0.050 | B | | 10 | 6.0 | Y | 1 | Slusarczyk,J | |
| 5.868 | 820019 | 5.5: | S | 112 | 12 | 5 | | | 0.063 | B | | 9 | 2.5C | N | 1 | Kammerer,A | O |
| 5.868 | 820020 | 5.7 | M | 112 | 11 | 4 | | | 0.06 | B | | 12 | 5.5C | Y | 1 | Rapavy,P | |
| 5.87 | 820021 | 5.5 | S | 112 | | | | | 0.05 | B | | 7 | 5.5 | | 39 | Shanklin,J.D | |
| 5.878 | 820022 | 5.1 | M | 3B | 5 | 7 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Stott,D | |
| 5.878 | 820023 | 5.6 | M | 112 | | 4 | | | 0.08 | B | | 10 | 5.0C | Y | 1 | Rapavy,P | |
| 5.878 | 820024 | 6.1 | M | CZ | 20 | 6 | | | 0.03 | B | | 8 | | | 1 | Silhan,J | |
| 5.884 | 820025 | 5.2 | S | 112 | 17 | 5 | 0.5 | 105 | 0.05 | B | | 10 | 4.0 | Y | 1 | Hurst,G.M | |
| 5.888 | 820026 | | | | 17 | 6 | 0.5 | 105 | 0.08 | B | | 15 | 4.0 | Y | 1 | Hurst,G.M | P |
| 5.89 | 820027 | 6.0 | B | DCS 13 | | 3 | | | 0.080 | B | | 15 | 5.5C | Y | 1 | Keijmel,P.C | |
| 5.896 | 820028 | 5.9 | B | 112 | 8 | 3 | | | 0.07 | B | | 10 | 5.6 | N | 7 | Deconinck,M | |
| 5.896 | 820029 | 5.4 | S | 112 | 7.5 | 6 | | | 0.25 | N | 6 | 60 | 4.1 | Y | 1 | Gainsford,M.J | Q |
| 5.899 | 820030 | 6.5 | M | 112 | | | | | 0.06 | R | 4.5 | 10 | 4.5 | Y | 1 | Chodorowski,F | |
| 5.899 | 820031 | 5.8: | M | 112 | 6 | 2 | | | 0.09 | M | 11 | 56 | 4.0 | Y | 9 | Westlund,M | R |
| 5.903 | 820032 | 5.6 | S | 112 | 11.5 | 3 | | | 0.08 | B | | 11 | 4.1 | Y | 1 | Gainsford,M.J | |
| 5.903 | 820033 | 5.9 | S | 112 | 16 | 2 | 0.5 | 90 | 0.050 | B | | 10 | 5.9 | Y | 2 | Rogers,J.E | S |
| 5.903 | 820034 | 5.6 | S | 112 | 7.1 | 4 | 0.15 | 93 | 0.070 | B | | 16 | 4.9C | Y | 1 | Taylor,M.D | T |
| 5.906 | 820035 | | | | 8 | 5 | | | 0.064 | R | 12 | 32 | 4.5 | Y | 1 | Chodorowski,F | |
| 5.906 | 820036 | 5.4 | S | 112 | 7.4 5.6 | 6 | 0.10 | 45 | 0.050 | B | | 10 | 4.7 | Y | 3 | Abbott,J | U |
| 5.910 | 820037 | 5.7 | S | 112 | 10.0 | 6 | | 100 | 0.050 | B | | 10 | 5.0 | Y | 1 | Rossi,L | |
| 5.910 | 820038 | 5.7 | B | CZ | 12 | 4 | | | 0.10 | O | | 25 | 4.0C | Y | 1 | Micek,I | |
| 5.917 | 820039 | 5.5 | S | 112 | 13.5 | 3 | 0.17 | 93 | 0.040 | B | | 8 | 4.9C | Y | 1 | Taylor,M.D | |
| 5.98 | 820040 | 5.8 | B | AAVSO | | | 4.5 | | 0.04 | B | | 7 | | | | Kiselev,N | |

NOTE A Magnitude estimate uncertainty +/-0.1 mag.
NOTE B Sky hazy. Comet not visible naked eye. Getting more diffuse. No tail seen.
NOTE C Coma diameter approximate.
NOTE D (PA value may have been incorrectly determined. Ed.)
NOTE E Condensation.
NOTE F Tail north boundary 3.50 deg. at PA 102, south boundary 3.30 deg. at PA 117.
NOTE G Observation from Tahiti.
NOTE H Tail plotted on chart.
NOTE I Very difficult. (Translated by IHW staff. Ed.)
NOTE J Tail length = yes.
NOTE K Midpoint on tail: 3.2 deg. at PA 105. End point of tail: 5.4 deg. at PA 109.
NOTE L Seeing good, transparency fair. Haze. Clouds.
NOTE M Estimated magnitude uncertainty +/-0.3. Coma diameter determined by comparison with a pair of stars. Measurement from a plot yields 10 arc min.
NOTE N Magnitude estimate uncertainty +/-0.3 mag.
NOTE O Relatively bright sky.
NOTE P Tail at PA 105 is broad. Tail at PA 30 is narrow and faint.
NOTE Q Coma diameter 7.5'+.
NOTE R Uncertain because of low altitude.
NOTE S Coma slightly pear-shaped, PA approximately 80 deg.; no nucleus. Tail length and PA approximate.
NOTE T Transparent and dark. Antoniadi II. Fan 9 arc min. or more, PA 10 to 93.

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NOTE U Comparison stars (4.9, 6.0), (4.9, 5.4). The coma's long axis was oriented along PA 88-268. The northern "tail-lobe" was 0.10 deg. long at PA 45. The central "tail-lobe" was 0.08 deg. long at PA 88. The southern "tail-lobe" was 0.08 deg. long at PA 162.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.144 | 831218 | 0.92 | 0.050 | B | | 7 | 26 | 4.9 | 1 | Will,M | A |
| 5.295 | 831219 | 3 | 0.050 | B | | 7 | 10 | 6.0 | 2 | Cook,A.J | |
| 5.708 | 831220 | 4 | 0.08 | B | | 11 | | 5.3 | 4 | Fleet,R.W | B |
| 5.885 | 831221 | 2.3 | 0.08 | B | | 15 | 29 | 4.0 | 1 | Hurst,G.M | C |
| 5.896 | 831222 | 1.6 | 0.090 | M | 11 | 56 | 10 | 4.0 | 9 | Westlund,M | D |

NOTE A The outer coma, zone 3, is circular and is the most nebulous portion of the coma. The inner coma, zone 2, is oval shaped and more concentrated. Zone 1, the central peak of brightness in the coma appears slightly larger than dot shape indicating that it too could have measurable size. The tail is a conical shape overall. The boundaries of the tail with space are curved toward the vertex or tip. More diffuse and fainter than the rest of the comet, the tail has star shining through it, probably as bright as magnitude 8. Coma diameter (zone 3) 19.37'; zone 2 major axis 11.14', minor axis 7.75', zone 1 diameter 2.42'; tail length 20.34' at PA 257.
NOTE B Tail end point at PA 109. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Tail at PA 105 broad and diffuse. Tail at PA 30 narrower and faint. Both also seen in 10x50 binoculars.
NOTE D Low altitude.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.148 | 852051 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | X | 19/P | | Falsarella,N | |
| 5.243 | 852052 | 0.050 | 2.8 | | 39.6 x27.0 | 10.00 | Fujichrome | 1600/ | N | T | 2/S | 1 | Coco,M | |
| 5.275 | 852053 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | S | 24/P | 3 | Yen,B | A |
| 5.331 | 852054 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 15.00 | Kodak 2415 | | Y | X | 18/P | 1 | Marafie,A.H | B |
| 5.849 | 852055 | 0.100 | 2.8 | | 20.4 x13.7 | 5.00 | HL | 400/27 | N | | 62/S | 1 | Chodorowski,F | C |
| 5.852 | 852056 | 0.300 | 4 | | 6.9 x 4.6 | 30.00 | Fotopan HL | 400/27 | N | O | 14/P | 1 | Slusarczyk,J | |
| 5.915 | 852057 | 1.780 | 5 | 0.356 | 1.2 x 0.8 | 25.60 | Fuji 1600 | 1600/ | N | M | 1/P | 1 | Mobberley,M | D |

NOTE A (Observer's image identifier is 10. Ed.) Instrument is Schmidt camera.
NOTE B Instrument is Schmidt camera.
NOTE C (Observer's image identifier is 24/62. Ed.)
NOTE D This color slide film was processed as a negative.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.069 | 820041 | 6.4 | B | AAVSO | 10 | 3 | | | 0.115 | N | 7.8 | 30 | 4.2 | Y | | Alves,A.A | |
| 6.069 | 820042 | 5.7 | B | 112 | 7 | | | | 0.040 | B | | 8 | 4.9 | Y | 1 | Levai,R | A |
| 6.076 | 820043 | 5.3 | S | 112 | | | | | 0.035 | B | | 7 | 4.8 | Y | 4 | Hudak,D.M | |
| 6.104 | 820044 | 5.7 | B | 112 | | | | | 0.080 | B | | 20 | 4.5 | Y | | Smith,D | |
| 6.21 | 820045 | 5.0 | B | 112 | 12 | 4 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | B |
| 6.21 | 820046 | | | | 29 | 4 | | | | EY | | | 6.0 | Y | 1 | Jacobson,E | |
| 6.37 | 820047 | 4.4 | M | 112 | | | | | | EY | | | 5.5 | Y | 13 | Keen,R | C |
| 6.38 | 820048 | 5.1 | S | 112 | 20 | 3 | | | 0.023 | B | | 3 | 5.4 | | | Jones,A | |
| 6.38 | 820049 | | | | | | 0.6 | 115 | 0.050 | B | | 7 | | | | Jones,A | D |
| 6.38 | 820050 | | | | | 8 | | | 0.317 | N | 5 | 86 | | | | Jones,A | E |
| 6.458 | 820051 | 5.1 | S | 112 | | | | | | EY | | | 6 | Y | 1 | Seargent,D | |
| 6.458 | 820052 | | | | | | 2.6 | 107 | 0.08 | B | | 15 | | | | Seargent,D | |
| 6.48 | 820053 | | | | 12 | | 6.5 | 100 | | EY | | | 6.3 | | 1 | Lovejoy,T | F |
| 6.50 | 820054 | 4.9 | M | 112 | 10 | 6 | | | 0.15 | N | 5.3 | 32 | 5.0C | Y | 1 | Oka,A | |
| 6.525 | 820055 | 5.8 | S | 112 | 18 | 4 | 2.2 | 90 | 0.07 | B | | 10 | 6 | Y | 1 | Kobayashi,J | |
| 6.698 | 820056 | 5.4 | B | 112 | 17 | 5 | 2 | | 0.05 | B | | 7 | 4.8 | Y | 4 | Vincent,J | G |
| 6.712 | 820057 | 5.9 | B | 112 | 10 | 1 | 2 | 208 | 0.050 | B | | 7 | 6.2 | Y | 1 | McBain,J | H |
| 6.715 | 820058 | 5.5 | M | 112 | 11 | 5 | 4.3 | 107 | 0.08 | B | | 11 | 5.2 | Y | 4 | Fleet,R.W | I |
| 6.76 | 820059 | 5.9 | B | M | 4 | 4 | 0.4 | 273 | 0.11 | N | | 30 | | | | Yurchenko,Yu | |
| 6.781 | 820060 | 5.5 | S | 112 | 10 | 6 | 2.00 | 104 | 0.13 | R | 4 | 21 | 5.4 | Y | 1 | Campos,J | |
| 6.79 | 820061 | 9 : | B | M | | | | | 0.10 | R | | | | | | Poroshin,A | |
| 6.80 | 820062 | 4.9 | B | E | 12 | 5 | 1 | 105 | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.800 | 820063 | 5.3 | M | 112 | 14 | 5 | 1.4 | 105 | 0.089 | R | 5.5 | 18 | 5.1 | N | 1 | Ventura,F | J |
| 6.82 | 820064 | 5.0 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 6.826 | 820065 | 6.7 | M | CZ | 10 | 0 | 0.5 | 145 | 0.035 | B | | 7 | 4.5T | Y | 1 | Hroch,F | K |
| 6.83 | 820066 | 6.8 | B | M | 18 | 0 | | | 0.03 | B | | 8 | | | | Drapun,I | |
| 6.833 | 820067 | 6.9: | | 112? | 6 | 3 | | | 0.350 | SC | 11 | 120 | TC | | 1 | Marx,H | L |
| 6.833 | 820068 | 6.4 | M | CZ | 10 | 2 | | | 0.05 | B | | 7 | | | 1 | Silhan,J | |
| 6.838 | 820069 | 5.6 | M | 112 | 7 | 4 | 0.5 | 120 | 0.15 | | 15 | 56 | 5.2C | Y | 1 | Posa,O | M |
| 6.840 | 820070 | 5.9 | B | 112 | 8 6 | 6 | | | 0.050 | B | | 12 | 3.0 | Y | 1 | Mosch,J | |
| 6.840 | 820071 | 6.2 | M | CZ | 15 | 2 | | | 0.03 | B | | 8 | | | 1 | Silhan,J | |
| 6.844 | 820072 | 5.5 | M | 112 | | 4 | | | 0.08 | B | | 10 | 5.2 | Y | 1 | Csomos,G | N |
| 6.844 | 820073 | 5.1 | B | 112 | | 4 | | | 0.064 | R | 6.3 | 10 | 6 | Y | 2 | Paradowski,M | |
| 6.844 | 820074 | 5.5 | M | 112 | 10 | 4 | 0.5 | 120 | 0.15 | N | 4 | 37 | 5.2C | Y | 1 | Posa,O | O |
| 6.847 | 820075 | 6.0 | S | 112 | 9.9 | 3 | 0.41 | 90 | 0.10 | B | | 14 | 5.0 | Y | 1 | Hasubick,W | |
| 6.847 | 820076 | 6.0 | B | 112 | 9.9 | 3 | | | 0.03 | B | | 8 | 5.0 | Y | 1 | Hasubick,W | |
| 6.848 | 820077 | 6.6 | B | 112 | 10 | 2 | | | 0.066 | R | 15.2 | 28 | 5.5 | Y | 1 | Gora,D | |
| 6.848 | 820078 | 5.6 | M | 112 | | 4 | | | 0.06 | B | | 12 | 5.2C | Y | 1 | Posa,O | P |
| 6.850 | 820079 | 5.5 | M | 112 | 10 | 4 | 0.4 | 120 | 0.15 | N | 4 | 37 | 5.2 | Y | 1 | Csomos,G | |
| 6.851 | 820080 | 5.9 | S | 112 | 16 | 6 | | | 0.11 | R | 11 | 36 | 4.6 | Y | 1 | Znasik,M | |
| 6.851 | 820081 | 5.2 | B | 112 | | | | | 0.030 | B | | 8 | 4.0C | Y | 2 | Kieltyka,G | |
| 6.851 | 820082 | 5.6 | M | 112 | | 4 | 2 | 110 | 0.08 | B | | 10 | 5.2C | Y | 1 | Posa,O | P |
| 6.854 | 820083 | 6.1 | S | 112 | 21 | 5 | | | 0.08 | B | | 10 | 4.6 | Y | 1 | Znasik,M | |
| 6.854 | 820084 | 6.2 | B | CZ | 6 | 6 | | | 0.04 | B | | 7 | 4.5 | | 1 | Brancik,K | |
| 6.854 | 820085 | 5.5 | M | 112 | | 4 | | | 0.06 | B | | 12 | 5.2 | Y | 1 | Csomos,G | Q |
| 6.856 | 820086 | 6 : | | CZ | | 6 | | | 0.060 | B | | 20 | 4 | N | 1 | Barak,R | R |
| 6.858 | 820087 | 5.9 | B | CZ | 12 9 | 5 | | | 0.10 | O | | 25 | 5.0C | Y | 1 | Micek,I | |
| 6.858 | 820088 | 6.0 | B | 112 | 4.5 | 3 | | | 0.08 | R | 15 | 39 | 4.1C | Y | 1 | Szulc,M | |
| 6.861 | 820089 | 6.0 | S | 112 | 20 | 4 | | | 0.06 | B | | 12 | 4.6 | Y | 1 | Znasik,M | |
| 6.861 | 820090 | 5.8 | M | CZ | 15 | 2 | | | 0.05 | B | | 7 | | | 1 | Kucera,P | |
| 6.861 | 820091 | 6.7 | M | 112 | 41 | 3 | | | 0.067 | R | 12 | 60 | 5.5 | Y | 1 | Kosinski,J | |
| 6.861 | 820092 | 6.1 | M | CZ | 15 | 1 | | | 0.05 | B | | 7 | | | 1 | Silhan,J | |
| 6.865 | 820093 | 5.0 | B | 112 | | 5 | | 310 | 0.064 | R | 12 | 60 | 4.0 | Y | 1 | Moskal,W | S |
| 6.865 | 820094 | 5.1 | B | 112 | | 4 | | | 0.05 | B | | 7 | 6 | Y | 2 | Paradowski,M | |
| 6.865 | 820095 | 5.9 | B | 112 | | 4 | | | 0.06 | R | 8 | 15 | 5.0 | N | 1 | Schambeck,C.M | |
| 6.865 | 820096 | 5.8 | B | 112 | | 4 | | | 0.090 | N | 7 | 26 | 4.5 | Y | 1 | Vohla,F | |
| 6.868 | 820097 | 5.0 | M | 112 | 28 | 6 | | | 0.030 | B | | 8 | 5.0 | Y | 14 | Villa,M | |
| 6.869 | 820098 | 5.1 | S | 112 | 12 | 5 | 1 | 100 | 0.152 | N | 5 | 44 | 3.8 | Y | 2 | Moeller,M | T |
| 6.871 | 820099 | 6.9 | B | | | 2 | | | 0.080 | R | 6.2 | 12 | 3.5 | Y | 1 | Lieder,F | |
| 6.872 | 820100 | 6.2 | M | CZ | 15 | 2 | | | 0.03 | B | | 8 | | | 1 | Silhan,J | |
| 6.875 | 820101 | 6.7 | M | 112 | | | | | 0.06 | R | 4.5 | 10 | 4.0 | Y | 1 | Chodorowski,F | |
| 6.875 | 820102 | 6.0 | | | | | | | 0.080 | B | | 15 | 4 | Y | 1 | Nagele,A | U |
| 6.882 | 820103 | | | | 12 | 5 | | | 0.064 | R | 12 | 32 | 4.0 | Y | 1 | Chodorowski,F | |
| 6.883 | 820104 | 6.0 | B | | 5.2 | 4 | | | 0.110 | R | 6.8 | 47 | 5.0 | Y | 1 | Lipski,P | |
| 6.890 | 820105 | 6.2 | M | 112 | | | 4.5 | | 0.035 | B | | 9 | 5.5 | Y | 1 | Begbie,M.J.R | V |

NOTE A Magnitude estimate uncertainty +/-0.1 mag.
NOTE B Condensation.
NOTE C Observation from Tahiti.
NOTE D Also 7.8 R, 30x.
NOTE E Large diffuse coma, small strong condensation.
NOTE F Tail still naked eye.
NOTE G PA 85/95.
NOTE H Visible with naked eye. (PA value appears incorrect. Ed.)
NOTE I Midpoint on tail: 1.3 deg. at PA 108. End point of tail: 4.3 deg. at PA 107.
NOTE J A very faint broad tail, widening from the coma outwards. It measured a surprising 84 arc min. long.
NOTE K Estimated magnitude uncertainty +/-0.5. Coma diameter determined by comparison with a pair of stars. Measurement from a plot yields 15 arc min.
NOTE L Coma diameter approximate. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE M Instrument is Coude refractor.
NOTE N Coma elliptical.
NOTE O Tail length is lower limit.
NOTE P Coma dia. = circle.
NOTE Q Coma circular.
NOTE R The observation was ended by clouds.
NOTE S No tail.
NOTE T Hazy.
NOTE U (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are SAO 156124, 156095, 156310, 156170.
NOTE V Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.083 | 831223 | 0.83 | 0.15 | N | 8 | 38 | | 5.6 | 1 | Cuthill,L | A |
| 6.095 | 831224 | 0.4 | 0.204 | N | 8 | 58,271 | 35 | 4.0 | 1 | Robinson,P.C | B |
| 6.715 | 831225 | 4 | 0.08 | B | | 11 | | 5.2 | 4 | Fleet,R.W | C |

NOTE A Coma DC = 6. Tail at PA 110 gas - 155. Axis of head at PA 315. Coma has a fairly strong central condensation. Coma size - 4 arc min. A possible gas tail at PA 110 deg. Magnitude estimated to be 6.0 using 10x50 binoculars (Morris method).
NOTE B Gas tail at PA 115, main dust tail at PA 120 to 135 (42.8') to 210 (3.2'), hood border, at PAs 160 (61.6'), 170 (38.8'), 180

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(18.0'), 290 (3.2') and 10 (27.2'); parabolic hood passes about 3' NW of center, tangent to coma. Tail at PA 0; tail at PA 295; forward jet at PA 295; "wing" jet at PAs 300 (0.16'), 210 (0.64'), 180 (1.36'); and "wing" jet at PAs 300 (0.16'), 30 (0.56'), 55 (1.6 deg.). [sic] Slightly stellar central condensation is non stellar at 271x. Close up drawing of coma shows that the NW half is much brighter than opposite side. "Wing" jets are curved gradually SE. Comet features were plotted with preplotted stars. City lights interfered with the observation. Two drawings in this listing.

NOTE C Tail end point at PA 107. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.029 | 852058 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | X | 20/P | | Falsarella,N | |
| 6.078 | 852059 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | C | 3/P | | Falsarella,N | |
| 6.087 | 852060 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.50 | Kodak 2415 | | Y | X | 275/P | 1 | Sabia,J.D | A |
| 6.110 | 852061 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 277/P | 1 | Sabia,J.D | B |
| 6.128 | 852062 | 0.050 | 4 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/27 | N | X | 043/P | 1 | Bro,M | C |
| 6.142 | 852063 | 0.500 | 8 | | 4.1 x 2.7 | 10.00 | Kodak Tri-X | 400/27 | N | X | 044/P | 1 | Bro,M | C |
| 6.322 | 852064 | 0.300 | 1.5 | 0.203 | 6.9 x 4.6 | 7.00 | Kodak 2415 | | Y | X | 19/P | 1 | Marafie,A.H | D |
| 6.858 | 852065 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 2.00 | Kodak 2415 | | Y | | 25/P | 1 | Conrad,R | E |
| 6.890 | 852066 | 0.300 | 4 | | 6.9 x 4.6 | 20.00 | Fotopan EL | 400/27 | N | O | 15/P | 1 | Slusarczyk,J | |

NOTE A Anti-tail suspected on negative, very short and stubby. Photograph made by J. Kamichitis and J.D. Sabia.
NOTE B Anti-tail noted on negative, very short and spike-like. Not seen visually. Photograph made by J. Kamichitis and J.D. Sabia.
NOTE C Some distant heat lightning present.
NOTE D Instrument is Schmidt camera.
NOTE E City lights interfered with the observation, Vienna, from room.

DATE: 7 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.028 | 820106 | 5.8 | B | 112 | | 1 | | 98 | 0.05 | B | | 10 | 4.9 | Y | 1 | Harris,L.A | A |
| 7.052 | 820107 | 6.3 | M | 112 | 6.5 | 3 | | | 0.114 | N | 8 | 45 | 3.8 | Y | 1 | Mac Kenzie,G | |
| 7.125 | 820108 | 6.0 | B | 112 | | | | | 0.080 | B | | 20 | 4.5 | Y | | Smith,D | |
| 7.149 | 820109 | 6.2 | B | 112 | 10 | 2 | | | 0.05 | B | | 7 | 4.0 | | 1 | Lairet,R | |
| 7.17 | 820110 | 6.1 | B | 112 | 13 | 3 | | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 7.1826 | 820111 | 5.6 | S | DCS | 12 | 5 | | | 0.080 | B | | 20 | 5.4 | | 3 | Machholz,D | |
| 7.19 | 820112 | 5.1 | S | 112 | | | | | 0.050 | B | | 10 | 4.0C | Y | 9 | Morris,C.S | |
| 7.198 | 820113 | 6.2 | S | 112 | 34 | 3 | | | 0.05 | B | | 10 | 4 C | Y | 1 | Gronek,J.D | B |
| 7.21 | 820114 | | | | | | 0.5 | | | EY | | | | | 7 | Edberg,S.J | |
| 7.29 | 820115 | 4.5 | M | 112 | | | | | | EY | | | 5.5 | Y | 15 | Keen,R | C |
| 7.39 | 820116 | 5.6 | S | 112 | | | | | 0.023 | B | | 3 | 5.4 | | | Jones,A | |
| 7.39 | 820117 | 5.7 | S | 112 | 13 | 3 | | | 0.049 | B | | 3 | | | | Jones,A | |
| 7.39 | 820118 | | | | | 4 | 0.4 | 107 | 0.078 | R | 7.5 | 30 | | | | Jones,A | |
| 7.40 | 820119 | | | | | 7 | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 7.457 | 820120 | 5.7 | M | 112 | 5.4 | 6 | 0.50 | 90 | 0.1 | N | 10 | 56 | 5.0 | Y | 1 | Ichikawa,K | |
| 7.47 | 820121 | 5.6 | B | | 20 | 6 | | | 0.05 | B | | 10 | 4.5 | Y | 1 | Uda,K | |
| 7.479 | 820122 | 6.2 | M | 112 | 12 | 5 | | | 0.08 | B | | 11 | 4 C | Y | 1 | Mitsuma,S | |
| 7.48 | 820123 | 5.6 | S | AAVSO | 10 | 4 | | | 0.07 | B | | 10 | 5.0 | Y | 1 | Hayashi,A | D |
| 7.48 | 820124 | 6.2 | M | 112 | 11.7 | 4 | | | 0.080 | B | | 11 | 3 | Y | 2 | Watanabe,N | |
| 7.482 | 820125 | 6.2 | M | 112 | 6 | 4 | | | 0.10 | N | 10 | 55 | 3.5C | Y | 1 | Kato,T | E |
| 7.482 | 820126 | 5.7 | S | 112 | 15 | 4 | 2.5 | 90 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |
| 7.49 | 820127 | 5.5 | S | AAVSO | 10 | 5 | 0.25 | 80 | 0.13 | N | 6.3 | 24 | 5.0 | Y | 1 | Hayashi,A | |
| 7.51 | 820128 | 6.0 | S | 112 | | 2 | | | 0.08 | B | | 11 | 3.0 | N | 1 | Momose,M | |
| 7.52 | 820129 | 5.4 | M | AAVSO | 15 | 4 | | | 0.065 | R | 8 | 16 | 4.5 | Y | 6 | Nakamura,A | F |
| 7.52 | 820130 | 5.5 | M | 3B | | | | | 0.05 | B | | 7 | 4.5 | Y | 2 | Suzuki,K | |
| 7.52 | 820131 | | | 3B | 2.0 | 4 | | | 0.31 | N | 5.7 | 147 | 4.5 | Y | 2 | Suzuki,K | G |
| 7.524 | 820132 | 5.9 | B | 112 | 15 | 3 | | | 0.05 | B | | 7 | 4.0 | Y | 1 | Hayashi,H | H |
| 7.528 | 820133 | 5.8 | B | 112 | | | | | 0.035 | B | | 7 | | Y | 2 | Okada,M | |
| 7.535 | 820134 | 7.1 | S | 112 | | 3 | | | 0.12 | N | 6 | 60 | 1.0C | Y | 1 | Kishi,A | |
| 7.549 | 820135 | 5.9 | B | 3B | | | | | 0.07 | B | | 10 | 3.6 | Y | 1 | Date,M | |
| 7.55 | 820136 | 6.2 | S | 112 | 10 | 6 | | | 0.07 | B | | 10 | 3.0 | Y | 1 | Yasuki,M | |
| 7.743 | 820137 | 5.7 | M | 112 | 12 | 5 | 7.0 | 107 | 0.08 | B | | 11 | 5.9 | Y | 1 | Fleet,R.W | I |
| 7.750 | 820138 | 5.2 | M | 112 | | 8 | | | | EY | | | 5.9 | Y | 1 | Fleet,R.W | |
| 7.75 | 820139 | 5.0 | B | E | 10 | 5 | 1 | 106 | 0.05 | B | | 7 | | | | Mormil,V | |
| 7.77 | 820140 | 6.4 | M | M | 15 | 5 | | | 0.04 | B | | 12 | | | | Maydik,A | |
| 7.781 | 820141 | 5.6 | B | 112 | 17 | 5 | 1.5 | 100 | 0.05 | B | | 7 | 5.1 | Y | 4 | Vincent,J | |
| 7.792 | 820142 | 5.4 | M | 112 | 14 | 5 | | | 0.089 | R | 5.5 | 18 | 5.1 | N | 1 | Ventura,F | |
| 7.795 | 820143 | 6.1 | S | 112 | | | | | | B | | 10 | 4.5 | Y | 3 | Hirth,G | J |
| 7.80 | 820144 | 4.8 | B | E | 15 | 5 | 3 | 106 | 0.05 | B | | 7 | | | | Mormil,V | |
| 7.809 | 820145 | 5.9 | M | 112 | 23 18 | 5 | | | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | K |
| 7.833 | 820146 | 6.0 | M | CZ | 15 | 2 | | | 0.05 | B | | 7 | | | 1 | Kucera,P | |
| 7.833 | 820147 | 6.2 | M | AAVSO | 6 | 3 | 0.5 | 67 | 0.156 | N | 10 | 54 | 5.0 | | | Kosa-Kiss,A | L |
| 7.837 | 820148 | 5.1 | M | 112 | 25 | 6 | | | 0.030 | B | | 8 | 4.5 | Y | 14 | Villa,M | |
| 7.840 | 820149 | 6.8 | B | 112 | 9 | 2 | | | 0.066 | R | 15.2 | 28 | 5.5 | Y | 1 | Gora,D | |
| 7.84 | 820150 | 5.0 | B | E | 8 | 5 | | 106 | 0.05 | B | | 7 | | | | Mormil,V | |
| 7.840 | 820151 | 6.5 | M | CZ | 10 | 3 | | | 0.05 | B | | 7 | | | 1 | Silhan,J | E |
| 7.840 | 820152 | | | 112 | 18 14 | 6 | | | 0.07 | B | | 20 | 5.5 | Y | 1 | Tanti,T | K |
| 7.8437 | 820153 | 5.9 | S | 112 | | 3 | | | 0.080 | B | | 15 | 3.5C | Y | | Giuntoli,M | |
| 7.844 | 820154 | 6.3 | B | CZ | 10 | 3 | | | 0.10 | O | | 25 | 4.0C | Y | 1 | Micek,I | |
| 7.847 | 820155 | 5.7 | M | CZ | 12 | 6 | | | 0.080 | B | | 10 | 5.0 | Y | 1 | Bilek,V | |
| 7.851 | 820156 | 6.1 | B | 112 | 4.5 | 3 | | | 0.08 | R | 15 | 39 | 4.1C | Y | 1 | Szulc,M | |
| 7.854 | 820157 | 6.3 | M | 112 | | | | | 0.035 | B | | 9 | 5.5 | Y | 1 | Begbie,M.J.R | |
| 7.854 | 820158 | 6.5 | M | CZ | 15 | 3 | | | 0.05 | B | | 7 | | | 1 | Silhan,J | M |
| 7.858 | 820159 | 6.8 | M | 112 | 13 11 | 6 | | | 0.135 | R | 15 | 80 | 5.1T | Y | 1 | Humenansky,J | |
| 7.858 | 820160 | 6.1 | M | CZ | 10 | 1 | | | 0.05 | B | | 7 | | | 1 | Kucera,P | |
| 7.859 | 820161 | 6.3 | B | CZ | 5.0 | 6 | | | 0.060 | B | | 20 | 5 | Y | 1 | Barak,R | |
| 7.861 | 820162 | 6.6 | M | 112 | | | | | 0.06 | R | 4.5 | 10 | 4.5 | Y | 1 | Chodorowski,F | |
| 7.861 | 820163 | 5.2 | B | 112 | | | | | 0.030 | B | | 8 | 4.0 | Y | 2 | Kieltyka,G | |
| 7.868 | 820164 | 6.1 | S | 112 | 18 | 5 | | | 0.11 | R | 11 | 36 | 4.3 | Y | 1 | Znasik,M | |
| 7.868 | 820165 | | | | 12 | 5 | | | 0.064 | R | 12 | 32 | 4.5 | Y | 1 | Chodorowski,F | |
| 7.871 | 820166 | | | | 4.9 | 5 | 2.8 | 100 | 0.30 | N | 8.5 | 102 | 5.5 | Y | 1 | Begbie,M.J.R | N |
| 7.878 | 820167 | 6.3 | S | 112 | 20 | 5 | | | 0.08 | B | | 10 | 4.3 | Y | 1 | Znasik,M | |
| 7.889 | 820168 | 6.8 | M | CZ | 12 | 2 | | | 0.055 | R | 6 | 12 | | | 1 | Silhan,J | |
| 7.896 | 820169 | 5.7 | S | U HYA | 14 | 5 | | | 0.050 | B | | 7 | | Y | 1 | Mikuz,H | O |
| 7.90 | 820170 | 6.0 | S | 112 | | | | | 0.08 | B | | 10 | 5.3 | | 1 | Shanklin,J.D | P |
| 7.90 | 820171 | 5.4 | B | 112 | 14 | 3 | 2.50 | 95 | 0.050 | B | | 7 | 5.5 | Y | 2 | Merlin,J.-C | |
| 7.90 | 820172 | 6.6 | B | AAVSO | 15 | 4 | | | 0.11 | B | | 20 | | | | Chernis,K | |
| 7.903 | 820173 | | | 112 | 8 | 1 | | | 0.09 | M | 11 | 56 | 3.0 | Y | 9 | Westlund,M | Q |
| 7.910 | 820174 | 5.8 | S | 112 | 8.0 | 4 | | | 0.070 | B | | 16 | 4.1C | Y | 1 | Taylor,M.D | R |
| 7.924 | 820175 | 5.9 | S | 112 | 11.5 | 6 | | 105 | 0.050 | B | | 10 | 5.5 | Y | 1 | Rossi,L | |

NOTE A Comparison stars = 5.7 and 6.0 (chart 112, Manual II, Bobr. method). (Translated by IHW staff. Ed.)
NOTE B Exc. see.
NOTE C Observation from Tahiti.
NOTE D Tail detected?
NOTE E Haze.
NOTE F Tail length = yes?
NOTE G Meter. (Coma diameter. Ed.) 0.4 deg. tail measured with magnification of 55.
NOTE H Tail length 0.17 deg. to 0.33 deg.
NOTE I Midpoint on tail: 3.4 deg. at PA 107. End point of tail: 7.0 deg. at PA 107.
NOTE J Lights.
NOTE K Seeing good, transparency excellent.
NOTE L 0.7 deg. tail PA 119, 127, 136 deg.
NOTE M Clear sky.
NOTE N Tail measurement refers to dust tail only.
NOTE O Possible very thin cirrus clouds.
NOTE P Tail not certain.
NOTE Q Low altitude. Just visible.
NOTE R Antoniadi III. Haze.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.051 | 831226 | 0.61 | 0.114 | N | 8 | 45 | 45 | 3.8 | 1 | Mac Kenzie,G | |
| 7.743 | 831227 | 4 | 0.08 | B | | 11 | | 5.9 | 1 | Fleet,R.W | A |
| 7.898 | 831228 | 1.6 | 0.090 | M | 11 | 56 | 15 | 3.0 | 9 | Westlund,M | B |
| 7.927 | 831229 | 0.9 | 0.40 | N | 5 | 81,170 | 10 | 5.5 | 2 | Merlin,J.-C | C |

NOTE A Tail end point at PA 107. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Low altitude, just visible.

DATE: 7 MAY 1986

DATE: 7 MAY 1986

NOTE C Tail at PA 61; tail at PA 95, axis of a multiple-tail structure; jet at PA 201, bright feature ending in a fountain like structure (toward PA 146); jet at PA 242, nearly sunward; jet at PA 303, short feature prolongated by a fountain-like structure (toward PA 34.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.835 | 852067 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | | 506/P | 4 | Jager,M | A |
| 7.858 | 852068 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 2.00 | Kodak 2415 | | Y | | 26/P | 1 | Conrad,R | B |
| 7.861 | 852069 | 0.300 | 4 | | 6.9 x 4.6 | 10.00 | HL | 400/27 | N | | 57/S | 1 | Chodorowski,F | C |

NOTE A Magnitude 5.4; antitail 13 arc min. at PA 287. (Print submitted is composite of two 4 min. exposures separated by 5 min. Ed.)
NOTE B City lights interfered with the observation; Vienna, from room.
NOTE C (Observer's image identifier is 34/57/58. Ed.)

DATE: 8 MAY 1986 DATE: 8 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.00 | 820176 | 5.9 | B | AAVSO | | | | | 0.04 | B | | 7 | | | | Kiselev,N | |
| 8.049 | 820177 | 5.9 | B | 112 | | 4 | | | 0.05 | B | | 20 | 5.0 | Y | 1 | da Silva,L.A.L | |
| 8.059 | 820178 | 6.9 | B | AAVSO | | 3 | | | 0.115 | N | 7.8 | 30 | 4.0 | Y | | Alves,A.A | |
| 8.090 | 820179 | 5.4 | S | 112 | | | | | 0.035 | B | | 7 | 4.1 | Y | 4 | Hudak,D.M | |
| 8.097 | 820180 | 5.2 | S | 112 | 3.1 | 2 | | | 0.08 | R | 11 | 39 | 4.1C | N | 1 | Graves,D | A |
| 8.110 | 820181 | 5.9 | S | 112 | 13 | 3 | | | 0.05 | B | | 10 | 5.5C | Y | 3 | House,R.R | |
| 8.120 | 820182 | 5.9 | S | 112 | 8 | 5 | | | 0.05 | B | | 7 | 5.5C | Y | 3 | House,R.R | |
| 8.122 | 820183 | 5.9 | S | 112 | 20 | 4 | | | 0.035 | B | | 7 | 6.2 | Y | 3 | Morrison,W | |
| 8.122 | 820184 | 5.4 | B | 112 | 9.2 | 3 | | | 0.127 | SC | 10 | 50 | 4.4 | Y | 1 | Rousom,J | B |
| 8.128 | 820185 | 6.1 | B | 112 | 13 | 3 | 1.8 | 120 | 0.05 | B | | 10 | 6.5 | Y | 1 | Hays Jr,R.H | |
| 8.14 | 820186 | 6.4 | B | 112 | 14 | 3 | | | 0.080 | B | | 20 | | Y | | Kronk,G | |
| 8.146 | 820187 | 6.3 | B | 112 | | | | | 0.080 | B | | 20 | 4.5 | Y | | Smith,D | |
| 8.22 | 820188 | 5.2: | | 112 | | | 10 | 100 | | EY | | | 6.0 | Y | 16 | Morris,C.S | C |
| 8.23 | 820189 | 5.4 | M | 112 | 13 | 4 | 10 | 100 | 0.050 | B | | 10 | 6.0 | Y | 16 | Morris,C.S | |
| 8.240 | 820190 | 6.3 | S | 112 | 34 | 3 | | | 0.05 | B | | 10 | 4 C | Y | 1 | Gronek,J.D | D |
| 8.2569 | 820191 | 5.2 | M | 112 | 13 | 6 | 10.40 | 104 | 0.05 | B | | 7 | 6.4 | Y | 3 | Cook,A.J | E |
| 8.2569 | 820192 | | | | 13 | | 10 | 104 | | EY | | | 6.4 | Y | 3 | Cook,A.J | |
| 8.406 | 820193 | 5.8 | S | 112 | 11 | | | | 0.025 | B | | 3 | 6 | Y | 1 | Seargent,D | F |
| 8.406 | 820194 | | | | 11 | 5 | 4 | 110 | 0.08 | B | | 15 | | | | Seargent,D | G |
| 8.41 | 820195 | 5.7 | S | 112 | 20 | | | | 0.049 | B | | 3 | 5.4 | Y | | Jones,A | |
| 8.414 | 820196 | 5.9 | S | 112 | | | 6 | | 0.05 | B | | 7 | 5.5C | Y | 6 | Garradd,G | |
| 8.417 | 820197 | 5.8 | B | 112 | 3 | | | | 0.05 | B | | 20 | | Y | 1 | Tregaskis,T.B | H |
| 8.420 | 820198 | | | 112 | | | | | | EY | | | 6 | Y | 1 | Tregaskis,T.B | I |
| 8.47 | 820199 | 5.7 | M | 3B | | 4 | | | 0.05 | B | | 7 | 4.0 | Y | 2 | Suzuki,K | J |
| 8.50 | 820200 | 5.7 | M | 112 | 10 | 5 | | | 0.15 | N | 5.3 | 32 | 5.0C | Y | 1 | Oka,A | |
| 8.500 | 820201 | 6.4 | M | 112 | 9.5 | 4 | | | 0.08 | B | | 11 | 3 | Y | 1 | Mitsuma,S | |
| 8.51 | 820202 | 5.7 | S | 112 | | | | | | EY | | | 6.6 | Y | | Clark,M.L | |
| 8.51 | 820203 | 5.9 | S | 112 | 21 | | | | 0.03 | R | | 6 | 6.6 | Y | | Clark,M.L | |
| 8.52 | 820204 | 6.3 | S | 112 | 14 | 7 | 1.9 | 103 | 0.25 | N | 5 | 38 | 6.6 | Y | | Clark,M.L | K |
| 8.56 | 820205 | 6.3 | M | 112 | 14.1 | 3 | 0 | 100 | 0.080 | B | | 11 | 4.5 | Y | 2 | Watanabe,N | |
| 8.67 | 820206 | 6.0 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 8.71 | 820207 | 6.7 | B | M | 7 | 0 | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 8.71 | 820208 | 5.8 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 8.760 | 820209 | 5.5 | M | 112 | | | 3.6 | 108 | | EY | | | 6.1 | Y | 1 | Fleet,R.W | |
| 8.767 | 820210 | 5.9 | M | 112 | 14 | 6 | 13.9 | 107 | 0.08 | B | | 11 | 6.1 | Y | 1 | Fleet,R.W | L |
| 8.77 | 820211 | 6.5 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 8.780 | 820212 | 6.0 | M | 112 | | | | | 0.035 | B | | 9 | 6.2 | Y | 1 | Begbie,M.J.R | |
| 8.792 | 820213 | 6.0 | B | 112 | 17 | 5 | 1 | 90 | 0.05 | B | | 7 | 4.8 | Y | 4 | Vincent,J | |
| 8.801 | 820214 | | | | 6.8 | 6 | 3.3 | 105 | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | M |
| 8.816 | 820215 | 5.6 | M | 112 | 12 | 4 | | 100 | 0.089 | R | 5.5 | 18 | 5.4 | N | 1 | Ventura,F | |
| 8.833 | 820216 | 6.1 | M | 112 | 20 | 5 | 1.1 | 102 | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | N |
| 8.840 | 820217 | 6.5 | | | | | | | 0.080 | B | | 15 | 4 | Y | 1 | Nagele,A | O |
| 8.844 | 820218 | 5.6 | S | 112 | | 4 | | | 0.05 | B | | 7 | | Y | 1 | Dziura,W | P |
| 8.850 | 820219 | 6.6 | B | 112 | | 6 | | | 0.050 | B | | 12 | 3.5 | Y | 1 | Mosch,J | |
| 8.851 | 820220 | 6.1 | M | 112 | 20 11 | 4 | 1.5 | 102 | 0.08 | B | | 11 | 5.5 | Y | 1 | Gubo,H | |
| 8.851 | 820221 | 6.1 | S | 112 | 10.8 | 4 | | | 0.10 | B | | 14 | 5.0 | Y | 1 | Hasubick,W | Q |
| 8.851 | 820222 | 6.2 | B | 112 | 10.8 | 4 | | | 0.10 | B | | 14 | 5.0 | Y | 1 | Hasubick,W | Q |
| 8.854 | 820223 | 6.2 | B | 112 | 11.1 | 4 | 0.37 | 90 | 0.080 | B | | 11 | 5.0 | Y | 1 | Koch,V | |
| 8.854 | 820224 | 6.4 | B | 112 | 8.6 | 4 | 0.42 | 90 | 0.080 | B | | 20 | 5.0 | Y | 1 | Koch,B.O | |
| 8.854 | 820225 | 6.0 | B | 112 | | 4 | | | 0.090 | N | 7 | 26 | 4.5 | Y | 1 | Vohla,F | |
| 8.858 | 820226 | 6.3 | B | 112 | 13.0 | 3 | | | 0.03 | B | | 8 | 5.0 | Y | 1 | Hasubick,W | |
| 8.861 | 820227 | 7.0 | | 112? | 8 | 5 | | | 0.175 | R | 15 | 43 | 4.2C | Y | 1 | Marx,H | R |
| 8.861 | 820228 | 6.5 | B | 112 | 7 | 4 | 1.2 | | 0.06 | R | 8 | 15 | 5.5 | Y | 1 | Schambeck,C.M | S |
| 8.865 | 820229 | 6.0 | | 112 | 6 | 3 | | | 0.08 | B | | 15 | | Y | 1 | Dietrich,M | T |
| 8.868 | 820230 | 6.4: | B | 112 | | 4 | | | 0.050 | B | | 7 | 4.5 | Y | 1 | Linder,J | |
| 8.868 | 820231 | 6.8 | | 112? | 10 | | | | 0.080 | B | | 11 | 4.2C | Y | 1 | Marx,H | U |
| 8.868 | 820232 | 5.8 | M | 112 | | 7 | 0.07 | 90 | 0.050 | B | | 7 | 6.0 | Y | 1 | Stott,D | |
| 8.87 | 820233 | 4.8 | S | DCS 13 | 15 | 5 | 5 | 105 | 0.050 | B | | 10 | 5.5 | Y | 9 | Comello,G | V |
| 8.872 | 820234 | 6.9 | M | 112 | 13 11 | 5 | | | 0.135 | R | 15 | 80 | 5.0 | Y | | Humenansky,J | |
| 8.875 | 820235 | 6.8 | B | | 9 | 1 | | | 0.050 | B | | 10 | 5.0 | Y | 1 | Linke,H | |
| 8.875 | 820236 | 6.4 | B | 112 | 6 | 7 | | | 0.05 | B | | 10 | 5.3C | Y | 2 | Franciosi,C | W |
| 8.879 | 820237 | 6.2 | B | | 4.8 | 5 | | | 0.110 | R | 6.8 | 47 | 4.5 | Y | 1 | Lipski,P | |
| 8.885 | 820238 | 6.3 | B | 112 | 9 | 2 | | | 0.05 | B | | 10 | 4.5 | Y | 1 | Bottger,B | |
| 8.885 | 820239 | 7.1 | B | 112 | 15 | 6 | | | 0.050 | B | | 10 | 4.5C | N | 2 | Richert,M | |
| 8.906 | 820240 | 5.3 | S | 112 | 16 | 4 | | | 0.05 | B | | 10 | 4.0 | Y | 1 | Hurst,G.M | |
| 8.909 | 820241 | | | | 14 | 5 | 0.4 | 118 | 0.08 | B | | 15 | 4.0 | Y | 1 | Hurst,G.M | X |
| 8.910 | 820242 | 6.3 | S | 112 | 2.3 | 8 | | | 0.076 | R | 12 | 37 | 4.1C | Y | 1 | Taylor,M.D | Y |
| 8.913 | 820243 | 6.4 | S | 112 | 6.8 | 4 | | | 0.070 | B | | 16 | 4.1C | Y | 1 | Taylor,M.D | Z |
| 8.917 | 820244 | 6.2 | S | 112 | 12 | 3 | | | 0.08 | B | | 11 | 4.1 | Y | 1 | Gainsford,M.J | |
| 8.92 | 820245 | 6.3 | S | 112 | | | | | 0.08 | B | | 10 | 4.0 | | 1 | Shanklin,J.D | |
| 8.92 | 820246 | 6.4 | S | 112 | | | | | 0.08 | B | | 20 | 4.0 | | 1 | Shanklin,J.D | a |

NOTE A Faint coma.
NOTE B Haze. Nucleus fuzzy.
NOTE C Comet involved with stars.
NOTE D Exc. see.
NOTE E Tail greatest length at PA 104; tail north boundary 10.25 deg. at PA 98, south boundary 7.50 deg. at PA 111.
NOTE F Still vis. naked eye.
NOTE G Tail length approximate.
NOTE H Clear.
NOTE I Comet at limit and doubtful. Clear.
NOTE J Cloud.
NOTE K Tail photo'd. to 3.1 deg.
NOTE L Midpoints on tail: 3.8 deg. at PA 106; 7.9 deg. at PA 106. End point of tail: 13.9 deg. at PA 106.
NOTE M Tail measurement refers to dust tail only.
NOTE N Seeing good, transparency excellent.
NOTE O (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are SAO 156124, 156024.
NOTE P Foggy.
NOTE Q Starting point of tail length. (Translated by IHW staff. Ed.)
NOTE R Comparison stars SAO 156057, 156137. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE S PA 95 to 109.
NOTE T (Observer indicated "A" method [Argelander?]. Ed.)
NOTE U Comparison stars SAO 156124, 156057. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE V Coma diameter and tail length approximate.
NOTE W Nucleus. Coma diameter approximate.
NOTE X Broad tail.
NOTE Y Antoniadi II. Stellar central condensation or nearby star?
NOTE Z Stellar central condensation or nearby star? Antoniadi II, haze.
NOTE a Tail not certain.

DATE: 8 MAY 1986

DATE: 8 MAY 1986

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.137 | 831230 | 0.5 | 0.13 | SC | 10 | 32,120 | 15 | 6.5 | 1 | Hays Jr,R.H | A |
| 8.260 | 831231 | 3 | 0.050 | B | | 7 | 10 | 6.4 | 3 | Cook,A.J | |
| 8.767 | 831232 | 4 | 0.08 | B | | 11 | | 6.1 | 1 | Fleet,R.W | B |
| 8.863 | 831233 | 0.15 | 0.298 | N | 5 | 40, 65,179 | 15 | 6.0 | 1 | Stott,D | C |

NOTE A Very dim spike or streamer at PA 120. 'Nucleus' not as prominent as on Apr. 26 and tail not so fan-shaped. Tiny condensation 1' across noted 'nucleus'.
NOTE B Tail end point at PA 107. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Tail seen as double, brightest at PA 90. The tail at PA 10 deg. is rather more elusive. Magnification of 269 also used.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.071 | 852070 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 5.00 | Kodak 2415 | | Y | S | 5/P | 1 | Dilsizian,R | |
| 8.095 | 852071 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 278/P | 1 | Sabia,J.D | A |
| 8.226 | 852072 | 0.050 | 2 | | 39.6 x27.0 | 1.00 | Ektachrome | 400/ | N | O | 12/N | 7 | Edberg,S.J | |
| 8.226 | 852073 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | Kodak Tri-X | 400/ | N | O | 32/C | 7 | Edberg,S.J | |
| 8.230 | 852074 | 0.050 | 2 | | 39.6 x27.0 | 10.00 | Ektachrome | 400/ | N | O | 13/N | 7 | Edberg,S.J | |
| 8.230 | 852075 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | Kodak Tri-X | 400/ | N | O | 33/C | 7 | Edberg,S.J | |
| 8.239 | 852076 | 0.200 | 4 | | 10.3 x 6.9 | 5.00 | 3M 1000 | 1000/ | N | O | 1/N | 7 | Edberg,S.J | |
| 8.239 | 852077 | 0.050 | 2 | | 39.6 x27.0 | 5.00 | Ektachrome | 400/ | N | O | 14/N | 7 | Edberg,S.J | |
| 8.239 | 852078 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | Kodak Tri-X | 400/ | N | O | 34/C | 7 | Edberg,S.J | |
| 8.244 | 852079 | 0.200 | 4 | | 10.3 x 6.9 | 10.00 | 3M 1000 | 1000/ | N | O | 2/N | 7 | Edberg,S.J | |
| 8.248 | 852080 | 0.200 | 4 | | 10.3 x 6.9 | 1.00 | 3M 1000 | 1000/ | N | O | 3/N | 7 | Edberg,S.J | |
| 8.456 | 852081 | 0.135 | 3.5 | | 15.2 x10.2 | 14.50 | Ektachr.400 | | N | X | 38/S | 1 | Tregaskis,T.B | B |
| 8.848 | 852082 | 0.135 | 3.2 | | 15.2 x10.2 | 2.50 | Agfa-Pan Pro | 400/27 | N | M | 22/C | 2 | Trixler,F | C |
| 8.856 | 852083 | 0.135 | 3.2 | | 15.2 x10.2 | 5.00 | Agfa-Pan Pro | 400/27 | N | M | 24/C | 2 | Trixler,F | C |
| 8.863 | 852084 | 0.135 | 3.2 | | 15.2 x10.2 | 5.00 | Agfa-Pan Pro | 400/27 | N | M | 28/C | 2 | Trixler,F | C |

NOTE A Anti-tail noted on negative, very short and spike-like. Not seen visually. Photograph made by J. Kamichitis and J.D. Sabia.
NOTE B Push processed to 800 ASA.
NOTE C City lights interfered with the observation.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.00 | 820247 | 6.0 | B | AAVSO | | | | | 0.04 | B | | 7 | | | | Kiselev,N | |
| 9.073 | 820248 | 5.5 | S | 112 | | | | | 0.035 | B | | 7 | 4.8 | Y | 4 | Hudak,D.M | |
| 9.139 | 820249 | 6.5 | B | 112 | | | | | 0.080 | B | | 20 | 4.5 | Y | | Smith,D | |
| 9.17 | 820250 | 5.5 | S | 112 | 13 | 3 | | | 0.050 | B | | 10 | 4.0C | Y | 38 | Morris,C.S | |
| 9.17 | 820251 | 5.5 | S | 112 | | | | | 0.080 | B | | 20 | 4.0C | Y | 38 | Morris,C.S | |
| 9.30 | 820252 | 5.2 | M | 112 | | | 6 | 105 | 0.05 | B | | 10 | 6 | Y | 19 | Hale,A | |
| 9.30 | 820253 | | | | | | 4 | 105 | | EY | | | 6 | Y | 11 | Hale,A | |
| 9.3611 | 820254 | 5.9 | S | DCS | 8 | 2 | | | 0.130 | R | 7.1 | 27 | 4.8 | | 1 | Machholz,D | A |
| 9.382 | 820255 | 5.8 | B | 112 | | 3 | 4.0 | 110 | 0.050 | B | | 7 | 5.9 | Y | 3 | Krisciunas,K | B |
| 9.406 | 820256 | 5.9 | S | 112 | | | 11 | | 0.05 | B | | 7 | 6.0 | Y | 14 | Garradd,G | |
| 9.417 | 820257 | 5.9 | S | 112 | | | | | 0.025 | B | | 3 | 6 | Y | 1 | Seargent,D | |
| 9.417 | 820258 | | | | | | 2 | 105 | 0.08 | B | | 15 | | | | Seargent,D | |
| 9.417 | 820259 | 5.8: | B | 3-39 | | | 3.5 | | 0.03 | B | | 8 | 6.3 | Y | 7 | Thompson,G | C |
| 9.50 | 820260 | 5.6 | M | AAVSO | 12 | 4 | | | 0.065 | R | 8 | 16 | 4.0C | Y | 10 | Nakamura,A | D |
| 9.507 | 820261 | 6.1 | B | 112 | | 5 | | | 0.05 | B | | 7 | 3.5 | Y | 1 | Hayashi,H | E |
| 9.679 | 820262 | 6.3 | M | 112 | | 6 | | | 0.04 | B | | 12 | 6.2 | Y | 4 | Henshaw,C | |
| 9.68 | 820263 | 6.6 | B | M | | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 9.70 | 820264 | 5.8 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 9.724 | 820265 | 6.5 | B | 112 | 10 | 1 | 2.5 | 208 | 0.050 | B | | 7 | 6.3 | Y | 1 | McBain,J | F |
| 9.736 | 820266 | 5.8 | S | 112 | 9 | 5 | 2.50 | 106 | 0.13 | R | 4 | 21 | 5.5 | Y | 1 | Campos,J | |
| 9.74 | 820267 | 6.1 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 9.750 | 820268 | 5.9 | M | 112 | 12 | 6 | 12.3 | 106 | 0.08 | B | | 11 | 6.1 | Y | 1 | Fleet,R.W | G |
| 9.764 | 820269 | 5.7 | M | 112 | | | 3.0 | 106 | | EY | | | 6.1 | Y | 1 | Fleet,R.W | H |
| 9.792 | 820270 | 5.9 | M | 112 | 12 | 4 | 0.4 | 100 | 0.089 | R | 5.5 | 18 | 5.5 | N | 1 | Ventura,F | |
| 9.806 | 820271 | 5.9 | M | 112 | 17 | 5 | | | 0.05 | B | | 12 | 5.5 | Y | 1 | Tanti,T | I |
| 9.81 | 820272 | 6.5 | B | AAVSO | | | | | 0.20 | R | | | | | | Churyumov,K | |
| 9.823 | 820273 | 6.5 | B | CZ | 8 | 3 | | | 0.10 | O | | 25 | 4.5C | Y | 1 | Micek,I | |
| 9.833 | 820274 | 6.4 | B | 112 | 60 20 | 5 | | | 0.05 | B | | 7 | 5.2 | Y | 4 | Vincent,J | J |
| 9.834 | 820275 | 6.1 | M | 112 | | | | | 0.035 | B | | 9 | 6.1 | Y | 1 | Begbie,M.J.R | |
| 9.847 | 820276 | 6.3 | M | CZ | 9 | 6 | | | 0.05 | B | | 7 | 5.0 | | 4 | Pravec,P | |
| 9.850 | 820277 | | | | 7.5 | 6 | 4.0 | 110 | 0.30 | N | 8.5 | 102 | 6.1 | Y | 1 | Begbie,M.J.R | K |
| 9.851 | 820278 | 6.4 | M | CZ | 15 | 4 | | | 0.055 | R | 6 | 12 | | | 1 | Silhan,J | L |
| 9.852 | 820279 | 5.6 | S | 112 | 15 | 4 | | | 0.050 | B | | 7 | 5.7 | Y | 1 | Meozzi,D | |
| 9.8541 | 820280 | 6.4 | B | 112 | 15 | 8 | | | 0.080 | B | | 11 | 5 C | Y | | Brogioni,A | M |
| 9.861 | 820281 | 6.5 | B | 112 | 9.5 | 2 | | | 0.08 | B | | 20 | 4.8 | Y | 1 | Gigli,P | |
| 9.861 | 820282 | 6.9 | M | 112 | 13 11 | 6 | | | 0.135 | R | 15 | 80 | 5.1 | Y | 1 | Humenansky,J | |
| 9.868 | 820283 | 6.0 | M | CZ | 10 | 6 | | | 0.080 | B | | 10 | 5.0 | Y | 1 | Bilek,V | |
| 9.875 | 820284 | 6.9 | B | | 8 | 1 | | | 0.050 | B | | 10 | 4.5 | Y | 1 | Linke,H | |
| 9.875 | 820285 | 6.3 | B | 112 | 5 | 7 | | | 0.05 | B | | 10 | 4.0C | Y | 2 | Franciosi,C | N |
| 9.875 | 820286 | 6.3 | S | 112 | 5 | 5 | 0.2 | 98 | 0.050 | B | | 10 | 5.5 | Y | 1 | Vanin,G | |
| 9.882 | 820287 | 6.1 | S | 112 | 8.0 | 7 | 1.0 | 98 | 0.050 | B | | 10 | 5.5 | Y | 1 | Rossi,L | |
| 9.885 | 820288 | 6.6 | S | 112 | 7 | 3 | | | 0.05 | B | | 10 | 5 C | Y | 1 | Menichetti,R | |
| 9.887 | 820289 | 6.3 | B | | 3.5 | 6 | | | 0.110 | R | 6.8 | 47 | 4.0 | Y | 1 | Lipski,P | |
| 9.896 | 820290 | 5.9 | M | FF HYA | 16 | 6 | 0.50 | 100 | 0.050 | B | | 7 | | Y | 1 | Mikuz,H | O |
| 9.906 | 820291 | | S | 112 | | | | | 0.06 | R | 11.7 | 28 | 5.5 | Y | 1 | Rossi,L | P |
| 9.931 | 820292 | 5.9 | M | 112 | 16 | 6 | | | 0.030 | B | | 8 | 5.0 | Y | 2 | Villa,M | |
| 9.938 | 820293 | 6.0 | M | 112 | | 6 | | | 0.03 | B | | 8 | 4.5 | Y | 2 | Melandri,F | Q |
| 9.9395 | 820294 | 6.2 | S | 112 | | 4 | | | 0.080 | B | | 15 | 3.5C | N | | Giuntoli,M | |
| 9.941 | 820295 | 6.5 | B | 112 | 6 | | | | 0.040 | B | | 8 | 5.5 | Y | 1 | Levai,R | R |

NOTE A Comet was 5 degrees high.
NOTE B Tail plotted on chart. Still visible naked eye.
NOTE C Tail quite visible in 20x80 binoculars. PA 88 91. [sic]
NOTE D Tail length = yes.
NOTE E Cloud.
NOTE F Visible with naked eye. (PA value appears incorrect. Ed.)
NOTE G Midpoints on tail: 5.3 deg. at PA 107, 8.5 deg. at PA 106. End point of tail: 12.3 deg. at PA 106.
NOTE H 5.7 mag. star interfering.
NOTE I Seeing good, transparency excellent.
NOTE J Coma elongated east and west.
NOTE K Antitail in PA 270. Tail measurement refers to dust tail only.
NOTE L Very clear sky.
NOTE M I perceive detail. (Roughly translated by IHW staff. Ed.)
NOTE N Nucleus. Coma diameter approximate. Fog.
NOTE O Excellent conditions.
NOTE P m2 = 7.2.
NOTE Q I haven't seen the tail with the binoculars.
NOTE R Magnitude estimate uncertainty +/-0.2 mag.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.057 | 831234 | 1 | 0.229 | R | 10 | 45 | 15 | 6.0 | 1 | Nowak,G.T | A |
| 9.095 | 831235 | 0.40 | 0.204 | N | 8 | 58,271 | 35 | 4.5 | 1 | Robinson,P.C | B |
| 9.144 | 831236 | 0.25 | 0.20 | N | 8 | 120 | 45 | 5 | 1 | Vargas B.,A.G | C |
| 9.750 | 831237 | 4 | 0.08 | B | | 11 | | 6.1 | 1 | Fleet,R.W | D |
| 9.851 | 831238 | 0.18 | 0.30 | N | 8.5 | 102 | 12 | 6.1 | 1 | Begbie,M.J.R | E |
| 9.875 | 831239 | | 0.356 | SC | 11 | 200 | | | 1 | Soc. Astro. de France | F |

NOTE A Dust tail at PA 270.
NOTE B Gas tail at PA 110; main dust tail at PA 115 to 180 (2.0') to 130 (60.0'); dust tail at PAs 290 (6.4'), 250 (6.6'), 180 (17.6'), 150 (66.4'); dust tail at PAs 290 (11.4'), 210 (17.6'), 180 (42.8'), 165 (75.2'); tail at PA 0; forward tail at PA 290; tail at PA 210. Very slightly stellar condensation. Round coma. Dust tails wrap around coma to north side of gas tail. Tail at PA 210 is only one which goes to center. South inner side of forward tail is brightest - sharp S border. Tail at PA 0 has sharp west border, diffuse east border. Comet plotted on chart with pre-plotted stars. City lights interfered with the observation.
NOTE C Central tail at PA 100 approx. Tail arms at PA 50 and 120 approx. A central tail and two arms (diffuse arms) was observed. [sic] A remarkable tail is visible and two little tails appear at both sides of the coma. The tail length is almost 4 deg. observing by binoculars (7x50). DC 6 approx.; coma diameter 3' approx.
NOTE D Tail end point at PA 106. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE E Fan centred on PA 40. Vertex distance 3.8 arc min.; semi latus rectums P1 = 3.1 arc min., P2 = 2.9 arc min. Coma elongated, tail still narrow.
NOTE F Drawing made by M. Verdenet. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.203 | 852085 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 25.00 | Kodak Tri-X | | N | M | 28/P | 1 | Webb,R | A |

DATE: 9 MAY 1986

DATE: 9 MAY 1986

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.263 | 852086 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | S | 25/P | 3 | Yen,B | B |
| 9.454 | 852087 | 0.200 | 3.5 | | 10.3 x 6.9 | 14.00 | Fujichrome | 1600/ | N | O | 4/S | 1 | Haagh,N | |
| 9.571 | 852088 | 0.180 | 2.8 | | 11.4 x 7.6 | 16.50 | Kodak 2415 | | Y | O | 88/S | 14 | Garradd,G | C |
| 9.847 | 852089 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 8.00 | Kodak Tri-X | 400/27 | N | O | 26/T | 1 | Mikuz,H | D |
| 9.866 | 852090 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 13.00 | Kodak Tri-X | 400/27 | N | O | 27/T | 1 | Mikuz,H | D |

NOTE A Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE B (Observer's image identifier is 0. Ed.) Instrument is Schmidt camera.
NOTE C Film was affected by heat and humidity before development, causing additional fogging. Film was excessively hypered (65-70 deg. C), causing severe fogging.
NOTE D Weather conditions excellent. (Observer's image identifier is followed by suffix A. Ed.)

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.066 | 820296 | 7.0 | M | 112 | 6.7 | 3 | 0.3 | 67 | 0.114 | N | 8 | 45 | 4.1 | Y | 1 | Mac Kenzie,G | A |
| 10.07 | 820297 | 5.2 | S | 112 | 14 | 4 | 2.8 | 105 | 0.050 | B | | 10 | 6.5 | Y | 1 | Bortle,J.E | |
| 10.07 | 820298 | | | | 45 | | | | | EY | | | | | | Bortle,J.E | B |
| 10.073 | 820299 | 6.4 | B | 112 | | | | | | EY | | | 6.9 | Y | 1 | Knight,S | |
| 10.076 | 820300 | 5.5 | S | 112 | 4.6 | 7 | | | 0.152 | N | 5.5 | 69 | 5.3 | Y | 1 | Hudak,D.M | |
| 10.08 | 820301 | 5.6 | M | AA | | | | | 0.035 | B | | 7 | | | | Green,D.W.E | |
| 10.08 | 820302 | 5.7 | S | AA | 20 | 5 | | | 0.035 | B | | 7 | | | | Green,D.W.E | B |
| 10.09 | 820303 | 6.3 | B | AA | | | | | 0.080 | B | | 20 | | | | Green,D.W.E | |
| 10.09 | 820304 | 5.7 | M | AA | 14 | 4 | 2 | | 0.080 | B | | 20 | | | | Green,D.W.E | C |
| 10.096 | 820305 | 6.4 | S | 112 | 11 | 3 | | | 0.035 | B | | 7 | 6 | Y | 3 | Morrison,W | D |
| 10.097 | 820306 | 6.1 | B | 112 | 6.3 | 4 | | | 0.127 | SC | 10 | 50 | 4.4 | N | 1 | Rousom,J | E |
| 10.100 | 820307 | 7.7 | M | 112 | 3.7 | 5 | | | 0.15 | N | 8 | 44 | 3.0C | Y | 1 | Allen,E | |
| 10.110 | 820308 | 6.3 | S | 112 | 7 | 3 | | | 0.05 | B | | 10 | 5.5C | Y | 3 | House,R.R | |
| 10.115 | 820309 | 6.5 | S | 112 | 2.4 | 1 | | | 0.08 | R | 11 | 39 | 4.1C | N | 1 | Graves,D | F |
| 10.149 | 820310 | 7.0 | B | 112 | 4.5 | 1 | | | 0.05 | B | | 7 | 4.1C | Y | 1 | Dodd,W.J | G |
| 10.174 | 820311 | 6.7 | M | 112 | 15.0 | 5 | | | 0.152 | N | 6 | 24 | 6.5 | Y | 1 | Knight,S | |
| 10.181 | 820312 | 6.4 | M | 112 | 12.0 | 6 | 5.1 | 106 | 0.05 | B | | 12 | 6.5 | Y | 1 | Knight,S | |
| 10.20 | 820313 | 4.8 | S | 112 | | | 2 | 110 | | EY | | | 6.0 | Y | 1 | Keen,R | H |
| 10.20 | 820314 | | | | | | 2 | 110 | 0.32 | N | 4 | 33 | 6.0 | Y | 1 | Keen,R | |
| 10.20 | 820315 | 5.6 | M | 112 | 13 | 5 | 8 | 105 | 0.050 | B | | 10 | 6.0 | Y | 16 | Morris,C.S | I |
| 10.21 | 820316 | | | | | | 4 | 105 | | EY | | | 6.0 | Y | 16 | Morris,C.S | |
| 10.22 | 820317 | 5.6 | M | 112 | 13 | 4 | | | 0.080 | B | | 20 | 6.0 | Y | 16 | Morris,C.S | |
| 10.23 | 820318 | | | | | | | | 0.256 | N | 4.5 | 222 | 6.0 | Y | 16 | Morris,C.S | J |
| 10.23 | 820319 | 5.6 | M | 112 | | | | | 0.050 | R | | 8 | 6.0 | Y | 16 | Morris,C.S | |
| 10.24 | 820320 | 5.5 | M | 112 | 18 | 4 | | | 0.015 | B | | 6 | 6.0 | Y | 16 | Morris,C.S | |
| 10.2694 | 820321 | 6.1 | S | DCS | 8 | 3 | | | 0.080 | B | | 20 | 4.5 | | 3 | Machholz,D | |
| 10.365 | 820322 | 6.0 | B | 112 | 20 | 5 | | | 0.05 | B | | | | Y | 1 | Tregaskis,T.B | K |
| 10.381 | 820323 | | | 112 | 6 | | 1 | 100 | 0.32 | N | 8 | 150 | | Y | 1 | Tregaskis,T.B | L |
| 10.381 | 820324 | | | 112 | | | | | 0.15 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | M |
| 10.381 | 820325 | | | 112 | | 5 | | | 0.10 | N | 6 | 24 | | | 1 | Tregaskis,T.B | N |
| 10.417 | 820326 | 6.0 | S | 112 | | | | | 0.025 | B | | 3 | | | | Seargent,D | |
| 10.417 | 820327 | | | | 11 | | 1.2 | 100 | 0.08 | B | | 15 | 6 | Y | 1 | Seargent,D | |
| 10.441 | 820328 | 5.1 | B | 112 | | 3 | 4.0 | 105 | 0.08 | B | | 11 | 5.6 | Y | 5 | Bembrick,C | |
| 10.485 | 820329 | 6.5 | M | 112 | 6 | 4 | | | 0.10 | N | 10 | 55 | 4.0C | Y | 1 | Kato,T | |
| 10.488 | 820330 | 6.0 | M | 112 | 8 | 4 | | | 0.030 | B | | 8 | 4.0C | Y | 1 | Kato,T | |
| 10.493 | 820331 | 6.5 | B | 112 | | | | | 0.035 | B | | 7 | | Y | 1 | Okada,M | |
| 10.50 | 820332 | 7.8 | B | 112 | 6 | 4 | | | 0.080 | B | | 11 | C | Y | 3 | Okuda,M | |
| 10.50 | 820333 | 5.8 | M | | | | | | 0.05 | B | | 7 | 4.5 | Y | 2 | Suzuki,K | |
| 10.50 | 820334 | 6.5 | M | | | 4 | 0.6 | | 0.31 | N | | 55 | 4.5 | Y | 2 | Suzuki,K | |
| 10.543 | 820335 | 6.1 | S | 112 | 10 | 4 | 1 | 90 | 0.07 | B | | 10 | 6 | Y | 1 | Kobayashi,J | |
| 10.55 | 820336 | 6.4 | M | 112 | 14 | 3 | | | 0.080 | B | | 11 | 3 | Y | 2 | Watanabe,N | |
| 10.576 | 820337 | 6.2 | S | 112 | 10 | | | | 0.05 | B | | 7 | 4.9 | Y | 1 | Bryant,K | O |
| 10.625 | 820338 | 6.7 | S | 112 | | 6 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 10.66 | 820339 | 7.1 | B | M | 7 | | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 10.68 | 820340 | 6.7 | B | M | 20 | 5 | | | 0.05 | B | | 7 | | | | Konstantinov,S | |
| 10.71 | 820341 | 6.2 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 10.77 | 820342 | 6.3 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 10.771 | 820343 | 6.4 | M | 112 | 10 | 6 | 9.6 | 107 | 0.08 | B | | 11 | 6.1 | Y | 1 | Fleet,R.W | P |
| 10.778 | 820344 | 5.5 | M | 112 | | | | | | EY | | | 6.1 | Y | 1 | Fleet,R.W | Q |
| 10.792 | 820345 | 6.1 | M | 112 | 9 | 4 | | | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | R |
| 10.792 | 820346 | 6.2 | B | 112 | 60 20 | 5 | | | 0.05 | B | | 7 | 5.0 | Y | 4 | Vincent,J | S |
| 10.816 | 820347 | 5.9 | S | 112 | 10 | 3 | | | 0.05 | B | | 12 | 5 | Y | 1 | Tanti,T | T |
| 10.819 | 820348 | 6.7 | B | 112 | 9.5 | 2 | | | 0.08 | B | | 20 | 4.8 | Y | 1 | Gigli,P | |
| 10.836 | 820349 | 5.8 | S | 112 | 11 | 3 | | | 0.050 | B | | 7 | 5.6 | Y | 1 | Meozzi,D | |
| 10.847 | 820350 | 6.2 | B | 112 | 15 14 | 3 | | | 0.090 | N | 7 | 40 | 4.0 | Y | 1 | Kopplin,J | |
| 10.8472 | 820351 | 6.4 | S | 112 | 10 | 8 | | | 0.080 | B | | 11 | 5 C | Y | | Brogioni,A | U |
| 10.85 | 820352 | 5.9 | B | 112 | 10 | 3 | | | 0.050 | B | | 7 | 5.0 | Y | 2 | Merlin,J.-C | |
| 10.854 | 820353 | 5.7 | S | 112 | | 4 | 0.50 | | 0.05 | B | | 7 | | Y | 1 | Dziura,W | |
| 10.854 | 820354 | 5.8 | B | 112 | | 4 | | | 0.05 | B | | 7 | 4 | Y | 2 | Paradowski,M | |
| 10.858 | 820355 | 5.6 | B | 112 | | | | | 0.030 | B | | 8 | 3.0 | Y | 2 | Kieltyka,G | V |
| 10.861 | 820356 | 6.9 | B | CZ | 8 | 3 | | | 0.10 | O | | 25 | 4.5C | Y | 1 | Micek,I | |
| 10.865 | 820357 | 6.8 | S | 112,132 | 7 | 3 | | | 0.114 | N | 7.9 | 50 | 4.5C | Y | 1 | Di Meglio,F | |
| 10.865 | 820358 | 6.7 | S | 112 | 17 | 3 | | | 0.06 | B | | 12 | 4.0 | Y | 1 | Znasik,M | W |
| 10.875 | 820359 | 6.6 | S | 112 | 6 | 3 | | | 0.13 | N | 5.5 | 36 | 5 C | Y | 1 | Menichetti,R | |
| 10.875 | 820360 | 6.7 | M | CZ | 20 | 3 | | | 0.10 | B | | 25 | 5.2 | | | Hajek,P | |
| 10.875 | 820361 | 6.3 | S | 112 | 6.9 | 3 | | | 0.10 | B | | 14 | 5.0 | Y | 1 | Hasubick,W | |
| 10.875 | 820362 | 6.3 | B | 112 | 6 | 7 | | | 0.05 | B | | 10 | 4.0C | Y | 2 | Franciosi,C | X |
| 10.875 | 820363 | 6.2 | M | 112 | 12 | 6 | | | 0.030 | B | | 8 | 6.0 | Y | 2 | Villa,M | |
| 10.88 | 820364 | 5.1 | S | DCS 13 | 10 | 4 | 2 | 105 | 0.050 | B | | 10 | 5 | Y | 9 | Comello,G | B |
| 10.882 | 820365 | 6.5 | S | 112 | 14 | 4 | | | 0.11 | R | 11 | 36 | 4.0 | Y | 1 | Znasik,M | W |
| 10.889 | 820366 | 6.3 | S | 112 | 7.0 | | 1.3 | 110 | 0.050 | B | | 7 | 6.0 | Y | 2 | Rossi,L | Y |
| 10.8958 | 820367 | 6.4 | B | 112 | 6.0 | 7 | | | 0.12 | R | 15 | 53 | 4.0C | Y | 2 | Franciosi,C | |
| 10.903 | 820368 | 6.5 | M | 112 | | | | | 0.035 | B | | 9 | 6.2 | Y | 1 | Begbie,M.J.R | |
| 10.917 | 820369 | 6.3 | M | 112 | 9 | 5 | | | 0.03 | B | | 8 | 6.0 | Y | 2 | Melandri,F | Z |
| 10.92 | 820370 | 6.4 | S | 112 | | | | | 0.08 | B | | 10 | 4.5 | | 1 | Shanklin,J.D | a |
| 10.927 | 820371 | | | | 7.8 | 5 | 5.2 | 112 | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | b |
| 10.93 | 820372 | 6.5 | S | DCS 13 | | 3 | | | 0.080 | B | | 15 | 4.5C | Y | 1 | Scholten,A | |
| 10.94 | 820373 | 5.3 | S | 112 | 12 | | | | 0.080 | B | | 20 | 4.5 | Y | 10 | Bouma,R.J | |

NOTE A Tail was very faint and the exact length is uncertain, as is the PA.
NOTE B Coma diameter approximate.
NOTE C Coma diameter and tail length approximate.
NOTE D 0.15 f/5 refr. 31x tail 0.47 deg. long. PA = 115.
NOTE E Haze. Nucleus stellar.
NOTE F Visible with averted vision only. Data may be questionable.
NOTE G No tail seen.
NOTE H Observation from Colorado.
NOTE I Tail may have been as long as 10 degrees. Width of tail was 30' at 4.5 degrees from head. Northern side of tail was brighter than southern.
NOTE J There was a bright sector coming from the non-stellar condensation which subtended PAs 320 to 10. A distinct jet was visible in PA 320. Extent of sector not more than a few seconds of arc.
NOTE K Coma diameter approximate. Clear. (Observer gave limit as approximately 10. Ed.)
NOTE L Almost stellar-like nucleus. Round head. Tail faint and narrow. Length and PA approximate.
NOTE M Almost stellar-like nucleus. Round head. Doubtful tail.
NOTE N Head not seen stellar-like.
NOTE O DC = moderate.
NOTE P Midpoint on tail: 3.3 deg. at PA 107, end point of tail: 9.6 deg. at PA 107.
NOTE Q 5.7 mag. star subtracted.
NOTE R Coma elongated.
NOTE S Comet partially superimposed on star.
NOTE T Seeing good, transparency good. Bright star near comet.

DATE: 10 MAY 1986

DATE: 10 MAY 1986

NOTE U I perceive detail. (Translated by IHW staff. Ed.)
NOTE V Foggy.
NOTE W Cirrus.
NOTE X Nucleus.
NOTE Y A 5.7 magnitude star involved with the coma's edge.
NOTE Z The data can be influenced by a bright star near the comet.
NOTE a Cloud. Close to 5.7 star.
NOTE b Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.061 | 831240 | 0.82 | 0.114 | N | 8 | 45, 90 | 55 | 4.1 | 1 | Mac Kenzie,G | |
| 10.771 | 831241 | 4 | 0.08 | B | | 11 | | 6.1 | 1 | Fleet,R.W | A |
| 10.833 | 831242 | 0.25 | 0.30 | N | 8.5 | 102,212 | 18 | 6.2 | 1 | Begbie,M.J.R | B |
| 10.865 | 831243 | 0.49 | 0.114 | N | 7.9 | 50 | 30 | 4.5 | 1 | Di Meglio,F | |
| 10.880 | 831244 | 0.6 | 0.13 | N | 5.5 | 36,144 | 26 | 4.5 | 1 | Menichetti,R | |

NOTE A Tail end point at PA 107. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Jets at PA 260 and PA 220. Extension to coma centred on PA 170. Vertex distance 3.9 arc min.; semi latus rectums P1 = 3.9 arc min., P2 = 7.0 arc min. The inner coma is composed of two brighter regions to the north and south. The tail is increased in width, and near nuclear activity is enhanced.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.075 | 852091 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 281/P | 1 | Sabia,J.D | A |
| 10.092 | 852092 | 0.135 | 2.8 | | 15.2 xl0.2 | 9.50 | Kodak Tri-X | 400/ | N | O | 2/P | 1 | Valeriani,G | B |
| 10.094 | 852093 | 0.200 | 4 | | 10.3 x 6.9 | 10.00 | Kodak 2415 | | Y | M | 4/P | 1 | Laroche,Y | |
| 10.098 | 852094 | 0.135 | 2.8 | | 15.2 xl0.2 | 3.00 | Kodak Tri-X | 400/ | N | O | 3/P | 1 | Valeriani,G | B |
| 10.106 | 852095 | 0.135 | 2.8 | | 15.2 xl0.2 | 5.00 | Kodak Tri-X | 400/ | N | O | 4/P | 1 | Valeriani,G | B |
| 10.110 | 852096 | 0.135 | 2.8 | | 15.2 xl0.2 | 2.00 | Kodak Tri-X | 400/ | N | O | 5/P | 1 | Valeriani,G | B |
| 10.142 | 852097 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 282/P | 1 | Sabia,J.D | A |
| 10.215 | 852098 | 0.550 | 5.5 | 0.102 | 3.7 x 2.5 | 20.00 | Konica 1600 | 1600/ | Y | O | 000/P | 1 | Bigbie,B | C |
| 10.225 | 852099 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 5.00 | 3M 1000 | 1000/ | N | O | 4/N | 7 | Edberg,S.J | |
| 10.225 | 852100 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | Ektachrome | 400/ | N | O | 15/N | 2 | Edberg,S.J | |
| 10.225 | 852101 | 0.050 | 2 | | 39.6 x27.0 | 5.00 | Kodak Tri-X | 400/ | N | O | 35/C | 2 | Edberg,S.J | |
| 10.230 | 852102 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/ | N | O | 5/N | 7 | Edberg,S.J | |
| 10.230 | 852103 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | Ektachrome | 400/ | N | O | 16/N | 2 | Edberg,S.J | |
| 10.230 | 852104 | 0.050 | 2 | | 39.6 x27.0 | 10.00 | Kodak Tri-X | 400/ | N | O | 36/C | 2 | Edberg,S.J | |
| 10.234 | 852105 | 0.260 | 5.2 | 0.050 | 7.9 x 5.3 | 1.00 | 3M 1000 | 1000/ | N | O | 6/N | 7 | Edberg,S.J | |
| 10.234 | 852106 | 0.050 | 2 | | 39.6 x27.0 | 1.00 | Kodak Tri-X | 400/ | N | O | 37/C | 2 | Edberg,S.J | |
| 10.251 | 852107 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 8.00 | Kodak 2415 | | Y | S | 26/P | 3 | Yen,B | D |
| 10.259 | 852108 | 0.200 | 4 | | 10.3 x 6.9 | 5.00 | 3M 1000 | 1000/ | N | O | 8/N | 7 | Edberg,S.J | |
| 10.259 | 852109 | 0.050 | 2 | | 39.6 x27.0 | 5.00 | Ektachrome | 400/ | N | O | 17/N | 2 | Edberg,S.J | |
| 10.264 | 852110 | 0.200 | 4 | | 10.3 x 6.9 | 10.00 | 3M 1000 | 1000/ | N | O | 9/N | 7 | Edberg,S.J | |
| 10.264 | 852111 | 0.050 | 2 | | 39.6 x27.0 | 10.00 | Ektachrome | 400/ | N | O | 18/N | 2 | Edberg,S.J | |
| 10.273 | 852112 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/ | N | O | 10/N | 7 | Edberg,S.J | |
| 10.291 | 852113 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 1.00 | 3M 1000 | 1000/ | N | O | 12/N | 2 | Edberg,S.J | |
| 10.296 | 852114 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | 3M 1000 | 1000/ | N | O | 13/N | 2 | Edberg,S.J | |
| 10.303 | 852115 | 0.050 | 2 | | 39.6 x27.0 | 1.00 | 3M 1000 | 1000/ | N | O | 14/N | 2 | Edberg,S.J | |
| 10.307 | 852116 | 0.050 | 2 | | 39.6 x27.0 | 5.00 | 3M 1000 | 1000/ | N | O | 15/N | 2 | Edberg,S.J | |
| 10.865 | 852117 | 0.950 | 4.7 | 0.20 | 2.2 x 1.4 | 2.00 | Kodak 2415 | | Y | | 27/P | 1 | Conrad,R | E |
| 10.877 | 852118 | 0.420 | 1.7 | 0.250 | 4.9 x 3.3 | 25.00 | Kodak 2415 | | Y | S | 4/P | 1 | Bruhin,W | F |

NOTE A Anti-tail noted on negative, very short and spike-like. Not seen visually. Photograph made by J. Kamichitis and J.D. Sabia.
NOTE B (Observer's image identifier is followed by suffix a. Ed.)
NOTE C Start time approximate.
NOTE D (Observer's image identifier is 2. Ed.) Instrument is Schmidt camera.
NOTE E City lights interfered with the observation, Vienna, from room.
NOTE F Net exposure duration 15 minutes because of interruption due to airplanes. (Observer's image identifier is IV. Ed.)

DATE: 11 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.05 | 820374 | 5.9 | S | AA | 6 | 2 | | | 0.050 | B | | 7 | | | | Green,D.W.E | A |
| 11.06 | 820375 | 6.1 | S | AA | 8 | 4 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |
| 11.063 | 820376 | 7.1 | M | 112 | 5.9 | 2 | 0.1 | 114 | 0.114 | N | 8 | 45 | 3.8 | Y | 1 | Mac Kenzie,G | B |
| 11.076 | 820377 | 5.6 | S | 112 | 5.1 | 6 | | | 0.203 | N | 6 | 101 | 5.4 | Y | 1 | Hudak,D.M | |
| 11.08 | 820378 | 5.4 | S | 112 | 14 | 4 | 2.7 | 112 | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 11.08 | 820379 | | | | 6 | 2 | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | C |
| 11.092 | 820380 | 7.3 | M | 112 | 3.7 | 5 | | | 0.15 | N | 8 | 44 | 3.5C | Y | 1 | Allen,E | D |
| 11.10 | 820381 | 6.7 | S | 112 | 40 | 6 | | | 0.05 | B | | 7 | 6.0 | Y | 1 | Harrington,P | |
| 11.160 | 820382 | 6.5 | S | 112 | 5 | 2 | | | 0.05 | B | | 10 | 5 C | N | 3 | House,R.R | |
| 11.17 | 820383 | 5.7 | M | 112 | 13 | 3 | | | 0.050 | B | | 10 | 4.0C | Y | 9 | Morris,C.S | |
| 11.17 | 820384 | 5.7 | S | 112 | | | | | 0.050 | B | | 10 | 4.0C | Y | 9 | Morris,C.S | |
| 11.17 | 820385 | 5.7 | S | 112 | | | | | 0.080 | B | | 20 | 4.0C | Y | 9 | Morris,C.S | |
| 11.187 | 820386 | 6.5 | B | 112 | | 5 | | | 0.05 | B | | 20 | 5.5 | Y | 4 | da Silva,L.A.L | |
| 11.190 | 820387 | 6.5 | B | 112 | | 1 | | | 0.05 | B | | 20 | 5.5 | Y | 2 | Onofre D.,D | |
| 11.219 | 820388 | 6.3 | S | 112 | 34 | 2 | | | 0.05 | B | | 10 | 4 C | Y | 1 | Gronek,J.D | E |
| 11.22 | 820389 | 4.9 | B | 112 | | | | | | EY | | | 6.5 | Y | 1 | Keen,R | |
| 11.2292 | 820390 | 6.0 | M | 112 | 12 | 6 | | | 0.05 | B | | 7 | 6.4 | Y | 3 | Cook,A.J | F |
| 11.24 | 820391 | 5.5 | S | 113 | 5.0 | 3 | | | 0.080 | R | 3.7 | 19 | 5.0 | Y | 2 | Spratt,C.E | |
| 11.25 | 820392 | 5.5 | S | 113 | 5.0 | 2 | | | 0.080 | B | | 11 | 5.6 | Y | 2 | Spratt,C.E | G |
| 11.2597 | 820393 | 6.3 | S | DCS | 8 | 2 | | | 0.080 | B | | 20 | 4.4 | | 3 | Machholz,D | |
| 11.26 | 820394 | 5.4 | S | 113 | 5.5 | 3 | | | 0.080 | B | | 11 | 5.5 | Y | 2 | Spratt,C.E | |
| 11.31 | 820395 | 5.5 | M | 112 | | | 5 | 105 | 0.05 | B | | 10 | 6 | Y | 11 | Hale,A | H |
| 11.458 | 820396 | 5.9 | S | 112 | | | | | 0.025 | B | | 3 | | | | Seargent,D | |
| 11.458 | 820397 | | | | 9 | 4 | 1 | 110 | 0.08 | B | | 15 | 6.1 | Y | 1 | Seargent,D | I |
| 11.484 | 820398 | 6.0 | S | 112 | | | 5.5 | | 0.05 | B | | 7 | 6.5 | Y | 2 | Garradd,G | |
| 11.500 | 820399 | 6.5 | S | 112 | 8 | 4 | | | 0.07 | B | | 10 | 2.0 | Y | 1 | Kobayashi,J | J |
| 11.520 | 820400 | 6.4 | S | 112 | | 6 | | | 0.05 | B | | 10 | 6.0 | Y | 1 | Williams,P.F | |
| 11.542 | 820401 | 5.4 | B | 112 | | 5 | 3.0 | 110 | 0.08 | B | | 11 | 5.6 | Y | 5 | Bembrick,C | |
| 11.70 | 820402 | 6.1 | B | AAVSO | | | | | 0.08 | B | | | | | | Churyumov,K | |
| 11.72 | 820403 | 6.1 | B | AAVSO | | | | | 0.11 | R | | | | | | Churyumov,K | |
| 11.739 | 820404 | 6.4 | M | 112 | | | | | 0.035 | B | | 9 | 6.1 | Y | 1 | Begbie,M.J.R | |
| 11.753 | 820405 | 6.0 | M | 112 | 11 | 6 | 10.7 | 108 | 0.08 | B | | 11 | 6.2 | Y | 1 | Fleet,R.W | K |
| 11.757 | 820406 | | | | 8.0 | 6 | 4.6 | 115 | 0.30 | N | 8.5 | 102 | 6.1 | Y | 1 | Begbie,M.J.R | L |
| 11.76 | 820407 | 5.6 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 11.778 | 820408 | 5.6 | M | 112 | | | | | | EY | | | 6.2 | Y | 1 | Fleet,R.W | M |
| 11.778 | 820409 | 6.8 | M | 112 | 7.5 | 6 | 3.3 | 120 | 0.04 | B | | 12 | 6.2 | Y | 1 | Henshaw,C | |
| 11.806 | 820410 | 6.2 | M | 112 | 9 | 4 | | 100 | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | N |
| 11.81 | 820411 | 5.5 | B | E | 15 | 5 | 1 | 112 | 0.05 | B | | 7 | | | | Mormil,V | |
| 11.813 | 820412 | 6.0 | M | 112 | 10 | 5 | | | 0.05 | B | | 12 | 5 | Y | 1 | Tanti,T | O |
| 11.8298 | 820413 | 6.6 | B | 112 | 10 | 8 | | | 0.080 | B | | 11 | 4.5C | Y | | Brogioni,A | P |
| 11.8298 | 820414 | 6.5 | S | 112 | | 6 | | | 0.080 | B | | 15 | 3.5C | Y | | Giuntoli,M | |
| 11.830 | 820415 | 6.2 | S | 112 | 11.0 | 4 | 1.73 | 105 | 0.08 | B | | 15 | 6.4 | Y | 4 | Haver,R | |
| 11.833 | 820416 | 6.0 | B | 112 | | 4 | | | 0.05 | B | | 7 | 3.5 | Y | 2 | Paradowski,M | |
| 11.833 | 820417 | 6.3 | M | 112 | 11 10 | 5 | | | 0.07 | B | | 20 | 5 | Y | 1 | Tanti,T | O |
| 11.840 | 820418 | 5.9 | S | 112 | 11.0 | 3 | 2.60 | 105 | 0.05 | B | | 7 | 6.4 | Y | 4 | Haver,R | |
| 11.840 | 820419 | 5.8 | S | 112 | 12 | 3 | | | 0.050 | B | | 7 | 5.3M | Y | 1 | Meozzi,D | |
| 11.845 | 820420 | 5.7 | S | 112 | | | | | | EY | | | 6.4 | Y | 4 | Haver,R | |
| 11.85 | 820421 | 5.7 | B | E | 8 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 11.866 | 820422 | | | 112 | 20 | 3 | | | 0.050 | B | | 10 | 2.5CT | N | 2 | Richert,M | |
| 11.872 | 820423 | 6.3 | M | 112 | 14 | 5 | | | 0.030 | B | | 8 | 4.5 | Y | 1 | Villa,M | |
| 11.875 | 820424 | 6.8 | S | 112,132 | 8 | 6 | | | 0.114 | N | 7.9 | 50 | 5.0C | Y | 1 | Di Meglio,F | |
| 11.875 | 820425 | 6.3 | M | 112 | 12 | 5 | | | 0.03 | B | | 8 | 4.5 | Y | 1 | Melandri,F | |
| 11.882 | 820426 | 6.6 | S | 112 | 7 | 3 | | | 0.05 | B | | 10 | 4.5C | Y | 1 | Menichetti,R | |
| 11.885 | 820427 | 7.1 | B | | 5 | 1 | | | 0.050 | B | | 10 | 4.5 | Y | 1 | Linke,H | |
| 11.890 | 820428 | 5.8 | S | 112 | | 4 | | | 0.05 | B | | 7 | | Y | 1 | Dziura,W | Q |

NOTE A Coma diameter approximate.
NOTE B Temp.: 2 deg. C. Tail was difficult to observe and length (as well as the PA) could be considered spurious.
NOTE C Using 68x and 170x: there are suggestions of very long, narrow, vague rays aligned north-south from the tiny central condensation within the coma. At 170x a stellar nucleus is glimpsed within it.
NOTE D Clouds.
NOTE E Exc. see.
NOTE F Tail north boundary 11.85 deg. at PA 101, south boundary 2.50 deg. at PA 114.
NOTE G DC approximate.
NOTE H Last naked-eye sighting was on this night.
NOTE I Tail length is lower limit.
NOTE J Haze.
NOTE K Midpoint on tail: 4.8 deg. at PA 106. End point of tail: 10.7 deg. at PA 108.
NOTE L Tail measurement refers to dust tail only.
NOTE M 5.7 mag. star subtracted.
NOTE N Coma elongated.
NOTE O Seeing good, transparency good.
NOTE P I perceive detail. (Roughly translated by IHW staff. Ed.)
NOTE Q Foggy.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.051 | 831245 | 0.89 | 0.114 | N | 8 | 45, 90 | 85 | 3.8 | 1 | Mac Kenzie,G | |
| 11.104 | 831246 | 0.40 | 0.204 | N | 8 | 58,271 | 60 | 4.5 | 1 | Robinson,P.C | A |
| 11.170 | 831247 | | 0.203 | N | 6 | 38 | 12 | 4.5 | 8 | Troiani,D.M | B |
| 11.233 | 831248 | 3 | 0.050 | B | | 7 | 10 | 6.4 | 3 | Cook,A.J | |
| 11.753 | 831249 | 4 | 0.08 | B | | 11 | | 6.2 | 1 | Fleet,R.W | C |
| 11.772 | 831250 | 0.19 | 0.30 | N | 8.5 | 102,212 | 16 | 6.1 | 1 | Begbie,M.J.R | D |
| 11.875 | 831251 | 0.65 | 0.114 | N | 7.9 | 50 | 30 | 5.0 | 1 | Di Meglio,F | |

NOTE A Gas tail at PA 110, very long; main dust tail at PA 120 to 180 (5.5') to 135 (60.0'), also very long; tail at PA 180; tail at PA 240; tail at PA 260; forward tail at PA 315, SW side of tail is sharper, brighter than other side, NE side is extended SE past coma to gas tail at PA 110; tail at PA 340. Tail at PA 270 (1.4') to 0 (6.0') to 25 (22.0') to 40 (50.0'); tail is curved, especially near coma. Hood at PA 200 (39.1') to 250 (32.4') to 290 (37.0') to 330 (52.4'); hood continued in both directions a long way. Slight stellar condensation. City lights interfered with the observation.
NOTE B Transparency (1-5): 2.5. Seeing (1-3): 3. Sky darkness (1-5): 2.0. DC = 6.
NOTE C Tail end point at PA 108. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE D Vertex distance 5.3 arc min.; semi latus rectums P1 = 4.1 arc min., P2 = 3.6 arc min. The inner coma consists of a bright, roughly oval cloud of material about 2 arc min. wide. The outer coma is fainter and is irregular at its limits. The tail is still broad.

DATE: 11 MAY 1986

DATE: 11 MAY 1986

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.067 | 852119 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 4.00 | Kodak 2415 | | Y | S | 1/P | 1 | Dilsizian,R | |
| 11.089 | 852120 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 25.00 | Kodak 2415 | | Y | S | 002/C | 1 | Chester,G.R | A |
| 11.113 | 852121 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 25.00 | Kodak 2415 | | Y | S | 003/C | 1 | Chester,G.R | B |
| 11.122 | 852122 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 284/P | 1 | Sabia,J.D | C |
| 11.259 | 852123 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 27/P | 3 | Yen,B | D |
| 11.514 | 852124 | 0.180 | 2.8 | | 11.4 x 7.6 | 8.00 | Kodak 2415 | | Y | O | 89/S | 2 | Garradd,G | E |
| 11.559 | 852125 | 0.180 | 2.8 | | 11.4 x 7.6 | 22.00 | Kodak 2415 | | Y | O | 90/S | 2 | Garradd,G | E |

NOTE A (Observer's image identifier is 2. Ed.)
NOTE B (Observer's image identifier is 3. Ed.)
NOTE C Anti-tail noted on negative, very short and spike-like. Not seen visually. Photograph made by J. Kamichitis and J.D. Sabia.
NOTE D (Observer's image identifier is 9. Ed.) Instrument is Schmidt camera.
NOTE E Film was affected by heat and humidity before development, causing additional fogging. Film was excessively hypered (65-70 deg. C), causing severe fogging.

DATE: 12 MAY 1986 DATE: 12 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.007 | 820429 | 6.5 | B | 112 | | | | | 0.05 | B | | 20 | 5.0 | Y | 1 | da Silva,L.A.L | |
| 12.069 | 820430 | 5.7 | S | 112 | 3.6 | 6 | | | 0.203 | N | 6 | 101 | 4.8 | Y | 1 | Hudak,D.M | |
| 12.07 | 820431 | 6.8 | S | 112 | 30 | 5 | | | 0.05 | B | | 7 | 4.5 | Y | 1 | Harrington,P | |
| 12.09 | 820432 | 4.9 | S | AA | 18 | 4 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |
| 12.090 | 820433 | 6.3 | M | 112 | 25.0 | 6 | 5.5 | 109 | 0.05 | B | | 12 | 6.9 | Y | 1 | Knight,S | |
| 12.090 | 820434 | 6.3 | B | 112 | | | | | | EY | | | 6.9 | Y | 1 | Knight,S | |
| 12.093 | 820435 | 7.7 | M | 112 | 2.3 | 7 | | | 0.15 | N | 8 | 44 | 3.5C | Y | 1 | Allen,E | B |
| 12.10 | 820436 | 4.7 | S | AA | 18 | 5 | | | 0.050 | B | | 7 | | | | Green,D.W.E | A |
| 12.10 | 820437 | 4.9 | S | AA | 16 | 3 | | | 0.035 | B | | 7 | | | | Green,D.W.E | A |
| 12.117 | 820438 | 6.1 | S | 112 | 10 | 3 | | | 0.035 | B | | 7 | 6.1 | Y | 3 | Morrison,W | C |
| 12.120 | 820439 | 6.4 | S | 112 | 14 | 3 | | | 0.05 | B | | 10 | 5.5C | Y | 3 | House,R.R | |
| 12.135 | 820440 | 6.5 | | | | | | | 0.050 | B | | 10 | 6 | Y | 1 | Minton,R.B | D |
| 12.17 | 820441 | 5.7 | M | 112 | 16 | 4 | 5 | 113 | 0.050 | B | | 10 | 6.0 | Y | 7 | Morris,C.S | E |
| 12.19 | 820442 | 5.5: | | 112 | | | | | | EY | | | 6.0 | Y | 7 | Morris,C.S | |
| 12.22 | 820443 | 5.0 | S | 112 | | | | | | EY | | | 6.5 | Y | 1 | Keen,R | |
| 12.229 | 820444 | 6.7 | M | 112 | | 6 | | | 0.279 | SC | 10 | 167 | 4.5 | Y | 1 | Kemble,L.J | F |
| 12.23 | 820445 | 5.6 | | 112 | 13 | 5 | 1.5 | 110 | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | G |
| 12.26 | 820446 | 5.1 | B | 112 | 5 | 0 | | | 0.035 | B | | 7 | 4.0 | Y | 1 | Jacobson,E | H |
| 12.26 | 820447 | | B | | 24 | | | | | EY | | | 4.0 | Y | 1 | Jacobson,E | A |
| 12.36 | 820448 | 5.9 | S | 112 | 13 | 3 | | | 0.049 | B | | 3 | 5.9 | | | Jones,A | I |
| 12.36 | 820449 | | | | | 6 | | | 0.078 | R | 7.5 | 30 | | | | Jones,A | J |
| 12.365 | 820450 | 6.0 | S | 112 | | | | | 0.025 | B | | 3 | 6.2 | Y | 1 | Seargent,D | |
| 12.365 | 820451 | | | | | | 1.5 | 100 | 0.08 | B | | 15 | | | | Seargent,D | |
| 12.38 | 820452 | | | | | 7 | | | 0.317 | N | 5 | 58 | | | | Jones,A | K |
| 12.38 | 820453 | | | | | | 5.0 | | 0.05 | B | | 7 | 6.3 | | 1 | Lovejoy,T | L |
| 12.434 | 820454 | 5.9 | S | 112 | | | 4 | | 0.05 | B | | 7 | 6.0 | Y | 6 | Garradd,G | |
| 12.438 | 820455 | 6.0 | B | 112 | | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | M |
| 12.508 | 820456 | 5.9 | S | 112 | 20 | 4 | 1.5 | 90 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |
| 12.52 | 820457 | 6.1 | M | 112 | 8 | 6 | | | 0.15 | N | 5.3 | 32 | 5.0CM | Y | 1 | Oka,A | |
| 12.52 | 820458 | 6.4 | M | 112 | 10.5 | 5 | 0 | 100 | 0.080 | B | | 11 | 5 | Y | 2 | Watanabe,N | |
| 12.705 | 820459 | 8.2 | B | 112 | 10 | 1 | 2 | 95 | 0.065 | B | | 20 | 6.5 | Y | 1 | McBain,J | N |
| 12.758 | 820460 | 6.7 | M | 112 | | | | | 0.035 | B | | 9 | 6.1 | Y | 1 | Begbie,M.J.R | |
| 12.78 | 820461 | 5.9 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 12.781 | 820462 | | | | 7.3 | 6 | 4.5 | 120 | 0.30 | N | 8.5 | 102 | 6.1 | Y | 1 | Begbie,M.J.R | O |
| 12.793 | 820463 | 6.6 | M | 112 | 7.5 | 6 | 4.25 | 120 | 0.04 | B | | 12 | 6.2 | Y | 1 | Henshaw,C | |
| 12.799 | 820464 | 6.1 | M | 112 | 11 | | 10.6 | 107 | 0.08 | B | | 11 | 6.1 | Y | 1 | Fleet,R.W | P |
| 12.80 | 820465 | 5.5 | B | E | 20 | 5 | 1 | 112 | 0.05 | B | | 7 | | | | Mormil,V | Q |
| 12.80 | 820466 | 6.1 | B | M | 3 | 3 | | | 0.07 | N | 8 | 33 | | | | Yurchenko,Yu | |
| 12.802 | 820467 | 5.8 | | 112 | | | | | | EY | | | 6.1 | Y | 1 | Fleet,R.W | |
| 12.826 | 820468 | 7.5 | S | 112 | 2 | 3 | | | 0.25 | N | 6 | 40 | 3.5CTM | N | 2 | Adamoli,G | |
| 12.826 | 820469 | 6.5 | S | 112 | 14 | 5 | | | 0.11 | R | 11 | 36 | 4.4M | Y | 1 | Znasik,M | R |
| 12.830 | 820470 | 6.7 | S | 112 | 18 | 4 | | | 0.06 | B | | 12 | 4.4M | Y | 1 | Znasik,M | R |
| 12.83 | 820471 | 5.8 | B | E | 10 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 12.837 | 820472 | 5.8 | S | 112 | | | 0.50 | | 0.05 | B | | 7 | | Y | 1 | Dziura,W | |
| 12.840 | 820473 | 6.8 | S | 112 | 20 | 4 | | | 0.08 | B | | 10 | 4.4M | Y | 1 | Znasik,M | R |
| 12.840 | 820474 | 6.9 | M | CZ | 10 | 3 | | | 0.10 | B | | 25 | | | 2 | Kucera,P | |
| 12.847 | 820475 | 7.1 | M | CZ | 10 | 1 | | | 0.045 | R | | 8 | | | 2 | Kucera,P | |
| 12.847 | 820476 | 6.6 | M | CZ | 10 | 2 | | | 0.055 | R | 6 | 12 | | | 1 | Silhan,J | S |
| 12.850 | 820477 | 6.7 | B | 112 | 8 | 6 | | | 0.050 | B | | 12 | 3.0 | Y | 1 | Mosch,J | |
| 12.854 | 820478 | 7.0 | M | 112 | | | | | 0.100 | B | | 25 | 5.0 | N | 1 | Fabricius,J | |
| 12.854 | 820479 | 6.9 | M | CZ | 8 | 2 | | | 0.10 | B | | 25 | | | 2 | Kucera,P | |
| 12.854 | 820480 | 7 | B | 112 | 2 | 2 | | | 0.050 | B | | 10 | 4.9C | Y | 1 | Laszlo,A | A |
| 12.854 | 820481 | 6.9 | B | CZ | 7 | 3 | | | 0.10 | O | | 25 | 3.5C | Y | 1 | Micek,I | |
| 12.854 | 820482 | 6.4 | B | CZ | 11.5 | 3 | | | 0.10 | B | | 25 | 5.5 | Y | 1 | Polak,J | T |
| 12.854 | 820483 | 6.8 | M | CZ | 8 | 3 | | | 0.16 | R | 15 | 50 | | | 1 | Silhan,J | U |
| 12.854 | 820484 | 6.2 | M | 112 | 9 | 4 | 0.5 | | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,F | V |
| 12.861 | 820485 | 6.4 | B | 112 | 8.6 | 4 | | | 0.10 | B | | 14 | 4.5 | Y | 1 | Hasubick,W | |
| 12.865 | 820486 | 6.3 | B | 112 | 6 | 4 | | | 0.090 | N | 7 | 26 | 5.0 | Y | 1 | Vohla,F | |
| 12.87 | 820487 | 6.3 | S | 112 | 6 | 5 | | | 0.08 | B | | 15 | 4.5M | Y | 1 | Glowinski,C | |
| 12.87 | 820488 | | | | | 6 | 0.1 | 100 | 0.203 | N | 6 | 38 | 4.5M | Y | 1 | Glowinski,C | W |
| 12.872 | 820489 | 6.9 | S | 112,132 | 7 | 3 | | | 0.114 | N | 7.9 | 50 | 5.0C | Y | 1 | Di Meglio,F | |
| 12.872 | 820490 | 6.8 | B | 112 | | 3 | | | 0.06 | R | 8 | 15 | 5.0M | N | 1 | Schambeck,C.M | |
| 12.872 | 820491 | 6.3 | M | 112 | | 4 | | | 0.07 | B | | 20 | 5 | Y | 1 | Tanti,T | X |
| 12.875 | 820492 | 6.9 | B | 112 | | 2 | | | 0.07 | B | | 10 | 4.0 | N | 1 | Deconinck,M | Y |
| 12.8750 | 820493 | 6.6 | S | 112 | | 4 | 0.75 | 90 | 0.080 | B | | 15 | 5.0 | Y | 1 | Korth,S | Z |
| 12.875 | 820494 | 7.0 | | 112? | 8 | 4 | | | 0.100 | N | 9 | 45 | 4.5C | Y | 2 | Marx,H | a |
| 12.878 | 820495 | 6.6 | B | 112 | 7 | 3 | | | 0.080 | R | 6.2 | 50 | 6.0 | Y | 1 | Pfitzner,E | b |
| 12.879 | 820496 | 6.4 | B | 112 | 11 10 | 3 | | | 0.090 | N | 7 | 40 | 4.0 | Y | 1 | Kopplin,J | |
| 12.88 | 820497 | 6.8 | S | 112 | | | | | 0.08 | B | | 20 | 4.0 | | 1 | Shanklin,J.D | c |
| 12.882 | 820498 | 6.7 | B | | | 3 | | | 0.080 | R | 6.2 | 12 | 5.0 | Y | 1 | Lieder,F | |
| 12.885 | 820499 | 6.7 | S | 112 | 7 | 3 | | | 0.05 | B | | 10 | 4.5C | Y | 1 | Menichetti,R | |
| 12.885 | 820500 | 7.1 | B | | 5 | 0 | | | 0.050 | B | | 10 | 5.0 | Y | 1 | Linke,H | |
| 12.885 | 820501 | 4.5 | B | | 7 4 | 4 | 5 | 215 | 0.030 | B | | 8 | 6.0 | Y | 1 | Winkler,R | d |
| 12.889 | 820502 | 6.5 | S | 112 | 8.2 | 5 | | | 0.050 | B | | 10 | 3.5 | Y | 1 | Rossi,L | e |
| 12.890 | 820503 | | | | 4.5 | 3 | | | 0.130 | N | 8 | 40 | 5.0 | Y | 1 | Lieder,F | |
| 12.892 | 820504 | 6.7 | S | 112 | 6 | 4 | | | 0.25 | N | 6 | 60 | 4 | Y | 1 | Gainsford,M.J | |
| 12.896 | 820505 | 6.2 | M | 122 | 20 | 5 | | | 0.03 | B | | 8 | 4.5 | Y | 1 | Melandri,F | |
| 12.896 | 820506 | 7.2 | | | | | | | 0.080 | B | | 15 | 3 | Y | 1 | Nagele,A | f |
| 12.896 | 820507 | 6.6 | B | SAO | 6.3 | 4 | 1.0 | | 0.125 | R | 6 | 35 | 4.0 | Y | 1 | Guthier,O | g |
| 12.90 | 820508 | 6.6 | S | DCS 13 | 10 | 4 | | | 0.080 | B | | 15 | 4.5MTC | Y | 1 | Scholten,A | A |
| 12.90 | 820509 | 5.8 | S | DCS 13 | 11 | 4 | 0.5 | 105 | 0.060 | B | | 12 | 6 MT | Y | 3 | van de Weg,R.L.W | h |
| 12.90 | 820510 | 6.3 | B | DCS 13 | 11 | | 0.5 | 105 | 0.060 | B | | 12 | 6 MT | Y | 3 | van de Weg,R.L.W | h |
| 12.903 | 820511 | 6.4 | S | 112 | | | | | 0.08 | B | | 11 | 4 | Y | 1 | Gainsford,M.J | |
| 12.906 | 820512 | 6.5 | B | CZ | | 3 | | | 0.03 | B | | 6 | 4.5 | | 1 | Vaclik,F | |
| 12.91 | 820513 | 6.4 | S | 112 | | | | | 0.05 | B | | 7 | 4.0 | | 1 | Shanklin,J.D | |
| 12.91 | 820514 | 4.9 | S | DCS 13 | 13 | 4 | 4.5 | 105 | 0.050 | B | | 10 | 6 | Y | 9 | Comello,G | A |
| 12.910 | 820515 | 6.2 | M | 112 | 19 | 5 | | | 0.030 | B | | 8 | 4.5 | Y | 1 | Villa,M | |
| 12.927 | 820516 | 6.7 | B | 112 | | | | | 0.05 | B | | 7 | 5.5C | Y | 2 | Martinez,C | |

NOTE A Coma diameter approximate.
NOTE B Turbulence.
NOTE C 0.15 f/5 refr. 31x tail 0.47 deg. long. PA = 110.
NOTE D I used my 10x50 binoculars out of focus. It was the same magnitude as SAO 156105. SAO 156105 = Mv 6.5 and spectrum = F0.
NOTE E Width of tail at 5 degrees was 20'.
NOTE F Comet seen at 0427 UT in twilight, then observations made in dark sky. Easily seen in binocs. Comet large and bright, two tails: one broad, relatively bright, about 1.5 deg. long at PA 103 deg., a fainter, narrower one about 0.5 deg. long at PA 8 deg. Coma diameter 7-8 arc min.
NOTE G Modified Sidgwick method used.
NOTE H Cirrus clouds. Coma diameter approximate.
NOTE I DC 5 (0.050 B, 7x).
NOTE J Tail suspected.

NOTE K Diffuse coma, small condensation around small nucleus.
NOTE L Arrow shaped coma. Tail length is lower limit.
NOTE M Broken cloud. (Observer gave limit as approximately 10 mag. Ed.)
NOTE N Moonlight.
NOTE O Tail measurement refers to dust tail only.
NOTE P Midpoint on tail: 5.6 deg. at PA 108. End point of tail: 10.6 deg. at PA 107.
NOTE Q Parabolic head (May 12.81).
NOTE R Moon.
NOTE S Very clear sky.
NOTE T Magnitude estimate uncertainty +/-0.5 mag.
NOTE U (Invisible in 7x50 binoculars.)
NOTE V The tail appeared to have a kink close to the coma. It certainly was not straight; the discontinuity could have been a disconnection event. Tail length is lower limit.
NOTE W Tail length and PA approximate.
NOTE X Seeing good, transparency good/fair.
NOTE Y Moon, cloudy.
NOTE Z Coma diameter to 10-15 arc min. Tail length approximate.
NOTE a Comparison stars SAO 156105, 156040. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE b Tail length = y.
NOTE c Tail not certain.
NOTE d (PA value may have been incorrectly determined. Ed.)
NOTE e Haze.
NOTE f (Observer indicated "A" method [Argelander?]. Ed.) Comparison stars are SAO 156105, 156040.
NOTE g Central condensation. Tail PA 113 133.
NOTE h Tail length is lower limit.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.101 | 831252 | 0.25 | 0.20 | N | 8 | 120 | 20 | 5 | 1 | Vargas B.,A.G | A |
| 12.799 | 831253 | 4 | 0.08 | B | | 11 | | 6.1 | 1 | Fleet,R.W | B |
| 12.869 | 831254 | 0.63 | 0.200 | SC | 10 | 50 | 22 | 3 | 1 | Schumacher,K | C |
| 12.870 | 831255 | 0.75 | 0.114 | N | 7.9 | 50 | 15 | 5.0 | 1 | Di Meglio,F | |
| 12.883 | 831256 | 0.08 | 0.36 | SC | 11 | 325 | 7 | 5.0 | 1 | Korth,S | D |

NOTE A Two diffuse tails were observed at PA 110 approx. and at 120 approx. DC 5 approx. Coma diameter 2.5 approx. [sic]
NOTE B Tail end point at PA 107. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE C Small, strong condensed nucleus. Large coma. No tail perceptible. (Translated by IHW staff. Ed.)
NOTE D Tail at about PA 80. The central condensation (cf. May 4) is more elongated. Note the increased diameter of the coma compared to the observations of May 4. I think this is not only because of better atmospheric conditions. In the 15x80 binoculars and at 123x the coma seemed to be at least 15' wide and also a diffuse tail has been observed.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.065 | 852126 | 0.225 | 1.7 | 0.140 | 9.1 x 6.1 | 4.00 | Kodak 2415 | | Y | S | 2/P | 1 | Dilsizian,R | |
| 12.152 | 852127 | 0.200 | 3.5 | | 10.3 x 6.9 | 16.00 | Ektachrome | 400/ | N | T | 800/S | 2 | Woidyla,B | A |
| 12.181 | 852128 | 0.050 | 1.8 | | 39.6 x27.0 | 16.00 | Ektachrome | 400/ | N | T | 804/S | 2 | Woidyla,B | A |
| 12.248 | 852129 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 28/P | 3 | Yen,B | B |
| 12.843 | 852130 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 9.50 | Kodak 2415 | | Y | | 708/P | 4 | Jager,M | C |

NOTE A (Observer's image identifier is preceded by prefix 1. Ed.)
NOTE B (Observer's image identifier is 12. Ed.) Instrument is Schmidt camera.
NOTE C Magnitude 6.0; antitail 16 arc min. at PA 287. (Print submitted is composite of 5 min. and 4.5 min. exposures separated by 3 min. Ed.)

DATE: 13 MAY 1986

DATE: 13 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.038 | 820517 | | B | | 8 | 3 | | | 0.115 | N | 7.8 | 30 | 5.0 | Y | | Alves,A.A | |
| 13.087 | 820518 | 7.0: | B | 112 | 8 | 2 | | | 0.05 | B | | 7 | 3.9 | | 1 | Lairet,R | |
| 13.089 | 820519 | 6.3 | S | 112 | 11.5 | 3 | | | 0.035 | B | | 7 | 6.1 | Y | 3 | Morrison,W | |
| 13.092 | 820520 | 6.8 | S | 112 | 6 | 5 | 0.47 | 110 | 0.15 | R | 5 | 31 | 6.1 | Y | 3 | Morrison,W | |
| 13.096 | 820521 | 7.0 | M | 112 | 4.2 4.9 | 6 | | | 0.15 | N | 8 | 44 | 3.5C | Y | 1 | Allen,E | |
| 13.108 | 820522 | 6.5 | B | 112 | | | | | 0.08 | B | | 11 | 4.2 | Y | 1 | Gorski,L | |
| 13.15 | 820523 | 6.6 | B | 112 | 10 | 2 | | | 0.080 | B | | 20 | | | | Kronk,G | |
| 13.18 | 820524 | 4.2 | B | 112 | 12 | 6 | 3.9 | 85 | 0.035 | B | | 7 | 5.6 | Y | 1 | Jacobson,E | A |
| 13.18 | 820525 | | | | 40 | 6 | | | | EY | | | 5.6M | Y | 1 | Jacobson,E | |
| 13.20 | 820526 | 5.3 | S | 112 | | | | | | EY | | | 6.0 | Y | 1 | Keen,R | |
| 13.20 | 820527 | 5.7 | | 112 | | | | | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | B |
| 13.20 | 820528 | 5.7 | M | 112 | 11 | 4 | | | 0.080 | B | | 20 | 4.5C | Y | 14 | Morris,C.S | |
| 13.21 | 820529 | 5.6 | M | 112 | 13 | 4 | | | 0.050 | B | | 10 | 4.5C | Y | 14 | Morris,C.S | |
| 13.365 | 820530 | 5.9 | S | 112 | | | | | 0.025 | B | | 3 | 6.1 | | | Seargent,D | |
| 13.365 | 820531 | | | | | | 1.6 | 105 | 0.08 | B | | 15 | | Y | 1 | Seargent,D | |
| 13.38 | 820532 | | | | | 6 | 5.0 | | 0.05 | B | | 7 | 6.3 | | 1 | Lovejoy,T | C |
| 13.444 | 820533 | 6.3 | B | 112 | 10 | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | D |
| 13.450 | 820534 | 6.4 | S | 112 | | 6 | | | 0.05 | B | | 10 | 5.5 | Y | 1 | Williams,P.F | |
| 13.455 | 820535 | | | 112 | 5 | 8 | 0.5 | | 0.32 | N | 8 | 150 | | Y | 1 | Tregaskis,T.B | E |
| 13.458 | 820536 | 5.9 | S | 112 | | 3 | | | 0.05 | B | | 7 | 6.0C | Y | 6 | Garradd,G | |
| 13.70 | 820537 | 7.3 | B | M | 4 | 0 | | | 0.05 | R | 7 | 20 | | | | Konstantinov,S | |
| 13.72 | 820538 | 7.0 | B | M | | | | | 0.05 | R | 7 | 20 | | | | Konstantinov,S | |
| 13.767 | 820539 | 6.5 | M | 112 | | | | | 0.035 | B | | 9 | 6.2M | Y | 1 | Begbie,M.J.R | |
| 13.775 | 820540 | | | | 7.6 | 6 | | 118 | 0.30 | N | 8.5 | 102 | 6.2M | Y | 1 | Begbie,M.J.R | |
| 13.775 | 820541 | | | | 7.6 | 6 | | 118 | 0.30 | N | 8.5 | 102 | 6.2M | Y | 1 | Begbie,M.J.R | F |
| 13.78 | 820542 | 6.0 | B | E | 7 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 13.792 | 820543 | 6.8 | B | 112 | 20 | 5 | 3 | 100 | 0.05 | B | | 7 | 5.6 | Y | 3 | Vincent,J | |
| 13.800 | 820544 | 6.3 | M | 112 | 9 | 5 | | 90 | 0.089 | R | 5.5 | 18 | 5.1 | N | 1 | Ventura,F | G |
| 13.813 | 820545 | 6.7 | M | 112 | 9 | 5 | 3.75 | 120 | 0.04 | B | | 12 | 6.2 | Y | 1 | Henshaw,C | |
| 13.818 | 820546 | 6.8 | M | AAVSO | 4 | 3 | 0.1 | 66 | 0.156 | N | 10 | 54 | 6.5 | | | Kosa-Kiss,A | |
| 13.819 | 820547 | 6.4 | M | 112 | 16 | 4 | | | 0.07 | B | | 20 | 5 | Y | 1 | Tanti,T | H |
| 13.826 | 820548 | 6.0 | M | 112 | 11 | 6 | 8.2 | 108 | 0.08 | B | | 11 | 5.9 | Y | 1 | Fleet,R.W | I |
| 13.830 | 820549 | 5.9 | | 112 | | | | | | EY | | | 5.9 | Y | 1 | Fleet,R.W | |
| 13.830 | 820550 | 6.2 | S | FF HYA | 13 | 5 | | | 0.050 | B | | 7 | M | Y | 1 | Mikuz,H | J |
| 13.830 | 820551 | 6.6 | M | 112 | | 3 | | | 0.08 | B | | 10 | 3.5CM | Y | 1 | Rapavy,P | K |
| 13.833 | 820552 | 6.5 | B | CZ | 5 | 3 | | | 0.04 | B | | 7 | 4.6 | | 1 | Brancik,K | |
| 13.833 | 820553 | 6.8 | M | CZ | 16 | 3 | | | 0.10 | B | | 25 | 4.5 | | | Hajek,P | |
| 13.8368 | 820554 | 6.7 | B | 112 | 8 | 8 | | | 0.080 | B | | 11 | 4.5CM | Y | | Brogioni,A | L |
| 13.854 | 820555 | 7.4 | B | CZ | 9.5 | 3 | | | 0.10 | B | | 25 | 5.0 | Y | 1 | Polak,J | M |
| 13.856 | 820556 | 5.9 | S | 112 | 12 | 3 | | | 0.050 | B | | 7 | 5.1M | Y | 1 | Meozzi,D | |
| 13.861 | 820557 | 6.8 | M | CZ | 8 | 2 | | | 0.055 | R | 6 | 12 | | | 1 | Silhan,J | N |
| 13.868 | 820558 | 5.9 | S | 112 | 9.7 | 6 | 1.5 | 108 | 0.050 | B | | 10 | 5.5 | Y | 1 | Rossi,L | |
| 13.875 | 820559 | 6.8 | B | 112 | 8 | 3 | | | 0.05 | B | | 10 | 4.5MC | Y | 1 | Menichetti,R | |
| 13.875 | 820560 | 6.2 | M | 122 | 15 | 5 | | | 0.03 | B | | 8 | 5.0M | Y | 1 | Melandri,F | |
| 13.875 | 820561 | 6.3 | M | 112 | 17 | 5 | | | 0.030 | B | | 8 | 5.0M | Y | 1 | Villa,M | |
| 13.882 | 820562 | 7.2 | M | 112 | | | | | 0.06 | R | 4.5 | 10 | 3.0M | Y | 1 | Chodorowski,F | |
| 13.89 | 820563 | 6.2 | S | DCS 13 | | 6 | | | 0.040 | B | | 8 | 5 MT | Y | 1 | Feijth,H | |
| 13.896 | 820564 | | | | 5 | 3 | | | 0.064 | R | 12 | 32 | 3.0M | Y | 1 | Chodorowski,F | |
| 13.896 | 820565 | 7.4: | | | | | | | 0.080 | B | | 15 | 4 | Y | 1 | Nagele,A | O |
| 13.90 | 820566 | 6.8 | S | 112 | | | | | 0.08 | B | | 20 | 4.5 | | 1 | Shanklin,J.D | P |
| 13.902 | 820567 | | | | 24 | 4 | 1 | 36 | 0.08 | B | | 15 | 4.1 | Y | 1 | Hurst,G.M | |
| 13.903 | 820568 | 4.5 | B | | 7 4 | 4 | 4 | 215 | 0.030 | B | | 8 | 6.0 | Y | 1 | Winkler,R | Q |
| 13.906 | 820569 | 5.2 | S | 112 | 19 | 4 | | | 0.05 | B | | 10 | 4.1 | Y | 1 | Hurst,G.M | |
| 13.910 | 820570 | 6.4 | S | 113 | 7 | 5 | | | 0.065 | B | | 12 | 4.9 | N | 1 | Foulkes,M | R |
| 13.917 | 820571 | 6.3 | S | 112 | 9.5 | 3 | | | 0.070 | B | | 16 | 4.9MC | Y | 1 | Taylor,M.D | S |
| 13.92 | 820572 | 5.5 | S | 112 | 15 | 4 | | | 0.050 | B | | 10 | 4.5M | Y | 10 | Bouma,R.J | |
| 13.920 | 820573 | 6.4 | S | 112 | 9.5 | 4 | 1.07 | 105 | 0.08 | B | | 15 | 5.8 | Y | 3 | Haver,R | |
| 13.925 | 820574 | 6.2 | S | 112 | 9.5 | 3 | 1.07 | 105 | 0.05 | B | | 7 | 5.8 | Y | 3 | Haver,R | |
| 13.93 | 820575 | 7.1 | S | 112 | | | | | 0.20 | R | 12 | 40 | 3.5 | | 1 | Shanklin,J.D | |

NOTE A Stellar condensation. 3.9 deg. tail is dust.
NOTE B Modified Sidgwick method used.
NOTE C Arrow shaped coma. Tail length is lower limit.
NOTE D Clear. (Observer gave limit as approximately 10. Ed.)
NOTE E Almost stellar-like nucleus. Tail length approximate. PA 45 to 90. (Observer gave limit as approximately 15. Ed.)
NOTE F Tail measurement refers to dust tail only.
NOTE G Coma elongated.
NOTE H Seeing good, transparency excellent. Moon.
NOTE I Midpoint on tail: 3.9 deg. at PA 107. End point of tail: 8.2 deg. at PA 108.
NOTE J Excellent conditions.
NOTE K Comet at threshold of visibility.
NOTE L I perceive detail. (Roughly translated by IHW staff. Ed.)
NOTE M Magnitude estimate uncertainty +/-0.5 mag.
NOTE N Haze.
NOTE O (Observer indicated "A" method [Argelander?]. Ed.) Comparison star is SAO 156040.
NOTE P Tail not certain.
NOTE Q (PA value may have been incorrectly determined. Ed.)
NOTE R Twilight, moon up.
NOTE S Rougly circular coma.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.826 | 831257 | 4 | 0.08 | B | | 11 | | 5.9 | 1 | Fleet,R.W | A |
| 13.913 | 831258 | 1.95 | 0.065 | B | | 12 | 10 | 4.9 | 1 | Foulkes,M | B |

NOTE A Tail end point at PA 108. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Central nucleus offset in direction PA 270 deg. to 300 deg. Coma roughly circular. Little else seen.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.193 | 852131 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 30.00 | Kodak Tri-X | | N | M | 29/P | 1 | Webb,R | A |
| 13.242 | 852132 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | S | 29/P | 1 | Yen,B | B |
| 13.436 | 852133 | 0.135 | 3.5 | | 15.2 x10.2 | 15.00 | Ektachr.400 | | N | X | 39/S | 1 | Tregaskis,T.B | C |
| 13.844 | 852134 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 7.00 | Kodak Tri-X | 400/27 | N | O | 34/T | 1 | Mikuz,H | D |
| 13.850 | 852135 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 5.00 | Kodak Tri-X | 400/27 | N | O | 35/T | 1 | Mikuz,H | D |
| 13.854 | 852136 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 4.00 | Kodak Tri-X | 400/27 | N | O | 36/T | 1 | Mikuz,H | D |
| 13.922 | 852137 | 1.200 | 7 | 0.17 | 1.7 x 1.1 | 21.00 | Kodak IIa-F | | N | M | 14/P | 1 | Ridley,H.B | E |

DATE: 13 MAY 1986

DATE: 13 MAY 1986

NOTE A Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE B (Observer's image identifier is 17. Ed.) Instrument is Schmidt camera.
NOTE C Push processed to 800 ASA.
NOTE D Weather conditions very good but with moonlight. (Observer's image identifier is followed by suffix A. Ed.)
NOTE E (Observer's image identifier is preceded by prefix ZB. Ed.) Instrument uses photographic plates.

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.030 | 820576 | 6.8 | B | 112 | 3 | 1 | | | 0.06 | R | 12 | 56 | 5.7 | Y | 1 | Onofre D.,D | |
| 14.052 | 820577 | | | 112 | 5.5 | 2 | 0.2 | 83 | 0.114 | N | 8 | 45 | 3.6 | N | 1 | Mac Kenzie,G | A |
| 14.063 | 820578 | 8.0 | B | AAVSO | 8 | 3 | | | 0.115 | N | 7.8 | 30 | 4.5 | Y | | Alves,A.A | |
| 14.07 | 820579 | 6.0 | S | AA | 12 | 3 | | | 0.080 | B | | 20 | | | | Green,D.W.E | B |
| 14.072 | 820580 | 6.9 | B | 112 | | 5 | | | 0.05 | B | | 20 | 5.0 | Y | 1 | da Silva,L.A.L | |
| 14.08 | 820581 | 5.8: | M | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 14.08 | 820582 | 5.5 | S | AA | 15 | 4 | | | 0.050 | B | | 7 | | | | Green,D.W.E | B |
| 14.097 | 820583 | 7.3 | M | 112 | 4.2 | 6 | | | 0.15 | N | 8 | 44 | 3.0C | Y | 1 | Allen,E | |
| 14.097 | 820584 | 6.5 | M | 112 | 19.0 | 7 | 4.25 | 105 | 0.05 | B | | 12 | 6.9M | Y | 1 | Knight,S | C |
| 14.10 | 820585 | 6.8 | S | 112 | 20 | 5 | | | 0.05 | B | | 7 | 4.0 | N | 1 | Harrington,P | |
| 14.10 | 820586 | 5.7 | S | 112 | 14 | 4 | 1.0 | 95 | 0.050 | B | | 10 | 5.5 | Y | 1 | Bortle,J.E | |
| 14.10 | 820587 | | | | | | 4.0 | 105 | 0.050 | B | | 7 | | | 1 | Bortle,J.E | |
| 14.10 | 820588 | | | | 6 | 5 | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | |
| 14.101 | 820589 | 6.4 | S | 112 | 11 | 3 | | | 0.035 | B | | 7 | 5.8M | Y | 3 | Morrison,W | D |
| 14.111 | 820590 | 6.6 | B | 112 | | | | | | EY | | | 6.9M | Y | 1 | Knight,S | |
| 14.118 | 820591 | 6.8 | M | 112 | 18.5 | 7 | | | 0.254 | N | 5.6 | 38 | 6.9M | Y | 1 | Knight,S | |
| 14.19 | 820592 | 4.3 | B | 112 | 11 | 6 | 3.2 | 87 | 0.035 | B | | 7 | 5.2M | Y | 1 | Jacobson,E | E |
| 14.19 | 820593 | | | | 34 | 6 | | | | EY | | | 5.2M | Y | 1 | Jacobson,E | |
| 14.35 | 820594 | 6.3 | S | 112 | | | | | 0.049 | B | | 3 | | | | Jones,A | |
| 14.35 | 820595 | | | | | | 0.1 | 105 | 0.078 | R | 7.5 | 30 | | | | Jones,A | F |
| 14.35 | 820596 | | | | | 6 | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 14.35 | 820597 | 6.1 | S | 112 | 13 | 3 | | | 0.050 | B | | 7 | 5.7 | | | Jones,A | |
| 14.495 | 820598 | 5.9 | S | 112 | | | 9 | | 0.05 | B | | 7 | 6.5 | Y | 14 | Garradd,G | |
| 14.513 | 820599 | 6.3 | S | 112 | 15 | 4 | 1.5 | 90 | 0.07 | B | | 10 | 5.5 | Y | 1 | Kobayashi,J | |
| 14.690 | 820600 | 6.3 | S | 112 | 7 | 5 | | | 0.13 | R | 4 | 21 | 5.3 | Y | 1 | Campos,J | |
| 14.726 | 820601 | 8.2 | B | 112 | 10 8 | 1 | 1.5 | 93 | 0.065 | B | | 20 | 6.5 | Y | 1 | McBain,J | G |
| 14.741 | 820602 | 6.8 | M | 112 | | | | | 0.035 | B | | 9 | 6.1M | Y | 1 | Begbie,M.J.R | |
| 14.752 | 820603 | | | | 6.8 | 5 | | 119 | 0.30 | N | 8.5 | 102 | 6.1M | Y | 1 | Begbie,M.J.R | H |
| 14.79 | 820604 | 6.2 | B | E | 6 | 5 | | | 0.06 | R | 10 | 21 | | | | Mormil,V | |
| 14.80 | 820605 | 6.6 | B | E | 15 | 4 | | | 0.11 | B | | 20 | | | | Chernis,K | |
| 14.833 | 820606 | 6.6 | B | 112 | | 4 | | | 0.08 | B | | 10 | 3 C | N | 1 | Paradowski,M | |
| 14.8368 | 820607 | 6.9 | B | 112 | 9 | 8 | | | 0.080 | B | | 11 | 4.5CM | Y | | Brogioni,A | I |
| 14.840 | 820608 | 6.0 | S | 112 | | | 0.67 | | 0.05 | B | | 7 | | Y | 1 | Dziura,W | |
| 14.846 | 820609 | 6.7 | M | 112 | 9 | 6 | 4 | 120 | 0.04 | B | | 12 | 6.2 | Y | 1 | Henshaw,C | |
| 14.847 | 820610 | 5.9 | | 112 | | | | | | EY | | | 5.9 | Y | 1 | Fleet,R.W | |
| 14.847 | 820611 | 6.0 | B | 112 | | | | | 0.080 | B | | 10 | 3.0CM | Y | 1 | Kieltyka,G | |
| 14.851 | 820612 | 6.1 | M | 112 | 10 | 6 | 8.6 | 109 | 0.08 | B | | 11 | 5.9 | Y | 1 | Fleet,R.W | J |
| 14.854 | 820613 | 6.1 | M | 112 | 21 | 5 | | | 0.030 | B | | 8 | 5.5M | Y | 1 | Villa,M | |
| 14.86 | 820614 | 6.7 | B | 112 | 15 | 3 | | | 0.050 | B | | 7 | 5.0 | Y | 2 | Merlin,J.-C | |
| 14.882 | 820615 | | | 112 | 5 | 1 | | | 0.07 | B | | 10 | 4.5 | N | 1 | Deconinck,M | K |
| 14.885 | 820616 | 7.3 | B | | 5 | 0 | | | 0.050 | B | | 10 | 5.0 | Y | 1 | Linke,H | |
| 14.998 | 820617 | 7.0 | B | 112 | | 4 | | | 0.05 | B | | 20 | 4.5 | Y | 1 | da Silva,L.A.L | |

NOTE A Temp.: 3 deg. C. Again tail very faint but a little easier than last observation, cresent moon nearby and a few clouds. Magnitude estimate not given because of fog/clouds but comet was noticeably dimmer (probably because of moon and no dark adaption).
NOTE B Coma diameter approximate.
NOTE C Stringy dust tail.
NOTE D 0.15 f/5 refr. 31x tail 0.40 deg. long PA = 110.
NOTE E Stellar condensation.
NOTE F Coma elongated. PA 105 deg.
NOTE G Moonlight.
NOTE H Tail measurements refer to dust tail only.
NOTE I I perceive detail. (Roughly translated by IHW staff. Ed.)
NOTE J Midpoint on tail: 5.9 deg. at PA 108. End point of tail: 8.6 deg. at PA 109.
NOTE K Moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.053 | 831259 | 0.84 | 0.114 | N | 8 | 45 | 30 | 3.6 | 1 | Mac Kenzie,G | |
| 14.851 | 831260 | 4 | 0.08 | B | | 11 | | 5.9 | 1 | Fleet,R.W | A |
| 14.875 | 831261 | | 0.356 | SC | 11 | 200 | | | | Soc. Astro. de France | B |

NOTE A Tail end point at PA 109. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Drawing made by M. Verdenet. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.255 | 852138 | 0.105 | 2.8 | | 19.5 x13.0 | 6.00 | Fuji. P1600D | 1600/ | N | S | 1/S | 1 | Coco,M |
| 14.261 | 852139 | 0.105 | 2.8 | | 19.5 x13.0 | 8.00 | Fuji. P1600D | 1600/ | N | S | 2/S | 1 | Coco,M |
| 14.268 | 852140 | 0.105 | 2.8 | | 19.5 x13.0 | 10.00 | Fuji. P1600D | 1600/ | N | S | 3/S | 1 | Coco,M |

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.059 | 820618 | 7.0 | S | 112 | 4.9 | 2 | | | 0.114 | N | 8 | 45 | 3.1 | Y | 1 | Mac Kenzie,G | A |
| 15.07 | 820619 | 5.7 | M | AA | | | | | 0.050 | B | | 7 | | | | Green,D.W.E | |
| 15.07 | 820620 | 5.6 | S | AA | 12 | 5 | | | 0.050 | B | | 7 | | | | Green,D.W.E | B |
| 15.07 | 820621 | 5.7 | S | 112 | 14 | 4 | 1.3 | 120 | 0.050 | B | | 10 | 5.5 | Y | 1 | Bortle,J.E | |
| 15.07 | 820622 | 6.1 | S | AA | 10 | 3 | | | 0.080 | B | | 20 | | | | Green,D.W.E | B |
| 15.093 | 820623 | 8.0 | M | 112 | 2.3 | 7 | | | 0.15 | N | 8 | 44 | 3.5CM | Y | 1 | Allen,E | C |
| 15.107 | 820624 | 7.0 | B | 112 | | 1 | | | 0.05 | B | | 20 | 5.3 | Y | 1 | Onofre D.,D | |
| 15.163 | 820625 | 6.6 | M | 112 | | 6 | | | 0.05 | B | | 12 | 6.5M | Y | 1 | Knight,S | |
| 15.17 | 820626 | 5.7 | | 112 | 13 | 4 | 1.4 | 110 | 0.040 | B | | 8 | 6.5 | Y | 1 | Keen,R | D |
| 15.1958 | 820627 | 6.5 | S | DCS | 6 | 4 | | | 0.130 | R | 7.1 | 27 | 4.5 | | 3 | Machholz,D | E |
| 15.438 | 820628 | 6.0 | S | 112 | | | | | 0.025 | B | | 3 | | | | Seargent,D | |
| 15.438 | 820629 | | | | 12 | 6 | 2.0 | 107 | 0.08 | B | | 15 | | Y | 1 | Seargent,D | |
| 15.458 | 820630 | 6.5 | B | 3-39 | | | 1.5 | | 0.03 | B | | 8 | 5.8 | | | Thompson,G | |
| 15.528 | 820631 | 7.4 | B | 112 | | 4 | | | 0.12 | N | 6 | 40 | 4.0 | Y | 1 | Hayashi,H | F |
| 15.563 | 820632 | 6.0 | S | 112 | | | 6 | | 0.05 | B | | 7 | 6.5 | Y | 14 | Garradd,G | |
| 15.705 | 820633 | 8.3 | B | 112 | 10 8 | 1 | 1.5 | 90 | 0.065 | B | | 20 | 5.6 | Y | 1 | McBain,J | G |
| 15.768 | 820634 | 6.8 | M | 112 | | | | | 0.035 | B | | 9 | 6.1M | Y | 1 | Begbie,M.J.R | |
| 15.779 | 820635 | | | | 6.0 | 6 | | 120 | 0.30 | N | 8.5 | 102 | 6.1M | Y | 1 | Begbie,M.J.R | H |
| 15.826 | 820636 | 6.9 | M | CZ | 15 | 4 | | | 0.10 | B | | 25 | 4.8 | | | Hajek,P | |
| 15.831 | 820637 | 6.2 | S | 88 | 8 | 3 | | | 0.050 | B | | 7 | 5.1M | Y | 1 | Meozzi,D | |
| 15.8646 | 820638 | 6.9 | S | 112 | 15 | 3 | 0.5 | 80 | 0.080 | B | | 15 | 5.0 | Y | 1 | Korth,S | I |
| 15.878 | 820639 | 6.5 | M | 112 | 10 | 5 | 5.9 | 109 | 0.08 | B | | 11 | 5.8 | Y | 1 | Fleet,R.W | J |
| 15.88 | 820640 | 7.1 | S | DCS 13 | 4 | 3 | | | 0.120 | B | | 20 | 4.5MT | Y | 1 | van Loo,F.R | |
| 15.89 | 820641 | 7.1 | S | 112 | | | | | 0.08 | B | | 20 | 4.3 | | 1 | Shanklin,J.D | |
| 15.90 | 820642 | 7.5 | S | 112 | | | | | 0.20 | R | 12 | 40 | 4.3 | | 1 | Shanklin,J.D | |
| 15.903 | 820643 | 7.0 | B | SAO | 5.0 | 3 | | | 0.125 | R | 6 | 35 | 3.0 | Y | 1 | Guthier,O | |
| 15.909 | 820644 | 7.1 | M | 112 | 9 | 6 | | | 0.04 | B | | 12 | 5.5 | Y | 1 | Henshaw,C | K |
| 15.91 | 820645 | 6.2 | S | 112 | 10 | 2 | | | 0.080 | B | | 20 | 3.5MT | N | 10 | Bouma,R.J | B |
| 15.913 | 820646 | 5.4: | S | 112 | 18 | 2 | | | 0.08 | B | | 15 | 2.0C | N | 1 | Hurst,G.M | |
| 15.917 | 820647 | 6.2 | S | 112 | 9.0 | 3 | | | 0.070 | B | | 16 | 4.1MC | Y | 1 | Taylor,M.D | L |

NOTE A Comet definitely appeared brighter than magnitude 7.1 (which was reported magnitude 4 nights earlier). Smaller size probably due to moon nearby.
NOTE B Coma diameter approximate.
NOTE C Clouds.
NOTE D Modified Sidgwick method used.
NOTE E 42% moon 36 degrees away.
NOTE F Moon.
NOTE G Moonlight.
NOTE H Tail measurement refers to dust tail only.
NOTE I Tail length is upper limit, PA approximate.
NOTE J Midpoint on tail: 2.9 deg. at PA 108. End point of tail: 5.9 deg. at PA 109.
NOTE K Low.
NOTE L Thin 'line' thru coma. [sic]

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.056 | 831262 | 0.52 | 0.114 | N | 8 | 45 | 39 | 3.1 | 1 | Mac Kenzie,G | |
| 15.878 | 831263 | 4 | 0.08 | B | | 11 | | 5.8 | 1 | Fleet,R.W | A |
| 15.906 | 831264 | 0.08 | 0.36 | SC | 11 | 325 | 10 | 5.0 | 1 | Korth,S | B |

NOTE A Tail end point at PA 109. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Compared to the observations of May 12 the inner coma has considerably diminished.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.082 | 852141 | 0.050 | 1.8 | | 39.6 x27.0 | 3.00 | Kodak Tri-X | 400/ | N | O | 10/P | 1 | Valeriani,G | A |

NOTE A (Observer's image identifier is followed by suffix a. Ed.)

DATE: 16 MAY 1986

DATE: 16 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.042 | 820648 | 8.6 | B | AAVSO | 6.0 | 3 | | | 0.115 | N | 7.8 | 30 | 4.5 | Y | | Alves,A.A | |
| 16.06 | 820649 | 6.2 | S | AA | 7 | 2 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |
| 16.122 | 820650 | 7.2 | S | 112 | | 3 | | | 0.05 | B | | 20 | 4.5 | Y | 1 | da Silva,L.A.L | |
| 16.18 | 820651 | 5.9 | M | 112 | | | 4 | 105 | 0.05 | B | | 10 | 5.5M | Y | 11 | Hale,A | B |
| 16.23 | 820652 | 5.3 | B | 112 | 13 | 0 | | | 0.035 | B | | 7 | 3.9M | Y | 1 | Jacobson,E | |
| 16.448 | 820653 | 6.1 | S | 112 | | | | | 0.025 | B | | 3 | | Y | 1 | Seargent,D | C |
| 16.448 | 820654 | | | | | | 1.4 | 107 | 0.08 | B | | 15 | | | | Seargent,D | |
| 16.488 | 820655 | 6.6 | M | 112 | 4 | 4 | | | 0.10 | N | 10 | 55 | 4.5M | Y | 1 | Kato,T | D |
| 16.500 | 820656 | 6.5 | S | 112 | | | | | 0.05 | B | | 7 | 5.5CM | Y | 6 | Garradd,G | |
| 16.500 | 820657 | 7.1 | M | 112 | 8.2 | 4 | | | 0.08 | B | | 11 | M | | 1 | Mitsuma,S | |
| 16.510 | 820658 | 7.1 | M | 112 | | 5 | | | 0.16 | N | 6.3 | 31 | M | | 1 | Mitsuma,S | |
| 16.52 | 820659 | 6.5 | S | AAVSO | 5 | 3 | | | 0.07 | B | | 10 | 4.0M | Y | 1 | Hayashi,A | |
| 16.54 | 820660 | 6.2 | S | AAVSO | 6 | 4 | | | 0.13 | N | 6.3 | 24 | 4.0M | Y | 1 | Hayashi,A | |
| 16.55 | 820661 | 8.0 | B | 112 | 5 | 4 | | | 0.080 | B | | 11 | CM | Y | 3 | Okuda,M | E |
| 16.705 | 820662 | 8.5 | B | 112 | 8 | 1 | | | 0.065 | B | | 20 | 5.6 | Y | 1 | McBain,J | F |
| 16.781 | 820663 | 6.7 | B | 112 | 20 | 5 | | | 0.05 | B | | 7 | 4.9 | Y | 2 | Vincent,J | G |
| 16.789 | 820664 | 6.9 | M | 112 | | | | | 0.035 | B | | 9 | 5.6M | Y | 1 | Begbie,M.J.R | |
| 16.79 | 820665 | 6.5 | B | E | 5 | 5 | | | 0.06 | R | 10 | 21 | | | | Mormil,V | |
| 16.792 | 820666 | 7.7 | M | 112 | 8 | 6 | | | 0.04 | B | | 12 | 5.4 | N | 1 | Henshaw,C | |
| 16.792 | 820667 | 6.9 | B | 112 | 20 | 5 | | | 0.105 | R | 15 | 86 | 4.9 | Y | 2 | Vincent,J | H |
| 16.798 | 820668 | | | | 5.1 | 6 | | 130 | 0.30 | N | 8.5 | 102 | 5.6M | Y | 1 | Begbie,M.J.R | I |
| 16.80 | 820669 | 7.0 | B | AAVSO | 15 | 4 | | | 0.11 | B | | 20 | | | | Chernis,K | |
| 16.81 | 820670 | 6.1 | | 112 | 10 | 3 | | | 0.050 | B | | 10 | 5 | Y | 1 | Ward,A | |
| 16.816 | 820671 | 6.7 | M | 112 | 8.5 | 6 | 3.4 | 106 | 0.08 | B | | 11 | 5.5M | Y | 1 | Fleet,R.W | |
| 16.8819 | 820672 | 7.0: | S | 112 | 10 | 4 | | | 0.080 | B | | 15 | 3.5M | Y | 1 | Korth,S | J |
| 16.90 | 820673 | 7.2 | S | 112 | | | | | 0.08 | B | | 20 | 4.3 | | 1 | Shanklin,J.D | |
| 16.913 | 820674 | 5.8 | S | 112 | 14 | 2 | | | 0.05 | B | | 10 | 2.5C | Y | 1 | Hurst,G.M | |
| 16.915 | 820675 | | | | 14 | 3 | | | 0.08 | B | | 15 | 2.5C | Y | 1 | Hurst,G.M | |

NOTE A Coma diameter approximate.
NOTE B Some interference from moonlight. This probably precluded a naked-eye sighting.
NOTE C Some moonlight.
NOTE D m2 = 12 m.
NOTE E Moon.
NOTE F Moonlight. No tail seen.
NOTE G Also used Vehrenberg chart no. 247. Quarter moon.
NOTE H Clear sky.
NOTE I Tail measurement refers to dust tail only.
NOTE J Coma diameter approximate. Moonlight disturbing.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.816 | 831265 | 4 | 0.08 | B | | 11 | | 5.5 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 106. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.109 | 852142 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | X | 21/P | | Falsarella,N |

DATE: 17 MAY 1986

DATE: 17 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.1944 | 820676 | 6.9 | S | DCS | 7 | 2 | | | 0.080 | B | | 20 | 3.8 | | 3 | Machholz,D | A |
| 17.450 | 820677 | 6.6 | S | 112 | | 4 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 17.46 | 820678 | 7.8 | B | 112 | 6 | 4 | | | 0.230 | | 4.4 | 44 | TM | Y | 1 | Okuda,M | B |
| 17.48 | 820679 | 6.3 | M | AAVSO | 11 | 5 | | | 0.065 | R | 8 | 16 | 4.5M | Y | 1 | Nakamura,A | |
| 17.48 | 820680 | 6.9 | B | AAVSO | 8 | 6 | | | 0.20 | N | 5.6 | 35 | 4.5M | Y | 1 | Nakamura,A | C |
| 17.483 | 820681 | 6.9 | M | 112 | 2 | 5 | | | 0.10 | N | 10 | 55 | 3.5M | Y | 1 | Kato,T | |
| 17.53 | 820682 | 8.0 | B | | 10 | 6 | | | 0.15 | N | 8 | 43 | 4.5 | Y | 1 | Uda,K | |
| 17.58 | 820683 | 5.6 | | 112 | | 5 | 1.0 | | 0.08 | B | | 15 | 4.5M | N | 1 | Lovejoy,T | |
| 17.59 | 820684 | 6.4 | S | 112 | 8 | 7 | | | 0.25 | N | 5 | 38 | 5.6 | Y | | Clark,M.L | D |
| 17.684 | 820685 | 6.6 | S | 112 | 5 | 5 | | | 0.13 | R | 4 | 21 | 5.2 | Y | 1 | Campos,J | E |
| 17.747 | 820686 | 6.8 | M | 112 | | | | | 0.035 | B | | 9 | 5.3M | Y | 1 | Begbie,M.J.R | |
| 17.760 | 820687 | | | | 4.2 | 7 | | | 0.30 | N | 8.5 | 102 | 5.3M | Y | 1 | Begbie,M.J.R | |
| 17.792 | 820688 | 6.7 | M | 112 | 6.5 | 6 | 2.4 | 106 | 0.08 | B | | 11 | 4.7M | Y | 1 | Fleet,R.W | |
| 17.896 | 820689 | 7.6 | | | | | | | 0.080 | B | | 15 | 4 | Y | 1 | Nagele,A | F |

NOTE A 62% moon 22 degrees away.
NOTE B Instrument is Wright-Schmidt. (Observer gave limit as 10.0. Ed.) Moon.
NOTE C Tail length = yes.
NOTE D Moon up. No tail visible.
NOTE E Moonlight.
NOTE F (Observer indicated "A" method [Argelander?]. Ed.) Comparison star is SAO 137588.

DATE: 18 MAY 1986

DATE: 18 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.188 | 820690 | 7.6 | S | 112 | 30 | 2 | | | 0.203 | SC | 10 | 50 | 3 MC | Y | 1 | Gronek,J.D | A |
| 18.19 | 820691 | 6.1 | S | 112 | 9 | 3 | | | 0.080 | B | | 20 | 3.5MC | Y | 9 | Morris,C.S | |
| 18.806 | 820692 | 6.9 | M | 112 | 4.5 | 5 | 1.2 | 107 | 0.08 | B | | 11 | 4.6M | Y | 1 | Fleet,R.W | |
| 18.812 | 820693 | 7.0 | M | 112 | | | | | 0.035 | B | | 9 | 5.2M | Y | 1 | Begbie,M.J.R | |
| 18.899 | 820694 | 7.2 | M | 112 | 4 | 4 | | | 0.298 | N | 5 | 40 | 5.8 | Y | 1 | Stott,D | B |
| 18.90 | 820695 | 7.3 | S | 112 | | | | | 0.08 | B | | 20 | 3.5 | | 1 | Shanklin,J.D | |
| 18.94 | 820696 | 8.1 | S | 88 | | | | | 0.20 | R | 12 | 40 | 3.0 | | 1 | Shanklin,J.D | |

NOTE A 1st 1/4 moon. Exc. see.
NOTE B Gibbous moon.

DATE: 19 MAY 1986 DATE: 19 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.19 | 820697 | 6.3 | S | 112 | 11 | 3 | | | 0.080 | B | | 20 | 3.0MC | Y | 9 | Morris,C.S | |
| 19.365 | 820698 | 6.5 | S | 112 | | | | | 0.05 | B | | 10 | | | | Seargent,D | |
| 19.365 | 820699 | | | | | | 1.5 | 107 | 0.08 | B | | 15 | | N | 1 | Seargent,D | A |
| 19.698 | 820700 | 6.8 | S | 112 | 4.0 | 5 | | | 0.13 | R | 4 | 21 | 5.2 | Y | 1 | Campos,J | B |
| 19.79 | 820701 | 7.0 | B | M | 14 | 4 | | | 0.05 | B | | 7 | | | | Tsygankov,D | |
| 19.90 | 820702 | 8.0 | S | 88 | | | | | 0.20 | R | 12 | 40 | 3.0 | | 1 | Shanklin,J.D | |
| 19.903 | 820703 | 4.7 | B | | 7 3 | 4 | 3 | 216 | 0.040 | R | 9 | 12 | 6.0 | Y | 1 | Winkler,R | C |

NOTE A Moon.
NOTE B Moonlight.
NOTE C (PA value may have been incorrectly determined. Ed.)

DATE: 20 MAY 1986

DATE: 20 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.19 | 820704 | 6.5 | S | 112 | 11 | | 3 | | | 0.080 | B | | 20 | 3.0MC | Y | 9 | Morris,C.S | |
| 20.438 | 820705 | 6.6 | S | 112 | | | | | | 0.05 | B | | 10 | | N | 1 | Seargent,D | A |
| 20.719 | 820706 | 6.8 | M | 112 | 5.0 | | 6 | 1.2 | 106 | 0.08 | B | | 11 | 4.8M | Y | 1 | Fleet,R.W | |
| 20.787 | 820707 | 6.9 | M | 88 | | | | | | 0.035 | B | | 9 | 4.9M | Y | 1 | Begbie,M.J.R | |
| 20.794 | 820708 | 8.6 | M | 88 | 4.2 | | 6 | | 114 | 0.30 | N | 8.5 | 102 | 4.9M | Y | 1 | Begbie,M.J.R | B |
| 20.860 | 820709 | 6.5 | S | CZ | 10 | | 0 | | | 0.08 | B | | 10 | 3.1M | Y | 1 | Hroch,F | C |
| 20.882 | 820710 | 7.2 | B | 88 | 7 | 6 | 3 | | | 0.090 | N | 7 | 40 | 3.5 | Y | 1 | Kopplin,J | |
| 20.89 | 820711 | 6.1 | | 112 | 10 | | 3 | | | 0.050 | B | | 10 | 5 | Y | 1 | Ward,A | |
| 20.896 | 820712 | 7.5 | M | 112 | 4 | | 4 | | | 0.298 | N | 5 | 40 | 5.7 | Y | 1 | Stott,D | D |

NOTE A Moon.
NOTE B Tail measurement refers to dust tail only.
NOTE C Estimated magnitude uncertainty +/-0.8.
NOTE D Gibbous moon.

DATE: 21 MAY 1986

DATE: 21 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.365 | 820713 | 6.6 | S | 112 | | | | | 0.05 | B | | 10 | | N | 1 | Seargent,D | A |
| 21.365 | 820714 | | | | | | 1 | 105 | 0.08 | B | | 15 | | | | Seargent,D | B |
| 21.743 | 820715 | 7.0 | M | 88 | 5.0 | 5 | 2.1 | 109 | 0.08 | B | | 11 | 4.8M | Y | 1 | Fleet,R.W | |
| 21.774 | 820716 | 7.0 | M | 88 | | | | | 0.035 | B | | 9 | 4.9M | Y | 1 | Begbie,M.J.R | |
| 21.82 | 820717 | 6.3 | | 112 | 10 | 3 | | | 0.050 | B | | 10 | 5 | Y | 1 | Ward,A | |
| 21.896 | 820718 | 7.9 | M | 112 | 4 | 4 | | | 0.298 | N | 5 | 40 | 5.5 | Y | 1 | Stott,D | C |
| 21.91 | 820719 | 8.1 | S | 88 | | | | | 0.20 | R | 12 | 40 | 3.5 | | 1 | Shanklin,J.D | |

NOTE A Moon.
NOTE B Tail lengths approximate. Tail 2? [sic]
NOTE C Full moon.

DATE: 22 MAY 1986

DATE: 22 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.365 | 820720 | 6.8 | S | 112 | | | | | 0.05 | B | | 10 | | N | 1 | Seargent,D | A |
| 22.365 | 820721 | | | | | | 1 | 107 | 0.08 | B | | 15 | | | | Seargent,D | B |
| 22.507 | 820722 | 7.8 | M | 88 | 2 | 3 | | | 0.10 | N | 10 | 55 | 4.0M | Y | 1 | Kato,T | |
| 22.757 | 820723 | 8.8 | M | 88 | 2.7 | 6 | | | 0.30 | N | 8.5 | 102 | 4.9M | Y | 1 | Begbie,M.J.R | |
| 22.785 | 820724 | 7.3 | M | 88 | 5.0 | 5 | 1.2 | 112 | 0.08 | B | | 11 | 4.6M | Y | 1 | Fleet,R.W | |
| 22.789 | 820725 | 7.1 | M | 88 | | | | | 0.035 | B | | 9 | 4.9M | Y | 1 | Begbie,M.J.R | |

NOTE A Moon.
NOTE B PA approximate.

DATE: 23 MAY 1986

DATE: 23 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.80 | 820726 | 7.3 | B | M | 11 | 3 | 0.1 | 175 | 0.05 | B | | 7 | | | | Tsygankov,D |

DATE: 24 MAY 1986

DATE: 24 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.391 | 820727 | 7.0 | S | 88 | 7.5 | 3 | | | 0.15 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | A |
| 24.43 | 820728 | 8.4 | S | 112 | 2 | 3 | | | 0.317 | N | 5 | 86 | 3.5 | | | Jones,A | B |
| 24.81 | 820729 | 7.3 | B | M | 7 | 3 | | | 0.07 | N | 8 | 33 | | | | Pashko,D | |
| 24.83 | 820730 | 6.9 | B | E | 7 | 3 | | | 0.07 | N | 8 | 33 | | | | Kolomeyets,S | |
| 24.8819 | 820731 | 7.6 | S | 112 | | 3 | | | 0.080 | B | | 15 | 3.8 | Y | 1 | Korth,S | C |
| 24.889 | 820732 | 7.9 | B | SAO | 5.4 | 3 | | | 0.125 | R | 6 | 35 | 3.2 | Y | 1 | Guthier,O | |
| 24.910 | 820733 | 4.8 | B | | 7 3 | 4 | 3 | 218 | 0.040 | R | 9 | 12 | 6.0 | Y | 1 | Winkler,R | D |

NOTE A Bright moon. (Observer gave limit as approximately 12. Ed.)
NOTE B Moon 15 days.
NOTE C Coma diameter 3-4 arc min.
NOTE D (PA value may have been incorrectly determined. Ed.)

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.1785 | 820734 | 7.4 | S | SAO | 6 | 5 | 0.57 | 86 | 0.130 | R | 7.1 | 27 | 5.5 | | 11 | Machholz,D | |
| 25.19 | 820735 | 6.7 | M | 88 | | | | | 0.080 | B | | 20 | 5.5 | Y | 2 | Morris,C.S | |
| 25.20 | 820736 | 6.7 | M | 88 | | | 1.5 | 105 | 0.05 | B | | 10 | 5.5M | Y | 16 | Hale,A | A |
| 25.354 | 820737 | 6.7 | S | 112, 88 | | | | | 0.05 | B | | 10 | 5.8 | Y | 1 | Seargent,D | |
| 25.354 | 820738 | 6.7 | S | | | | 1.4 | 108 | 0.08 | B | | 15 | | | | Seargent,D | |
| 25.503 | 820739 | 8.0 | M | 88 | 6.0 | 5 | | | 0.16 | N | 6.3 | 31 | 4 M | N | 1 | Mitsuma,S | |
| 25.52 | 820740 | 6.9 | S | AAVSO | 6 | 4 | | | 0.13 | N | 6.3 | 24 | 5.0 | Y | 1 | Hayashi,A | |
| 25.52 | 820741 | 7.1 | M | 112 | 5 | 4 | | | 0.080 | B | | 11 | 3 MC | Y | 1 | Watanabe,N | |
| 25.524 | 820742 | 7.9 | M | 88 | | | | | 0.08 | B | | 11 | 4 M | N | 1 | Mitsuma,S | |
| 25.529 | 820743 | 7.0 | S | 88 | 3.6 | 5 | | | 0.1 | N | 10 | 56 | 4.5 | Y | 1 | Ichikawa,K | |
| 25.67 | 820744 | 8.5 | B | M | 4 | 0 | | | 0.05 | R | 7 | 20 | | | | Konstantinov,S | |
| 25.705 | 820745 | 7.3 | M | 88 | 6.7 | 6 | 4.7 | 108 | 0.08 | B | | 11 | 5.9 | Y | 1 | Fleet,R.W | B |
| 25.713 | 820746 | 7.4 | M | 88 | | | | | 0.035 | B | | 9 | 5.6M | Y | 1 | Begbie,M.J.R | |
| 25.727 | 820747 | | | | 3.4 | 6 | | | 0.30 | N | 8.5 | 102 | 5.6M | Y | 1 | Begbie,M.J.R | |
| 25.812 | 820748 | | S | 88 | 5.5 | 3 | | | 0.089 | R | 5.5 | 18 | 4.5 | N | 1 | Ventura,F | C |
| 25.82 | 820749 | 7 | B | E | 6 | 5 | | | 0.08 | R | 10 | 28 | | | | Mormil,V | |
| 25.826 | 820750 | 6.8 | S | 88 | 8 | 1 | | | 0.07 | B | | 20 | 4 | Y | 1 | Tanti,T | D |
| 25.847 | 820751 | 8.6 | B | 88 | 3 | 3 | | | 0.25 | N | 6 | 40 | 4 CT | N | 2 | Adamoli,G | |
| 25.858 | 820752 | 6.8 | M | CZ | 10 | 0 | | | 0.08 | B | | 10 | 6.2T | Y | 1 | Hroch,F | E |
| 25.859 | 820753 | 6.7 | S | 88 | 6 | 3 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Meozzi,D | |
| 25.864 | 820754 | 7.9 | M | CZ | 5 | | | | 0.10 | B | | 25 | | | 2 | Kucera,P | |
| 25.8645 | 820755 | 7.6 | B | 88 | 8 | 8 | | | 0.080 | B | | 11 | 5 C | Y | | Brogioni,A | F |
| 25.866 | 820756 | 7.6 | S | CZ | 7 | 4 | | | 0.035 | B | | 7 | 6.2 | Y | 1 | Hroch,F | G |
| 25.868 | 820757 | 6.9 | M | 88 | 11 | 4 | | | 0.030 | B | | 8 | 5.5 | Y | 1 | Villa,M | |
| 25.869 | 820758 | 7.4 | S | 88 | 5 | 1 | | | 0.05 | B | | 10 | 5 C | Y | 1 | Menichetti,R | |
| 25.872 | 820759 | 7.3 | S | 88 | 5 | 2 | | | 0.113 | N | 8 | 22 | 5.5 | Y | 1 | Schambeck,C.M | |
| 25.875 | 820760 | 7.0 | M | 88 | | 4 | | | 0.03 | B | | 8 | 5.5 | Y | 1 | Melandri,F | |
| 25.875 | 820761 | 7.9 | B | 88 | | | | | 0.090 | N | 7 | 26 | 3.5 | Y | 1 | Vohla,F | |
| 25.879 | 820762 | 8.1 | B | SAO | 2.7 | 4 | 0.1 | 128 | 0.250 | N | 6 | 75 | 3.8 | Y | 1 | Guthier,O | |
| 25.88 | 820763 | 7.4 | S | 88 | 5 | 3 | | | 0.080 | B | | 15 | 4 | Y | 1 | Glowinski,C | |
| 25.882 | 820764 | 7.9 | | | 6 | 3 | | | 0.350 | SC | 11 | 120 | 4.0C | Y | 1 | Marx,H | H |
| 25.886 | 820765 | 7.8 | B | | 2.5 | 5 | | | 0.110 | R | 6.8 | 47 | 4.0C | Y | 1 | Lipski,P | |
| 25.889 | 820766 | 7.0 | S | SAO | 10 | 4 | | | 0.063 | B | | 9 | 4.0 | Y | 2 | Kammerer,A | I |
| 25.896 | 820767 | 7.2 | S | 88 | 20 | 3 | | | 0.050 | B | | 16 | 6.2 | Y | 1 | Nolle,M | |
| 25.903 | 820768 | 7 | B | 88 | | 4 | | | 0.200 | SC | 10 | 50 | 5.0 | Y | 7 | Linder,J | J |
| 25.903 | 820769 | 7.9 | | | | | | | 0.080 | B | | 15 | 4 | Y | 1 | Nagele,A | K |
| 25.910 | 820770 | 4.8 | B | | 7 3 | 3 | 2 | 218 | 0.040 | R | 9 | 12 | 6.0 | Y | 1 | Winkler,R | L |

NOTE A Some interference from moonlight (full moon) at end of observation.
NOTE B Midpoint on tail: 2.3 deg. at PA 108. End point of tail: 4.7 deg. at PA 108.
NOTE C Mist. Magnitude <<6.2. [sic]
NOTE D Seeing good, transparency fair/poor. Haze.
NOTE E Estimated magnitude uncertainty +/-0.2. Coma diameter determined by comparison with a pair of stars. Measurement from a plot yields 10 arc min.
NOTE F I perceive detail. (Roughly translated by IHW staff. Ed.)
NOTE G Estimated magnitude uncertainty +/-0.2.
NOTE H Comparison stars SAO 137559, 137576. (Observer indicated "A" method [Argelander?]. Ed.)
NOTE I In 0.075 Newton starlike central condensation, about 10 mag. glimpsed.
NOTE J Tail length 3-4'.
NOTE K Nearly invisible.
NOTE L (PA value may have been incorrectly determined. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.705 | 831266 | 4 | 0.08 | B | | 11 | | 5.9 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 108. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.834 | 852143 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 10.00 | Kodak 2415 | | Y | | 910/P | 4 | Jager,M | A |

NOTE A Magnitude 6.9; antitail 12 arc min. at PA 287. (Print submitted is composite of two 5 min. exposures separated by 4 min. Ed.)

DATE: 26 MAY 1986

DATE: 26 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.08 | 820771 | | | | 7.2 | 4 | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | |
| 26.08 | 820772 | 6.4 | S | 88 | 16 | 4 | | | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 26.101 | 820773 | 7.9 | S | 88 | 4.5 | 4 | | | 0.06 | R | 15 | 36 | 5.8 | Y | 3 | Morrison,W | |
| 26.101 | 820774 | 8.0 | S | 88 | 8 | | | | 0.035 | B | | 7 | 5.8 | Y | 3 | Morrison,W | A |
| 26.17 | 820775 | 6.2 | B | 88 | 16 | 0 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | |
| 26.1715 | 820776 | 7.7 | S | SAO | 6 | 4 | 0.29 | 90. | 0.130 | R | 7.1 | 27 | 5.6 | | 11 | Machholz,D | |
| 26.19 | 820777 | 6.7 | S | 88 | | 3 | | | 0.050 | B | | 10 | 6.2 | Y | 2 | Morris,C.S | |
| 26.21 | 820778 | 6.8 | M | 88 | | | 1.5 | 105 | 0.05 | B | | 10 | 5.5M | Y | 16 | Hale,A | B |
| 26.2188 | 820779 | 6.2 | M | 88 | 12 | 6 | 3.00 | 120 | 0.05 | B | | 7 | 6.1 | Y | 3 | Cook,A.J | |
| 26.34 | 820780 | 7.6 | S | MP-5 23 | | | | | 0.078 | R | 7.5 | 30 | | | | Jones,A | |
| 26.34 | 820781 | | | | 3 | 6 | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 26.360 | 820782 | 7.4 | S | 88 | | 4 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 26.42 | 820783 | 6.4 | S | 88 | 10 | | 1.0 | | 0.03 | R | 7 | 8 | 6.1C | | 1 | Lovejoy,T | |
| 26.481 | 820784 | 7.0 | S | 88 | 3.6 | 5 | | | 0.1 | N | 10 | 56 | 5.0 | Y | 1 | Ichikawa,K | |
| 26.482 | 820785 | 7.4 | S | 88 | 7.5 | 3 | | | 0.15 | N | 8 | 4 | | Y | 1 | Tregaskis,T.B | C |
| 26.51 | 820786 | 6.5 | M | 88 | 8 | 5 | | | 0.15 | N | 5.3 | 32 | 5.5 | Y | 1 | Oka,A | |
| 26.51 | 820787 | 9 | : | | | | | | 0.20 | N | 6 | 48 | 3 | Y | 5 | Tanikawa,M | |
| 26.52 | 820788 | 7.0 | S | AAVSO | 4 | 3 | | | 0.13 | N | 6.3 | 24 | 4.5 | Y | 1 | Hayashi,A | |
| 26.53 | 820789 | 6.8 | M | 112 | 13 | 3 | | | 0.080 | B | | 11 | 3 C | Y | 1 | Watanabe,N | |
| 26.531 | 820790 | 8.1 | M | 88 | 5.5 | 4 | | | 0.16 | N | 6.3 | 31 | 4 | N | 1 | Mitsuma,S | |
| 26.712 | 820791 | 7.1 | S | 88 | 6.0 | 4 | | | 0.13 | R | 4 | 21 | 5.5 | Y | 1 | Campos,J | |
| 26.729 | 820792 | 8.5 | B | 88 | 9 | 1 | 0.17 | 270 | 0.065 | B | | 20 | 6.2 | Y | 1 | McBain,J | D |
| 26.78 | 820793 | 6.9 | B | E | 8 | 5 | | | 0.08 | R | 10 | 28 | | | | Mormil,V | |
| 26.81 | 820794 | 6.8 | B | E | 13 | 5 | 1.5 | | 0.05 | B | | 7 | | | | Mormil,V | |
| 26.840 | 820795 | 6.9 | S | 88 | 5.5 | 3 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Meozzi,D | |
| 26.84 | 820796 | 7.0 | B | M | 6 | 5 | | | 0.05 | B | | 7 | | | | Mormil,V | |
| 26.858 | 820797 | 7.6 | S | X SEX | 8 | 7 | | | 0.080 | B | | 10 | | Y | 1 | Mikuz,H | E |
| 26.860 | 820798 | 7.3 | S | 88 | 7.0 | 5 | 1.00 | 100 | 0.08 | B | | 15 | 6.0 | Y | 3 | Haver,R | |
| 26.863 | 820799 | 8.0 | B | | 2.0 | 6 | | | 0.110 | R | 6.8 | 47 | 4.0C | N | 1 | Lipski,P | |
| 26.865 | 820800 | 7.2 | S | 88 | 7.5 | 3 | 1.00 | 100 | 0.05 | B | | 7 | 6.0 | Y | 3 | Haver,R | |
| 26.872 | 820801 | 8.0 | S | 88, 133 | 4 | 3 | | | 0.114 | N | 7.9 | 23 | 4.5C | Y | 1 | Di Meglio,F | |
| 26.875 | 820802 | 7.5 | S | 88 | 5 | 1 | | | 0.05 | B | | 10 | 4.5C | Y | 1 | Menichetti,R | |
| 26.875 | 820803 | 8.0 | B | 88 | | | | | 0.090 | N | 7 | 26 | 5.5 | Y | 1 | Vohla,F | |
| 26.885 | 820804 | 8.4 | B | CZ | 9 | 2 | | | 0.10 | B | | 25 | 4 | Y | 1 | Polak,J | F |
| 26.890 | 820805 | 8.4 | B | | 2.0 | 1 | | | 0.130 | N | 8 | 40 | 4.0 | Y | 1 | Lieder,F | |
| 26.899 | 820806 | 7.0 | S | 88 | | 4 | | | 0.030 | B | | 8 | 5.0 | Y | 1 | Villa,M | |
| 26.910 | 820807 | 4.9 | B | | 6 3 | 2 | 1 | 218 | 0.040 | R | 9 | 12 | 6.0 | Y | 1 | Winkler,R | G |
| 26.93 | 820808 | 8.4 | S | 88 | | | | | 0.20 | R | 12 | 40 | 4.0 | | 1 | Shanklin,J.D | H |
| 26.982 | 820809 | 7.9 | B | 88 | | 1 | | | 0.05 | B | | 20 | 5.5 | Y | 1 | Onofre D.,D | |

NOTE A Coma diameter approximate.
NOTE B Some interference from moonlight at end of observation. A distinct brightening in the outer coma, detached from the central condensation was observed with the 20 cm reflector.
NOTE C Bright moon and haze. (Observer gave limit as approximately 11. Ed.)
NOTE D Seeing very good; comet also visible in a 12x40 finderscope.
NOTE E Very good conditions.
NOTE F Magnitude estimate uncertainty +/-0.3 mag.
NOTE G (PA value may have been incorrectly determined. Ed.)
NOTE H Low.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 26.224 | 831267 | 3 | 0.050 | B | | 7 | 15 | 6.1 | 3 | Cook,A.J |
| 26.870 | 831268 | 0.75 | 0.114 | N | 7.9 | 23 | 15 | 4.5 | 1 | Di Meglio,F |

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.208 | 852144 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 25.00 | Kodak Tri-X | | N | M | 30/P | 1 | Webb,R | A |
| 26.881 | 852145 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 15.00 | Kodak Tri-X | 400/27 | N | O | 0/T | 1 | Mikuz,H | B |
| 26.890 | 852146 | 0.760 | 4 | 0.19 | 2.7 x 1.8 | 10.00 | Kodak Tri-X | 400/27 | N | O | 1/T | 1 | Mikuz,H | B |

NOTE A Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE B Weather conditions very good. Possible very thin cirrus clouds. (Observer's image identifier is followed by suffix A. Ed.)

DATE: 27 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.07 | 820810 | 7.7 | M | AA | | | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | |
| 27.07 | 820811 | 7.5 | S | AA | 4 | 5 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 27.09 | 820812 | 6.3 | S | 88 | 15 | 3 | | | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 27.09 | 820813 | 7.1 | S | AA | 8 | 3 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |
| 27.125 | 820814 | 6.8 | M | 88 | | 7 | 2.0 | 96 | 0.05 | B | | 12 | 6.2 | Y | 1 | Knight,S | |
| 27.15 | 820815 | 6.2 | B | 88 | 12 | 0 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | |
| 27.33 | 820816 | 7.0 | S | 88 | | | | | 0.050 | B | | 7 | | | | Jones,A | |
| 27.33 | 820817 | | | | 7 | 5 | | | 0.078 | R | 7.5 | 30 | | | | Jones,A | |
| 27.33 | 820818 | | | | | 6 | 0.25 | 115 | 0.317 | N | 5 | 86 | 5.2 | | | Jones,A | B |
| 27.352 | 820819 | 6.8 | S | 112, 88 | 9 | | | | 0.05 | B | | 10 | 6.1 | Y | 1 | Seargent,D | |
| 27.352 | 820820 | | | | | | 1 | 100 | 0.08 | B | | 15 | | | | Seargent,D | C |
| 27.38 | 820821 | 6.5 | S | 88 | 11 | | 1.0 | | 0.08 | B | | 15 | 6.1C | | 1 | Lovejoy,T | D |
| 27.479 | 820822 | 8.1 | M | 88 | 6.4 | 5 | | | 0.16 | N | 6.3 | 31 | 5 | Y | 1 | Mitsuma,S | |
| 27.483 | 820823 | 8.2 | M | 88 | 4.8 | 5 | | | 0.16 | N | 6.3 | 80 | 5 | Y | 1 | Mitsuma,S | |
| 27.501 | 820824 | 8.0 | M | 88 | 2 | 3 | | | 0.10 | N | 10 | 55 | 4.0C | Y | 1 | Kato,T | |
| 27.52 | 820825 | 8.1 | B | | 7 | 6 | | | 0.15 | N | 8 | 43 | 5.0 | Y | 1 | Uda,K | |
| 27.708 | 820826 | 7.4 | S | 88 | 5.5 | 4 | | | 0.13 | R | 4 | 21 | 5.2 | Y | 1 | Campos,J | |
| 27.726 | 820827 | 7.5 | M | 88 | 7.0 | 6 | 3.1 | 109 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | |
| 27.76 | 820828 | 7.8 | B | E | | 3 | 0.1 | 183 | 0.07 | N | 8 | 33 | | | | Shitikov,A | |
| 27.809 | 820829 | 7.5 | M | 88 | | | | | 0.035 | B | | 9 | 6.0 | Y | 1 | Begbie,M.J.R | |
| 27.81 | 820830 | 7.3 | B | E | 10 | 5 | 0.5 | | 0.08 | R | 10 | 28 | | | | Mormil,V | |
| 27.816 | 820831 | 6.8 | S | 88 | 8 | 4 | | | 0.07 | B | | 20 | 4.5 | Y | 1 | Tanti,T | E |
| 27.817 | 820832 | | | | 4.0 | 6 | | 100 | 0.30 | N | 8.5 | 102 | 6.0 | Y | 1 | Begbie,M.J.R | F |
| 27.851 | 820833 | 7.6: | M | 112 | 5 | 1 | | | 0.15 | | 15 | 56 | 4.1C | Y | 1 | Posa,O | G |
| 27.854 | 820834 | 7.5 | M | | 5 | 2 | | | 0.15 | R | 15 | 56 | 4.1 | Y | 1 | Csomos,G | H |
| 27.859 | 820835 | 7.1 | S | 88 | 5 | 3 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Meozzi,D | |
| 27.8645 | 820836 | 7.9 | B | 88 | 7 | 3 | | | 0.080 | B | | 11 | 4.5C | Y | | Brogioni,A | I |
| 27.875 | 820837 | 7.6 | S | 88 | 5 | 1 | | | 0.05 | B | | 10 | 4.5C | N | 1 | Menichetti,R | |
| 27.89 | 820838 | 7.5 | B | 88 | 5.6 | 3 | 0.63 | 112 | 0.150 | N | 5 | 25 | 6.0 | Y | 2 | Merlin,J.-C | |
| 27.899 | 820839 | 7.3 | S | 88 | 9 | 2 | | | 0.08 | B | | 15 | 2.5 | Y | 1 | Hurst,G.M | |
| 27.904 | 820840 | 8.3 | M | 88 | | 3 | | | 0.298 | N | 5 | 40 | 5.5T | Y | 1 | Stott,D | |

NOTE A Coma diameter approximate.
NOTE B Diffuse coma, moderate condensation, small nucleus.
NOTE C Possible fan between PA about 60 and 150. PA 100 is approximate. PA 150 tail length approximate.
NOTE D PA 110 to 145.
NOTE E Seeing good, transparency fair. Haze.
NOTE F Tail measurement refers to dust tail only.
NOTE G Probably a rough estimate (missing map 88). Instrument is Coude refractor.
NOTE H Instrument is Coude refractor.
NOTE I I perceive detail. (Roughly translated by IHW staff. Ed.)

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.726 | 831269 | 4 | 0.08 | B | | 11 | | 6.0 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 109. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 28 MAY 1986

DATE: 28 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.17 | 820841 | 6.3 | B | 88 | 10 | 0 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | |
| 28.19 | 820842 | 6.9 | M | 88 | | | | | 0.05 | B | | 10 | 5.5 | Y | 17 | Hale,A | A |
| 28.2083 | 820843 | 6.9 | S | SAO | 6 | 3 | 0.43 | 92 | 0.080 | B | | 20 | 5.7 | | 1 | Machholz,D | |
| 28.368 | 820844 | 6.8 | S | 112, 88 | | | | | 0.05 | B | | 10 | 6.2 | Y | 1 | Seargent,D | |
| 28.368 | 820845 | | | | | | 1.6 | 108 | 0.08 | B | | 15 | | | | Seargent,D | |
| 28.766 | 820846 | 7.5 | M | 88 | | | | | 0.035 | B | | 9 | 5.9 | Y | 1 | Begbie,M.J.R | |
| 28.785 | 820847 | 7.4 | M | 88 | 6.5 | 6 | 3.7 | 110 | 0.08 | B | | 11 | 5.9 | Y | 1 | Fleet,R.W | B |
| 28.80 | 820848 | 7.8: | B | E | 9 | 5 | | | 0.08 | R | 10 | 28 | | | | Mormil,V | |
| 28.815 | 820849 | 7.5 | S | 88 | 7 | 3 | | | 0.089 | R | 5.5 | 18 | 5.2 | N | 1 | Ventura,F | C |
| 28.823 | 820850 | 6.8 | S | 88 | 8 | 4 | | | 0.07 | B | | 20 | 5 | Y | 1 | Tanti,T | D |
| 28.864 | 820851 | 7.8 | S | 88 | 4 | 1 | | | 0.05 | B | | 10 | 4 C | Y | 1 | Menichetti,R | |
| 28.865 | 820852 | 7.6 | M | 88 | 7 | 3 | | | 0.030 | B | | 8 | 5.0 | Y | 1 | Villa,M | |

NOTE A Some interference from thin cirrus.
NOTE B Midpoint on tail: 1.3 deg. at PA 110. End point of tail: 3.7 deg. at PA 110.
NOTE C PA 130 to 140.
NOTE D Seeing good. Transparency good/fair.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.785 | 831270 | 4 | 0.08 | B | | 11 | | 5.9 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 110. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 29 MAY 1986

DATE: 29 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.06 | 820853 | 7.8 | M | AA | | | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | |
| 29.06 | 820854 | 7.7 | S | AA | 4 | 5 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 29.100 | 820855 | 7.8 | S | 88 | 6 | 3 | | | 0.06 | R | 15 | 36 | 5.8T | Y | 3 | Morrison,W | |
| 29.21 | 820856 | 6.0: | | 88 | 40 | 0 | | | | EY | | | 6.2 | Y | 39 | Morris,C.S | B |
| 29.23 | 820857 | 6.3 | B | 88 | 10 | 0 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | |
| 29.23 | 820858 | 7.0 | S | 88 | 14.5 | 3 | 1.67 | 108 | 0.050 | B | | 10 | 6.2 | Y | 39 | Morris,C.S | |
| 29.365 | 820859 | 6.9 | S | 112, 88 | | | 3 | 108 | 0.05 | B | | 10 | 6.2 | Y | 1 | Seargent,D | |
| 29.42 | 820860 | 7.0 | S | 88 | | | | | 0.08 | B | | 15 | | | 1 | Lovejoy,T | |
| 29.54 | 820861 | 7.2 | S | DCS | 8 | 5 | | | 0.25 | N | 5 | 62 | 6.3 | Y | | Clark,M.L | |
| 29.726 | 820862 | 7.6 | M | 88 | 7.0 | 5 | 5.4 | 109 | 0.08 | B | | 11 | 6.1 | Y | 1 | Fleet,R.W | C |
| 29.740 | 820863 | 7.5 | S | 88 | 6.0 | 4 | | | 0.13 | R | 4 | 21 | 5.4 | Y | 1 | Campos,J | |
| 29.797 | 820864 | 7.6 | M | 88 | | | | | 0.035 | B | | 9 | 6.1 | Y | 1 | Begbie,M.J.R | |
| 29.80 | 820865 | 7.9: | B | E | 6 | 5 | | | 0.08 | R | 10 | 28 | | | | Mormil,V | |
| 29.810 | 820866 | | | | 5.9 | 5 | | 107 | 0.30 | N | 8.5 | 102 | 6.1 | Y | 1 | Begbie,M.J.R | D |
| 29.823 | 820867 | 7.2 | S | 88 | 6.5 | 2 | | | 0.07 | B | | 20 | 4 | Y | 1 | Tanti,T | E |

NOTE A Coma diameter approximate.
NOTE B Probable naked eye sighting, but comet very close to 6th mag. star. Coma diameter very uncertain.
NOTE C Midpoint on tail: 3.0 deg. at PA 108. End point of tail: 5.4 deg. at PA 109.
NOTE D Tail measurement refers to dust tail only.
NOTE E Seeing fair, transparency fair. Haze.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.726 | 831271 | 4 | 0.08 | B | | 11 | | 6.1 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 109. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.094 | 852147 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 285/P | 1 | Sabia,J.D | A |

NOTE A Anti-tail noted on negative, very short and spike-like. Not seen visually. Photograph made by J. Kamichitis and J.D. Sabia.

DATE: 30 MAY 1986

DATE: 30 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.19 | 820868 | 6.8 | | 88 | 15 | 3 | 0.5 | 100 | 0.040 | B | | 8 | 7.0 | Y | 1 | Keen,R | A |
| 30.21 | 820869 | 7.2 | S | SAO, 88 | 10 | 4 | 1.5 | 100 | 0.32 | N | 4 | 33 | 7.0 | Y | 1 | Keen,R | |
| 30.22 | 820870 | 6.3 | B | 88 | 10 | 0 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | |
| 30.33 | 820871 | 7.3 | S | 88 | | | | | 0.045 | R | 6 | 13 | | | | Jones,A | B |
| 30.33 | 820872 | | | | | 5 | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 30.365 | 820873 | 7.1 | S | 112, 88 | | | 2 | 110 | 0.05 | B | | 10 | 6.2 | Y | 1 | Seargent,D | C |
| 30.435 | 820874 | 7.6 | S | 88 | | 3 | | | 0.05 | B | | 10 | 5.0 | Y | 1 | Williams,P.F | |
| 30.740 | 820875 | 7.7 | M | 88 | | | | | 0.035 | B | | 9 | 6.1 | Y | 1 | Begbie,M.J.R | |
| 30.740 | 820876 | 7.6 | M | 88 | 6.5 | 6 | 4.8 | 109 | 0.08 | B | | 11 | 5.9 | Y | 1 | Fleet,R.W | D |
| 30.757 | 820877 | | | | 4.7 | 5 | | 115 | 0.30 | N | 8.5 | 102 | 6.1 | Y | 1 | Begbie,M.J.R | E |
| 30.80 | 820878 | 8.2: | B | | 5 | 5 | | | 0.08 | R | 10 | 28 | | | | Mormil,V | |
| 30.861 | 820879 | 8.0 | M | 88 | 5 | 3 | | | 0.114 | N | | 25 | 6.0 | Y | 2 | Villa,M | |
| 30.882 | 820880 | 7.9 | M | 88 | 8 | 3 | | | 0.030 | B | | 8 | 6.0 | Y | 2 | Villa,M | |
| 30.885 | 820881 | 8.1 | S | 88 | 3 | 0 | | | 0.05 | B | | 10 | 4 C | Y | 1 | Menichetti,R | |

NOTE A Visible with naked eye. Modified Sidgwick method used.
NOTE B Gaps in clouds.
NOTE C Near bright star. Fan-tail.
NOTE D Midpoint on tail: 2.8 deg. at PA 108. End point of tail: 4.8 deg. at PA 109.
NOTE E Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.740 | 831272 | 4 | 0.08 | B | | 11 | | 5.9 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 109. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 31 MAY 1986

DATE: 31 MAY 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.142 | 820882 | 7.7 | B | 88 | 9 | 2 | | | 0.05 | B | | 10 | 6.5 | Y | 1 | Hays Jr,R.H | |
| 31.18 | 820883 | 7.0 | | 88 | 15 | 3 | 0.4 | 100 | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | A |
| 31.2389 | 820884 | 7.6 | S | SAO | 4 | 2 | | | 0.130 | R | 7.1 | 27 | 4.4 | | 3 | Machholz,D | |
| 31.25 | 820885 | 6.1 | B | 88 | 14 | 1 | | | 0.035 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | |
| 31.354 | 820886 | 7.0 | S | 88 | | | | | 0.05 | B | | 10 | | | | Seargent,D | |
| 31.354 | 820887 | | | | 8 | 6 | 2 | 110 | 0.08 | B | | 15 | 6 | Y | 1 | Seargent,D | B |
| 31.448 | 820888 | 7.1 | S | 88 | | | 4 | | 0.05 | B | | 7 | 6.0 | Y | 14 | Garradd,G | |
| 31.47 | 820889 | 9.0 | B | | 5 | 5 | | | 0.15 | N | 8 | 43 | 4.0 | Y | 1 | Uda,K | |
| 31.722 | 820890 | 7.7 | M | 88 | 6.3 | 6 | 4.0 | 110 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | C |
| 31.740 | 820891 | 8.0 | M | 88 | 5.0 | 6 | 0.9 | 109 | 0.15 | N | 4 | 50 | 6.0 | Y | 1 | Fleet,R.W | |
| 31.80 | 820892 | 8.4: | B | E | 4 | 5 | | | 0.08 | R | 10 | 28 | | | | Mormil,V | |
| 31.801 | 820893 | 8.1 | M | 88 | | 5 | | | 0.04 | B | | 12 | 5.5 | Y | 1 | Henshaw,C | |
| 31.838 | 820894 | 7.3 | S | 88 | 4 | 3 | | | 0.050 | B | | 7 | 5.6 | Y | 1 | Meozzi,D | |
| 31.994 | 820895 | 8.3 | B | 88 | | 4 | | | 0.06 | R | 15 | 41 | 5.0 | Y | 1 | da Silva,L.A.L | |

NOTE A Modified Sidgwick method used.
NOTE B Tail length approximate.
NOTE C Midpoint on tail: 2.8 deg. at PA 109. End point of tail: 4.0 deg. at PA 110.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.722 | 831273 | 4 | 0.08 | B | | 11 | | 6.0 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 110. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 1 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.016 | 820896 | 8.4 | S | 88 | | 1 | | | 0.05 | B | | 20 | 5.3 | Y | 1 | Onofre D.,D | |
| 1.19 | 820897 | 7.0 | | 88 | | | | | 0.040 | B | | 8 | 5.0 | Y | 1 | Keen,R | A |
| 1.23 | 820898 | 6.2 | B | 88 | 16 | 1 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | |
| 1.243 | 820899 | 8.2 | S | 112 | 3 | 1 | | | 0.203 | SC | 10 | 50 | 8 | Y | 5 | Pryal,J | B |
| 1.32 | 820900 | 7.5 | S | 88 | | | | | 0.050 | B | | 7 | | Y | | Jones,A | |
| 1.32 | 820901 | | | | 5 | 4 | | | 0.078 | R | 7.5 | 30 | 5.2 | | | Jones,A | |
| 1.32 | 820902 | | | | | 5 | 0.15 | 115 | 0.317 | N | 5 | 86 | | | | Jones,A | C |
| 1.406 | 820903 | 7.0 | S | 88 | | | | | 0.05 | B | | 10 | 6 | Y | 1 | Seargent,D | |
| 1.406 | 820904 | | | | | 2 | | 108 | 0.08 | B | | 15 | | | | Seargent,D | |
| 1.45 | 820905 | 7.3 | S | 88 | | 5 | 1.5 | | 0.08 | B | | 15 | 6.0C | Y | 1 | Lovejoy,T | D |
| 1.747 | 820906 | 7.7 | S | 88 | 5.5 | 4 | | | 0.13 | R | 4 | 21 | 5.3 | Y | 1 | Campos,J | |
| 1.764 | 820907 | 7.8 | M | 88 | 6.5 | 6 | 3.9 | 109 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | |
| 1.81 | 820908 | 8.9: | B | E | 5 | 4 | | | 0.16 | N | | 50 | | | | Mormil,V | |
| 1.833 | 820909 | 7.4 | S | 88 | | 2 | | | 0.07 | B | | 20 | 4 | Y | 1 | Tanti,T | E |
| 1.833 | 820910 | 7.5 | S | 88 | 6 | 2 | | | 0.089 | R | 5.5 | 18 | 5.0C | N | 1 | Ventura,F | F |
| 1.861 | 820911 | 8.2 | M | 88 | 5 | 3 | | | 0.114 | N | | 25 | 4.5 | Y | 2 | Villa,M | |

NOTE A Observed during thunderstorm. Modified Sidgwick method used.
NOTE B Small transparent. About 20 deg. above southwest horizon.
NOTE C Diffuse coma, moderate condensation.
NOTE D Broad triple tail.
NOTE E Seeing good, transparency fair. Clouds.
NOTE F Street lights interfere.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.085 | 831274 | 4 | 0.050 | B | | 10 | 14 | 3.5 | 2 | Robinson,P.C | A |
| 1.764 | 831275 | 4 | 0.08 | B | | 11 | | 6.0 | 1 | Fleet,R.W | B |

NOTE A Tails at PAs 120, 300 (forward), 205, and 165; all were dimmest near the coma and increased in brightness with increasing distance from coma. All were also picked up with the unaided eye where more than 10 deg. from comet except for that at PA 205 which went to horizon too quickly. Each was also traced out to dozens of degrees length. Ray (misses coma) at PA 110 (388') to 20 (50') to 310 (200'); ray (misses coma) at PA 125 (392') to 200 (36') to 285 (200'). The coma was hardly condensed at all. It looked more like an enhancement in the tails. It was oval along the main tails at PAs 120 and 300.
NOTE B Tail end point at PA 109. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 2 JUN 1986 DATE: 2 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.006 | 820912 | 8.5 | S | 88 | | 1 | | | 0.05 | B | | 20 | 5.5 | Y | 1 | Onofre D.,D | |
| 2.020 | 820913 | 8.5 | S | 88 | | 3 | | | 0.06 | R | 15 | 41 | 5.0 | Y | 1 | da Silva,L.A.L | |
| 2.114 | 820914 | 7.9 | S | 88 | 6.5 | | | | 0.035 | B | | 7 | 5.8 | Y | 3 | Morrison,W | A |
| 2.114 | 820915 | 7.9 | S | 88 | 6.5 | 3 | | | 0.06 | R | 15 | 36 | 5.8 | Y | 3 | Morrison,W | |
| 2.19 | 820916 | 6.5 | B | 88 | 15 | 0 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | |
| 2.20 | 820917 | 7.3 | M | 88 | | | 1.5 | 105 | 0.05 | B | | 10 | 5 | Y | 3 | Hale,A | B |
| 2.20 | 820918 | 7.2 | S | 88 | 12.5 | 3 | | | 0.050 | B | | 10 | 4.0 | Y | 7 | Morris,C.S | |
| 2.20 | 820919 | 7.2 | S | 88 | 12.5 | 2 | 1.17 | 115 | 0.080 | B | | 20 | 4.0 | Y | 7 | Morris,C.S | |
| 2.354 | 820920 | 7.1 | S | 88 | | | | | 0.05 | B | | 10 | | Y | 1 | Seargent,D | |
| 2.717 | 820921 | 8.1 | M | 88 | | 6 | | | 0.04 | B | | 12 | 5.5 | Y | 1 | Henshaw,C | |
| 2.722 | 820922 | 8.0 | M | 88 | 5.9 | 6 | 3.6 | 109 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | C |
| 2.733 | 820923 | 8.2 | M | 88 | 5.0 | 6 | 1.1 | 108 | 0.15 | N | 4 | 50 | 6.0 | Y | 1 | Fleet,R.W | |
| 2.746 | 820924 | 8.0 | M | 88 | | | | | 0.035 | B | | 9 | 5.9 | Y | 1 | Begbie,M.J.R | |
| 2.755 | 820925 | 8.9 | M | 88 | 4.0 | 6 | | 109 | 0.30 | N | 8.5 | 102 | 5.9 | Y | 1 | Begbie,M.J.R | D |
| 2.80 | 820926 | 9 : | B | E | 4 | 4 | 0.3 | 90 | 0.16 | N | | 50 | | | | Mormil,V | E |

NOTE A Coma diameter approximate. 0.15 f/5 refr. 31x coma dia. 5', DC = 4, tail 0.20 deg. long, PA = 115 deg.
NOTE B Sky conditions poor; thick haze and possible cirrus. Tail very faint in 10x50 binoculars.
NOTE C Midpoint on tail: 1.3 deg. at PA 109. End point of tail: 3.6 deg. at PA 109.
NOTE D Tail measurement refers to dust tail only.
NOTE E Tail length and PA approximate.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.722 | 831276 | 4 | 0.08 | B | | 11 | | 6.0 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 109. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.012 | 852148 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | X | 23/P | | Falsarella,N |
| 2.973 | 852149 | 0.050 | 2.0 | | | 3.50 | Kodak Tri-X | 400/ | N | X | 24/P | | Falsarella,N |

DATE: 3 JUN 1986

DATE: 3 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.076 | 820927 | 8.7 | M | 88 | 5 | 4 | | | 0.254 | N | 4.5 | 36 | 3.9 | Y | 1 | DeYoung,J.A | |
| 3.08 | 820928 | 7.2 | S | AA | 11 | 1 | | | 0.050 | B | | 7 | | | | Green,D.W.E | A |
| 3.08 | 820929 | 7.3 | S | AA | 10 | 3 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |
| 3.087 | 820930 | 8.1 | S | 88 | 3.5 | 6 | | | 0.152 | N | 5.5 | 69 | 5.2T | Y | 1 | Hudak,D.M | |
| 3.10 | 820931 | | | | 6.5 | 3 | | 120 | 0.317 | N | 6 | 55 | | | | Bortle,J.E | |
| 3.10 | 820932 | 6.8 | S | 88 | 7 | 2 | | | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 3.101 | 820933 | 9.8 | M | 88 | | 2 | | | 0.15 | N | 8 | 102 | 3.0CT | Y | 1 | Allen,E | |
| 3.116 | 820934 | 8.2 | S | 88 | 3.6 | 4 | | | 0.15 | R | 5 | 31 | 5.8 | Y | 3 | Morrison,W | |
| 3.19 | 820935 | 6.6 | B | 88 | 9 | 0 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | |
| 3.365 | 820936 | 7.1 | S | 88 | | | | | 0.05 | B | | 10 | | | | Seargent,D | |
| 3.365 | 820937 | | | | | | 2 | 110 | 0.08 | B | | 15 | 6.1 | Y | 1 | Seargent,D | |
| 3.486 | 820938 | 7.8 | S | 88 | | | 4 | | 0.05 | B | | 7 | 6.0 | Y | 14 | Garradd,G | |
| 3.733 | 820939 | 8.1 | M | 88 | 5.2 | 6 | 3.5 | 111 | 0.08 | B | | 11 | 5.9 | Y | 1 | Fleet,R.W | |
| 3.743 | 820940 | 8.3 | M | 88 | 5.5 | 5 | 0.7 | 109 | 0.15 | N | 4 | 50 | 5.9 | Y | 1 | Fleet,R.W | |
| 3.758 | 820941 | 9.1 | M | 88 | 3.5 | 6 | | 96 | 0.30 | N | 8.5 | 102 | 6.1 | Y | 1 | Begbie,M.J.R | B |
| 3.759 | 820942 | 8.2 | M | 88 | | | | | 0.04 | B | | 12 | 5.5 | Y | 1 | Henshaw,C | |
| 3.80 | 820943 | 8.9: | B | E | 4 | 4 | | | 0.16 | N | | 50 | | | | Mormil,V | A |
| 3.861 | 820944 | | | 88 | 4 | 2 | | | 0.114 | N | | 50 | 5.0 | Y | 1 | Villa,M | |
| 3.89 | 820945 | 7.6: | S | DCS 13 | | 4 | | | 0.050 | B | | 10 | 6 | Y | 4 | Comello,G | |
| 3.90 | 820946 | 7.4: | S | 88 | | 3 | | | 0.080 | B | | 20 | 6 | Y | 4 | Bouma,R.J | |
| 3.974 | 820947 | 8.7 | S | 88 | | 1 | | | 0.05 | B | | 20 | 5.5 | Y | 1 | Onofre D.,D | |

NOTE A Coma diameter approximate.
NOTE B Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.083 | 831277 | 0.83 | 0.152 | N | 8 | 38 | | 5 | 1 | Cuthill,L | A |
| 3.733 | 831278 | 4 | 0.08 | B | | 11 | | 5.9 | 1 | Fleet,R.W | B |

NOTE A Coma DC = 6. Tail at PA 75-135. Axis of head at PA 280. The coma has a faint but strong central condensation. Coma size - 3.5'. The tail between PA 75 deg. and 135 deg. is very faint. Magnitude using 10x50 binoculars is estimated to be about 8.5 (Morris method).
NOTE B Tail end point at PA 111. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 4 JUN 1986

DATE: 4 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.075 | 820948 | 8.8 | M | 88 | 6 | 4 | | | 0.254 | N | 4.5 | 36 | 3.9 | Y | 1 | DeYoung,J.A | |
| 4.087 | 820949 | 8.3 | S | 88 | 3.1 | 5 | | | 0.152 | N | 5.5 | 69 | 5.1T | Y | 1 | Hudak,D.M | |
| 4.19 | 820950 | 7.3: | S | 88 | 10 | | | | 0.080 | B | | 20 | 3.0C | Y | 9 | Morris,C.S | |
| 4.365 | 820951 | 7.1 | S | 88 | | | | | 0.05 | B | | 10 | 6 | Y | 1 | Seargent,D | A |
| 4.365 | 820952 | | | | | | 1 | 108 | 0.08 | B | | 15 | | | | Seargent,D | B |
| 4.722 | 820953 | 8.0 | M | 88 | 5.2 | 6 | 3.0 | 110 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | C |
| 4.733 | 820954 | 8.2 | M | 88 | 4.6 | 5 | 0.7 | 106 | 0.15 | N | 4 | 50 | 6.0 | Y | 1 | Fleet,R.W | |
| 4.733 | 820955 | 8.2 | M | 88 | | | | | 0.04 | B | | 12 | 6.2 | Y | 1 | Henshaw,C | |
| 4.776 | 820956 | 9.2 | M | 88 | 3.0 | 6 | | 96 | 0.30 | N | 8.5 | 102 | 6.4 | Y | 1 | Begbie,M.J.R | D |
| 4.826 | 820957 | 7.5 | S | 88 | 6.5 | 3 | | | 0.07 | B | | 20 | 4.5 | Y | 1 | Tanti,T | E |
| 4.87 | 820958 | 7.5 | S | 88 | 7 | 4 | | | 0.080 | B | | 20 | 6 T | Y | 4 | Bouma,R.J | |
| 4.88 | 820959 | 7.6 | S | DCS 13 | | 4 | | | 0.050 | B | | 10 | 6 | Y | 4 | Comello,G | F |
| 4.983 | 820960 | 8.7 | S | 88 | | | | | 0.06 | R | 15 | 41 | 4.0 | Y | 1 | da Silva,L.A.L | |

NOTE A Close to 6.9 mag. star.
NOTE B Broad tail.
NOTE C Midpoint on tail: 1.6 deg. at PA 111. End point of tail: 3.0 deg. at PA 110.
NOTE D Tail measurement refers to dust tail only.
NOTE E Seeing good, transparency fair. Haze.
NOTE F 0.5 deg. tail seen in 0.203 Schmidt-Cass. at magnification of 50x.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.087 | 831279 | 0.38 | 0.318 | N | 8 | 75 | 20 | 6.0 | 1 | Hathaway,W | |
| 4.094 | 831280 | 0.4 | 0.050 | B | | 10, 22 | 30 | 4.5 | 2 | Robinson,P.C | A |
| 4.722 | 831281 | 4 | 0.08 | B | | 11 | | 6.0 | 1 | Fleet,R.W | B |

NOTE A Main tail at PA 105; tail at PA 135; detached tail at PA 200 (about 5' to >40'); forward tail at PA 280; tail at PA 315. All tails were brighter with increasing distance from coma and indefinitely long. Tail at PA 80 (less than or equal to 15'). Patch at PA 315 (6.8'); patch was a diffuse patch of haziness on PA 315 tail. The coma looked distinctly triangular in shape. Newtonian 0.152 f/4 also used.
NOTE B Tail end point at PA 110. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.105 | 852150 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 30.00 | Kodak 2415 | | Y | S | 12/C | 1 | Chester,G.R | A |
| 4.120 | 852151 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 30.00 | Kodak 2415 | | Y | S | 13/C | 1 | Chester,G.R | B |

NOTE A (Observer's image identifier is 12A. Ed.)
NOTE B (Observer's image identifier is 13A. Ed.)

DATE: 5 JUN 1986

DATE: 5 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.20 | 820961 | 7.2 | | SAO, 88 | 13 | 2 | | | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | A |
| 5.21 | 820962 | 7.2 | B | 88 | 6 | 0 | | | 0.050 | B | | 7 | 6.0 | Y | 1 | Jacobson,E | |
| 5.32 | 820963 | 8.2 | S | MP-5 23 | 2.5 | 4 | | | 0.078 | R | 7.5 | 30 | 5.5 | | | Jones,A | B |
| 5.32 | 820964 | | | | 1.8 | 5 | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 5.365 | 820965 | 7.2 | S | 88 | | | 1 | 100 | 0.05 | B | | 10 | 6 | Y | 1 | Seargent,D | C |
| 5.375 | 820966 | 7.4 | S | 88 | | | | | 0.05 | B | | 10 | 6 | Y | 1 | Seargent,D | |
| 5.733 | 820967 | 7.9 | M | 88 | 5.9 | 6 | 3.0 | 111 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | |
| 5.737 | 820968 | 8.2 | M | 88 | | 3 | | | 0.04 | B | | 12 | 6.2 | Y | 1 | Henshaw,C | |
| 5.747 | 820969 | 8.1 | M | 88 | 5.0 | 6 | 0.7 | 110 | 0.15 | N | 4 | 50 | 6.0 | Y | 1 | Fleet,R.W | |
| 5.767 | 820970 | 8.9 | M | 88 | 4.5 | 6 | | 96 | 0.30 | N | 8.5 | 102 | 6.5 | Y | 1 | Begbie,M.J.R | D |
| 5.882 | 820971 | 7.9 | B | | 3.7 | 2 | | | 0.10 | B | | 14 | 4.0 | Y | 1 | Hasubick,W | |
| 5.89 | 820972 | 7.6 | S | 88 | 7 | 3 | | | 0.080 | B | | 20 | 6 | Y | 4 | Bouma,R.J | |
| 5.89 | 820973 | 7.6 | S | DCS 13 | | 4 | | | 0.050 | B | | 10 | 6 | Y | 4 | Comello,G | |

NOTE A Modified Sidgwick method used.
NOTE B Comet among two stars.
NOTE C Tail broad, faint. PA approximate.
NOTE D Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.733 | 831282 | 4 | 0.08 | B | | 11 | | 6.0 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 111. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 6 JUN 1986

DATE: 6 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.20 | 820974 | 7.0 | M | 88 | 14.5 | 3 | 0.42 | 110 | 0.080 | B | | 20 | 5.5 | Y | 16 | Morris,C.S | |
| 6.21 | 820975 | 7.0 | S | 88 | 18 | 3 | | | 0.050 | B | | 10 | 5.5 | Y | 16 | Morris,C.S | |
| 6.33 | 820976 | 8.0 | S | MP-5 23 | | | | | 0.045 | R | 6 | 13 | 5.5 | | | Jones,A | |
| 6.33 | 820977 | | | | 5 | 2 | 0.15 | 108 | 0.078 | R | 7.5 | 30 | | | | Jones,A | |
| 6.33 | 820978 | | | | 2.5 | 4 | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 6.708 | 820979 | 8.0 | M | 88 | 5.6 | 5 | 2.5 | 110 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | |
| 6.715 | 820980 | 8.3 | M | 88 | 4.6 | 5 | 0.8 | 108 | 0.15 | N | 4 | 50 | 6.0 | Y | 1 | Fleet,R.W | |
| 6.724 | 820981 | 8.2 | M | 88 | | 3 | | | 0.04 | B | | 12 | 6.2 | Y | 1 | Henshaw,C | |
| 6.740 | 820982 | 7.8 | S | 88 | 6.0 | 5 | | | 0.13 | R | 4 | 21 | 5.7 | Y | 1 | Campos,J | A |
| 6.749 | 820983 | 9.3 | M | 88 | 4.5 | 5 | | 101 | 0.30 | N | 8.5 | 102 | 6.5 | Y | 1 | Begbie,M.J.R | B |
| 6.813 | 820984 | 7.9: | S | 88 | 4 | 2 | | | 0.089 | R | 5.5 | 18 | 5.0 | N | 1 | Ventura,P | |
| 6.88 | 820985 | 8.0 | B | 88 | | | | | 0.080 | B | | 20 | 6 | Y | 4 | Bouma,R.J | |
| 6.88 | 820986 | 7.7 | S | DCS 13 | | 4 | | | 0.050 | B | | 10 | 6 | Y | 4 | Comello,G | |
| 6.89 | 820987 | 7.7 | S | 88 | 7 | 4 | | | 0.080 | B | | 20 | 6 | Y | 4 | Bouma,R.J | |
| 6.89 | 820988 | 7.7 | S | 88 | | 3 | | | 0.050 | B | | 10 | 6 | Y | 4 | Bouma,R.J | |

NOTE A No tail seen.
NOTE B Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.708 | 831283 | 4 | 0.08 | B | | 11 | | 6.0 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 110. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.103 | 852152 | 0.305 | 1.5 | 0.203 | 6.8 x 4.5 | 3.00 | Kodak 2415 | | Y | X | 287/P | 1 | Sabia,J.D | A |

NOTE A Anti-tail noted on negative, very short and spike-like. Not seen visually. Photograph made by J. Kamichitis and J.D. Sabia.

DATE: 7 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.20 | 820989 | 7.4 | | SAO, 88 | 12 | 2 | | | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | A |
| 7.20 | 820990 | 7.5 | M | 88 | | | | | 0.05 | B | | 10 | 6 | Y | 3 | Hale,A | |
| 7.20 | 820991 | | | | | | 0.5 | 105 | 0.20 | N | 6 | 61 | 6 | Y | 3 | Hale,A | |
| 7.21 | 820992 | 7.2 | S | 88 | 16 | 3 | | | 0.050 | B | | 10 | 6.2 | Y | 16 | Morris,C.S | |
| 7.22 | 820993 | 7.2 | M | 88 | 10 | 3 | 0.42 | 112 | 0.080 | B | | 20 | 6.2 | Y | 16 | Morris,C.S | B |
| 7.23 | 820994 | 7.4 | M | 88 | 7 | 4 | 0.42 | 112 | 0.256 | N | 4.5 | 45 | 6.2 | Y | 16 | Morris,C.S | C |
| 7.389 | 820995 | 7.9 | S | 88 | 7.5 | 3 | | | 0.15 | N | 8 | 64 | | Y | 1 | Tregaskis,T.B | D |
| 7.413 | 820996 | 7.9 | S | 88 | | 3 | | | 0.10 | N | 6 | 24 | | Y | 1 | Tregaskis,T.B | E |
| 7.440 | 820997 | 7.9 | S | 88 | | 3 | | | 0.05 | B | | 10 | | Y | 1 | Tregaskis,T.B | F |
| 7.50 | 820998 | 7.7 | M | 88 | 5 | 4 | | | 0.15 | N | 5.3 | 32 | 6.0 | Y | 1 | Oka,A | |
| 7.758 | 820999 | 9.0 | M | 88 | 3.5 | 6 | | 97 | 0.30 | N | 8.5 | 102 | 6.4 | Y | 1 | Begbie,M.J.R | G |
| 7.88 | 821000 | 7.9 | S | 88 | 7 | 2 | | | 0.080 | B | | 20 | 6 | Y | 4 | Bouma,R.J | |
| 7.88 | 821001 | 7.9 | S | DCS 13 | | 4 | | | 0.050 | B | | 10 | 6 | Y | 4 | Comello,G | |
| 7.89 | 821002 | 8.0: | S | 88 | | | | | 0.050 | B | | 10 | 6 | Y | 4 | Bouma,R.J | |

NOTE A Modified Sidgwick method used.
NOTE B Multiple tails define the shape of the fan tail.
NOTE C Multiple tails define the shape of the fan tail. No central condensation was visible.
NOTE D Clear and windy. (Observer gave limit as approximately 13. Ed.)
NOTE E Clear and windy. (Observer gave limit as approximately 12. Ed.)
NOTE F Patchy cloud. (Observer gave limit as approximately 10. Ed.)
NOTE G Tail measurement refers to dust tail only.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.232 | 852153 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 5.00 | 3M 1000 | 1000/ | N | O | 4/N | 7 | Edberg,S.J | |
| 7.237 | 852154 | 0.500 | 3.6 | 0.140 | 4.1 x 2.7 | 10.00 | 3M 1000 | 1000/ | N | O | 5/N | 7 | Edberg,S.J | |
| 7.245 | 852155 | 0.260 | 5.2 | | 7.9 x 5.3 | 1.00 | 3M 1000 | 1000/ | N | O | 6/N | 7 | Edberg,S.J | |
| 7.248 | 852156 | 0.260 | 5.2 | | 7.9 x 5.3 | 5.00 | 3M 1000 | 1000/ | N | O | 7/N | 7 | Edberg,S.J | A |
| 7.422 | 852157 | 0.135 | 3.5 | | 15.2 x10.2 | 10.00 | Ektachr.400 | | N | X | 40/S | 1 | Tregaskis,T.B | B |

NOTE A Exposure time uncertain.
NOTE B Push processed to 800 ASA.

DATE: 8 JUN 1986

DATE: 8 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.000 | 821003 | 9.0: | | 88 | | 2 | | | 0.06 | R | 15 | 41 | 5.0 | Y | 1 | da Silva,L.A.L | A |
| 8.20 | 821004 | 7.2 | M | 88 | 14.5 | 3 | | | 0.050 | B | | 10 | 6.0 | Y | 7 | Morris,C.S | |
| 8.20 | 821005 | 7.2 | M | 88 | 9 | 3 | 0.42 | 76 | 0.080 | B | | 20 | 6.0 | Y | 7 | Morris,C.S | B |
| 8.21 | 821006 | | | | 6.0 | 5 | 0.42 | 76 | 0.256 | N | 4.5 | 45 | 6.0 | Y | 7 | Morris,C.S | C |
| 8.2250 | 821007 | 7.8 | S | DCS | 4 | 5 | | | 0.254 | N | | 32 | 5.4 | | 12 | Machholz,D | |
| 8.2250 | 821008 | 7.8 | S | DCS | 4 | 5 | | | 0.254 | N | 3.8 | 32 | 5.4 | | 12 | Machholz,D | |
| 8.375 | 821009 | 7.5 | S | 88 | | | | | 0.05 | B | | 10 | 6.2 | Y | 1 | Seargent,D | |
| 8.389 | 821010 | 7.8 | S | 88 | | | | | 0.05 | B | | 7 | 6.0C | Y | 17 | Garradd,G | |
| 8.47 | 821011 | 8.2 | M | AAVSO | 8 | 5 | | | 0.065 | R | 8 | 16 | 4.5 | Y | 1 | Nakamura,A | |
| 8.47 | 821012 | 8.1 | S | AAVSO | 6.5 | 6 | | | 0.20 | N | 5.6 | 35 | 4.5 | Y | 1 | Nakamura,A | |
| 8.476 | 821013 | 7.9 | M | 88 | 2.5 | 4 | | | 0.1 | N | 10 | 56 | 4.0 | Y | 1 | Ichikawa,K | |
| 8.490 | 821014 | 8.8 | M | 88 | 3 | 3 | | | 0.10 | N | 10 | 55 | 4.0C | Y | 1 | Kato,T | |
| 8.49 | 821015 | 8.3 | B | | 8 | 6 | | | 0.15 | N | 8 | 43 | 4.5 | Y | 1 | Uda,K | |
| 8.50 | 821016 | 7.8 | S | AAVSO | 4 | 2 | | | 0.13 | N | 6.3 | 44 | 4.0 | Y | 1 | Hayashi,A | |
| 8.50 | 821017 | 7.9 | M | 88 | 4 | 4 | | | 0.15 | N | 5.3 | 32 | 5.5 | Y | 1 | Oka,A | |
| 8.501 | 821018 | 8.4 | S | 88 | 4.3 | 3 | | | 0.15 | N | 6 | 28 | 2.5 | N | 1 | Kanai,K | |
| 8.507 | 821019 | 8.2 | M | 88 | 6.5 | 5 | | | 0.16 | N | 6.3 | 31 | 5.5 | Y | 4 | Mitsuma,S | |
| 8.826 | 821020 | 7.7 | S | 88 | 5.4 | 4 | | | 0.07 | B | | 20 | 5.5 | Y | 1 | Tanti,T | D |
| 8.830 | 821021 | 8.7 | S | CZ | 2 | 4 | | | 0.08 | B | | 10 | 5.1T | Y | 1 | Hroch,F | E |
| 8.875 | 821022 | 7.9 | S | 88 | 6.0 | 3 | | | 0.05 | B | | 7 | 6.0 | Y | 4 | Haver,R | |
| 8.88 | 821023 | 7.9 | S | DCS 13 | | 4 | | | 0.050 | B | | 10 | 6 | Y | 4 | Comello,G | |
| 8.89 | 821024 | 7.8 | S | 88 | 7.5 | 3 | | | 0.080 | B | | 20 | 6 | Y | 4 | Bouma,R.J | |
| 8.89 | 821025 | 7.8 | S | 88 | | 2 | | | 0.050 | B | | 10 | 6 | Y | 4 | Bouma,R.J | |

NOTE A Comet very faint.
NOTE B Multiple tails define the shape of the fan tail. Stellar condensation was obvious.
NOTE C Multiple tails define the shape of the fan tail. Nucleur outburst! Stellar condensation (m2 = 9.5:) was present. Even at 222x condensation was stellar.
NOTE D Seeing good, transparency excellent. Wind.
NOTE E Estimated magnitude uncertainty +/-0.3. Stellar appearance, hardly visible.

DATE: 9 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.08 | 821026 | 7.4 | S | AA | 7 | 1 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |
| 9.09 | 821027 | 7.9 | S | 88 | 3.5 | 4 | | | 0.317 | N | 6 | 68 | | | | Bortle,J.E | |
| 9.09 | 821028 | 7.9 | M | AA | | | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | |
| 9.09 | 821029 | 7.1: | S | 88 | 9 | 1 | | | 0.050 | B | | 10 | 6 | Y | 1 | Bortle,J.E | |
| 9.09 | 821030 | 7.4 | S | 88 | 7 | 3 | | | 0.080 | B | | 20 | | | | Bortle,J.E | |
| 9.09 | 821031 | 8.1 | S | AA | 3 | 4 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 9.101 | 821032 | 8.4 | S | 88 | 2.2 | 6 | | | 0.203 | N | 6 | 101 | 5.1 | Y | 1 | Hudak,D.M | |
| 9.119 | 821033 | 8.2 | S | 88 | 4.5 | 3 | | | 0.15 | R | 5 | 31 | 5.2 | Y | 3 | Morrison,W | B |
| 9.139 | 821034 | 8.5 | S | 88 | 5 | 1 | | | 0.15 | N | 8 | 30 | 5.5 | Y | 2 | Hays Jr,R.H | C |
| 9.21 | 821035 | 7.4 | S | 88 | 11 | 4 | 1.25 | 95 | 0.050 | B | | 10 | 6.0 | Y | 7 | Morris,C.S | D |
| 9.22 | 821036 | 7.4 | M | 88 | 7 | 4 | 1.75 | 68 | 0.080 | B | | 20 | 6.0 | Y | 7 | Morris,C.S | D |
| 9.23 | 821037 | | | | 3.6 | 5 | 0.5 | 110 | 0.256 | N | 4.5 | 45 | 6.0 | Y | 7 | Morris,C.S | E |
| 9.23 | 821038 | | | | | | | | 0.256 | N | 4.5 | 156 | 6.0 | Y | 7 | Morris,C.S | F |
| 9.2542 | 821039 | 7.5 | M | 88 | 7 | 5 | | | 0.05 | B | | 7 | 6.3 | Y | 3 | Cook,A.J | G |
| 9.2667 | 821040 | | | | 4 | 6 | | | 0.32 | N | 4.8 | 64 | 6.3 | Y | 3 | Cook,A.J | |
| 9.410 | 821041 | 7.7 | S | 88 | | | 1.5 | | 0.05 | B | | 7 | 6.5 | Y | 2 | Garradd,G | |
| 9.413 | 821042 | | | | | | 1.5 | | 0.31 | N | 5.4 | 129 | | | | Garradd,G | |
| 9.417 | 821043 | 7.6 | S | 88 | 11 | 3 | | | 0.05 | B | | 10 | 6 | Y | 1 | Seargent,D | |
| 9.417 | 821044 | | | | | | 2 | 110 | 0.08 | B | | 15 | | | | Seargent,D | |
| 9.47 | 821045 | 8.2 | M | AAVSO | 7 | 4 | | | 0.065 | R | 8 | 16 | 4.5 | Y | 5 | Nakamura,A | |
| 9.47 | 821046 | 8.2 | S | AAVSO | 6 | 4 | | | 0.20 | N | 5.6 | 35 | 4.5 | Y | 5 | Nakamura,A | |
| 9.476 | 821047 | 8.0 | M | 88 | 3.0 | 3 | | | 0.1 | N | 10 | 40 | 4.0 | Y | 1 | Ichikawa,K | |
| 9.712 | 821048 | 8.0 | M | 88 | 4.8 | 5 | 2.6 | 110 | 0.08 | B | | 11 | 6.1 | Y | 1 | Fleet,R.W | |
| 9.729 | 821049 | 8.2 | S | 88 | 5 | 4 | | | 0.13 | R | 4 | 21 | 5.9 | Y | 1 | Campos,J | |
| 9.736 | 821050 | 8.2 | M | 88 | 4.6 | 6 | 0.8 | 110 | 0.15 | N | 4 | 50 | 6.0 | Y | 1 | Fleet,R.W | |
| 9.745 | 821051 | 9.2 | M | 88 | 3.6 | 6 | | 98 | 0.30 | N | 8.5 | 102 | 6.4 | Y | 1 | Begbie,M.J.R | H |
| 9.753 | 821052 | 8.3 | M | 88 | | | | | 0.04 | B | | 12 | 6.2 | Y | 1 | Henshaw,C | |
| 9.823 | 821053 | 8.0 | S | 88 | 5.1 | 4 | | | 0.07 | B | | 20 | 5 | Y | 1 | Tanti,T | I |
| 9.870 | 821054 | 7.7 | S | | 2 | | | | 0.05 | B | | 7 | 6.3 | Y | 4 | Haver,R | |
| 9.870 | 821055 | 7.9 | S | | 7.0 | 2 | | | 0.08 | B | | 15 | 6.3 | Y | 4 | Haver,R | |
| 9.878 | 821056 | | | | | | | | 0.10 | B | | 14 | 4.0 | Y | 1 | Hasubick,W | J |
| 9.88 | 821057 | 7.9: | S | 88 | | 2 | | | 0.080 | B | | 20 | 4.5 | Y | 4 | Bouma,R.J | |
| 9.89 | 821058 | 8.2: | S | DCS 13 | | 3 | | | 0.050 | B | | 10 | 4.5 | Y | 4 | Comello,G | |
| 9.90 | 821059 | 8.4 | B | 88 | 5.5 | 3 | | | 0.150 | N | 5 | 25 | 5.5 | Y | 2 | Merlin,J.-C | |
| 9.994 | 821060 | > 9.0 | | 88 | | 2 | | | 0.06 | R | 15 | 41 | 4.5 | Y | 1 | da Silva,L.A.L | K |

NOTE A Coma diameter approximate.
NOTE B Altitude 15 deg.
NOTE C S Sex c AAVSO chart also used.
NOTE D Multiple tails define the shape of the fan tail.
NOTE E Sunward tail was diffuse and very faint.
NOTE F Condensation observed on 860608.21 is no longer stellar. Instead there is a diffuse 0.3' disk.
NOTE G Tail north boundary 1.15 deg. at PA 96, south boundary 1.10 deg. at PA 112.
NOTE H Tail measurement refers to dust tail only.
NOTE I Seeing good, transparency good. Artificial light. Low.
NOTE J Very weakly visible. (Translated by IHW staff. Ed.)
NOTE K Comet very faint. DC uncertain.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.215 | 831284 | 3 | 0.050 | B | | 7 | 10 | 6.3 | 3 | Cook,A.J | |
| 9.712 | 831285 | 4 | 0.08 | B | | 11 | | 6.1 | 1 | Fleet,R.W | A |
| 9.885 | 831286 | | 0.356 | SC | 11 | 200 | | | | Soc. Astro. de France | B |

NOTE A Tail end point at PA 110. (Duration not indicated. Time of observation is assumed to be start time. Ed.)
NOTE B Drawing made by M. Verdenet. (Duration not indicated. Time of observation is assumed to be start time. Drawing data inferred from magnitude report form. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.211 | 852158 | 0.260 | 5.2 | | 7.9 x 5.3 | 5.00 | 3M 1000 | 1000/ | N | O | 8/N | 7 | Edberg,S.J | |
| 9.214 | 852159 | 2.306 | 5 | 0.45 | 0.9 x 0.6 | 25.00 | Kodak Tri-X | | N | M | 31/P | 1 | Webb,R | A |
| 9.216 | 852160 | 0.260 | 5.2 | | 7.9 x 5.3 | 6.33 | 3M 1000 | 1000/ | N | O | 9/N | 7 | Edberg,S.J | |
| 9.224 | 852161 | 0.260 | 5.2 | | 7.9 x 5.3 | 10.00 | 3M 1000 | 1000/ | N | O | 10/N | 7 | Edberg,S.J | B |
| 9.237 | 852162 | 0.200 | 4 | | 10.3 x 6.9 | 10.00 | 3M 1000 | 1000/ | N | O | 11/N | 7 | Edberg,S.J | |
| 9.244 | 852163 | 0.200 | 4 | | 10.3 x 6.9 | 5.00 | 3M 1000 | 1000/ | N | O | 12/N | 7 | Edberg,S.J | |
| 9.269 | 852164 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 5.00 | Kodak 2415 | | Y | S | 30/P | 1 | Yen,B | C |

NOTE A Film pushed to ASA 1000. Standard 3 min.-3 min. processing.
NOTE B Exposure time approximate.
NOTE C (Observer's image identifier is 24. Ed.) Instrument is Schmidt camera.

DATE: 10 JUN 1986

DATE: 10 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.08 | 821061 | 7.2 | S | AA | 8 | 4 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |
| 10.09 | 821062 | 8.0 | S | | 5 | 2 | | | 0.203 | N | 7 | 54 | 4.0 | N | 1 | Harrington,P | |
| 10.09 | 821063 | 7.2 | S | AA | 9 | 1 | | | 0.050 | B | | 7 | | | | Green,D.W.E | A |
| 10.09 | 821064 | 7.3 | S | 88 | 7 | 2 | | | 0.080 | B | | 20 | 6.5 | Y | 1 | Bortle,J.E | |
| 10.09 | 821065 | 7.9 | S | 88 | 5.3 | 4 | | | 0.317 | N | 6 | 55 | | | | Bortle,J.E | |
| 10.097 | 821066 | 8.5 | S | 88 | | | | | 0.203 | N | 6 | 101 | 5.1T | Y | 1 | Hudak,D.M | |
| 10.21 | 821067 | 7.5 | S | 88 | 11 | 3 | 2.0 | 95 | 0.050 | B | | 10 | 6.0 | Y | 7 | Morris,C.S | B |
| 10.22 | 821068 | 7.4 | M | 88 | 9 | 3 | | | 0.080 | B | | 20 | 6.0 | Y | 7 | Morris,C.S | |
| 10.23 | 821069 | | | | 4.3 | | 0.33 | 105 | 0.256 | N | 4.5 | 45 | 6.0 | Y | 7 | Morris,C.S | C |
| 10.23 | 821070 | | | | | | | | 0.256 | N | 4.5 | 156 | 6.0 | Y | 7 | Morris,C.S | D |
| 10.45 | 821071 | 7.8 | S | 88 | | 4 | 1.5 | | 0.08 | B | | 15 | 6.0C | | 1 | Lovejoy,T | E |
| 10.48 | 821072 | 9.5 | M | | | 3 | | | 0.31 | N | | 55 | 4.0T | Y | 2 | Suzuki,K | F |
| 10.718 | 821073 | 8.4 | M | 88 | | | | | 0.035 | B | | 9 | 6.7 | Y | 1 | Begbie,M.J.R | G |
| 10.731 | 821074 | 9.3 | M | 88 | 4.4 | 6 | | 94 | 0.30 | N | 8.5 | 102 | 6.7 | Y | 1 | Begbie,M.J.R | H |
| 10.736 | 821075 | 8.0 | M | 88 | 4.8 | 6 | 2.4 | 110 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | |
| 10.747 | 821076 | 8.3 | M | 88 | 5.7 | 6 | 0.7 | 109 | 0.15 | N | 4 | 50 | 6.0 | Y | 1 | Fleet,R.W | |
| 10.771 | 821077 | 8.3 | M | 88 | | | | | 0.04 | B | | 12 | 6.2 | Y | 1 | Henshaw,C | |
| 10.833 | 821078 | 8.1 | S | 88 | 4 | 2 | | | 0.089 | R | 5.5 | 18 | 5.1 | N | 1 | Ventura,F | |

NOTE A Coma diameter approximate.
NOTE B Multiple tails define the shape of the fan tail.
NOTE C The sunward tail was very faint.
NOTE D In the coma, a stellar condensation (m2 = 10.3:) was surrounded by a small disk of material (perhaps 0.5' diameter) offset to the north relative to the condensation. The condensation/disk combination was off center toward the south within the coma.
NOTE E Haze. PA 115 to 142.
NOTE F Cloud.
NOTE G Power cut - complete darkness.
NOTE H Power cut - complete darkness. Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.125 | 831287 | 0.8 | 0.152 | N | 4 | 30 | 20 | 4.0 | 3 | Robinson,P.C | A |
| 10.736 | 831288 | 4 | 0.08 | B | | 11 | | 6.0 | 1 | Fleet,R.W | B |

NOTE A Main tail at PA 100 to 115; tail at PA 155-170; tail at PA 210; forward tail at PA 285; tail at PA 345; ray (misses coma) at PA 190 (64') to 300 (102'). The coma was slightly condensed. Tail at PA 155-170 seemed to join tail at PA 345 and the two were wider than the coma at the coma. "Tail" (ray) at PA 190-300 missed the coma, and like all other tails was very long. Another E-W tail passed north of the top of the drawing parallel to tails at PA 100-115 and PA 285.
NOTE B Tail end point at PA 110. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 11 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.19 | 821079 | 7.5 | | SAO, 88 | 10 | 1 | | | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | A |
| 11.19 | 821080 | 7.5 | M | 88 | | | 1 | 110 | 0.05 | B | | 10 | 6 | Y | 3 | Hale,A | |
| 11.19 | 821081 | | | | | | 1 | 110 | 0.20 | N | 6 | 61 | 6 | Y | 3 | Hale,A | |
| 11.20 | 821082 | 7.3 | S | 88 | 14.5 | 3 | 1.83 | 108 | 0.050 | B | | 10 | 5.5 | Y | 7 | Morris,C.S | B |
| 11.21 | 821083 | 7.3 | M | 88 | 9 | 3 | | | 0.080 | B | | 20 | 5.5 | Y | 7 | Morris,C.S | |
| 11.22 | 821084 | 7.9 | M | 88 | 4.5 | 4 | | | 0.256 | N | 4.5 | 45 | 5.5 | Y | 7 | Morris,C.S | C |
| 11.22 | 821085 | | | | 4.5 | | | | 0.256 | N | 4.5 | 156 | 5.5 | Y | 7 | Morris,C.S | D |
| 11.323 | 821086 | 8.2 | B | 88 | | 3 | | | 0.050 | B | | 7 | 5.3 | Y | 3 | Krisciunas,K | |
| 11.40 | 821087 | 8.5 | S | MP-5 23 | 4 | 2 | | | 0.078 | R | 7.5 | 30 | 5.2 | | | Jones,A | |
| 11.40 | 821088 | | | | 2.5 | 4 | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 11.48 | 821089 | 7.6 | S | AAVSO | 5 | 3 | | | 0.13 | N | 6.3 | 44 | 4.5M | Y | 1 | Bayashi,A | |
| 11.497 | 821090 | 8.5 | M | 88 | | | | | 0.16 | N | 6.3 | 31 | 3.5CM | N | 1 | Mitsuma,S | |
| 11.726 | 821091 | 8.2 | M | 88 | 5.2 | 6 | 2.1 | 109 | 0.08 | B | | 11 | 5.9 | Y | 1 | Fleet,R.W | |
| 11.740 | 821092 | 8.4 | M | 88 | 5.5 | 6 | 0.6 | 112 | 0.15 | N | 4 | 50 | 5.9 | Y | 1 | Fleet,R.W | |
| 11.746 | 821093 | 9.7 | M | 88 | 4.0 | 5 | | 105 | 0.30 | N | 8.5 | 102 | 6.2M | Y | 1 | Begbie,M.J.R | E |
| 11.779 | 821094 | 8.4 | M | 88 | | 8 | | | 0.04 | B | | 12 | 5.5 | Y | 1 | Henshaw,C | |
| 11.823 | 821095 | 8.2 | S | 88 | 4.6 | 2 | | | 0.07 | B | | 20 | 5 | Y | 1 | Tanti,T | F |

NOTE A Modified Sidgwick method used.
NOTE B Multiple tails define the shape of the fan tail.
NOTE C Sunward tail was suspected.
NOTE D Coma had disk of material (dia. = 0.8'), but no stellar condensation.
NOTE E Tail measurement refers to dust tail only.
NOTE F Seeing good, transparency excellent. Moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.726 | 831289 | 4 | 0.08 | B | | 11 | | 5.9 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 109. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 12 JUN 1986

DATE: 12 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.19 | 821096 | 7.6 | | SAO, 88 | 10 | 1 | | | 0.040 | B | | 8 | 6.0 | Y | 1 | Keen,R | |
| 12.19 | 821097 | 7.4 | S | 88 | 9 | 3 | 1.33 | 108 | 0.080 | B | | 20 | 5.0 | Y | 7 | Morris,C.S | A |
| 12.20 | 821098 | 8.0 | M | SAO, 88 | | | 0.3 | 105 | 0.32 | N | 4 | 33 | 6.0 | Y | 1 | Keen,R | |
| 12.20 | 821099 | 7.3 | S | 88 | 14.5 | 3 | | | 0.050 | B | | 10 | 5.0 | Y | 7 | Morris,C.S | |
| 12.2292 | 821100 | 7.9 | M | 88 | 12 | 4 | | | 0.05 | B | | 7 | 6.0 | Y | 3 | Cook,A.J | |
| 12.705 | 821101 | 8.2 | M | 88 | 4.8 | 5 | 1.8 | 111 | 0.08 | B | | 11 | 5.7M | Y | 1 | Fleet,R.W | |
| 12.715 | 821102 | 8.3 | M | 88 | 5.0 | 6 | 0.5 | 108 | 0.15 | N | 4 | 50 | 5.7M | Y | 1 | Fleet,R.W | |
| 12.733 | 821103 | 8.4 | M | 88 | | | | | 0.04 | B | | 12 | 5.5 | N | 1 | Henshaw,C | B |
| 12.740 | 821104 | 9.5 | M | 88 | 3.2 | 6 | | 101 | 0.30 | N | 8.5 | 102 | 6.1M | Y | 1 | Begbie,M.J.R | C |
| 12.837 | 821105 | 8.7 | S | 88 | | 2 | | | 0.203 | SC | 10 | 80 | 4 | Y | 1 | Tanti,T | D |

NOTE A Modified Sidgwick method used.
NOTE B Moon.
NOTE C Tail measurement refers to dust tail only.
NOTE D Seeing good, transparency good. Moon. Wind.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.231 | 831290 | 3 | 0.050 | B | | 7 | 5 | 6.0 | 3 | Cook,A.J | A |
| 12.705 | 831291 | 4 | 0.08 | B | | 11 | | 5.7 | 1 | Fleet,R.W | B |

NOTE A Some interference from light of crescent moon.
NOTE B Tail end point at PA 111. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.233 | 852165 | 3.20 | 7 | 0.457 | 0.6 x 0.4 | 10.00 | Kodak 098 | | N | | 039/P | 1 | Royer,R | A |

NOTE A Wr. 4 filter used. Drive slipped during exposure.

DATE: 13 JUN 1986

DATE: 13 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.19 | 821106 | 7.7 | | SAO, 88 | 12 | 1 | | | 0.040 | B | | 8 | 5.5 | Y | 1 | Keen,R | A |
| 13.21 | 821107 | 7.5 | B | 88 | 12 | 0 | | | 0.050 | B | | 10 | 5.2M | Y | 1 | Jacobson,E | |
| 13.715 | 821108 | 8.3 | S | 88 | 5 | 5 | | | 0.13 | R | 4 | 21 | 4.8 | Y | 1 | Campos,J | B |
| 13.741 | 821109 | 9.6 | M | 88 | 3.0 | 5 | | 102 | 0.30 | N | 8.5 | 102 | 6.1M | Y | 1 | Begbie,M.J.R | C |
| 13.743 | 821110 | 8.3 | M | 88 | 5.2 | 5 | 1.5 | 106 | 0.08 | B | | 11 | 5.6M | Y | 1 | Fleet,R.W | |
| 13.753 | 821111 | 8.6 | M | 88 | 4.6 | 5 | 0.3 | 108 | 0.15 | N | 4 | 50 | 5.5M | Y | 1 | Fleet,R.W | |
| 13.819 | 821112 | 8.7 | S | 88 | 2.2 | 2 | | | 0.203 | SC | 10 | 80 | 4 | Y | 1 | Tanti,T | D |

NOTE A Modified Sidgwick method used.
NOTE B Some moonlight.
NOTE C Tail measurement refers to dust tail only.
NOTE D Seeing good, transparency excellent. Moon.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.743 | 831292 | 4 | 0.08 | B | | 11 | | 5.6 | 1 | Fleet,R.W | A |

NOTE A Tail end point at PA 106. Moonlight. (Duration not indicated. Time of observation is assumed to be start time. Ed.)

DATE: 14 JUN 1986

NETWORK: AMATEUR OBSERVATION

DATE: 14 JUN 1986

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.708 | 821113 | 8.5 | M | 88 | 3.7 | 5 | | | 0.08 | B | | 11 | 4.8M | Y | 1 | Fleet,R.W |
| 14.728 | 821114 | 9.7 | M | 88 | 2.5 | 6 | | | 0.30 | N | 8.5 | 102 | 5.6M | Y | 1 | Begbie,M.J.R |

DATE: 15 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.09 | 821115 | 6.8: | S | AA | 8 | 1 | | | 0.080 | B | | 20 | | | | Green,D.W.E | A |
| 15.34 | 821116 | 9.2 | S | MP-5 24 | | | | | 0.078 | R | 7.5 | 30 | 5.1 | | | Jones,A | B |
| 15.34 | 821117 | 9.5 | S | MP-5 24 | 2 | 3 | | | 0.317 | N | 5 | 86 | | | | Jones,A | |
| 15.720 | 821118 | 9.8 | M | 88 | 2.5 | 5 | | | 0.30 | N | 8.5 | 102 | 5.6M | Y | 1 | Begbie,M.J.R | |

NOTE A Coma diameter approximate.
NOTE B Moon 8 days. Comet a very faint patch.

DATE: 16 JUN 1986

DATE: 16 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.33 | 821119 | 9.5 | S | MP-5 24 | 1 | 4 | | | 0.317 | N | 5 | 86 | 4.5 | | | Jones,A | A |

NOTE A Coma diameter is lower limit. Moon 9 days.

DATE: 17 JUN 1986

DATE: 17 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.09 | 821120 | 8.5: | S | AA | 2 | 1 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 17.727 | 821121 | 9.8 | M | S SEX | | 5 | | | 0.30 | N | 8.5 | 102 | 5.0M | Y | 1 | Begbie,M.J.R | |

NOTE A Coma diameter approximate.

DATE: 18 JUN 1986

DATE: 18 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.08 | 821122 | 7.8: | S | AA | 2.5 | 1 | | | 0.229 | R | 12 | 86 | | | | Green,D.W.E | A |
| 18.354 | 821123 | 8.0 | S | 88 | | | | 110 | 0.08 | B | | 15 | | N | 1 | Seargent,D | B |
| 18.815 | 821124 | 9.8 | M | S SEX | 2.0 | 5 | | | 0.30 | N | 8.5 | 102 | 5.0M | Y | 1 | Begbie,M.J.R | |

NOTE A Coma diameter approximate.
NOTE B Moon.

DATE: 19 JUN 1986

DATE: 19 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.19 | 821125 | 7.4 | B | 88 | 17 | 1 | | | 0.050 | B | | 10 | 2.9M | Y | 1 | Jacobson,E |
| 19.726 | 821126 | 9.8 | M | S SEX | 2.7 | 5 | | | 0.30 | N | 8.5 | 102 | 4.8M | Y | 1 | Begbie,M.J.R |

DATE: 20 JUN 1986

DATE: 20 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.20 | 821127 | 7.7 | B | 88 | 12 | 0 | | | 0.050 | B | | 10 | 2.8M | Y | 1 | Jacobson,E |

DATE: 22 JUN 1986

DATE: 22 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.38 | 821128 | 10 | S | MP-5 23 | | | | | 0.317 | N | 5 | 86 | 3.6 | | | Jones,A | A |
| 22.694 | 821129 | 9.2 | M | 88 | 2.6 | 4 | | | 0.08 | B | | 11 | 4.5M | Y | 1 | Fleet,R.W | |
| 22.708 | 821130 | 9.6 | M | 88 | 1.9 | 3 | | | 0.15 | N | 4 | 50 | 4.4M | Y | 1 | Fleet,R.W | |
| 22.722 | 821131 | 10.0 | M | | 1.6 | 6 | | | 0.35 | N | 5.5 | 100 | 4.4M | Y | 1 | Fleet,R.W | B |

NOTE A Moon 15 days. Very faint path glimpsed.
NOTE B Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 23 JUN 1986

DATE: 23 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.08 | 821132 | 8.9: | S | AA | 2 | 1 | | | 0.203 | N | 6 | 49 | | | | Green,D.W.E | A |
| 23.17 | 821133 | 9.0 | S | SAO, 88 | 6 | 1 | | | 0.32 | N | 4 | 33 | 4.0 | Y | 1 | Keen,R | B |
| 23.21 | 821134 | 7.8 | B | 88 | 6 | 0 | | | 0.050 | B | | 10 | 2.7M | Y | 1 | Jacobson,E | C |
| 23.351 | 821135 | 8.1 | S | 88 | | | | | 0.08 | B | | 15 | | Y | 1 | Seargent,D | D |

NOTE A Coma diameter approximate.
NOTE B Full moon.
NOTE C Low altitude.
NOTE D Some light from moon.

DATE: 24 JUN 1986 DATE: 24 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.20 | 821136 | 7.9 | S | SAO | 8 | 2 | 0.5 | 103 | 0.080 | B | | 20 | 5.5 | Y | 7 | Morris,C.S | |
| 24.20 | 821137 | 7.8 | S | SAO | 11 | 2 | | | 0.050 | B | | 10 | 5.5 | Y | 7 | Morris,C.S | |
| 24.20 | 821138 | 8.4 | M | SAO | 5.6 | 3 | | | 0.256 | N | 4.5 | 45 | 5.5 | Y | 7 | Morris,C.S | |
| 24.21 | 821139 | 7.9 | B | 88 | 7 | 0 | | | 0.050 | B | | 10 | 4.8M | Y | 1 | Jacobson,E | A |
| 24.2153 | 821140 | 8.5 | M | 88 | 12 | 4 | | | 0.05 | B | | 7 | 6.0 | Y | 3 | Cook,A.J | |
| 24.361 | 821141 | 8.2 | S | 88 | | | | | 0.08 | B | | 15 | | Y | 1 | Seargent,D | |
| 24.708 | 821142 | 8.9 | M | | 3.7 | 6 | 0.9 | 107 | 0.08 | B | | 11 | 6.1 | Y | 1 | Fleet,R.W | B |
| 24.719 | 821143 | 9.4 | M | | 3.6 | 6 | 0.4 | 105 | 0.15 | N | 4 | 50 | 6.1 | Y | 1 | Fleet,R.W | B |
| 24.721 | 821144 | 9.9 | M | S SEX | 3.0 | 4 | | 97 | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | C |
| 24.726 | 821145 | 10.0 | M | | 3.2 | 6 | 0.5 | 110 | 0.35 | N | 5.5 | 100 | 6.0 | Y | 1 | Fleet,R.W | B |

NOTE A Low altitude.
NOTE B Comparison star magnitudes derived from S Sex and SX Leo charts.
NOTE C Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 24.217 | 831293 | 3 | 0.050 | B | | 7 | 5 | 6.0 | 3 | Cook,A.J |

DATE: 25 JUN 1986

DATE: 25 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.09 | 821146 | 8.9 | S | SAO | 2.5 | 1 | | | 0.203 | N | 6 | 68 | | | | Green,D.W.E | A |
| 25.20 | 821147 | 7.9 | S | 88 | | | | | 0.20 | N | 6 | 61 | 5.5 | Y | 3 | Hale,A | B |
| 25.21 | 821148 | 7.6 | B | 88 | 9 | 2 | | | 0.050 | B | | 10 | 5.4M | Y | 1 | Jacobson,E | C |
| 25.2139 | 821149 | 9.1 | S | AA | 5 | 2 | | | 0.080 | B | | 20 | 5.0 | | 1 | Machholz,D | D |
| 25.2153 | 821150 | 9.0 | S | AA | 5 | 3 | | | 0.254 | N | 3.8 | 32 | 5.0 | | 1 | Machholz,D | E |
| 25.41 | 821151 | 8.4 | S | 88 | 4 | 3 | | | 0.20 | N | 6 | 50 | 6.0C | Y | 1 | Lovejoy,T | F |
| 25.761 | 821152 | 9.8 | M | S SEX | 2.2 | 5 | | 96 | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | G |
| 25.771 | 821153 | 10.3 | M | | 3.2 | 6 | 0.4 | 112 | 0.35 | N | 5.5 | 100 | 5.5 | Y | 1 | Fleet,R.W | H |
| 25.774 | 821154 | 9.8 | M | | 3.0 | 5 | 0.3 | 112 | 0.15 | N | 4 | 50 | 5.5 | Y | 1 | Fleet,R.W | H |
| 25.778 | 821155 | 9.0 | M | | 4.4 | 3 | | | 0.08 | B | | 11 | 5.3 | Y | 1 | Fleet,R.W | H |

NOTE A Coma diameter approximate.
NOTE B Comet next to 7th magnitude star which made observation difficult. Also some interference from low altitude. The comet could just barely be seen with 10x50 binoculars - this was the last binocular sighting.
NOTE C Low altitude. Small condensation could have been occulted star.
NOTE D At the time of observation, the comet's altitude was +13 deg. and the sun's altitude was -14 deg.
NOTE E At the time of observation, the comet's altitude was +12 deg. and the sun's altitude was -15 deg.
NOTE F Low contrast. Haze.
NOTE G Tail measurement refers to dust tail only.
NOTE H Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 26 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | m1 | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.344 | 821156 | 8.2 | S | 88 | 10 | 4 | 0.5 | | 0.08 | B | | 15 | 6.1 | Y | 1 | Seargent,D | A |
| 26.431 | 821157 | 9.5 | S | 88 | | 2 | | | 0.15 | N | 8 | 50 | 5.0 | Y | 1 | Williams,P.F | |
| 26.469 | 821158 | 8.0 | M | 88 | 2.7 | 3 | | | 0.1 | N | 10 | 40 | 4.5 | Y | 1 | Ichikawa,K | |
| 26.476 | 821159 | 10.3 | M | 88 | 3 | 2 | | | 0.16 | N | 6.3 | 80 | 4.5T | Y | 4 | Mitsuma,S | |
| 26.479 | 821160 | 10.1 | M | 88 | 3 | 1 | | | 0.16 | N | 6.3 | 31 | 4.5T | Y | 4 | Mitsuma,S | |
| 26.48 | 821161 | 9.7 | S | AAVSO | 2 | | | | 0.20 | N | 5.6 | 65 | 4.0 | Y | 5 | Nakamura,A | |
| 26.708 | 821162 | 9.6 | M | S SEX | 3.0 | 5 | | 94 | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | B |
| 26.729 | 821163 | 9.7 | M | | 3.6 | 6 | 0.5 | 109 | 0.15 | N | 4 | 50 | 6.0 | Y | 1 | Fleet,R.W | C |
| 26.740 | 821164 | 9.1 | M | | 3.7 | 5 | 0.7 | 110 | 0.08 | B | | 11 | 5.9 | Y | 1 | Fleet,R.W | C |
| 26.747 | 821165 | 10.1 | M | | 3.4 | 6 | 0.5 | 110 | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | C |

NOTE A PA 90 to 100.
NOTE B Tail measurement refers to dust tail only.
NOTE C Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 27 JUN 1986

DATE: 27 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.701 | 821166 | 9.1 | M | | 4.1 | 5 | 0.3 | 110 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | A |
| 27.715 | 821167 | 9.4 | M | | 3.6 | 6 | 0.3 | 111 | 0.15 | N | 4 | 50 | 6.0 | Y | 1 | Fleet,R.W | A |
| 27.719 | 821168 | 9.9 | M | | 3.4 | 6 | 0.4 | 111 | 0.35 | N | 5.5 | 100 | 6.0 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 28 JUN 1986

DATE: 28 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.51 | 821169 | 7.7 | S | DCS | 7 | 5 | | | 0.25 | N | 5 | 62 | 5.8 | | | Clark,M.L | |
| 28.699 | 821170 | 9.6 | M | S SEX | 3.0 | 5 | | 92 | 0.30 | N | 8.5 | 102 | 6.4 | Y | 1 | Begbie,M.J.R | A |
| 28.712 | 821171 | 9.1 | M | | 4.1 | 6 | 0.3 | 110 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | B |
| 28.726 | 821172 | 9.4 | M | | 3.6 | 6 | 0.3 | 111 | 0.15 | N | 4 | 50 | 6.0 | Y | 1 | Fleet,R.W | B |
| 28.733 | 821173 | 9.9 | M | | 3.4 | 6 | 0.4 | 111 | 0.35 | N | 5.5 | 100 | 6.0 | Y | 1 | Fleet,R.W | B |
| 28.736 | 821174 | 10.1 | S | S&X SEX | 3 | 4 | | | 0.20 | N | 7 | 35 | 5.5 | Y | 2 | Campos,J | |

NOTE A Tail measurement refers to dust tail only.
NOTE B Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 29 JUN 1986

DATE: 29 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.20 | 821175 | 8.2 | S | SAO | 8 | 2 | | | 0.080 | B | | 20 | 4.5 | Y | 7 | Morris,C.S | |
| 29.20 | 821176 | 8.6 | M | SAO | 5.6 | 3 | | | 0.256 | N | 4.5 | 45 | 4.5 | Y | 7 | Morris,C.S | |
| 29.2243 | 821177 | 9.5 | S | AA | 3 | 1 | | | 0.254 | N | 3.8 | 32 | 3.5 | | 1 | Machholz,D | A |
| 29.347 | 821178 | 8.3 | S | 88 | | | | | 0.08 | B | | 15 | 6.1 | Y | 1 | Seargent,D | |
| 29.708 | 821179 | 9.0 | M | | 3.7 | 5 | 0.6 | 109 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | B |
| 29.731 | 821180 | 9.6 | M | S SEX | 3.0 | 6 | | 110 | 0.30 | N | 8.5 | 102 | 6.1 | Y | 1 | Begbie,M.J.R | C |
| 29.733 | 821181 | 9.6 | M | | 3.3 | 6 | 0.2 | 112 | 0.15 | N | 4 | 50 | 5.9 | Y | 1 | Fleet,R.W | B |
| 29.740 | 821182 | 9.8 | M | | 3.0 | 6 | 0.4 | 108 | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | B |

NOTE A At the time of observation, the comet's altitude was +6 deg. and the sun's altitude was -17 deg.
NOTE B Comparison star magnitudes derived from S Sex and SX Leo charts.
NOTE C Tail measurement refers to dust tail only.

DATE: 30 JUN 1986

DATE: 30 JUN 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.19 | 821183 | 8.1 | S | SAO | 8 | 2 | | | 0.080 | B | | 20 | 5.0 | Y | 7 | Morris,C.S | |
| 30.19 | 821184 | 8.0 | S | SAO | 11 | 1 | | | 0.050 | B | | 10 | 5.0 | Y | 7 | Morris,C.S | |
| 30.20 | 821185 | 8.6 | M | SAO | 5.0 | 3 | | | 0.256 | N | 4.5 | 45 | 5.0 | Y | 7 | Morris,C.S | |
| 30.2042 | 821186 | 8.5 | M | S&X SEX | 5 | 3 | | | 0.05 | B | | 7 | 6.0 | Y | 3 | Cook,A.J | |
| 30.2083 | 821187 | 8.5 | M | S&X SEX | 8 | 4 | | | 0.14 | SN | | 52 | 6.0 | Y | 3 | Cook,A.J | |
| 30.2153 | 821188 | 9.5 | S | AA | 4 | 2 | | | 0.254 | N | 3.8 | 32 | 3.2 | | 1 | Machholz,D | A |
| 30.32 | 821189 | 10.5 | S | S SEX | 1 | 2 | | | 0.317 | N | 5 | 86 | 4.5 | Y | | Jones,A | B |
| 30.708 | 821190 | 9.0 | M | | 4.4 | 6 | 0.5 | 110 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | C |
| 30.719 | 821191 | 9.9 | M | | 3.1 | 6 | 0.4 | 107 | 0.35 | N | 5.5 | 100 | 6.0 | Y | 1 | Fleet,R.W | C |
| 30.729 | 821192 | 9.6 | M | | 3.3 | 6 | 0.2 | 108 | 0.15 | N | 4 | 50 | 5.9 | Y | 1 | Fleet,R.W | C |
| 30.760 | 821193 | 9.7 | M | S SEX | 2.7 | 6 | | 97 | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | D |

NOTE A At the time of observation, the comet's altitude was +9 deg. and the sun's altitude was -15 deg.
NOTE B Coma diameter is lower limit. Hazy sky.
NOTE C Comparison star magnitudes derived from S Sex and SX Leo charts.
NOTE D Tail measurement refers to dust tail only.

SUB-NETWORK: DRAWING

| Date(UT) | AON# | Scale | Ap | Ins | f/ | Pwr(s) | DurM | Lim | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|
| 30.206 | 831294 | 3.1 | 0.050 | B | | 7 | 6 | 6.0 | 3 | Cook,A.J |

DATE: 1 JUL 1986

DATE: 1 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.20 | 821194 | 8.2 | S | SAO | 8 | 2 | | | 0.080 | B | | 20 | 5.0 | Y | 7 | Morris,C.S | |
| 1.20 | 821195 | 8.1: | S | SAO | 11 | 1 | | | 0.050 | B | | 10 | 5.0 | Y | 7 | Morris,C.S | |
| 1.30 | 821196 | 10.3 | S | AA,SSEX | 2 | 3 | | | 0.317 | N | 5 | 86 | 5.2 | | | Jones,A | A |
| 1.705 | 821197 | 9.2 | M | | 3.7 | 5 | 0.6 | 111 | 0.08 | B | | 11 | 6.0 | Y | 1 | Fleet,R.W | B |
| 1.715 | 821198 | 9.5 | M | | 3.5 | 6 | 0.2 | 111 | 0.15 | N | 4 | 50 | 6.0 | Y | 1 | Fleet,R.W | B |
| 1.722 | 821199 | 9.8 | M | | 3.4 | 6 | 0.4 | 108 | 0.35 | N | 5.5 | 100 | 5.9 | Y | 1 | Fleet,R.W | B |
| 1.724 | 821200 | 9.8 | M | S SEX | 3.0 | 5 | | | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | |

NOTE A Fair sky.
NOTE B Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 2 JUL 1986

DATE: 2 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.18 | 821201 | 9.0 | S | SAO, 88 | 5 | 1 | | | 0.32 | N | 4 | 33 | 4.0 | Y | 1 | Keen,R | |
| 2.18 | 821202 | 9.1 | S | SAO, 88 | 4 | 1 | | | 0.32 | N | 4 | 66 | 4.0 | Y | 1 | Keen,R | |
| 2.2132 | 821203 | 9.5 | S | SAO | 3 | 2 | | | 0.254 | N | 3.8 | 64 | 2.5 | | 1 | Machholz,D | A |
| 2.31 | 821204 | 10.4 | S | S SEX | | | | | 0.317 | N | 5 | 86 | 5.0 | | | Jones,A | |
| 2.700 | 821205 | 9.1 | M | | 3.7 | 5 | 0.5 | 111 | 0.08 | B | | 11 | 5.9 | Y | 1 | Fleet,R.W | B |
| 2.712 | 821206 | 9.9 | M | | 3.0 | 6 | 0.3 | 108 | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | B |

NOTE A At the time of observation the comet's altitude was +8 deg. and the sun's altitude was -14 deg.
NOTE B Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 3 JUL 1986

DATE: 3 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.19 | 821207 | 8.3 | S | SAO | 7 | 2 | | | 0.080 | B | | 20 | 4.0 | Y | 7 | Morris,C.S | |
| 3.20 | 821208 | 8.7 | S | SAO | 5.6 | 2 | | | 0.256 | N | 4.5 | 45 | 4.0 | Y | 7 | Morris,C.S | |
| 3.20 | 821209 | 8.2: | S | SAO | 8 | 1 | | | 0.050 | B | | 10 | 4.0 | Y | 7 | Morris,C.S | |
| 3.31 | 821210 | 10.4 | S | S SEX | 2 | 2 | | | 0.317 | N | 5 | 86 | 5.0 | | | Jones,A | |
| 3.365 | 821211 | 8.5: | S | 88 | | | | | 0.08 | B | | 15 | | Y | 1 | Seargent,D | A |
| 3.705 | 821212 | 10.0 | M | | 3.1 | 6 | 0.3 | 108 | 0.35 | N | 5.5 | 100 | 5.7 | Y | 1 | Fleet,R.W | B |
| 3.745 | 821213 | 9.9 | M | S SEX | 2.5 | 4 | | | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | |

NOTE A High cloud.
NOTE B Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 4 JUL 1986

DATE: 4 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.31 | 821214 | 10.4 | S | S SEX | 2 | 2 | | | 0.317 | N | 5 | 86 | 5.1 | | | Jones,A | |
| 4.722 | 821215 | 9.7 | M | | 3.2 | 5 | | | 0.15 | N | 4 | 50 | 5.7 | Y | 6 | Fleet,R.W | A |
| 4.726 | 821216 | 9.1 | M | | 4.4 | 3 | | | 0.08 | B | | 11 | 5.5 | Y | 6 | Fleet,R.W | A |
| 4.743 | 821217 | 10.0 | M | | 2.7 | 6 | 0.1 | 111 | 0.30 | N | 8 | 120 | 5.5 | Y | 6 | Fleet,R.W | A |
| 4.749 | 821218 | 10.1 | M | S SEX | | 5 | | | 0.30 | N | 8.5 | 102 | 6.5 | Y | 1 | Begbie,M.J.R | |

NOTE A Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 5 JUL 1986

DATE: 5 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.2111 | 821219 | 9.5 | S | SAO | 3 | 2 | | | 0.254 | N | 3.8 | 64 | 2.2 | | 1 | Machholz,D | A |
| 5.354 | 821220 | 8.7 | S | S SEX | | | | | 0.08 | B | | 15 | 6.1 | Y | 1 | Seargent,D | |
| 5.708 | 821221 | 9.4 | M | | 3.7 | 5 | 0.2 | 114 | 0.08 | B | | 11 | 5.8 | Y | 1 | Fleet,R.W | B |
| 5.715 | 821222 | 9.9 | M | | 2.9 | 6 | 0.3 | 112 | 0.35 | N | 5.5 | 100 | 5.8 | Y | 1 | Fleet,R.W | B |
| 5.722 | 821223 | 10.0 | M | | 2.6 | 6 | 0.2 | 115 | 0.15 | N | 4 | 50 | 5.7 | Y | 1 | Fleet,R.W | B |
| 5.729 | 821224 | 10.3 | M | S SEX | 2.5 | 5 | | | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | |

NOTE A At the time of observation, the comet's altitude was +6 deg. and the sun's altitude was -14 deg.
NOTE B Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 6 JUL 1986

DATE: 6 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.354 | 821225 | 8.8 | S | S SEX | 6 | 4 | | | 0.08 | B | | 15 | 6.1 | Y | 1 | Seargent,D | A |

NOTE A Coma diameter approximate.

DATE: 7 JUL 1986

DATE: 7 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.2083 | 821226 | 8.9 | M | S&X SEX | 5 | 2 | | | 0.14 | SN | | 52 | 5.5 | Y | 2 | Cook,A.J |

DATE: 8 JUL 1986

DATE: 8 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.19 | 821227 | 8.9 | S | SAO | 3.8 | 2 | | | 0.256 | N | 4.5 | 45 | 3.0 | Y | 7 | Morris,C.S | A |
| 8.30 | 821228 | 10.6 | S | S SEX | 2 | 2 | | | 0.317 | N | 5 | 86 | 3.9 | | | Jones,A | B |
| 8.354 | 821229 | 9.0 | S | S SEX | | 4 | | | 0.08 | B | | 15 | 6.1 | Y | 1 | Seargent,D | |
| 8.708 | 821230 | 9.4 | M | | 4.1 | 3 | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | C |
| 8.715 | 821231 | 10.2 | M | | 3.1 | 6 | 0.3 | 111 | 0.35 | N | 5.5 | 100 | 5.5 | Y | 1 | Fleet,R.W | C |
| 8.722 | 821232 | 10.0 | M | | 3.2 | 4 | | | 0.15 | N | 4 | 50 | 5.5 | Y | 1 | Fleet,R.W | C |

NOTE A Comet very low.
NOTE B Hazy sky.
NOTE C Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 9 JUL 1986

NETWORK: AMATEUR OBSERVATION

DATE: 9 JUL 1986

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.347 | 821233 | 9.0 | S | S SEX | | | | | 0.08 | B | | 15 | 6.1 | Y | 1 | Seargent,D | |
| 9.701 | 821234 | 9.6 | M | | 3.7 | 4 | | | 0.08 | B | | 11 | 5.6 | Y | 1 | Fleet,R.W | A |
| 9.708 | 821235 | 9.6 | M | | 3.2 | 5 | | | 0.15 | N | 4 | 50 | 5.6 | Y | 1 | Fleet,R.W | A |
| 9.710 | 821236 | 10.6 | M | S SEX | 1.7 | 6 | | | 0.30 | N | 8.5 | 102 | 6.2 | Y | 1 | Begbie,M.J.R | |
| 9.719 | 821237 | 10.2 | M | | 3.2 | 6 | 0.3 | 109 | 0.35 | N | 5.5 | 100 | 5.6 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from S Sex chart.

DATE: 10 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.347 | 821238 | 9.0 | S | S SEX | | | | | 0.08 | B | | 15 | 6 | Y | 1 | Seargent,D | |
| 10.708 | 821239 | 9.6 | M | | 3.7 | 3 | | | 0.08 | B | | 11 | 5.4 | Y | 1 | Fleet,R.W | A |
| 10.715 | 821240 | 10.3 | M | | 3.0 | 6 | 0.2 | 105 | 0.35 | N | 5.5 | 100 | 5.4 | Y | 1 | Fleet,R.W | A |
| 10.726 | 821241 | 10.0 | M | | 3.2 | 4 | | | 0.15 | N | 4 | 50 | 5.4 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from S Sex chart.

DATE: 11 JUL 1986

DATE: 11 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.347 | 821242 | 8.9 | S | S SEX | | | | | 0.08 | B | | 15 | | Y | 1 | Seargent,D | |
| 11.712 | 821243 | 9.7 | M | | 4.0 | 4 | | | 0.08 | B | | 11 | 4.5M | Y | 1 | Fleet,R.W | A |
| 11.719 | 821244 | 10.5 | M | | 2.4 | 6 | 0.2 | 107 | 0.35 | N | 5.5 | 100 | 4.4M | Y | 1 | Fleet,R.W | B |

NOTE A Comparison star magnitudes derived from S Sex chart.
NOTE B Comparison star magnitudes derived from S Sex chart. Tail only suspected.

DATE: 12 JUL 1986

DATE: 12 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.17 | 821245 | 9 : | S | 88 | | | | | 0.20 | N | 6 | 55 | 4 TM | Y | 33 | Hale,A | A |
| 12.347 | 821246 | 9.0 | S | S SEX | | | | | 0.08 | B | | 15 | 5.5 | Y | 1 | Seargent,D | B |
| 12.708 | 821247 | 10.5 | M | | 2.2 | 5 | | | 0.35 | N | 5.5 | 100 | 4.6M | Y | 1 | Fleet,R.W | C |

NOTE A Observation strongly affected by low altitude, twilight and moonlight. Comet little more than a vague fuzzy patch. Candidate suspected on July 12.17, confirmed on July 13.15. The magnitude estimates on both nights are little more than educated "guestimates".
NOTE B Some moonlight.
NOTE C Comparison star magnitudes derived from S Sex chart.

DATE: 13 JUL 1986

DATE: 13 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.15 | 821248 | 9 : | S | 88 | | | | | 0.20 | N | 6 | 55 | 4 | Y | 33 | Hale,A | A |
| 13.705 | 821249 | 10.7 | M | | 2.2 | 5 | | | 0.35 | N | 5.5 | 100 | 4.8M | Y | 1 | Fleet,R.W | B |
| 13.81 | 821250 | 10.8 | S | S SEX | | | | | 0.317 | N | 5 | 86 | 4.5 | | | Jones,A | C |

NOTE A Observation strongly affected by low altitude, twilight and moonlight. Comet little more than a vague fuzzy patch. Candidate suspected on July 12.17, confirmed on July 13.15. The magnitude estimates on both nights are little more than educated "guestimates".
NOTE B Comparison star magnitudes derived from S Sex chart.
NOTE C Hazy sky. Moon 6.5 days.

DATE: 14 JUL 1986

DATE: 14 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.705 | 821251 | 10.9 | M | | 1.2 | 4 | | | 0.35 | N | 5.5 | 100 | 4.0M | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from S Sex chart.

DATE: 22 JUL 1986

DATE: 22 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.701 | 821252 | 11.5 | M | | 1.4 | 6 | | | 0.35 | N | 5.5 | 100 | 5.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from S Sex chart.

DATE: 23 JUL 1986

DATE: 23 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.719 | 821253 | 11.3 | M | | 1.5 | 6 | | | 0.35 | N | 5.5 | 100 | 5.2 | Y | 1 | Fleet,R.W | A |

NOTE A 2.2' coma, averted vision. Comparison star magnitudes derived from S Sex chart.

DATE: 24 JUL 1986

DATE: 24 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.705 | 821254 | 11.2 | M | | 1.5 | 5 | | | 0.35 | N | 5.5 | 100 | 4.7 | Y | 1 | Fleet,R.W | A |

NOTE A 2.5' coma, averted vision. Comparison star magnitudes derived from S Sex chart.

DATE: 25 JUL 1986 DATE: 25 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.365 | 821255 | 9.5 | S | S SEX | | | | | 0.08 | B | | 15 | 6 | Y | 1 | Seargent,D | |
| 25.708 | 821256 | 11.4 | M | | 1.5 | 5 | | | 0.35 | N | 5.5 | 100 | 4.7 | Y | 1 | Fleet,R.W | A |

NOTE A 2.5' coma, averted vision. Comparison star magnitudes derived from S Sex chart.

DATE: 26 JUL 1986

NETWORK: AMATEUR OBSERVATION

DATE: 26 JUL 1986

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.48 | 821257 | 8.6 | S | DCS | 4.5 | 3 | | | 0.25 | N | 5 | 62 | 5.7 | | | Clark,M.L | |
| 26.705 | 821258 | 11.4 | M | | 1.7 | 5 | | | 0.35 | N | 5.5 | 100 | 4.6 | Y | 1 | Fleet,R.W | A |

NOTE A 2.5' coma, averted vision. Comparison star magnitudes derived from S Sex chart.

DATE: 28 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.724 | 821259 | 11.2 | S | S&X SEX | 1.8 | 4 | | | 0.20 | N | 7 | 78 | 5.6 | Y | 2 | Campos,J |
| 28.958 | 821260 | | | | | 2 | | | 0.20 | N | 5 | 50 | 5.5 | Y | 4 | da Silva,L.A.L |

DATE: 29 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

DATE: 29 JUL 1986

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.708 | 821261 | 11.3 | M | | 1.7 | 6 | | | 0.35 | N | 5.5 | 100 | 4.9 | Y | 1 | Fleet,R.W | A |

NOTE A 2.7' coma, averted vision. Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 30 JUL 1986

DATE: 30 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.36 | 821262 | 10.0: | S | | 2 | 3 | | | 0.20 | N | 6 | 118 | 5.0 | Y | 1 | Lovejoy,T | |
| 30.712 | 821263 | 10.9 | M | | 1.4 | 7 | | | 0.35 | N | 5.5 | 100 | 4.9 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 31 JUL 1986

DATE: 31 JUL 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.705 | 821264 | 10.8 | M | | 1.1 | 7 | | | 0.35 | N | 5.5 | 100 | 4.4 | Y | 1 | Fleet,R.W | A |

NOTE A Between clouds. Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 1 AUG 1986 DATE: 1 AUG 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.705 | 821265 | 11.0 | M | | 1.1 | 6 | | | 0.35 | N | 5.5 | 100 | 4.0 | Y | 1 | Fleet,R.W | A |

NOTE A Between clouds. Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 2 AUG 1986

DATE: 2 AUG 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.708 | 821266 | 11.1 | M | | 1.4 | 6 | | | 0.35 | N | 5.5 | 100 | 4.7 | Y | 1 | Fleet,R.W | A |

NOTE A 1.9' coma, averted vision. Comparison star magnitudes derived from S Sex and SX Leo charts.

DATE: 3 AUG 1986

DATE: 3 AUG 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.35 | 821267 | 9.8: | S | | 3 | 3 | | | 0.20 | N | 6 | 52 | 5.3C | Y | 1 | Lovejoy,T | |
| 3.398 | 821268 | 10.1 | S | 88SXLEO | 3 | 2 | | | 0.32 | N | 8 | 150 | | Y | 1 | Tregaskis,T.B | A |

NOTE A Very low. Comparison in tree. (Observer gave limit as approximately 13.5. Ed.)

DATE: 4 AUG 1986

DATE: 4 AUG 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.701 | 821269 | 11.5 | M | X SEX | 2.0 | 5 | | | 0.35 | N | 5.5 | 100 | 5.5 | Y | 2 | Begbie,M.J.R | |
| 4.705 | 821270 | 11.6 | M | | 1.6 | 5 | | | 0.35 | N | 5.5 | 100 | 4.6 | Y | 1 | Fleet,R.W | A |

NOTE A 2.5' coma, averted vision. Comparison star magnitudes derived from SX Leo chart.

DATE: 5 AUG 1986 DATE: 5 AUG 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.705 | 821271 | 11.6 | M | | 1.4 | 4 | | | 0.35 | N | 5.5 | 100 | 4.6 | Y | 1 | Fleet,R.W | A |

NOTE A 2.3' coma, averted vision. Comparison star magnitudes derived from SX Leo chart.

DATE: 6 AUG 1986

DATE: 6 AUG 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.705 | 821272 | 11.5 | M | | 1.6 | 5 | | | 0.35 | N | 5.5 | 100 | 4.6 | Y | 1 | Fleet,R.W | A |

NOTE A 2.5' coma, averted vision. Comparison star magnitudes derived from SX Leo chart.

DATE: 7 AUG 1986

DATE: 7 AUG 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.705 | 821273 | 11.6 | M | | 1.3 | 4 | | | 0.35 | N | 5.5 | 100 | 4.6 | Y | 1 | Fleet,R.W | A |

NOTE A 1.8' coma, averted vision. Comparison star magnitudes derived from SX Leo chart.

DATE: 8 AUG 1986

DATE: 8 AUG 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.705 | 821274 | 11.7 | M | | | 3 | | | 0.35 | N | 5.5 | 100 | 4.2M | Y | 1 | Fleet,R.W | A |

NOTE A 1.1' coma, averted vision, haze. Comparison star magnitudes derived from SX Leo chart.

DATE: 9 AUG 1986

DATE: 9 AUG 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.47 | 821275 | | | | 2.5 | 1 | | | 0.25 | N | 5 | 62 | 4.2 | | | Clark,M.L | A |
| 9.705 | 821276 | 11.9 | M | | | 3 | | | 0.35 | N | 5.5 | 100 | 4.1M | Y | 1 | Fleet,R.W | B |

NOTE A Mag. estimate not possible in bright twilight.
NOTE B 0.9' coma, averted vision, haze. Comparison star magnitudes derived from SX Leo chart.

DATE: 29 OCT 1986

DATE: 29 OCT 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.53 | 821277 | 11.5: | | | 1.3 | 1 | | | 0.256 | N | 4.5 | 111 | 5.0MC | Y | 6 | Morris,C.S |

DATE: 31 OCT 1986

DATE: 31 OCT 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.51 | 821278 | 12.0: | S | SX LEO | | 1 | | | 0.20 | N | 6 | 163 | 5 T | Y | 40 | Hale,A | A |
| 31.53 | 821279 | 11.5 | | | 1.4 | 2 | | | 0.256 | N | 4.5 | 111 | 5.5TC | Y | 6 | Morris,C.S | B |

NOTE A Observation hampered by low altitude, twilight, and skyglow.
NOTE B Clouds interfered with observation.

DATE: 1 NOV 1986

DATE: 1 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.51 | 821280 | 12.0: | S | SX LEO | | 1 | | | 0.20 | N | 6 | 163 | 5 T | Y | 40 | Hale,A | A |
| 1.5444 | 821281 | 12 | S | SAO | 1.0 | 2 | | | 0.254 | N | 3.8 | 64 | | | 1 | Machholz,D | |

NOTE A Observation hampered by low altitude, twilight, and skyglow.

DATE: 3 NOV 1986

DATE: 3 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.080 | 821282 | 13.0 | S | | 1.4 | 2 | | | 0.35 | N | 5.5 | 100 | 6.0 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 4 NOV 1986

DATE: 4 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.080 | 821283 | 13.0 | S | | 1.2 | 2 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | |
| 4.53 | 821284 | 11.7 | S | Y VIR | 1.4 | 2 | | | 0.256 | N | 4.5 | 156 | 4.5C | Y | 6 | Morris,C.S | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 5 NOV 1986

DATE: 5 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.076 | 821285 | 13.2 | S | | 0.8 | 2 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | A |
| 5.083 | 821286 | 13.4 | S | | 1.0 | 3 | | | 0.35 | N | 5.5 | 160 | 6.0 | Y | 1 | Fleet,R.W | A |
| 5.51 | 821287 | 12.0 | S | SX LEO | | 1 | | | 0.20 | N | 6 | 163 | 5.5 | Y | 40 | Hale,A | B |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.
NOTE B Observation affected by low altitude and skyglow. The brightness has been corrected for extinction by 0.1 magnitude.

DATE: 7 NOV 1986

DATE: 7 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.54 | 821288 | 12.0 | S | Y VIR | 1.2 | 3 | | | 0.256 | N | 4.5 | 156 | 5.0C | Y | 6 | Morris,C.S |

DATE: 8 NOV 1986

DATE: 8 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.074 | 821289 | 13.1 | S | | 0.7 | 2 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |
| 8.080 | 821290 | 13.2 | S | | 0.6 | 2 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 9 NOV 1986

DATE: 9 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.080 | 821291 | 13.1: | S | | 0.6 | 2 | | | 0.35 | N | 5.5 | 100 | 6.0 | Y | 1 | Fleet,R.W | A |
| 9.83 | 821292 | 13.3 | S | AAVSO | 0.7 | | | | 0.20 | N | 5.6 | 106 | 5.0 | Y | 6 | Nakamura,A | |

NOTE A Comet suspected only. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 13 NOV 1986

DATE: 13 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.076 | 821293 | 13.5 | S | | 0.7 | 2 | | | 0.35 | N | 5.5 | 160 | 5.9 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 14 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

DATE: 14 NOV 1986

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.078 | 821294 | 13.4 | S | | 0.6 | 3 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 22 NOV 1986

DATE: 22 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.559 | 821295 | 13.5 | M | 113 | | 2 | | | 0.279 | SC | 10 | 167 | 5 | Y | 1 | Kemble,L.J | A |

NOTE A This is my first sighting since May 1986. Comet about 23 deg. above horizon. Some early morning frost and atmospheric interference, but otherwise, clear sky. Observation made mostly for experience and challenge, to see how far I can follow Halley out-bound. Gibbous moon in ENE.

DATE: 27 NOV 1986

DATE: 27 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.439 | 821296 | 12.8 | S | T VIR | 0.6 | 0 | | | 0.445 | N | 4.5 | 167 | 5.9M | Y | 3 | Morrison,W | A |
| 27.48 | 821297 | 12.0 | S | SX LEO | | 1 | | | 0.20 | N | 6 | 163 | 5.5 | Y | 40 | Hale,A | |

NOTE A Moon near T Vir field on this morning - comet compared to defocused stars near comet - these stars compared to T Vir field on Nov. 30, when moon out of the way.

DATE: 28 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.48 | 821298 | 12.7 | B | 113 | 2 | 0 | | | 0.29 | N | 4.5 | 46 | 5.5M | Y | 1 | Jacobson,E | |
| 28.52 | 821299 | 12.0 | S | Y VIR | 1.2 | 1 | | | 0.256 | N | 4.5 | 156 | 5.5 | Y | 13 | Morris,C.S | |
| 28.53 | 821300 | 11.6 | S | Y VIR | 1.9 | 2 | | | 0.256 | N | 4.5 | 67 | 5.5 | Y | 13 | Morris,C.S | |
| 28.53 | 821301 | 11.9 | S | NPS | | | | | 0.256 | N | 4.5 | 67 | 5.5 | Y | 13 | Morris,C.S | |
| 28.677 | 821302 | 12.9: | S | V HYD | 1.4 | 1 | | | 0.254 | N | 4.5 | 114 | 6 | Y | 1 | Seargent,D | A |

NOTE A The observation of Nov. 28 and Dec. 4 used the stars marked "12.9" and "12.3" on the V Hydrae d chart. These values appear to be about one magnitude too faint.

DATE: 29 NOV 1986

DATE: 29 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.5486 | 821303 | 14 | M | 113 | | 2 | | | 0.279 | SC | 10 | 167 | 5 | Y | 1 | Kemble,L.J | A |
| 29.78 | 821304 | 12.8 | S | AAVSO | 1.2 | 2 | | | 0.20 | N | 5.6 | 106 | 5.5 | Y | 1 | Nakamura,A | |

NOTE A -10 deg. Celsius. Some atmospheric icing, but clear, dark sky. Comet about 24 deg. above horizon. Comet only a very faint uniform, small hazy spot, unresolved, while nearby very faint stars flickered with back-and-forth focusing.

DATE: 30 NOV 1986

DATE: 30 NOV 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.059 | 821305 | 12.6 | M | | 1.0 | 4 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |
| 30.24 | 821306 | 12.0 | S | | 0.4 | 4 | | | 0.203 | SC | 10 | 85 | 6.0 | Y | 2 | Hasubick,W | |
| 30.441 | 821307 | 12.8 | S | T VIR | 1.0 | 1 | | | 0.445 | N | 4.5 | 167 | 6.2 | Y | 3 | Morrison,W | |
| 30.4688 | 821308 | 12.3 | S | T VIR | 1.3 | 4 | | | 0.32 | N | 4.8 | 160 | 6.2 | Y | 4 | Cook,A.J | |
| 30.53 | 821309 | 11.5 | S | Y VIR | 1.9 | 1 | | | 0.256 | N | 4.5 | 67 | 5.5 | Y | 13 | Morris,C.S | |
| 30.54 | 821310 | 11.5 | S | Y VIR | 1.9 | 2 | | | 0.256 | N | 4.5 | 45 | 5.5 | Y | 13 | Morris,C.S | |
| 30.54 | 821311 | 11.6 | S | NPS | | | | | 0.256 | N | 4.5 | 45 | 5.5 | Y | 13 | Morris,C.S | |
| 30.54 | 821312 | 11.8 | S | Y VIR | 1.2 | 2 | | | 0.256 | N | 4.5 | 156 | 5.5 | Y | 13 | Morris,C.S | |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 2 DEC 1986

DATE: 2 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.50 | 821313 | 12.4 | B | 113 | 1 | 0 | | | 0.29 | N | 4.5 | 29 | 6.0 | Y | 1 | Jacobson,E |
| 2.51 | 821314 | 11.9 | S | SX LEO | | 1 | | | 0.20 | N | 6 | 61 | 6 | Y | 40 | Hale,A |

DATE: 3 DEC 1986

DATE: 3 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.48 | 821315 | 11.9 | B | 113 | 1 | 0 | | | 0.29 | N | 4.5 | 29 | 6.0 | Y | 1 | Jacobson,E |
| 3.54 | 821316 | 11.9 | S | Y VIR | 1.7 | 1 | | | 0.256 | N | 4.5 | 67 | 5.5 | Y | 13 | Morris,C.S |
| 3.55 | 821317 | 11.8 | S | Y VIR | 1.9 | 1 | | | 0.256 | N | 4.5 | 45 | 5.5 | Y | 13 | Morris,C.S |

DATE: 4 DEC 1986

DATE: 4 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.42 | 821318 | 12.1 | S | AAVSO | 1.1 | 0 | | | 0.500 | N | 5 | 96 | 6 | Y | 1 | Bortle,J.E | |
| 4.667 | 821319 | 12.5: | S | V HYD | 1 | 1 | | | 0.254 | N | 4.5 | 114 | 6 | Y | 1 | Seargent,D | A |

NOTE A The observations of Nov. 28 and Dec. 4 used the stars marked "12.9" and "12.3" on the V Hydrae d chart. These values appear to be about one magnitude too faint.

DATE: 5 DEC 1986

DATE: 5 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.50 | 821320 | 12.0 | B | 113 | 1.2 | 0 | | | 0.29 | N | 4.5 | 29 | 6.0 | Y | 1 | Jacobson,E |
| 5.78 | 821321 | 13.0 | S | AAVSO | 1.0 | 1 | | | 0.20 | N | 5.6 | 106 | 5.5 | Y | 5 | Nakamura,A |
| 5.83 | 821322 | 12.3 | S | AAVSO | 2 | 2 | | | 0.13 | N | 6.3 | 62 | 5.0 | Y | 1 | Hayashi,A |

DATE: 6 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

DATE: 6 DEC 1986

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.44 | 821323 | 11.9 | S | AAVSO | 1.2 | 1 | | | 0.500 | N | 5 | 96 | 6 | Y | 1 | Bortle,J.E |

DATE: 7 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.80 | 821324 | 12.9 | S | AAVSO | 1.1 | 2 | | | 0.20 | N | 5.6 | 106 | 5.5 | Y | 6 | Nakamura,A |

DATE: 8 DEC 1986

DATE: 8 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.444 | 821325 | 13.3 | S | T VIR | 0.7 | 0 | | | 0.445 | N | 4.5 | 167 | 6.2 | Y | 3 | Morrison,W | |
| 8.51 | 821326 | 11.8 | B | 113 | 1.2 | 0 | | | 0.29 | N | 4.5 | 29 | 6.0 | Y | 1 | Jacobson,E | |
| 8.52 | 821327 | 11.9 | S | Y VIR | 1.9 | 1 | | | 0.256 | N | 4.5 | 67 | 5.5 | Y | 13 | Morris,C.S | |
| 8.52 | 821328 | 11.8 | S | Y VIR | 2.2 | 1 | | | 0.256 | N | 4.5 | 45 | 5.5 | Y | 13 | Morris,C.S | |
| 8.52 | 821329 | 11.8 | S | NPS | | | | | 0.256 | N | 4.5 | 45 | 5.5 | Y | 13 | Morris,C.S | |
| 8.53 | 821330 | 11.9 | S | Y VIR | 1.9 | 1 | | | 0.256 | N | 4.5 | 111 | 5.5 | Y | 13 | Morris,C.S | |
| 8.618 | 821331 | 12.6 | S | U GEM | 1 | 3 | | | 0.152 | N | 5.8 | 100 | 6.3 | Y | 3 | Krisciunas,K | A |
| 8.694 | 821332 | 11.7 | S | T VIR | 2 | 2 | | | 0.254 | N | 4.5 | 114 | 6.2 | Y | 1 | Seargent,D | B |

NOTE A Magnitude accuracy +/-0.3. Coma diameter approximate, DC uncertain. Faintest star visible in 6 inch was mv approx. 14.2. Comet at limits of averted vision. Used chart in Nov. 1986 Sky and Telescope to locate field. This was the clearest night in the year at sea level.

NOTE B Coma diameter approximate.

DATE: 12 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.54 | 821333 | 11.9 | S | Y VIR | | 1 | | | 0.20 | N | 6 | 55 | 6 | Y | 40 | Hale,A |
| 12.747 | 821334 | 12.8 | M | U GEM | | | | | 0.10 | N | 10 | 111 | 4.5M | Y | 1 | Kato,T |

DATE: 13 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

DATE: 13 DEC 1986

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.069 | 821335 | 12.7 | M | | 0.6 | 5 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |
| 13.076 | 821336 | 12.8 | M | | 0.6 | 5 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | B |
| 13.448 | 821337 | 12.7 | S | T VIR | 0.8 | 3 | | | 0.445 | N | 4.5 | 167 | 6.4 | Y | 3 | Morrison,W | |

NOTE A 1.0' coma, averted vision. Comparison star magnitudes derived from T Vir chart.
NOTE B Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 14 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.035 | 821338 | 13.2 | S | | 0.5 | 3 | | | 0.35 | N | 5.5 | 160 | 5.8M | Y | 1 | Fleet,R.W | A |
| 14.069 | 821339 | 12.8 | S | | 0.5 | 4 | | | 0.22 | N | 8 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 14.073 | 821340 | 12.8 | M | | 0.8 | 5 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | B |
| 14.076 | 821341 | 12.8 | M | | 0.7 | 5 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | C |

NOTE A Comparable to early Nov. estimate. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.
NOTE B 1.0' coma, averted vision. Comparison star magnitudes derived from T Vir chart.
NOTE C Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 15 DEC 1986

DATE: 15 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.076 | 821342 | 12.9 | M | | 0.5 | 4 | | | 0.35 | N | 5.5 | 100 | 5.9 | Y | 1 | Fleet,R.W | A |

NOTE A 1.0' coma, averted vision. Comparison star magnitudes derived from T Vir chart. At moonset.

DATE: 25 DEC 1986

DATE: 25 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.938 | 821343 | 13.2 | S | | 0.8 | 2 | | | 0.35 | N | 5.5 | 100 | 5.9 | Y | 1 | Fleet,R.W | A |
| 25.941 | 821344 | 13.3 | S | | 0.8 | 2 | | | 0.35 | N | 5.5 | 160 | 5.9 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 26 DEC 1986

DATE: 26 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.54 | 821345 | 12.0 | S | SX LEO | | 1 | | | 0.20 | N | 6 | 55 | 6 | Y | 40 | Hale,A | |
| 26.955 | 821346 | 13.2 | S | | 1.0 | 2 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | A |
| 26.962 | 821347 | 13.3 | S | | 0.7 | 3 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 27 DEC 1986

DATE: 27 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.10 | 821348 | 12.3 | S | T VIR | 3 | 1 | | | 0.510 | N | 4 | 75 | 6.5 | Y | 4 | Comello,G | A |
| 27.11 | 821349 | 12.1 | S | T VIR | 3.1 | 1 | | | 0.510 | N | 4 | 75 | 6.5 | Y | 4 | Bouma,R.J | |
| 27.12 | 821350 | 12.2 | S | T VIR | | 1 | | | 0.254 | JB | 6 | 73 | 6.5 | Y | 4 | Bouma,R.J | |
| 27.52 | 821351 | 12.0 | S | Y VIR | 2.3 | 0 | | | 0.256 | N | 4.5 | 67 | 5.5 | Y | 13 | Morris,C.S | |
| 27.52 | 821352 | 12.0 | S | T VIR | | | | | 0.256 | N | 4.5 | 67 | 5.5 | Y | 13 | Morris,C.S | |
| 27.990 | 821353 | 13.1 | S | | 1.2 | 2 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | B |
| 27.997 | 821354 | 13.2 | S | | 1.0 | 2 | | | 0.35 | N | 5.5 | 160 | 6.2 | Y | 1 | Fleet,R.W | B |

NOTE A Coma diameter approximate.
NOTE B Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 28 DEC 1986

DATE: 28 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.11 | 821355 | 12.4 | S | T VIR | 3 | 1 | | | 0.510 | N | 4 | 75 | 6.5 | Y | 4 | Comello,G | A |
| 28.12 | 821356 | 12.0 | S | T VIR | 2.8 | 1 | | | 0.510 | N | 4 | 75 | 6.5 | Y | 4 | Bouma,R.J | |
| 28.79 | 821357 | 12.9 | S | AAVSO | 1.5 | 2 | | | 0.20 | N | 5.6 | 106 | 6.0 | Y | 6 | Nakamura,A | |

NOTE A Coma diameter approximate.

DATE: 29 DEC 1986

DATE: 29 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.14 | 821358 | 12.3 | S | T VIR | | 0 | | | 0.510 | N | 4 | 93 | 5.5 | Y | 4 | Bouma,R.J |
| 29.14 | 821359 | 12.5 | S | T VIR | | 1 | | | 0.510 | N | 4 | 93 | 6 | Y | 4 | Comello,G |
| 29.53 | 821360 | 12.0 | S | Y VIR | 2.3 | 1 | | | 0.256 | N | 4.5 | 67 | 5.5 | Y | 13 | Morris,C.S |

DATE: 30 DEC 1986

DATE: 30 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.042 | 821361 | 13.2 | S | | 0.7 | 3 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | A |
| 30.049 | 821362 | 13.3 | S | | 0.7 | 3 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |
| 30.14 | 821363 | 12.3 | S | T VIR | 3 | 0 | | | 0.510 | N | 4 | 93 | 6 | Y | 4 | Bouma,R.J | B |
| 30.54 | 821364 | 12.3 | S | Y VIR | | | | | 0.20 | N | 6 | 55 | 6 | Y | 40 | Hale,A | C |
| 30.625 | 821365 | 12.0 | S | T VIR | | | | | 0.254 | N | 4.5 | 190 | 6 | Y | 1 | Seargent,D | D |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.
NOTE B Coma diameter approximate.
NOTE C Comet involved with small group of stars which made observation and determination of magnitude difficult.
NOTE D V. marginal.

DATE: 31 DEC 1986

DATE: 31 DEC 1986

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.003 | 821366 | 13.2 | S | | 0.8 | 3 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | A |
| 31.014 | 821367 | 13.3 | S | | 0.7 | 3 | | | 0.35 | N | 5.5 | 160 | 6.2 | Y | 1 | Fleet,R.W | A |
| 31.15 | 821368 | 12.3 | S | T VIR | 3 | 1 | | | 0.510 | N | 4 | 75 | 6 | Y | 4 | Bouma,R.J | B |
| 31.16 | 821369 | 12.5 | S | T VIR | | 1 | | | 0.510 | N | 4 | 75 | 5.5 | Y | 4 | Comello,G | |
| 31.425 | 821370 | 12.5 | B | 113 | 1.2 | 0 | | | 0.254 | N | 4.5 | 46 | 6.0 | Y | 1 | Jacobson,E | |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.
NOTE B Coma diameter approximate.

DATE: 1 JAN 1987

DATE: 1 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.056 | 821371 | 13.3 | S | | 1.0 | 2 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | A |
| 1.063 | 821372 | 13.5 | S | | 0.7 | 2 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |
| 1.354 | 821373 | 13.0 | S | V HYA | 1.0 | 3 | | | 0.254 | N | 5.6 | 120 | 7.4 | Y | 1 | Knight,S | |
| 1.399 | 821374 | 14.2 | S | SX LEO | 1.0 | 3 | | | 0.254 | N | 5.6 | 120 | 7.4 | Y | 1 | Knight,S | B |
| 1.410 | 821375 | 12.7 | S | T VIR | 1.0 | 3 | | | 0.254 | N | 5.6 | 38 | 7.4 | Y | 1 | Knight,S | C |
| 1.459 | 821376 | 12.8 | B | 113 | 1.4 | 0 | | | 0.254 | N | 4.5 | 46 | 6.0 | Y | 1 | Jacobson,E | |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.
NOTE B SX Leo sequence much brighter than other two sequences (V Hya, T Vir).
NOTE C Detected motion in 1:22. SX Leo sequence much brighter than other two sequences (V Hya, T Vir).

DATE: 2 JAN 1987 DATE: 2 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.042 | 821377 | 13.2 | S | | 1.1 | 3 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | A |
| 2.049 | 821378 | 13.5 | S | | 0.6 | 3 | | | 0.35 | N | 5.5 | 160 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 3 JAN 1987

NETWORK: AMATEUR OBSERVATION

DATE: 3 JAN 1987

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.045 | 821379 | 13.1 | S | | 1.3 | 3 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | A |
| 3.069 | 821380 | 13.4 | S | | 0.9 | 3 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |
| 3.17 | 821381 | 12.2 | S | T VIR | | 1 | | | 0.510 | N | 4 | 75 | 6.5 | Y | 4 | Bouma,R.J | |
| 3.17 | 821382 | 12.4 | S | T VIR | | 1 | | | 0.510 | N | 4 | 75 | 6.5 | Y | 4 | Comello,G | |
| 3.18 | 821383 | 12.3 | S | T VIR | | 1 | | | 0.254 | JB | 6 | 73 | 6.5 | Y | 4 | Bouma,R.J | |
| 3.467 | 821384 | 12.6 | B | 113 | 1.2 | 0 | | | 0.254 | N | 4.5 | 46 | 6.0 | Y | 1 | Jacobson,E | |
| 3.52 | 821385 | 12.1 | S | Y VIR | | 0 | | | 0.20 | N | 6 | 55 | 6.5 | Y | 40 | Hale,A | |
| 3.84 | 821386 | 12.8 | S | AAVSO | 2 | 2 | | | 0.20 | N | 4.5 | 69 | 5.0 | Y | 1 | Hayasbi,A | |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 4 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.12 | 821387 | 12.5: | S | T VIR | 1.5 | 1 | | | 0.254 | JB | 6 | 73 | 5.7 | Y | 6 | Bus,E.P | |
| 4.16 | 821388 | 12.2 | S | T VIR | 2.5 | 1 | | | 0.510 | N | 4 | 75 | 7 | Y | 4 | Bouma,R.J | A |
| 4.17 | 821389 | 12.3 | S | T VIR | | 1 | | | 0.510 | N | 4 | 75 | 7 | Y | 4 | Comello,G | |
| 4.399 | 821390 | 12.0 | B | 113 | 1.7 | 0 | | | 0.254 | N | 4.5 | 46 | 6.0 | Y | 1 | Jacobson,E | |

NOTE A Coma diameter approximate.

DATE: 5 JAN 1987

DATE: 5 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.045 | 821391 | 13.5 | S | | 0.7 | 5 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | A |
| 5.063 | 821392 | 13.3 | S | | 1.2 | 4 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 6 JAN 1987

DATE: 6 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.014 | 821393 | 13.5 | S | | 0.9 | 3 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | A |
| 6.035 | 821394 | 13.5 | S | T VIR | 0.4 | 3 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 2 | Begbie,M.J.R | |
| 6.458 | 821395 | 12.5 | B | 113 | 1.5 | 0 | | | 0.254 | N | 4.5 | 46 | 6.0 | Y | 1 | Jacobson,E | B |
| 6.82 | 821396 | 12.9 | S | AAVSO | 2 | 2 | | | 0.20 | N | 4.5 | 69 | 5.0 | Y | 1 | Hayashi,A | |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter. Gap in cirrus.
NOTE B Very cold; estimation made very quickly. Coma diameter approximate.

DATE: 7 JAN 1987

DATE: 7 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.028 | 821397 | 13.4 | S | | 0.9 | 5 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |
| 7.045 | 821398 | 13.4 | S | | 0.8 | 5 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 8 JAN 1987

DATE: 8 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.003 | 821399 | 13.4 | S | | 1.2 | 4 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | A |
| 8.021 | 821400 | 13.4 | S | | 0.8 | 5 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | A |
| 8.381 | 821401 | 13.7 | S | T VIR | 0.7 | 1 | | | 0.445 | N | 4.5 | 167 | 6.6 | Y | 3 | Morrison,W | |
| 8.477 | 821402 | 12.4 | B | 113 | 1.4 | 0 | | | 0.254 | N | 4.5 | 46 | 6.0 | Y | 1 | Jacobson,E | |
| 8.53 | 821403 | 12.2 | S | T VIR | 1.9 | 0 | | | 0.256 | N | 4.5 | 67 | 5.5 | Y | 13 | Morris,C.S | B |
| 8.80 | 821404 | 13.0 | S | AAVSO | 1.5 | 2 | | | 0.20 | N | 4.5 | 69 | 5.0M | Y | 1 | Hayashi,A | |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.
NOTE B Comet was very difficult.

DATE: 9 JAN 1987

DATE: 9 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.059 | 821405 | 13.1 | S | | 1.1 | 4 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |
| 9.076 | 821406 | 13.3 | S | | 0.7 | 5 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | A |
| 9.51 | 821407 | 12.2 | S | Y VIR | | | | | 0.20 | N | 6 | 55 | 6 | Y | 40 | Hale,A | |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 10 JAN 1987

DATE: 10 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.024 | 821408 | 13.1 | S | | 1.4 | 5 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |
| 10.035 | 821409 | 13.3 | S | | 0.9 | 5 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 11 JAN 1987

DATE: 11 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.031 | 821410 | 13.2 | S | | 1.3 | 4 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |
| 11.045 | 821411 | 13.3 | S | | 0.8 | 4 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | A |
| 11.430 | 821412 | 12.7 | B | 113 | 1.7 | 0 | | | 0.254 | N | 4.5 | 46 | 6.0 | Y | 1 | Jacobson,E | |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 12 JAN 1987

DATE: 12 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.056 | 821413 | 13.4 | S | | 0.6 | 4 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | A |
| 12.069 | 821414 | 13.2 | S | | 1.1 | 3 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 13 JAN 1987

DATE: 13 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13.083 | 821415 | 13.6 | S | | 0.5 | 3 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Star interfering. Averted vision coma diameter.

DATE: 25 JAN 1987

DATE: 25 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.52 | 821416 | 12.1 | S | Y VIR | | 2 | | | 0.20 | N | 6 | 55 | 6.5 | Y | 40 | Hale,A | A |

NOTE A Comet was noticeably more prominent than earlier in the month; a minor outburst in the interim?

DATE: 26 JAN 1987

NETWORK: AMATEUR OBSERVATION

DATE: 26 JAN 1987

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.40 | 821417 | 12.4 | S | T VIR | 1.3 | 1 | | | 0.256 | N | 4.5 | 111 | 6.0 | Y | 16 | Morris,C.S | A |
| 26.979 | 821418 | 13.8 | S | | 1.0 | 4 | | | 0.35 | N | 5.5 | 100 | 5.9 | Y | 1 | Fleet,R.W | B |

NOTE A Difficult observation - comet was close to a star.
NOTE B Comparison star magitudes derived from T Vir chart. Averted vision coma diameter. Between clouds.

DATE: 27 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.000 | 821419 | 13.9 | S | | | 4 | | | 0.35 | N | 5.5 | 160 | 6.2 | Y | 1 | Fleet,R.W | A |
| 27.380 | 821420 | 12.9 | B | 113 | 1.2 | 0 | | | 0.254 | N | 4.5 | 82 | 5.8 | Y | 1 | Jacobson,E | B |

NOTE A Comparison star magnitudes derived from T Vir chart.
NOTE B Slight moonlight.

DATE: 28 JAN 1987

DATE: 28 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.010 | 821421 | 13.6 | S | | 0.7 | 5 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |
| 28.021 | 821422 | 13.7 | S | | 0.6 | 4 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 29 JAN 1987

DATE: 29 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.440 | 821423 | 13.1 | B | 113 | 1.0 | 0 | | | 0.254 | N | 4.5 | 46 | 6.0 | Y | 1 | Jacobson,E | |
| 29.903 | 821424 | 13.8 | S | | 0.5 | 4 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |
| 29.913 | 821425 | 13.8 | S | | 0.6 | 3 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 30 JAN 1987

DATE: 30 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.15 | 821426 | 12.7: | S | V HYA | 1.5 | 1 | | | 0.205 | N | 6 | 38 | 5.7 | Y | 3 | van de Weg,R.L.W | A |
| 30.458 | 821427 | 12.7 | B | 113 | 1.1 | 0 | | | 0.254 | N | 4.5 | 46 | 6.0 | Y | 1 | Jacobson,E | |
| 30.50 | 821428 | 12.4 | S | Y VIR | | 0 | | | 0.20 | N | 6 | 163 | 6 | Y | 40 | Hale,A | B |

NOTE A Coma diameter approximate.
NOTE B Observation hampered by proximity of comet to the 10th magnitude star.

DATE: 31 JAN 1987

DATE: 31 JAN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.052 | 821429 | 13.7 | S | | 0.8 | 4 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |
| 31.059 | 821430 | 13.8 | S | | 0.7 | 3 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.181 | 852166 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 2.00 | Kodak 2415 | | Y | | 18/P | 1 | Ward,A | A |

NOTE A Instrument is Schmidt camera. (Observer's image identifier is SC-18. Ed.)

DATE: 1 FEB 1987

DATE: 1 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.042 | 821431 | 13.9 | S | | 0.6 | 3 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |
| 1.052 | 821432 | 13.8 | S | | 0.7 | 4 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 2 FEB 1987

DATE: 2 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.003 | 821433 | 13.6 | S | | 0.8 | 4 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |
| 2.042 | 821434 | 13.7 | S | | 0.7 | 3 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 3 FEB 1987

DATE: 3 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.052 | 821435 | 13.8 | S | | 0.7 | 3 | | | 0.35 | N | 5.5 | 160 | 6.2 | Y | 1 | Fleet,R.W | |
| 3.063 | 821436 | 13.7 | S | | 0.8 | 3 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |
| 3.910 | 821437 | 13.7 | S | | 0.8 | 3 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |
| 3.922 | 821438 | 14.0 | S | T VIR | 1.0 | 3 | | | 0.35 | N | 5.5 | 100 | 6.4 | Y | 2 | Begbie,M.J.R | A |
| 3.931 | 821439 | 13.8 | S | | 0.7 | 3 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | |
| 3.934 | 821440 | 13.8 | S | T VIR | | 3 | | | 0.35 | N | 5.5 | 160 | 6.4 | Y | 2 | Begbie,M.J.R | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 4 FEB 1987

DATE: 4 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.426 | 821441 | 12.9 | B | 113 | 1.2 | 0 | | | 0.254 | N | 4.5 | 46 | 6.0 | Y | 1 | Jacobson,E |

DATE: 5 FEB 1987

DATE: 5 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.25 | 821442 | 12.8 | S | AAVSO | 1.1 | 0 | | | 0.500 | N | 5 | 125 | 6 | Y | 1 | Bortle,J.E |
| 5.316 | 821443 | 13.9 | S | T VIR | 0.4 | 0 | | | 0.445 | N | 4.5 | 167 | 6.5 | Y | 3 | Morrison,W |

DATE: 6 FEB 1987

DATE: 6 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.035 | 821444 | 13.9 | S | | 0.6 | 4 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |
| 6.066 | 821445 | 13.8 | S | | 0.7 | 5 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | A |
| 6.468 | 821446 | 13.4 | B | 112 | 1.2 | | | | 0.254 | N | 4.5 | 82 | 6.0 | Y | 1 | Jacobson,E | B |
| 6.50 | 821447 | 11.8 | S | T+Y VIR | 2.4 | 1 | | | 0.256 | N | 4.5 | 45 | 7.0 | Y | 16 | Morris,C.S | |
| 6.51 | 821448 | 12.5 | S | Y VIR | | | | | 0.20 | N | 6 | 55 | 6 | Y | 40 | Hale,A | |
| 6.51 | 821449 | 11.8 | S | T+Y VIR | 2.4 | 1 | | | 0.256 | N | 4.5 | 67 | 7.0 | Y | 16 | Morris,C.S | |
| 6.51 | 821450 | 12.0 | S | T+Y VIR | 1.9 | 2 | | | 0.256 | N | 4.5 | 111 | 7.0 | Y | 16 | Morris,C.S | |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.
NOTE B Very diffuse, near telescope's limit. Coma diameter approximate.

DATE: 8 FEB 1987

DATE: 8 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.028 | 821451 | 13.6 | S | | 1.0 | 4 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | A |
| 8.045 | 821452 | 13.8 | S | | 0.8 | 4 | | | 0.35 | N | 5.5 | 160 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 9 FEB 1987

DATE: 9 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.038 | 821453 | 14.0 | S | | 0.6 | 4 | | | 0.35 | N | 5.5 | 160 | 6.3 | Y | 1 | Fleet,R.W | A |
| 9.049 | 821454 | 14.0 | S | | 0.6 | 4 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |

NOTE A Faint star distracting. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 11 FEB 1987

DATE: 11 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.073 | 821455 | 13.5 | S | | 0.9 | 3 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | A |
| 11.080 | 821456 | 13.8 | S | | 0.7 | 3 | | | 0.35 | N | 5.5 | 160 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 12 FEB 1987

DATE: 12 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.108 | 821457 | 13.7 | S | | 0.6 | 4 | | | 0.35 | N | 5.5 | 160 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Bright star nuisance. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 18 FEB 1987

DATE: 18 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.795 | 821458 | 13.7 | | S | 0.8 | 3 | | | 0.35 | N | 5.5 | 100 | 5.9 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 20 FEB 1987

DATE: 20 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.221 | 821459 | 14.0 | S | T VIR | 0.5 | 0 | | | 0.445 | N | 4.5 | 167 | 6.5 | Y | 3 | Morrison,W | |
| 20.802 | 821460 | 13.8 | S | | 0.9 | 3 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Faint star nuisance. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 21 FEB 1987

DATE: 21 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.221 | 821461 | 14.0 | S | T VIR | 0.7 | 0 | | | 0.445 | N | 4.5 | 167 | 6.5 | Y | 3 | Morrison,W | |
| 21.26 | 821462 | 12.9: | S | AUL UBV | 1 | 0 | | | 0.25 | N | 4.5 | 82 | 6.0 | Y | 1 | Jacobson,E | A |
| 21.28 | 821463 | 13.5: | S | LNES | 1 | 0 | | | 0.406 | C | 18 | 229 | | | | Green,D.W.E | B |
| 21.882 | 821464 | 13.8 | S | | 0.8 | 4 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | C |
| 21.889 | 821465 | 13.9 | S | | 0.6 | 4 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | C |

NOTE A Visible only with averted vision. Coma diameter approximate.
NOTE B Coma diameter approximate.
NOTE C Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 22 FEB 1987 DATE: 22 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.30 | 821466 | 12.8: | S | AUL UBV | 1 | 0 | | | 0.25 | N | 4.5 | 82 | 6.0 | Y | 1 | Jacobson,E | A |
| 22.858 | 821467 | 13.6 | S | | 0.8 | 4 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | B |
| 22.868 | 821468 | 13.5 | S | | 0.7 | 4 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | B |

NOTE A Coma diameter approximate.
NOTE B Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 23 FEB 1987

NETWORK: AMATEUR OBSERVATION

DATE: 23 FEB 1987

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.35 | 821469 | 12.2: | S | | 2.2 | 0 | | | 0.256 | N | 4.5 | 67 | 5.5 | Y | 16 | Morris,C.S | |
| 23.41 | 821470 | 12.4 | S | Y VIR | | 1 | | | 0.20 | N | 6 | 110 | 6.5 | Y | 40 | Hale,A | |
| 23.927 | 821471 | 13.6 | S | | 1.0 | 4 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | A |
| 23.947 | 821472 | 13.9 | S | T VIR | 1.0 | 3 | | | 0.52 | N | 5.6 | 150 | 6.4 | Y | 2 | Begbie,M.J.R | |
| 23.955 | 821473 | 13.5 | S | | 1.1 | 5 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 24 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.256 | 821474 | 14.0 | S | T VIR | 0.9 | 0 | | | 0.445 | N | 4.5 | 167 | 6.6 | Y | 3 | Morrison,W | |
| 24.920 | 821475 | 13.4 | S | | 1.0 | 4 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Ended by cloud, poor conditions. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.908 | 852167 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 6.00 | Kodak 2415 | | Y | | 101/P | | Jager,M |

DATE: 26 FEB 1987

DATE: 26 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.562 | 821476 | 13.5 | M | X LEO | 1 | 3 | | | 0.15 | N | 8.5 | 142 | 4.5C | Y | 1 | Kato,T | |
| 26.68 | 821477 | 13.5 | S | AAVSO | 1 | 3 | | | 0.20 | N | 4.5 | 119 | 6.0 | Y | 1 | Hayashi,A | |
| 26.809 | 821478 | 13.7 | S | | 1.0 | 4 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | A |
| 26.844 | 821479 | 13.8 | S | | 0.6 | 4 | | | 0.35 | N | 5.5 | 100 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 27 FEB 1987

DATE: 27 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.31 | 821480 | 13.3 | S | AUL UBV | 1.2 | 0 | | | 0.29 | N | 4.3 | 144 | 6.0 | Y | 1 | Jacobson,E | |
| 27.66 | 821481 | 13.4 | S | AAVSO | 1.5 | 3 | | | 0.20 | N | 4.5 | 119 | 6.0 | Y | 1 | Hayashi,A | |
| 27.806 | 821482 | 13.7 | S | | 0.6 | 5 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | A |
| 27.865 | 821483 | 13.8 | S | | 0.5 | 3 | | | 0.35 | N | 5.5 | 160 | 6.2 | Y | 1 | Fleet,R.W | B |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.
NOTE B Glare from bright star. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 28 FEB 1987

DATE: 28 FEB 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.601 | 821484 | 13.5 | M | X LEO | 1 | 5 | | | 0.15 | N | 8.5 | 142 | 4.5C | Y | 1 | Kato,T | |
| 28.872 | 821485 | 13.8 | S | | 0.7 | 5 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 28.878 | 821486 | 13.8 | S | | 0.5 | 4 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 1 MAR 1987

DATE: 1 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.858 | 821487 | 13.6 | S | | 0.7 | 5 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 1.875 | 821488 | 13.7 | S | | 0.5 | 4 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 2 MAR 1987

DATE: 2 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.34 | 821489 | 13.4 | S | AUL UBV | 0.9 | 0 | | | 0.29 | N | 4.3 | 144 | 6.0 | Y | 1 | Jacobson,E |

DATE: 3 MAR 1987

DATE: 3 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.32 | 821490 | 13.4 | S | AUL UBV | 1 | 0 | | | 0.29 | N | 4.3 | 144 | 6.0 | Y | 1 | Jacobson,E |
| 3.36 | 821491 | 12.1 | S | Y VIR | | 1 | | | 0.20 | N | 6 | 55 | 6.5 | Y | 40 | Hale,A |
| 3.38 | 821492 | 12.3 | S | Y VIR | | 1 | | | 0.20 | N | 6 | 110 | 6.5 | Y | 40 | Hale,A |

DATE: 4 MAR 1987

DATE: 4 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.024 | 821493 | 13.9 | S | | 0.4 | 4 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 4.031 | 821494 | 14.0 | S | | 0.4 | 5 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | A |
| 4.851 | 821495 | 13.7 | S | | 0.8 | 5 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 4.872 | 821496 | 13.7 | S | | 0.8 | 4 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 5 MAR 1987 DATE: 5 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.30 | 821497 | 13.6 | S | AUL UBV | 0.9 | 0 | | | 0.29 | N | 4.3 | 144 | 6.0 | Y | 1 | Jacobson,E | |
| 5.872 | 821498 | 13.7 | S | | 0.8 | 5 | | | 0.52 | N | 5.6 | 150 | 6.3 | Y | 1 | Fleet,R.W | A |
| 5.889 | 821499 | 13.8 | S | | 0.6 | 5 | | | 0.35 | N | 5.5 | 100 | 6.3 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 6 MAR 1987

DATE: 6 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.889 | 821500 | 13.9 | S | | 0.7 | 5 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 6.903 | 821501 | 13.8 | S | | 0.6 | 4 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 7 MAR 1987

DATE: 7 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7.26 | 821502 | 13.2 | S | AUL UBV | 0.9 | 0 | | | 0.29 | N | 4.3 | 144 | 6.0 | Y | 1 | Jacobson,E |
| 7.41 | 821503 | 12.4 | S | Y VIR | | 1 | | | 0.20 | N | 6 | 110 | 6 | Y | 40 | Hale,A |

DATE: 8 MAR 1987

DATE: 8 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8.39 | 821504 | 13.7 | S | AUL UBV | 0.9 | 0 | | | 0.29 | N | 4.3 | 144 | 6.0 | Y | 1 | Jacobson,E |

DATE: 11 MAR 1987

DATE: 11 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11.049 | 821505 | 13.8 | S | | 0.7 | 3 | | | 0.52 | N | 5.6 | 150 | 5.9 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 18 MAR 1987

DATE: 18 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.18 | 821506 | 12.8 | S | NPS | 1.5 | 1 | | | 0.256 | N | 4.5 | 67 | 7.0 | Y | 3 | Morris,C.S | A |
| 18.18 | 821507 | 12.8 | S | NPS | | | | | 0.256 | N | 4.5 | 111 | 7.0 | Y | 3 | Morris,C.S | |
| 18.740 | 821508 | 14.2 | S | | 0.4 | 3 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | B |

NOTE A Small, non-stellar knot of material at center of coma.
NOTE B Difficult. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 19 MAR 1987

DATE: 19 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.750 | 821509 | 14.2 | S | | 0.8 | 3 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | A |
| 19.760 | 821510 | 14.4 | S | | 0.5 | 3 | | | 0.52 | N | 5.6 | 240 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 20 MAR 1987

DATE: 20 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.21 | 821511 | 12.7 | S | SX LEO | | 0 | | | 0.20 | N | 6 | 110 | 6.5 | Y | 40 | Hale,A | |
| 20.753 | 821512 | 14.3 | S | | 0.4 | 3 | | | 0.52 | N | 5.6 | 150 | 5.9 | Y | 1 | Fleet,R.W | A |

NOTE A Ended by cloud. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 21 MAR 1987

DATE: 21 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.48 | 821513 | 13.4 | S | AUL UBV | 0.8 | 0 | | | 0.29 | N | 4.3 | 144 | 6.0 | Y | 1 | Jacobson,E | |
| 21.774 | 821514 | 14.4 | S | | 0.5 | 4 | | | 0.52 | N | 5.6 | 240 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 22 MAR 1987

DATE: 22 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.16 | 821515 | 13.4 | S | | 1.5 | 1 | | | 0.4 | N | 5 | 101 | | Y | 1 | Levy,D.H | |
| 22.858 | 821516 | 14.0 | S | | 0.6 | 4 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 22.872 | 821517 | 14.1 | S | | 0.5 | 3 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | A |
| 22.90 | 821518 | 13.0 | S | AAVSO | 0.3 | 6 | | | 0.203 | SC | 10 | 135 | 6.5 | Y | 1 | Hasubick,W | B |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.
NOTE B DC approximate.

DATE: 23 MAR 1987

DATE: 23 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.906 | 821519 | 14.2 | S | | 0.4 | 3 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | A |
| 23.913 | 821520 | 14.2 | S | | 0.4 | 4 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 24 MAR 1987

DATE: 24 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.547 | 821521 | 13.7 | M | X LEO | 1 | 5 | | | 0.15 | N | 8.5 | 142 | 5.0C | Y | 1 | Kato,T |

DATE: 26 MAR 1987

DATE: 26 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.21 | 821522 | 12.9 | S | NPS | 1.7 | 1 | | | 0.256 | N | 4.5 | 67 | 6.5 | Y | 3 | Morris,C.S |
| 26.21 | 821523 | 12.9 | S | NPS | | | | | 0.256 | N | 4.5 | 111 | 6.5 | Y | 3 | Morris,C.S |
| 26.494 | 821524 | 13.5 | M | X LEO | 0.5 | 4 | | | 0.10 | N | 10 | 111 | 4.5C | Y | 1 | Kato,T |

DATE: 27 MAR 1987

DATE: 27 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.30 | 821525 | 13.0 | S | SX LEO | | 0 | | | 0.20 | N | 6 | 110 | 6 | Y | 40 | Hale,A |

DATE: 29 MAR 1987

DATE: 29 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.521 | 821526 | 13.8 | M | X LEO | 0.5 | 4 | | | 0.15 | N | 8.5 | 142 | 4.0C | Y | 1 | Kato,T | A |
| 29.90 | 821527 | 12.5: | S | | 3 | 0 | | | 0.300 | N | 5 | 62 | 6.0 | Y | 5 | Scholten,A | |
| 29.91 | 821528 | 12.3 | S | S SEX | 3 | 1 | | | 0.205 | N | 6 | 38 | 5.8 | Y | 1 | van de Weg,R.L.W | B |

NOTE A Hazy sky.
NOTE B Surprising easily visible, big object. Coma diameter approximate.

DATE: 30 MAR 1987

DATE: 30 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.84 | 821529 | 12.3 | S | S SEX | 3 | 1 | | | 0.254 | JB | 6 | 73 | 6.2 | Y | 6 | Bus,E.P | A |

NOTE A Unexpected large and bright, coma diameter approximate; the brightness is probably brighter after extinction correction: approximately 12.0?

DATE: 31 MAR 1987

DATE: 31 MAR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31.23 | 821530 | 13.2 | S | AUL UBV | 0.7 | 0 | | | 0.29 | N | 4.3 | 144 | 6.0 | Y | 1 | Jacobson,E | |
| 31.24 | 821531 | 13.0: | S | AUL UBV | 0.9 | 0 | | | 0.25 | N | 4.5 | 179 | 6.0 | Y | 1 | Jacobson,E | |
| 31.830 | 821532 | 14.6 | S | | 0.4 | 3 | | | 0.52 | N | 5.6 | 240 | 6.0 | Y | 1 | Fleet,R.W | A |

NOTE A Gap in cirrus. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 1 APR 1987

DATE: 1 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.844 | 821533 | 14.3 | S | | 0.5 | 3 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | A |
| 1.903 | 821534 | 14.3 | S | | 0.5 | 2 | | | 0.52 | N | 5.6 | 240 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 2 APR 1987

DATE: 2 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.29 | 821535 | 13.0 | S | SX LEO | | 0 | | | 0.20 | N | 6 | 110 | 6 | Y | 40 | Hale,A | |
| 2.29 | 821536 | 12.8 | S | Y VIR | | 0 | | | 0.20 | N | 6 | 110 | 5.6 | Y | 40 | Hale,A | |
| 2.844 | 821537 | 14.3 | S | | 0.7 | 4 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 2.858 | 821538 | 14.4 | S | | 0.5 | 3 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 3 APR 1987

DATE: 3 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.833 | 821539 | 14.2 | S | | 0.9 | 4 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 3.851 | 821540 | 14.2 | S | | 0.6 | 5 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 4 APR 1987

DATE: 4 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.944 | 821541 | 14.3 | | S | 0.4 | 4 | | | 0.52 | N | 5.6 | 240 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Star nuisance. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 5 APR 1987

DATE: 5 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.27 | 821542 | 13.1 | S | AUL UBV | 0.7 | 0 | | | 0.29 | N | 4.3 | 144 | 6.0 | Y | 1 | Jacobson,E | A |
| 5.896 | 821543 | 14.2 | S | | 0.8 | 4 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | B |
| 5.906 | 821544 | 14.2 | S | | 0.6 | 3 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | B |

NOTE A Very slightly condensed.
NOTE B Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 6 APR 1987

DATE: 6 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.951 | 821545 | 14.4 | S | | 0.4 | 3 | | | 0.52 | N | 5.6 | 240 | 6.0 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 16 APR 1987

DATE: 16 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.20 | 821546 | 13.2 | S | AUL UBV | 0.7 | 0 | | | 0.29 | N | 4.3 | 144 | 6.0 | Y | 1 | Jacobson,E |

DATE: 17 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.20 | 821547 | 12.9 | S | AUL UBV | 0.9 | 0 | | | 0.25 | N | 4.5 | 179 | 6.0 | Y | 1 | Jacobson,E |

DATE: 18 APR 1987

DATE: 18 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.781 | 821548 | 14.4 | S | | 0.5 | 2 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | A |
| 18.788 | 821549 | 14.2 | S | | 0.5 | 3 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 19 APR 1987 DATE: 19 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.809 | 821550 | 14.3 | S | | 0.7 | 3 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | A |
| 19.816 | 821551 | 14.2 | S | | 0.7 | 4 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 20 APR 1987

NETWORK: AMATEUR OBSERVATION

DATE: 20 APR 1987

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.21 | 821552 | 13.3 | S | NPS | 1.2 | 2 | | | 0.256 | N | 4.5 | 111 | 6.5 | Y | 3 | Morris,C.S | A |
| 20.806 | 821553 | 14.5 | S | | 0.6 | 3 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | B |
| 20.813 | 821554 | 14.4 | S | | 0.8 | 3 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | B |

NOTE A Comet surprisingly condensed with a knot or condensation in the center of the coma.
NOTE B Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 21 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.736 | 821555 | 13.6 | | | | 9 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | A |
| 21.826 | 821556 | 13.7 | | | 0.5 | 8 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | B |
| 21.847 | 821557 | 13.8 | | | 0.5 | 8 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | C |
| 21.88 | 821558 | 12.5: | S | | 2 | 0 | | | 0.300 | N | 5 | 62 | 5.5 | Y | 5 | Scholten,A | |
| 21.89 | 821559 | 12.6 | S | S SEX | 2.5 | 0 | | | 0.205 | N | 6 | 38 | 5.9 | Y | 1 | van de Weg,R.L.W | D |
| 21.910 | 821560 | 13.9 | | | 0.1 | 8 | | | 0.52 | N | 5.6 | 240 | 5.9 | Y | 1 | Fleet,R.W | E |

NOTE A C. cond. slightly fuzzy? Magnitude of almost stellar central condensation estimated as if it were a star, estimates of outer coma diameter uncertain because of intensity of central condensation. Change from previous night so marked that identification initially uncertain. Comparison star magnitudes derived from T Vir chart.

NOTE B Motion confirmed. Coma difficult. Outer coma diameter; averted vision coma diameter. Magnitude of almost stellar central condensation estimated as if it were a star, estimates of outer coma diameter uncertain because of intensity of central condensation. Change from previous night so marked that identification initially uncertain. Comparison star magnitudes derived from T Vir chart.

NOTE C Magnitude of almost stellar central condensation estimated as if it were a star, estimates of outer coma diameter uncertain because of intensity of central condensation. Change from previous night so marked that identification initially uncertain. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

NOTE D Unmistakable.

NOTE E C. cond. definitely fuzzy. Magnitude of almost steller central condensation estimated as if it were a star, estimates of outer coma diameter uncertain because of intensity of central condensation. Change from previous night so marked that identification initially uncertain. Comparison star magnitudes derived from T Vir chart. Coma diameter uncertain.

DATE: 22 APR 1987

DATE: 22 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 22.778 | 821561 | 13.6 | M | | 0.4 | 8 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 22.788 | 821562 | 13.7 | M | | 0.3 | 7 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | B |

NOTE A Comparison star magnitudes derived from T Vir chart.
NOTE B 0.5' coma averted vision. Comparison star magnitudes derived from T Vir chart.

DATE: 23 APR 1987

DATE: 23 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.20 | 821563 | 12.7: | S | SX LEO | | 1 | | | 0.20 | N | 6 | 163 | 5.5 | Y | 40 | Hale,A | A |
| 23.545 | 821564 | 14.0 | M | X LEO | 1 | 3 | | | 0.20 | SC | 10 | 222 | 4.0C | Y | 1 | Kato,T | |
| 23.736 | 821565 | 13.5 | M | | 0.4 | 7 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | B |
| 23.753 | 821566 | 13.4 | M | | 0.5 | 6 | | | 0.52 | N | 5.6 | 240 | 6.1 | Y | 1 | Fleet,R.W | B |

NOTE A Sky conditions only fair; the comet was small, faint and difficult. The observation was hurried due to oncoming clouds.
NOTE B 0.6' coma, averted vision. Comparison star magnitudes derived from T Vir chart.

DATE: 24 APR 1987

NETWORK: AMATEUR OBSERVATION

DATE: 24 APR 1987

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.17 | 821567 | 13.1 | S | AAVSO | 1.5 | 1 | | | 0.20 | N | 7 | 71 | | Y | 2 | Levy,D.H | |
| 24.23 | 821568 | 12.6 | S | Y VIR | 0.5 | 6 | | | 0.20 | N | 6 | 163 | 7 | Y | 41 | Hale,A | A |
| 24.24 | 821569 | 12.8 | M | Y VIR | 0.5 | 6 | | | 0.61 | C | 15 | 300 | 7 | Y | 41 | Hale,A | A |
| 24.492 | 821570 | 14.2 | M | X LEO | 0.5 | 3 | | | 0.15 | N | 8.5 | 256 | 4.5C | Y | 1 | Kato,T | |
| 24.799 | 821571 | 13.7 | M | | 0.4 | 6 | | | 0.52 | N | 5.6 | 240 | 5.9 | Y | 1 | Fleet,R.W | B |

NOTE A Small, well condensed coma; the appearance of the comet was quite similar to that of P/Schwassman-Wachmann 1 during an outburst.

NOTE B 0.6' coma, averted vision. Comparison star magnitudes derived from T Vir chart. Haze.

DATE: 25 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.22 | 821572 | 13.1 | S | AUL UBV | 0.9 | 0 | | | 0.25 | N | 4.5 | 179 | 6.0 | Y | 1 | Jacobson,E | |
| 25.757 | 821573 | 13.5 | M | | 0.7 | 6 | | | 0.52 | N | 5.6 | 240 | 6.3 | Y | 1 | Fleet,R.W | A |
| 25.771 | 821574 | 13.5 | M | | 0.7 | 6 | | | 0.35 | N | 5.5 | 100 | 6.2 | Y | 1 | Fleet,R.W | A |
| 25.781 | 821575 | 13.5 | M | | 0.8 | 6 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.288 | 852168 | 1.270 | 4 | 0.318 | 1.6 x 1.1 | 20.00 | Kodak Tri-X | 400/ | N | S | 17/C | 2 | Edberg,S.J | A |
| 25.303 | 852169 | 1.270 | 4 | 0.318 | 1.6 x 1.1 | 20.00 | Ektachrome | 200/ | N | S | 1/N | 2 | Edberg,S.J | B |

NOTE A Definite nonstellar image.
NOTE B Weak but detectable image.

DATE: 26 APR 1987

DATE: 26 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.15 | 821576 | 13.6 | S | SA 57 | 0.9 | 1 | | | 0.406 | C | 18 | 229 | | | | Green,D.W.E | A |
| 26.160 | 821577 | 13.9 | S | S SEX | 0.5 | 2 | | | 0.254 | N | 5.6 | 120 | 7.0 | Y | 1 | Knight,S | B |
| 26.18 | 821578 | >12.5 | | | | | | | 0.20 | N | 6 | 163 | 5 | Y | 40 | Hale,A | C |
| 26.878 | 821579 | 13.8 | S | | 0.5 | 4 | | | 0.52 | N | 5.6 | 240 | 5.8 | Y | 1 | Fleet,R.W | D |

NOTE A Coma diameter approximate.
NOTE B Detected motion 0:45.
NOTE C Negative search. Sky conditions quite poor; scattered clouds, high atmospheric moisture content and poor transparency.
NOTE D Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter. After rain.

DATE: 27 APR 1987

DATE: 27 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.12 | 821580 | 13.9 | S | LNES | 0.8 | 1 | | | 0.406 | C | 18 | 229 | | | | Green,D.W.E | A |
| 27.146 | 821581 | 13.8 | S | S SEX | 0.6 | 3 | | | 0.254 | N | 5.6 | 120 | 7.0 | Y | 1 | Knight,S | B |
| 27.21 | 821582 | >12.5 | | | | | | | 0.20 | N | 6 | 163 | 5.5 | Y | 40 | Hale,A | C |
| 27.546 | 821583 | 14.2 | M | X LEO | | | | | 0.15 | N | 8.5 | 256 | 4.5C | Y | 1 | Kato,T | |
| 27.826 | 821584 | 13.6 | S | | 0.7 | 5 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | D |
| 27.833 | 821585 | 13.7 | S | | 0.7 | 4 | | | 0.52 | N | 5.6 | 240 | 6.1 | Y | 1 | Fleet,R.W | D |

NOTE A Coma diameter approximate.
NOTE B Detected motion 0:30.
NOTE C Negative search.
NOTE D Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 28 APR 1987

DATE: 28 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.760 | 821586 | 13.7 | S | | 0.6 | 5 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | A |
| 28.771 | 821587 | 13.7 | S | | 0.7 | 5 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 28.89 | 821588 | 12.8: | S | S SEX | 2.5 | 0 | | | 0.205 | N | 6 | 38 | 5.9 | Y | 1 | van de Weg,R.L.W | B |
| 28.90 | 821589 | 12.5: | S | | 2 | 0 | | | 0.300 | N | 5 | 62 | 6.0 | Y | 5 | Scholten,A | |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.
NOTE B Not quite sure because close too the limited magnitude; danger for imagination! [sic] Coma diameter approximate.

DATE: 29 APR 1987

DATE: 29 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.475 | 821590 | 14.5 | M | X LEO | | | | | 0.15 | N | 8.5 | 256 | 4.0C | Y | 1 | Kato,T | |
| 29.802 | 821591 | 13.6 | S | | 0.8 | 4 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | A |
| 29.816 | 821592 | 13.6 | S | | 0.7 | 3 | | | 0.52 | N | 5.6 | 240 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 30 APR 1987

DATE: 30 APR 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.778 | 821593 | 13.5 | S | | 0.8 | 3 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |
| 30.788 | 821594 | 13.5 | S | | 0.7 | 3 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 1 MAY 1987

DATE: 1 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.806 | 821595 | 13.7 | S | | 0.7 | 3 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | A |
| 1.833 | 821596 | 13.7 | S | | 0.7 | 3 | | | 0.52 | N | 5.6 | 240 | 6.0 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 2 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

DATE: 2 MAY 1987

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.830 | 821597 | 13.9 | S | | 0.6 | 3 | | | 0.52 | N | 5.6 | 240 | 6.0 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 15 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.712 | 821598 | 14.7 | S | | 0.3 | 3 | | | 0.52 | N | 5.6 | 240 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Suspected only. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 17 MAY 1987

DATE: 17 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.15 | 821599 | >12.5 | | | | | | | 0.20 | N | 6 | 163 | 5 | Y | 40 | Hale,A | A |
| 17.757 | 821600 | 14.9 | | S | 0.3 | 3 | | | 0.52 | N | 5.6 | 240 | 6.0 | Y | 1 | Fleet,R.W | B |

NOTE A Negative search. Sky conditions poor; fast-moving clouds.
NOTE B Suspected only. Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 18 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.722 | 821601 | 14.8 | S | | 0.5 | 2 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | A |
| 18.726 | 821602 | 14.9 | S | | 0.4 | 2 | | | 0.52 | N | 5.6 | 240 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 19 MAY 1987

NETWORK: AMATEUR OBSERVATION

DATE: 19 MAY 1987

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.733 | 821603 | 14.9 | S | | 0.4 | 3 | | | 0.52 | N | 5.6 | 150 | 6.1 | Y | 1 | Fleet,R.W | A |
| 19.736 | 821604 | 15.0 | S | | 0.4 | 3 | | | 0.52 | N | 5.6 | 240 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 20 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.494 | 821605 | 15.5 | M | X LEO | 0.5 | 2 | | | 0.20 | SC | 10 | 160 | 5.0C | Y | 1 | Kato,T | |
| 20.760 | 821606 | 14.7 | S | | 0.5 | 2 | | | 0.52 | N | 5.6 | 150 | 6.0 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 21 MAY 1987

DATE: 21 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.708 | 821607 | 15.0 | S | | 0.5 | 3 | | | 0.52 | N | 5.6 | 240 | 6.2 | Y | 1 | Fleet,R.W | A |
| 21.715 | 821608 | 14.9 | S | | 0.6 | 3 | | | 0.52 | N | 5.6 | 150 | 6.2 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 24 MAY 1987

DATE: 24 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 24.19 | 821609 | >13.0 | | | | | | | 0.20 | N | 6 | 163 | 6 | Y | 16 | Hale,A | A |
| 24.501 | 821610 | 14.5 | M | X LEO | | | | | 0.13 | N | 8 | 208 | 6.0C | Y | 1 | Kato,T | |
| 24.520 | 821611 | 14.2 | M | X LEO | 0.5 | 4 | | | 0.20 | SC | 10 | 286 | 6.0C | Y | 1 | Kato,T | |
| 24.740 | 821612 | 15.1 | S | | 0.3 | 3 | | | 0.52 | N | 5.6 | 240 | 6.0 | Y | 1 | Fleet,R.W | B |

NOTE A Negative search.
NOTE B Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 25 MAY 1987

DATE: 25 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.719 | 821613 | 14.8 | | S | 0.4 | 4 | | | 0.52 | N | 5.6 | 240 | 6.1 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 26 MAY 1987

DATE: 26 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26.736 | 821614 | 15.0 | S | | 0.5 | 3 | | | 0.52 | N | 5.6 | 150 | 6.0 | Y | 1 | Fleet,R.W | A |
| 26.740 | 821615 | 14.9 | S | | 0.5 | 3 | | | 0.52 | N | 5.6 | 240 | 6.0 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. Averted vision coma diameter.

DATE: 27 MAY 1987

DATE: 27 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.17 | 821616 | >13.5 | | | | | | | 0.41 | N | 4.5 | 244 | 6 | Y | 40 | Hale,A | A |

NOTE A Negative search.

DATE: 28 MAY 1987

DATE: 28 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.486 | 821617 | 14.3 | M | U GEM | 0.5 | 3 | | | 0.15 | N | 8.5 | 142 | 5.0C | Y | 1 | Kato,T |

DATE: 29 MAY 1987

DATE: 29 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.21 | 821618 | 13.3 | S | NPS | 1 | 3 | | | 0.256 | N | 4.5 | 156 | 6.0 | Y | 3 | Morris,C.S | A |

NOTE A Comet obvious with faint (m2 = 14.0) stellar condensation. Coma diameter may have been as large as 1.5'.

DATE: 30 MAY 1987

DATE: 30 MAY 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30.18 | 821619 | 13.8 | S | AAVSO | 1.5 | 0 | | | 0.60 | N | 4 | | | Y | 3 | Levy,D.H |

DATE: 1 JUN 1987

DATE: 1 JUN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.17 | 821620 | >13.0 | | | | | | | 0.41 | N | 4.5 | 244 | 5.5M | Y | 40 | Hale,A | A |

NOTE A Negative search. Attempt slightly affected by crescent moon in sky.

DATE: 15 JUN 1987

DATE: 15 JUN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.17 | 821621 | >13.5 | | | | | | | 0.41 | N | 4.5 | 244 | 6 | Y | 40 | Hale,A | |
| 15.21 | 821622 | 13.8: | S | | 1 | 0 | | | 0.318 | N | 4 | 100 | 5.0 | Y | 3 | Morris,C.S | A |
| 15.72 | 821623 | >15.0 | | | | | | | 0.52 | N | 5.6 | 240 | 6.0 | Y | 1 | Fleet,R.W | B |

NOTE A Comet could not have been fainter than 14.0. Comet also detected in 25.6 cm f/4.5 reflector (111x, 156x).
NOTE B Comparison star magnitudes derived from T Vir chart. The magnitude limit given is the approximate limit for a star defocussed to about 0.2' arc, the stellar limit was nearer 16.0. Comet not seen.

DATE: 16 JUN 1987

DATE: 16 JUN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.18 | 821624 | | | | 2 | 0 | | | 0.914 | N | | | | Y | 4 | Levy,D.H | |
| 16.72 | 821625 | >15.0 | | | | | | | 0.52 | N | 5.6 | 240 | 6.0 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. The magnitude limit given is the approximate limit for a star defocussed to about 0.2' arc, the stellar limit was nearer 16.0. Comet not seen.

DATE: 17 JUN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17.19 | 821626 | 13.9 | S | SAO | 2 | 0 | | | 0.914 | N | 7.5 | 274 | | Y | 4 | Levy,D.H | |
| 17.72 | 821627 | >15.0 | | | | | | | 0.52 | N | 5.6 | 240 | 5.9 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. The magnitude limit given is the approximate limit for a star defocussed to about 0.2' arc, the stellar limit was nearer 16.0. Comet not seen.

DATE: 18 JUN 1987

DATE: 18 JUN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18.72 | 821628 | >15.0 | | | | | | | 0.52 | N | 5.6 | 240 | 5.9 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. The magnitude limit given is the approximate limit for a star defocussed to about 0.2' arc, the stellar limit was nearer 16.0. Comet not seen.

DATE: 23 JUN 1987

DATE: 23 JUN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.71 | 821629 | >15.0 | | | | | | | 0.52 | N | 5.6 | 240 | 5.9 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. The magnitude limit given is the approximate limit for a star defocussed to about 0.2' arc, the stellar limit was nearer 16.0. Comet not seen.

DATE: 25 JUN 1987

DATE: 25 JUN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25.72 | 821630 | >15.0 | | | | | | | 0.52 | N | 5.6 | 240 | 5.8 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. The magnitude limit given is the approximate limit for a star defocussed to about 0.2' arc, the stellar limit was nearer 16.0. Comet not seen.

DATE: 27 JUN 1987

DATE: 27 JUN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27.71 | 821631 | >15.0 | | | | | | | 0.52 | N | 5.6 | 240 | 5.9 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. The magnitude limit given is the approximate limit for a star defocussed to about 0.2' arc, the stellar limit was nearer 16.0. Comet not seen.

DATE: 28 JUN 1987

DATE: 28 JUN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 28.70 | 821632 | >15.0 | | | | | | | 0.52 | N | 5.6 | 240 | 5.8 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. The magnitude limit given is the approximate limit for a star defocussed to about 0.2' arc, the stellar limit was nearer 16.0. Comet not seen.

DATE: 29 JUN 1987

DATE: 29 JUN 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29.72 | 821633 | >15.0 | | | | | | | 0.52 | N | 5.6 | 240 | 5.8 | Y | 1 | Fleet,R.W | A |

NOTE A Comparison star magnitudes derived from T Vir chart. The magnitude limit given is the approximate limit for a star defocussed to about 0.2' arc, the stellar limit was nearer 16.0. Comet not seen.

DATE: 19 NOV 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

DATE: 19 NOV 1987

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 19.52 | 821634 | 14.6 | S | AAVSO | | 0 | | | 1.549 | N | 13.5 | 654 | | Y | 5 | Levy,D.H |

DATE: 20 NOV 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.53 | 821635 | 14.4 | S | AAVSO | | 0 | | | 1.549 | N | 13.5 | 654 | | Y | 5 | Levy,D.H |

DATE: 1 DEC 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

DATE: 1 DEC 1987

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.34 | 821636 | 12.5 | S | T VIR | 1.4 | 0 | | | 0.256 | N | 4.5 | lll | 7.0 | Y | 3 | Morris,C.S | A |

NOTE A Difficult observation - comet was close to a star.

DATE: 21 DEC 1987

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21.45 | 821637 | 15.3 | S | AAVSO | 0.8 | 2 | | | 1.549 | N | 13.5 | 654 | | Y | 5 | Levy,D.H |

DATE: 15 JAN 1988

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

DATE: 15 JAN 1988

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15.44 | 821638 | 15.8 | S | AAVSO | 0.3 | 1 | | | 1.549 | N | 13.5 | 654 | | Y | 5 | Levy,D.H |

DATE: 14 FEB 1988

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14.43 | 821639 | >15.0 | | V | | | | | 0.254 | N | 6.8 | | 6.5 | Y | 2 | Edberg,S.J | A |

NOTE A Comet not seen. Estimate based on in-focus stars. Several magnifications used.

DATE: 16 FEB 1988

DATE: 16 FEB 1988

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: PHOTOGRAPHY

| Date(UT) | AON# | FL | f/ | Ap | FOV | ExpM | Emulsion | ISO | Hyp | Gdng | Id/Typ | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16.902 | 852170 | 0.300 | 1.5 | 0.200 | 6.9 x 4.6 | 27.00 | Ektagraphic | 25/ | Y | | 101/P | | Jager,M | A |

NOTE A Possible observation. Magnitude 16. Film is Ektagraphic HC (ortho).

DATE: 23 FEB 1988

DATE: 23 FEB 1988

NETWORK: AMATEUR OBSERVATION

SUB-NETWORK: VISUAL APPEARANCE

| Date(UT) | AON# | ml | MM | Chart | Coma size | DC | Tail | PA | Ap | Ins | f/ | Pwr | Lim | DA | Site | Observer(s) | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 23.32 | 821640 | 16.8 | S | SAO | 0.8 | 1 | | | 1.549 | N | 13.5 | 654 | | Y | 5 | Levy,D.H | |
| 23.39 | 821641 | >16.5 | S | | 0.5 | 0 | | | 1.549 | C | 13.5 | 550 | 5.5 | Y | 4 | Morris,C.S | A |

NOTE A Comet may have been glimpsed. ml fainter than 16.5.