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Crustal Dynamics Project
Data Analysis—1987

Volume 1—Fixed Station VLBI Geodetic Results 1979-86

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CRUSTAL DYNAMICS PROJECT DATA ANALYSIS - 1987

Volume 1. Fixed Station VLBI Geodetic Results

I. INTRODUCTION

This report to the Crustal Dynamics Project Data Information System (CDP-DIS) documents the results obtained by the Goddard VLBI Data Analysis Team in analyzing the CDP VLBI observing sessions using only fixed stations between 1979 and the end of 1986. Also included are results from: 1) earth orientation observing sessions of the IRIS Program (formerly the POLARIS Project) coordinated by the National Geodetic Survey (NGS) from 1980 until the end of 1986 and 2) data acquired between fixed stations and the mobile VLBI sites at Platteville, CO, Penticton, B.C., and Yellowknife, N-W.T. These sites were occupied for the measurement of continental plate stability.

Results from CDP mobile sessions and special purpose experiments such as source surveys will be discussed in later volumes of this report.

The results presented here are complete in that they include all available relevant data and supersede results given in previous submissions. The values presented are the results from two new least-squares adjustments using most of the Mark III geodetic data acquired with fixed stations between 1979 and 1986. These solutions, designated GLB121 and GLB122, are discussed below.

II. OBSERVATIONS

A. Instrumentation

The Mark III instrumentation is described in detail in Rogers _et al_. (1983) and Clark _et al_. (1985). Its salient characteristic is the ability to record up to 28 channels simultaneously, each 2 MHz in bandwidth. The current standard CDP practice is to record 14 channels in the forward direction and the remaining 14 in the backward direction with 8 channels applied to X-band (8.4 GHz) and 6 channels to S-band (2.3 GHz). This procedure is repeated twelve times on a single tape, moving the record heads slightly for each pair of passes, at the stations equipped with high density heads. Observations run from 100 to 800 seconds. Realtime logging of pressure, temperature, relative humidity, and cable length calibrations is an integral part of the Mark III system. Hydrogen masers provide both time and frequency for all observing sessions. The receivers have 400 MHz bandwidth at X-band and 80 MHz at S-band. A single phase calibration frequency is used in each recorded channel to remove instrumental dispersion.

Table 1 describes the radio telescopes employed in the observing sessions. The 8-character station names are used throughout this report.

B. Observing Sessions

Table 2 is a summary of the observing sessions discussed here. Each line corresponds to one observing session and contains the data base name of the session, the purpose of the session, and the stations which participated.

The purposes of the various session types are as follows:

North American Plate Stability, US transcontinental sessions designed to measure the internal stability of the North American Plate.

Transatlantic, US to Europe sessions designed to measure motion between North America and Europe.

IRIS and POLARIS, NGS sessions designed to measure earth rotation. These sessions began in November 1980 with HAYSTACK and HRAS 085 and were scheduled every seven days. ONSALA60 participated when possible on a monthly basis. In August 1983 operations were increased to once every five days. In late 1983 two new stations, RICHMOND and WETTZELL, were brought on line and became fully operational in 1984. Currently IRIS is undertaking one 24-hour session every five days with WESTFORD, HRAS 085, RICHMOND, and WETTZELL. Whenever possible, ONSALA60 continues to observe monthly. The IRIS intensive UT1 measurement sessions are not included here.

Pacific Basin, sessions involving KASHIMA and stations in California. Only two sessions are so designated in Table 2 and they occur in early 1984 when KASHIMA was first used operationally.

East Pacific, sessions designed to measure baselines in the Pacific Basin with emphasis on the baselines in the east.

West Pacific, sessions designed to measure baselines in the Pacific Basin with emphasis on the baselines in the west.

Polar, sessions involving stations in Europe, the conterminous US, Alaska, and Japan. These sessions are undertaken to link the global VLBI reference frame.

North Atlantic, sessions designed to measure baselines between Europe and stations on the east and west of the North American Plate.

North Pacific, sessions designed to measure baselines in the Pacific Basin with emphasis on the northern baselines.

South Africa, a series of six observing sessions carried out in January and February 1986 by the NGS using HARTRAO and stations in Europe and the U.S.

Transpacific, a series of monthly (when possible) experiments which began in early 1986 involving KAUAI, GILCREEK, and KASHIMA. These sessions are designed to densify the interplate measurements in the Pacific Basin.

III. DATA ANALYSIS METHODS

A. Processing and Data Handling

Nearly all the Mark III data discussed here were correlated by the Haystack Mark III correlator. Some IRIS data were correlated at the Max Planck Institute for Radio Astronomy in Bonn (FRG), and beginning in 1986 most IRIS data were processed at the new Washington correlator located at the US Naval Observatory. The Bonn correlator is a copy of the Haystack correlator and the Washington correlator is a improved version of the Haystack correlator. Some data involving the Kashima station were correlated at Kashima using the Japanese K-3 correlator. For the purposes of this report the output of the four Mark III-compatible correlators can be considered indistinguishable. The output of these correlators is sent either to the analysis center at the Goddard Space Flight Center or to a similar center at the NGS in Rockville, MD, where the data are organized by session and frequency band into Mark III data bases. Calibration data, solar system ephemerides, a priori parameter values, partial derivatives, and theoretical delays and rates are added to each data base prior to actual data analysis. In the analysis process information about editing, ambiguity resolution, solution parametrization, and data-variance-modification is added to the data bases. The final data base files are available to investigators from the CDP-DIS. The Mark III Data Base System utilities required to read the files have been implemented on HP 1000 and VAX 11/780 computer systems.

B. Models

The models adhere generally to the MERIT standards (Melbourne et al., 1983). The precession and nutation models used in the data analysis are the J2000.0 and IAU 1980 models, respectively. The a priori earth orientation parameters from BIH Circular D are interpolated to each observation epoch then modified by the standard MERIT model for short-period tidal variations in UT1. The tidal potential used to compute the effect of solid earth tides is calculated using the MIT PEP ephemeris; the values of the Love numbers are 0.60967 for Love h, 0.085 for Love l, and zero for the phase lag. General relativistic solar deflection is modeled using Einstein's value for gamma. An axis offset model is applied for each antenna where the pointing axes do not intersect. Clocks are modeled with a combination of polynomials and diurnal sinusoids. The value of the speed of light is 299,792,458. m/sec. The models are described in greater detail in NASA TM-79582 and are embodied in the program CALC developed by the Goddard VLBI group. CALC Version 6.0 was used for this analysis and includes a pole tide model.

Mark III observations are calibrated for the delay caused by charged particles in the line of sight (ionosphere and solar corona) by generating new observables which are linear combinations of the X-band and S-band observations. To the extent that the delay effects of charged particles have an inverse frequency-squared dependence these new observables are free of charged particle effects.

In general the effects of tropospheric refraction are calibrated using the Marini model; this model requires surface measurements of pressure, temperature, and relative humidity. In some cases valid meteorological measurements were not available and the Chao model, which requires only an average zenith-path-delay for each station, was used. The formulation of the Marini model was presented in our 1984 report to the CDP-DIS. Water vapor radiometer data, which can be used to calibrate the wet portion of the tropospheric delay, were either unavailable or deemed not operational for the data presented here. During 1986 water vapor radiometers were operated extensively at some stations to monitor the troposphere.

Cable calibration, i.e., corrections for variations in the electrical length of the cable carrying timing signals from the maser frequency standard to the receiver, was applied where available and useful.

IV. DATA ANALYSIS RESULTS

A. The GLOBL analysis system

The GLOBL analysis system, developed at Goddard by W. E. Himwich, permits the adjustment of parameters using an arbitrarily large set of data within the memory limits of the Goddard VLBI group's minicomputer facility. GLOBL is an extension of the interactive SOLVE system developed by the Goddard VLBI group and used for all routine VLBI data analysis. After a data base for one observing session has been fully updated using SOLVE, a superfile retaining the necessary information is created. The complete set of superfiles is the potential input to GLOBL. GLOBL processes the selected superfiles sequentially, in each step applying arc parameter elimination and carrying the global parameters forward. Arc parameters are those relevant only to a single data base, e.g., clock and atmosphere parametrization for a single session, UT1 and polar motion, and daily nutation adjustments. Global parameters are those whose estimated values may be affected by more than one observing session, e.g., source positions. Coefficients of the nutation series, the precession constant, and Love numbers of the solid earth tide are other possible global parameters. Depending on the purpose of the GLOBL solution, station coordinates can be either global or arc parameters.

Since at each step GLOBL handles only the global parameters and arc parameters required for a single data base, large data sets can be analyzed. Current program and machine size constraints limit the maximum number of parameters to 384 at one time. Sequential processing does entail two passes through the data. After the forward pass the values of the global parameters are known. The backward pass is necessary to recover the arc parameter values and the solution statistics. The two passes give a solution which is identical to a conventional one-step least-squares estimation of the entire ensemble of estimated parameters.

B. The GLB122 solution

The purpose of the GLB122 solution was to produce tables of baseline evolution from the ensemble of CDP fixed station data in a manner which made no a priori assumptions about tectonic plate motion. The station coordinates were therefore treated as arc parameters, i.e., they were allowed to vary from session to session subject only to the constraint of being estimated with a global set of source coordinate values. The GLB122 solution used 177,095 delay/delay rate pairs to estimate 105 global parameters and 12,800 arc parameters. 466 separate sessions, listed in Table 2, were included. The overall weighted rms fit of the solution was 85 ps for delay and 75 fs/s for delay rate, and the reduced chi-square was 0.97. The coordinates of the observed extragalactic radio sources except for the right ascension of 3C273B, which was fixed to define the right ascension origin, made up the 105 global parameters. The source positions are given in Table 3.1. The arc parameters included the positions of the stations for each session (except for the reference station for that session), the parametrizations for the station clocks and atmospheres, and daily offsets in obliquity and longitude.

Tables 6.1-6.108 present the baseline lengths and formal errors of the baselines measured in these sessions. With the exception of the three mobile sites (PENTICTN, PLATTVIL, and YELLOWKN), the lengths presented are the chord distances between the VLBI reference points of the two antennas involved. For an antenna with intersecting axes the VLBI reference point is located at the intersection of axes. For an offset axis antenna the VLBI reference point is located at the point of intersection of the fixed axis with the plane perpendicular to the fixed axis containing the moving axis. In the case of the baselines involving mobile sites, the baseline lengths are the chord distances from the fixed station VLBI reference points to a ground survey monument near the mobile antenna. The eccentricity data used to map the VLBI results to the monuments are presented in Table 5.

For the purposes of geodetic interpretation, the HAYSTACK and WESTFORD antennas, which are only 1.24 km apart, can be considered to be identical. In the tables for HAYSTACK the results from the WESTFORD antenna have been mapped to HAYSTACK. The mapping used the geodetic tie between the antennas given in CDP: Catalog of Site Information (NASA TM 86218) which was derived from an NGS ground survey. An asterisk indicates a mapped value.

Tables 6.1-6.108 also show the weighted mean baseline values, the weighted rms scatter about the mean values, and, where a useful value could be computed, the rate of change of baseline length. In general the rate of change is not presented if there were too few observing sessions or if the sessions did not span more than one year. The least-squares mean and rate estimates were based on the formal standard errors of the individual baseline length values. The listed error for each mean and rate value was computed by scaling the formal error from the least-squares estimate by the reduced chi-square of the fit. The weighted rms fit of the data about the best-fit line is also given where relevant.

C. The GLB121 solution

The purpose of the GLB121 solution was to produce a time series of earth orientation (polar motion and universal time) from the ensemble of CDP and IRIS data. In such a solution it is necessary to estimate the coordinates of the fixed stations as global parameters. The GLB121 solution used the same data as the GLB122. There were 168 global parameters (source and station positions) and 10,543 arc parameters. The right ascension of 3C273B and the coordinates of HAYSTACK were held fixed to define the celestial and terrestrial reference frames, respectively. The source catalog is given in Table 3.2 and the fixed station catalog in Table 4. The weighted rms fit was 88 ps for delay and 75 fs/s for delay rate. The reduced chi-square was 1.00. As in solution GLB122, the arc parameters included clock and atmosphere parametrization and daily nutation offsets. (The nutation offsets from solution GLB121 are not significantly different from those of solution GLB122.)

Earth orientation results are presented in Table 7 together with their correlations. No _a priori_ model of global plate motion was applied. Because VLBI cannot measure absolute earth orientation, a reference day was selected to fix the geographic pole and UT1 angle. The reference day is 17 October 1980, a date which is a BIH tabular day and for which a 5-station network was used. The geographic pole is defined by the values of pole position from the nearest four Circular D tabular points quadratically interpolated and applied as _a priori_ parameters for each observation in the data set spanning 0 hr UT 17 October 1980. The rotation about the pole is defined similarly except that to each interpolated value the short period terms from the standard MERIT model of UT1 tidal variation were added. The values for 17 October 1980 in Table 7 are identical to the Circular D values, however. In order to make the UT1 values from this solution identical in origin to those in Circular D, the tidal effect at the reference epoch has been removed from all the estimated UT1 values.

For the single-baseline sessions only UT1 and one component of polar motion were estimated. Since single North American baselines are predominant because of POLARIS, the x-component is generally the single pole component estimated. In a single baseline solution the correlation between UT1 and the adjusted polar motion component is large, and both adjustments depend on the a priori value of the unadjusted component.

The tabular values are the unmodified results from the GLB121 solution except for the UT1 rotation described above. In particular, no smoothing has been applied, and no corrections have been made to the UT1 values to account for known tidal variations. For comparison with BIH Circular D values, the tidal terms should be removed from the values in Table 7.

The nutation offsets from the IAU 1980 nutation series, estimated in solution GLB121 for each session, are tabulated in Table 8. These offsets are with respect to the reference day 17 October 1980.

D. Formal Errors

The formal errors for the cartesian coordinates of the stations, the baseline lengths, the earth orientation values, and the nutation offsets are computed from the covariance matrix of the relevant solution. The weights applied to each observation are composed of three terms: 1) SNR measurement error, 2) ionosphere calibration error from the SNR of X and S- band observations, and 3) normalizing white noise root-sum-squared added for each baseline. The last term is computed for each baseline for each session such that the reduced chi-square of the observations for each baseline is reduced to unity in a standard baseline solution in which only the data from that session are included and a good a priori source catalog is used. The true uncertainties will be larger because of unmodeled systematic effects.

V. DIFFERENCES FROM THE 1986 CDP-DIS SUBMISSION

The 1987 CDP-DIS submission is a straightforward extension of the 1986 submission. The analysis techniques used to produce it are identical to those of the previous year. The principal differences are: 1) the data extend an additional year, 2) new stations in South Africa and China have been added, 3) entirely new solutions have been produced. There are some changes in the contents of the tables. The table of a priori station positions (Table 4.1) and the tables of station positions by experiment (Table 6.1-6.22) have been deleted, but they are available in machine-readable form from the DIS. Correlations between the geocentric components are also available. The number of observations used and the total number of observations for each baseline determination have been eliminated. The units and number of digits for some tables have been changed.

VI. REFERENCES

Rogers, A. E. E., Cappallo, R. J., Hinteregger, H. F., Levine, J. I., Nesman, E. F., Webber, J. C., Whitney, A. R., Clark, T. A., Ma, C., Ryan, J., Corey, B. E., Counselman, C. C., Herring, T. A., Shapiro, I. I., Knight, C. A., Shaffer, D. B., Vandenberg, N. R., Lacasse, R., Mauzy, R., Rayhrer, B., Schupler, B. R., and Pigg, J C (1983). *Science* **219**, 51.

Melbourne, W., Anderle, R., Feissel, M., King, R., McCarthy, D., Smith, D., Tapley, B., Vicente, R. (1983). US Naval Observatory Circular No. 167, Washington, D.C.

Clark, T. A., Corey, B. E., Davis, J. L., Elgered, G., Herring, T. A., Hinteregger, H. F., Knight, C. A., Levine, J. I., Lundqvist, G., Ma, C., Nesman, E. F., Phillips, R. B., Rogers, A. E. E., Rönnäng, B. O., Ryan, J. W., Schupler, B. R., Shaffer, D. B., Shapiro, I. I., Vandenberg, N. R., Webber, J. C., and Whitney, A. R. (1985). *IEEE Trans. Geoscience and Remote Sensing* **GE-23**, 438.

Table 1

VLBI Observing Stations

ALGOPARK, 46-m-diameter antenna at the Algonquin Radio Observatory near Lake Traverse, Ontario, Canada.

CHLBOLTN, 26-m-diameter antenna located in Chilbolton, England and operated by the Appleton Laboratories. (No longer in use for VLBI.)

EFLSBERG, 100-m-diameter antenna of the Max Planck Institute for Radio Astronomy located near Effelsberg, FRG.

GILCREEK, 26-m-diameter antenna operated by the CDP and located at the NOAA/NESDIS facility at Gilmore Creek, Alaska.

HARTRAO, 26-m-diameter antenna at the Hartebeesthoek Radio Astronomy Observatory near Johannesburg, South Africa.

HATCREEK, 26-m-diameter antenna at the Hat Creek Radio Observatory, Hat Creek, CA.

HAYSTACK, 37-m-diameter antenna at the Haystack Observatory, Westford, MA.

HRAS 085, 26-m-diameter antenna at the George R. Agassiz Station operated by the Harvard College Observatory and located near Fort Davis, TX.

KASHIMA, 26-m-diameter antenna at the Kashima Space Research Center, Kashima, Japan.

KAUAI, 9-m-diameter antenna of NASA's Spaceflight Tracking and Data Network located near Kokee Park on Kauai in the state of Hawaii.

KWAJAL26, 26-m-diameter TRADEX antenna operated for the US Air Force by Lincoln Laboratory in the Marshall Islands.

MARPOINT, 26-m-diameter antenna of the US Naval Research Laboratory located near Maryland Point, MD.

MOJAVE12, 12-m-diameter antenna located at the NASA Goldstone complex near Barstow, CA and operated by the NGS.

NRAO 140, 43-m-diameter antenna at the National Radio Astronomy Observatory, Green Bank, WV.

ONSALA60, 20-m-diameter antenna at the Onsala Space Observatory, Onsala, Sweden.

OVRO 130, 40-m-diameter antenna at the Owens Valley Radio Observatory, Big Pine, CA.

PENTICTN, the site of occupation by CDP mobile VLBI systems located near Penticton, B.C., Canada.

PLATTVIL, the site of occupation by CDP mobile VLBI systems located near Platteville, CO.

RICHMOND, 18-m-diameter antenna of the NGS near Miami, FL.

ROBLED32, 32-m-diameter antenna located at the NASA Madrid complex in Spain and operated by the Deep Space Network.

SHANGHAI, 6-m-diameter antenna at the Shanghai Astronomical Observatory in Shanghai, China.

VNDNBERG, 9-m-diameter MV1 antenna operated by the CDP and permanently located at the Vandenberg Air Force Base near Lompoc, CA.

WESTFORD, 18-m-diameter antenna at the Haystack Observatory, Westford, MA.

WETTZELL, 20-m-diameter antenna located in Bavaria, FRG and operated by the German Institute for Applied Geodesy (IFAG).

YELLOWKN, the site of occupation by CDP mobile VLBI systems located near Yellowknife, N-W.T., Canada.

Table 2

Summary of VLBI Experiments

DATABASE NAME	EXPERIMENT PURPOSE	STATIONS																								
		ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRAS 085	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO 140	ONSALA60	OVRO 130	PENTICTN	PLATTVIL	RICHMOND	ROBLED32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
79AUG03XX	N. Am. Pl. Stab.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.
79NOV25X	N. Am. Pl. Stab.	.	.	X	.	.	.	X	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.
80APR11XQ	N. Am. Pl. Stab.	.	.	.	.	.	.	X	X	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.
80JUL26X	Transatlantic	.	.	X	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80JUL27X	Transatlantic	.	.	X	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80SEP26X	Transatlantic	.	.	X	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80SEP27X	Transatlantic	.	.	X	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80SEP28X	Transatlantic	.	.	X	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80SEP29X	Transatlantic	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80SEP30X	Transatlantic	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80OCT01X	Transatlantic	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80OCT02X	Transatlantic	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80OCT16X	Transatlantic	.	X	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80OCT17X	Transatlantic	.	X	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80OCT18X	Transatlantic	.	X	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80OCT19X	Transatlantic	.	X	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80OCT20X	Transatlantic	.	X	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80OCT21X	Transatlantic	.	X	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80OCT22X	Transatlantic	.	X	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
80NOV03XA	Polaris/Iris	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
80DEC01XA	Polaris/Iris	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
80DEC19XA	Polaris/Iris	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
81JAN07XB	Polaris/Iris	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
81JAN22XA	Polaris/Iris	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
81FEB12X	Polaris/Iris	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
81FEB27X	Polaris/Iris	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
81MAR16X	Polaris/Iris	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
81MAY13X	Polaris/Iris	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81JUN16X	N. Am. Pl. Stab.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.
81JUN24XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81JUL01X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81JUL08X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81JUL15X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81JUL22X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81JUL29X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81AUG05X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81AUG26X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81SEP02XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.

DATABASE NAME	EXPERIMENT PURPOSE	ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRAS 085	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO140	ONSALA60	OVRO130	PENTICTN	PLATTVIL	RICHMOND	ROBLED32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
81SEP09X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81SEP16X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81SEP23X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81SEP30X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81OCT15X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81OCT21XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
81OCT28X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81NOV04XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81NOV10X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81NOV18X	Transatlantic	.	.	.	.	.	.	X	X	.	.	.	.	.	X	X	X	.	.	.	.	.	.	X	.	.
81NOV19X	Transatlantic	.	.	.	.	.	.	X	X	.	.	.	.	.	X	X	X	.	.	.	.	.	.	X	.	.
81NOV24XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81DEC02XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81DEC16X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81DEC22X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
81DEC29XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82JAN06X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82JAN13X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82JAN20X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82JAN27X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82FEB01X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82FEB10X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82FEB17X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82FEB24X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82MAR03X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82MAR10X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82MAR17X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
82MAR24X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82MAR29X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82APR07X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82APR13X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82APR19XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
82APR26X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82MAY03X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82MAY10XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82MAY17X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82JUN02X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82JUN07X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82JUN16X	Transatlantic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.
82JUN18X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	X	.	.	X	X	.	.	.	.	.	.	X	.	.
82JUN19XA	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	X	.	.	X	X	.	.	.	.	.	.	X	.	.
82JUN20XA	Transatlantic	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.

DATABASE NAME	EXPERIMENT PURPOSE	STATIONS																								
		ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRAS 085	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO 140	ONSALA60	OVRO 130	PENTICTN	PLATTVIL	RICHMOND	ROBLED32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
82JUN21X	Transatlantic	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	X	.	.	.	.	.	.	X	.	.
82JUN28X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82JUL06XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82JUL12X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82JUL19X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82JUL26X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82AUG04X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82AUG09X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82AUG16X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82AUG23X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82AUG30X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82SEP07X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82SEP13X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
82SEP20X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
82SEP27X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82OCT04X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82OCT13X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82OCT18X	N. Am. Pl. Stab.	.	.	.	.	.	.	.	X	.	.	.	X	.	.	X	X	.	.	.	.	.	.	X	.	.
82OCT25X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.
82NOV01XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82NOV08XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82NOV15X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
82NOV22XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82NOV29XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82DEC06XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82DEC15X	Transatlantic	.	.	.	.	.	.	.	X	.	.	.	.	.	X	X	X	.	.	.	.	.	.	X	.	.
82DEC16X	Transatlantic	.	.	.	.	.	.	.	X	.	.	.	.	.	X	X	X	.	.	.	.	.	.	X	.	.
82DEC20XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
82DEC27X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83JAN03X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83JAN10X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83JAN17X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83JAN24XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83JAN31XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83FEB07X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
83FEB14XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83FEB28X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
83MAR07X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83MAR14X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
83MAR21X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83MAR28X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83APR04X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.

DATABASE NAME	EXPERIMENT PURPOSE	STATIONS																								
		ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRAS085	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO140	ONSALA60	OVRO130	PENTICTN	PLATTVIL	RICHMOND	ROBLED32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
83APR11X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83APR18X	Polaris/Iris	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
83APR25X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83MAY02X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83MAY05X	Transatlantic	.	.	X	.	.	.	X	X	.	.	.	.	.	.	X	.	.	.	.	X	.	.	X	.	.
83MAY09X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83MAY16X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
83MAY23X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83MAY31X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83JUN06X	N. Am. Pl. Stab.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	X	.	X	.	.	.	.	X	.	.
83JUN07X	N. Am. Pl. Stab.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.
83JUN07XP	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83JUN09X	N. Am. Pl. Stab.	.	.	.	.	.	X	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.
83JUN13X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
83JUN20X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83JUN28XA	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.
83JUL05X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83JUL11X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83JUL25X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.
83AUG01X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83AUG08X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.
83AUG15X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83AUG22XP	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83AUG29X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	X	.	.	X	.	.	.	.	.	.	.	X	.	.
83AUG30X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
83SEP02X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83SEP07X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83SEP12X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83SEP17X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83SEP22X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.
83SEP23XA	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
83SEP27X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.
83OCT02X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83OCT07X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83OCT12X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.
83OCT17X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83OCT22X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83OCT27X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	X	.	X	.	.	.	.	.	.	.	X	.	.
83OCT28X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
83NOV01X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83NOV06X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83NOV11X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.

DATABASE NAME	EXPERIMENT PURPOSE	STATIONS																								
		ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRAS 085	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO 140	ONSALA60	OVRO 130	PENTICTN	PLATTVIL	RICHMOND	ROBLED32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
83NOV16X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
83NOV17X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
83NOV21X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.
83NOV26X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83DEC01X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.
83DEC06X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83DEC11X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83DEC16X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83DEC21X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
83DEC22X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
83DEC26X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
83DEC31X	Polaris/Iris	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
84JAN04X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	X	.	.	.	.	.	X	.	.	.	X	.	.
84JAN09X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
84JAN14X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.
84JAN24X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
84JAN24XK	Pacific Basin	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.
84JAN29X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
84FEB03X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84FEB08X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
84FEB13X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.
84FEB18X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84FEB23XA	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
84FEB24XW	Pacific Basin	.	.	.	.	.	X	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.
84FEB24X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
84FEB28XP	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
84MAR04XP	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84MAR09XP	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
84MAR14X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
84MAR19X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84MAR25X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84MAR30X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.
84APR03X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84APR08X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84APR13X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84APR18X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
84APR19X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.
84APR23X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84APR26X	N. Am. Pl. Stab.	.	.	.	.	.	X	X	X	.	.	.	.	X	.	.	X	.	X	.	.	.	.	.	.	.
84APR28X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84MAY03X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
84MAY08X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.

DATABASE NAME	EXPERIMENT PURPOSE	STATIONS																								
		ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRAS085	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO140	ONSALA60	OVRO130	PENTICTN	PLATTVIL	RICHMOND	ROBLED32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
84MAY13X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
84MAY18X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
84MAY19X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
84MAY23X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
84MAY28X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84JUN02X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84JUN07X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84JUN12XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
84JUN17X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84JUN22XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84JUN27XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84JUL02XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84JUL07X	East Pacific 1	.	.	.	X	.	.	.	.	.	X	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.
84JUL07XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84JUL12XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84JUL17XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84JUL21X	East Pacific 2	.	.	.	X	.	.	.	.	.	X	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.
84JUL22X	East Pacific 2	.	.	.	X	.	.	.	.	.	X	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.
84JUL22XA	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.
84JUL27XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.
84JUL28X	West Pacific 1	.	.	.	.	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.
84JUL29X	West Pacific 1	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.
84AUG01X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84AUG04X	West Pacific 2	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.
84AUG05X	West Pacific 2	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	.	.	.	.
84AUG06X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84AUG11X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84AUG16X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84AUG21X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84AUG24X	N. Am. Pl. Stab.1	X	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X
84AUG26XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84AUG28X	N. Am. Pl. Stab.2	X	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.
84AUG30X	Polar 1	.	.	.	X	.	.	X	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.
84AUG31XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84SEP02X	Polar 2	.	.	.	X	.	.	X	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.
84SEP05XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84SEP10XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84SEP15XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84SEP20XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
84SEP25XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84SEP30XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84OCT05XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.

DATABASE NAME	EXPERIMENT PURPOSE	ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRAS085	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO140	ONSALA60	OVRO130	PENTICTN	PLATTVIL	RICHMOND	ROBLED32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
84OCT10XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84OCT15XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84OCT20XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84OCT25XB	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
84OCT26X	N. Am. Pl. Stab.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.
84OCT30XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84NOV04XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
84NOV09XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84NOV14XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
84NOV15X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.
84NOV19XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84NOV24XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84NOV29XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84DEC04XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84DEC09XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84DEC14XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84DEC19XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
84DEC23XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
84DEC29XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
85JAN03XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JAN08XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JAN13XI	IRIS	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JAN18XA	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JAN23XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
85JAN24X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.
85JAN28XA	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85FEB02XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85FEB07XB	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85FEB12XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85FEB17XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85FEB22XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85FEB27XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
85MAR04XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
85MAR05X	North Atlantic 1	.	.	.	.	.	.	X	X	.	.	.	.	X	.	X	X	.	.	.	.	.	.	.	X	.
85MAR09XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.
85MAR14XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
85MAR19XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
85MAR24XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85MAR29XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85APR03XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85APR08XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85APR13XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.

DATABASE NAME	EXPERIMENT PURPOSE	ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRASO85	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO140	ONSALA60	OVRO130	PENTICTN	PLATTVIL	RICHMOND	ROBLED32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
85APR18XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85APR23XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
85APR24X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.
85APR28XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85MAY03XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
85MAY07XA	N. Am. Pl. Stab.	.	.	.	X	.	X	.	X	.	.	.	.	X	.	.	X	.	X	.	.	.	.	X	.	.
85MAY08XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
85MAY09X	North Atlantic 2	.	.	.	.	.	.	.	X	.	.	.	.	X	.	X	X	.	.	.	.	.	.	X	X	.
85MAY13XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85MAY15XG	North Pacific 1	.	.	.	X	.	X	.	.	X	X	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.
85MAY18XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85MAY23XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85MAY28XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JUN02XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JUN07XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JUN12XI	IRIS	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	X	.	.	.	X	X	.
85JUN17XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
85JUN18X	Transatlantic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
85JUN19X	Polar 1	.	.	.	X	.	.	.	.	X	.	.	.	X	.	X	.	.	.	.	.	.	.	X	X	.
85JUN22XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JUN27XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JUL02XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JUL06X	East Pacific 1	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.
85JUL07XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JUL12XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JUL17XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JUL20X	West Pacific 1	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.
85JUL22XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85JUL27X	East Pacific 2	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.
85JUL27XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85AUG01XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85AUG06XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85AUG10X	West Pacific 2	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.
85AUG11XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85AUG16X	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
85AUG21XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85AUG24X	N. Am. Pl. Stab.C	X	.	.	X	.	.	.	X	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.
85AUG26XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85AUG28X	N. Am. Pl. Stab.B	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.
85AUG31XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85SEP04X	N. Am. Pl. Stab.B	X	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X
85SEP05XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.

STATIONS

DATABASE NAME	EXPERIMENT PURPOSE	ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRAS 085	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO140	ONSALA60	OVRO130	PENTICTN	PLATTVIL	RICHMOND	ROBLED32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
85SEP10XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
85SEP11X	Transatlantic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
85SEP15XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85SEP20XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85SEP25XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85SEP30X	North Pacific 2	.	.	.	X	.	X	.	.	X	X	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.
85SEP30XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85OCT05XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85OCT10XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85OCT15XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85OCT20XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85OCT25XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
85OCT29X	North Atlantic 3	.	.	.	.	.	.	.	X	.	.	.	.	X	.	X	X	.	.	.	.	.	.	X	X	.
85OCT30XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
85NOV04XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
85NOV09XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85NOV14XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85NOV19XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
85NOV20X	Transatlantic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
85NOV21X	Polar 2	.	.	.	X	.	.	.	.	X	.	.	.	X	.	X	.	.	.	.	.	.	.	X	X	.
85NOV24XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
85NOV29XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85DEC04XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85DEC09XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
85DEC10X	Transatlantic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
85DEC14XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85DEC19XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
85DEC23XI	IRIS	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
85DEC29XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
86JAN03XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
86JAN08XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JAN09XH	South Africa	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JAN13XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JAN14X	Transatlantic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
86JAN15XH	South Africa	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	.	.
86JAN18XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JAN19XH	South Africa	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JAN23XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JAN28XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JAN29XH	South Africa	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86FEB02XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86FEB03XH	South Africa	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.

DATABASE NAME	EXPERIMENT PURPOSE	ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRAS085	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO140	ONSALA60	OVRO130	PENTICTN	PLATTVIL	RICHMOND	ROBL32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
86FEB07XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86FEB11XH	South Africa	.	.	.	.	X	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	.	.
86FEB12XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86FEB17XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86FEB22XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86FEB27XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86MAR04XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86MAR09XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86MAR13X	Transpacific	.	.	.	X	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
86MAR14XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86MAR19XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
86MAR20X	Transatlantic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
86MAR24XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86MAR29XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86APR01X	N. Am. Plt. Stab.	.	.	.	X	.	X	.	X	.	.	.	.	X	.	.	X	.	X	.	.	.	.	X	.	.
86APR03XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
86APR04X	North Atlantic	.	.	.	.	.	.	.	X	.	.	.	.	X	.	X	X	.	.	.	.	.	.	X	X	.
86APR08X	North Pacific	.	.	.	X	.	X	.	.	X	X	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.
86APR08XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86APR13XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86APR18XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86APR23XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86APR28XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86MAY02XT	Transpacific	.	.	.	X	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
86MAY03XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	.	.
86MAY08XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86MAY13XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
86MAY14X	North Atlantic	.	.	.	.	.	.	.	X	.	.	.	.	X	.	X	X	.	.	.	.	.	.	X	X	.
86MAY17XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86MAY23XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86MAY28XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JUN02XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JUN07XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JUN12XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JUN13X	Transpacific	.	.	.	X	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.
86JUN16X	Transatlantic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
86JUN17XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
86JUN18X	Polar	.	.	.	X	.	.	.	.	X	.	.	.	X	.	X	.	.	.	.	.	.	.	X	X	.
86JUN22XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JUN27XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JUL02XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JUL05X	East Pacific	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.

DATABASE NAME	EXPERIMENT PURPOSE	ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRAS 085	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO140	ONSALA60	OVRO130	PENTICTN	PLATTVIL	RICHMOND	ROBLED32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
86JUL07XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JUL12X	West Pacific	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.
86JUL12XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JUL17XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JUL22XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86JUL26X	East Pacific	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.
86JUL27XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86AUG01XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86AUG02X	West Pacific	.	.	.	X	.	.	.	.	X	X	X	.	X	.	.	.	.	.	.	.	.	X	.	.	.
86AUG06XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86AUG11XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
86AUG16XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
86AUG21XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
86AUG25X	Transatlanitic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
86AUG26XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
86AUG31XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86SEP05XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86SEP05X	Transpacific	.	.	.	X	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
86SEP10XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86SEP15XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
86SEP16X	Transatlantic	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
86SEP20XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86SEP25XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86SEP30XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86OCT05XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86OCT10XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86OCT15XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
86OCT16X	North Atlantic	.	.	.	.	.	.	.	X	.	.	.	.	X	.	X	X	.	.	.	.	.	.	X	X	.
86OCT20XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86OCT23X	North Pacific	.	.	.	X	.	X	.	.	X	X	.	.	X	.	.	.	.	.	.	.	.	X	.	.	.
86OCT25XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86OCT30XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86OCT31X	N. Am. Pl. Stab.	.	.	.	X	.	X	.	X	.	.	.	.	X	.	.	X	.	.	.	.	.	.	X	.	.
86NOV03X	Transatlantic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
86NOV04XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
86NOV05X	Polar	.	.	.	X	.	.	.	.	X	.	.	.	X	.	.	.	.	.	.	.	.	.	X	X	.
86NOV07X	Transpacific	.	.	.	X	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
86NOV09XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86NOV14XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86NOV19XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86NOV24XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	X	.
86NOV29XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.

DATABASE NAME	EXPERIMENT PURPOSE	ALGOPARK	CHLBOLTN	EFLSBERG	GILCREEK	HARTRAO	HATCREEK	HAYSTACK	HRAS 085	KASHIMA	KAUAI	KWAJAL26	MARPOINT	MOJAVE12	NRAO 140	ONSALA60	OVRO 130	PENTICTN	PLATTVIL	RICHMOND	ROBLED32	SHANGHAI	VNDNBERG	WESTFORD	WETTZELL	YELLOWKN
86DEC04XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86DEC05X	Transpacific	.	.	.	X	.	.	.	.	X	X	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
86DEC08X	Transatlantic	.	.	.	.	.	.	.	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	X	X	.
86DEC09XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	X	.	.	.	X	.	.	.	X	X	.
86DEC14XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86DEC19XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86DEC23XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.
86DEC29XI	IRIS	.	.	.	.	.	.	.	X	.	.	.	.	.	.	.	.	.	.	X	.	.	.	X	X	.

Table 3.1

Source Coordinates from GLB122 Solution
(Values from GLOBL Solution with
Stations as Arc Parameters)

Source Name	Right Ascension h	m	s		Declination °	'	"	
0106+013	1	8	38.77108	±.00001	1	35	±.3198	±.0003
0212+735	2	17	30.81371	±.00005	73	49	32.6223	±.0003
4C67.05	2	28	50.05177	±.00004	67	21	3.0299	±.0003
0229+131	2	31	45.89410	±.00001	13	22	54.7178	±.0003
0234+285	2	37	52.40574	±.00001	28	48	8.9908	±.0003
0235+164	2	38	38.93013	±.00001	16	36	59.2760	±.0004
0300+470	3	3	35.24234	±.00002	47	16	16.2765	±.0003
3C84	3	19	48.16018	±.00002	41	30	42.1038	±.0003
NRAO150	3	59	29.74738	±.00002	50	57	50.1616	±.0003
0420-014	4	23	15.80073	±.00001	-1	20	33.0638	±.0003
3C120	4	33	11.09558	±.00003	5	21	15.6157	±.0016
0454-234	4	57	3.17928	±.00003	-23	24	52.0181	±.0005
0528+134	5	30	56.41678	±.00001	13	31	55.1492	±.0003
0552+398	5	55	30.80567	±.00002	39	48	49.1642	±.0002
0727-115	7	30	19.11251	±.00001	-11	41	12.6001	±.0003
0742+103	7	45	33.05953	±.00010	10	11	12.6885	±.0028
OJ287	8	54	48.87491	±.00001	20	6	30.6398	±.0002
4C39.25	9	27	3.01384	±.00001	39	2	20.8506	±.0002
OK290	9	56	49.87540	±.00002	25	15	16.0476	±.0008
1034-293	10	37	16.07994	±.00004	-29	34	2.8099	±.0006
1144+402	11	46	58.29782	±.00001	39	58	34.3042	±.0003
1219+285	12	21	31.69049	±.00002	28	13	58.4993	±.0008
3C273B	12	29	6.6997	*	2	3	8.5990	±.0003
3C279	12	56	11.16659	±.00004	-5	47	21.5285	±.0023
1308+326	13	10	28.66377	±.00001	32	20	43.7829	±.0003
1354+195	13	57	4.43659	±.00001	19	19	7.3728	±.0003
OQ208	14	7	±.39431	±.00001	28	27	14.6901	±.0003
1418+546	14	19	46.59719	±.00003	54	23	14.7874	±.0003
1502+106	15	4	24.97974	±.00001	10	29	39.2007	±.0003
1548+056	15	50	35.26920	±.00001	5	27	10.4511	±.0003
CTD93	16	9	13.32024	±.00033	26	41	28.9583	±.0092
1633+38	16	35	15.49282	±.00004	38	8	4.5026	±.0006
1637+574	16	38	13.45613	±.00003	57	20	23.9809	±.0003
1642+690	16	42	7.84824	±.00005	68	56	39.7577	±.0002
3C345	16	42	58.80985	±.00001	39	48	36.9955	±.0002
NRAO530	17	33	2.70580	±.00001	-13	4	49.5444	±.0004
1741-038	17	43	58.85614	±.00001	-3	50	4.6125	±.0003
1749+701	17	48	32.84029	±.00020	70	5	50.7677	±.0007
1749+096	17	51	32.81853	±.00001	9	39	±.7319	±.0003
1803+784	18	0	45.68346	±.00009	78	28	4.0198	±.0002
3C390.3	18	42	8.98963	±.00042	79	46	17.1282	±.0009
1921-293	19	24	51.05603	±.00003	-29	14	30.1155	±.0006
1923+210	19	25	59.60535	±.00002	21	6	26.1625	±.0009

1928+738	19	27	48.49471	±.00015	73	58	1.5726	±.0009
3C418	20	38	37.03474	±.00004	51	19	12.6659	±.0004
2134+00	21	36	38.58632	±.00001	0	41	54.2172	±.0003
2145+067	21	48	5.45867	±.00001	6	57	38.6074	±.0003
VR422201	22	2	43.29138	±.00002	42	16	39.9824	±.0003
2201+315	22	3	14.97579	±.00004	31	45	38.2737	±.0008
2216-038	22	18	52.03773	±.00001	-3	35	36.8756	±.0003
2234+282	22	36	22.47089	±.00001	28	28	57.4161	±.0003
3C454.3	22	53	57.74796	±.00001	16	8	53.5637	±.0003
2345-167	23	48	2.60850	±.00002	-16	31	12.0178	±.0005

* The right ascension origin of the CDP celestial reference frame is fixed by the adopted value of 3C273B given above.

Table 3.2

Source Coordinates from GLB121 Solution
(Values from GLOBL Solution with Fixed
Stations as Global Parameters)

Source Name	Right Ascension h	m	s		Declination °	'	"	
0106+013	1	8	38.77108	±.00001	1	35	.3196	±.0003
0212+735	2	17	30.81373	±.00005	73	49	32.6223	±.0003
4C67.05	2	28	50.05177	±.00004	67	21	3.0299	±.0003
0229+131	2	31	45.89410	±.00001	13	22	54.7177	±.0003
0234+285	2	37	52.40575	±.00001	28	48	8.9908	±.0003
0235+164	2	38	38.93013	±.00001	16	36	59.2766	±.0004
0300+470	3	3	35.24236	±.00002	47	16	16.2764	±.0003
3C84	3	19	48.16019	±.00002	41	30	42.1038	±.0003
NRAO150	3	59	29.74740	±.00002	50	57	50.1617	±.0003
0420-014	4	23	15.80072	±.00001	-1	20	33.0637	±.0003
3C120	4	33	11.09557	±.00003	5	21	15.6167	±.0016
0454-234	4	57	3.17926	±.00003	-23	24	52.0185	±.0005
0528+134	5	30	56.41678	±.00001	13	31	55.1492	±.0003
0552+398	5	55	30.80567	±.00002	39	48	49.1642	±.0002
0727-115	7	30	19.11250	±.00001	-11	41	12.6005	±.0004
0742+103	7	45	33.05957	±.00010	10	11	12.6870	±.0028
OJ287	8	54	48.87491	±.00001	20	6	30.6397	±.0003
4C39.25	9	27	3.01384	±.00001	39	2	20.8506	±.0003
OK290	9	56	49.87541	±.00002	25	15	16.0476	±.0008
1034-293	10	37	16.07991	±.00004	-29	34	2.8105	±.0006
1144+402	11	46	58.29782	±.00001	39	58	34.3041	±.0003
1219+285	12	21	31.69050	±.00002	28	13	58.4987	±.0008
3C273B	12	29	6.6997	*	2	3	8.5988	±.0003
3C279	12	56	11.16659	±.00004	-5	47	21.5298	±.0023
1308+326	13	10	28.66379	±.00001	32	20	43.7828	±.0003
1354+195	13	57	4.43660	±.00001	19	19	7.3725	±.0003
OQ208	14	7	±.39432	±.00001	28	27	14.6900	±.0003
1418+546	14	19	46.59713	±.00003	54	23	14.7878	±.0003
1502+106	15	4	24.97975	±.00001	10	29	39.2006	±.0003
1548+056	15	50	35.26920	±.00001	5	27	10.4507	±.0003
CTD93	16	9	13.32036	±.00034	26	41	28.9617	±.0093
1633+38	16	35	15.49282	±.00004	38	8	4.5025	±.0006
1637+574	16	38	13.45615	±.00003	57	20	23.9809	±.0003
1642+690	16	42	7.84823	±.00005	68	56	39.7577	±.0003
3C345	16	42	58.80985	±.00002	39	48	36.9955	±.0002
NRAO530	17	33	2.70579	±.00001	-13	4	49.5448	±.0004
1741-038	17	43	58.85612	±.00001	-3	50	4.6127	±.0003
1749+701	17	48	32.84029	±.00019	70	5	50.7675	±.0007
1749+096	17	51	32.81853	±.00001	9	39	±.7319	±.0003
1803+784	18	0	45.68346	±.00009	78	28	4.0198	±.0002
3C390.3	18	42	8.98959	±.00042	79	46	17.1279	±.0008
1921-293	19	24	51.05601	±.00003	-29	14	30.1160	±.0005
1923+210	19	25	59.60535	±.00002	21	6	26.1622	±.0009

1928+738	19	27	48.49471	±.00015	73	58	1.5726	±.0009
3C418	20	38	37.03476	±.00004	51	19	12.6657	±.0004
2134+00	21	36	38.58632	±.00001	0	41	54.2170	±.0003
2145+067	21	48	5.45867	±.00001	6	57	38.6072	±.0003
VR422201	22	2	43.29139	±.00002	42	16	39.9825	±.0003
2201+315	22	3	14.97585	±.00004	31	45	38.2738	±.0008
2216-038	22	18	52.03773	±.00001	-3	35	36.8758	±.0003
2234+282	22	36	22.47090	±.00001	28	28	57.4160	±.0003
3C454.3	22	53	57.74797	±.00001	16	8	53.5636	±.0003
2345-167	23	48	2.60849	±.00002	-16	31	12.0183	±.0005

* The right ascension origin of the CDP celestial reference frame is fixed by the adopted value of 3C273B given above.

Table 4

Station Coordinates from Solution GLB121
(Fixed Stations Estimated Globally)

Station Name	X-Component Value (mm)	Formal Error	Y-Component Value (mm)	Formal Error	Z-Component Value (mm)	Formal Error
ALGOPARK	918036721.8	±2.2	-4346133075.1	±6.5	4561971564.6	±6.8
CHLBOLTN	4008312027.6	±9.4	-100651833.6	±5.4	4943794766.0	±14.3
EFLSBERG	4033949454.4	±9.1	486989438.6	±5.9	4900430747.7	±15.5
GILCREEK	-2281545161.1	±3.8	-1453645798.6	±6.7	5756993709.7	±13.0
HARTRAO	5085444323.3	±37.7	2668262213.0	±22.1	-2768697219.7	±23.1
HAYSTACK	1492406691.0	*	-4457267330.0	*	4296882102.0	*
HATCREEK	-2523968045.4	±2.3	-4123507186.1	±7.4	4147753187.1	±10.3
HRAS 85	-1324209137.4	±1.9	-5332023972.7	±6.1	3232118948.2	±7.0
KASHIMA	-3997890415.5	±14.9	3276580453.3	±9.8	3724118780.4	±25.7
KAUAI	-5543844199.2	±9.4	-2054565129.4	±13.8	2387814366.2	±19.6
KWAJAL26	-6143534842.1	±19.3	1363996204.9	±16.9	1034707939.4	±26.5
MARPOINT	1106631222.4	±3.8	-4882907986.4	±10.7	3938087338.2	±9.5
MOJAVE12	-2356169133.2	±1.8	-4646756730.3	±7.1	3668471195.3	±9.4
NRAO 140	882881810.7	±1.6	-4924483118.8	±5.5	3944131065.4	±5.0
ONSALA60	3370608091.4	±6.6	711916486.7	±4.7	5349830799.0	±13.1
OVRO 130	-2409598873.6	±1.7	-4478350384.5	±6.9	3838603790.0	±9.4
RICHMOND	961259853.0	±2.7	-5674090918.6	±4.9	2740534208.0	±4.0
ROBLED32	4849247132.8	±45.3	-360279284.9	±14.2	4114884511.7	±41.1
SHANGHAI	-2847695786.9	±129.1	4659871662.0	±110.6	3283958888.6	±103.6
VNDNBERG	-2678095536.8	±2.9	-4525456374.4	±8.0	3597414393.9	±10.5
WETTZELL	4075541953.3	±7.8	931734215.6	±4.9	4801629397.3	±14.0
WESTFORD	1492208550.8	±0.8	-4458131341.8	±1.6	4296015878.6	±1.8

* The CDP terrestrial reference frame is fixed by the adopted value of the coordinates of HAYSTACK given above and the BIH Circular D earth orientation parameters of the reference date 17 October 1980 modified by the MERIT standard UT1 tidal model.

Table 5

Eccentricity Data for Mobile Antennas

Vector from Monument to Mobile VLBI Reference Point

MONUMENT to	STATION	Experiment Date YY MM DD HH MM:	EAST	NORTH (m)	UP
83JUN06X					
7258	PLATTVIL	83 6 7 00 00	2.715	-0.082	4.181
83JUN07X					
7258	PLATTVIL	83 6 8 00 00	2.715	-0.082	4.181
83JUN09X					
7258	PLATTVIL	83 6 10 00 00	2.715	-0.082	4.181
84APR26X					
7258	PLATTVIL	84 4 27 00 00	-0.051	-0.005	2.751
84AUG24X					
7283	PENTICTN	84 8 25 00 00	-0.007	0.063	2.871
7285	YELLOWKN	84 8 25 00 00	0.051	0.075	4.243
85MAY07XA					
7258	PLATTVIL	85 5 8 00 00	0.050	-0.034	2.854
85AUG28X					
7283	PENTICTN	85 8 29 00 00	-0.071	0.031	2.853
85SEP04X					
7283	PENTICTN	85 9 5 00 00	-0.071	0.031	2.853
7285	YELLOWKN	85 9 5 00 00	0.046	0.074	4.224
86APR01X					
7258	PLATTVIL	86 4 2 00 00	-0.010	-0.004	4.250

Except for 85AUG28X, all values are taken from eccentricity file "ECCDAT" maintained by the National Geodetic Survey. The values for PLATTVILL for 85AUG28X were assumed to be identical to those for 85SEP04X.

Table 6.1
VLBI BASELINE LENGTH EVOLUTION
ALGOPARK TO GILCREEK

DATE	Length (cm)	Formal Error
84 8 24	447569934.4	.7
84 8 28	447569936.8	.4
85 8 24	447569934.7	.6
85 9 4	447569941.2	.7

LENGTH:

Mean = 447569936.6 ± 1.3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.2 cm
Slope = 1.4 ± 2.5 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.1 cm

Table 6.2
VLBI BASELINE LENGTH EVOLUTION
ALGOPARK TO HRAS 085

DATE	Length (cm)	Formal Error
84 8 24	278714107.6	.5
84 8 28	278714107.6	.4
85 8 24	278714105.3	.7
85 8 28	278714104.1	1.2
85 9 4	278714107.7	.5

LENGTH:

Mean = 278714107.2 ± .5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.0 cm
Slope = -.9 ± .9 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .9 cm

Table 6.3
VLBI BASELINE LENGTH EVOLUTION
ALGOPARK TO MOJAVE12

DATE	Length (cm)	Formal Error
85 8 24	340721901.0	.6

Table 6.4
VLBI BASELINE LENGTH EVOLUTION
ALGOPARK TO PENTICTN(7283)

DATE	Length (cm)	Formal Error
84 8 24	307423464.0	1.8
85 8 28	307423463.3	2.6
85 9 4	307423467.9	.6

LENGTH:

Mean = 307423467.3 ± 1.0 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.4 cm

Table 6.5
VLBI BASELINE LENGTH EVOLUTION
ALGOPARK TO WESTFORD

DATE	Length (cm)	Formal Error
84 8 28	64261133.0	.5
85 8 24	64261134.0	.4

LENGTH:

Mean = 64261133.7 ± .5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .5 cm

Table 6.6
VLBI BASELINE LENGTH EVOLUTION
ALGOPARK TO YELLOWKN(7285)

DATE	Length (cm)	Formal Error
84 8 24	291229600.1	1.2
85 9 4	291229604.0	.9

LENGTH:

Mean = 291229602.5 ± 1.9 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.9 cm

Table 6.7
VLBI BASELINE LENGTH EVOLUTION
CHLBOLTN TO HAYSTACK

DATE	Length (cm)	Formal Error
80 10 16	507231449.7	1.1
80 10 17	507231445.1	1.4
80 10 18	507231449.9	1.6
80 10 19	507231445.7	.9
80 10 20	507231447.2	1.3
80 10 21	507231435.0	1.9
80 10 22	507231445.5	.9

LENGTH:
Mean = 507231446.2 ± 1.3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.2 cm

Table 6.8
VLBI BASELINE LENGTH EVOLUTION
CHLBOLTN TO HRAS 085

DATE	Length (cm)	Formal Error
80 10 16	766373733.5	2.8
80 10 17	766373746.7	3.2
80 10 18	766373745.7	3.9
80 10 19	766373730.4	2.6
80 10 20	766373740.5	2.9
80 10 21	766373718.8	3.8
80 10 22	766373737.9	2.1

LENGTH:
Mean = 766373736.5 ± 3.0 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 7.3 cm

Table 6.9
VLBI BASELINE LENGTH EVOLUTION
CHLBOLTN TO ONSALA60

DATE	Length (cm)	Formal Error
80 10 16	110986432.4	.7
80 10 17	110986435.1	1.1
80 10 18	110986432.2	2.1
80 10 19	110986432.0	.6
80 10 20	110986432.5	.9
80 10 21	110986431.0	1.5
80 10 22	110986433.1	.5

LENGTH:
Mean = 110986432.7 ± .4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .9 cm

Table 6.10
VLBI BASELINE LENGTH EVOLUTION
CHLBOLTN TO OVRO 130

DATE	Length (cm)	Formal Error
80 10 16	784699125.4	2.0
80 10 17	784699129.6	2.5
80 10 18	784699130.9	3.0
80 10 19	784699128.5	4.5
80 10 20	784699131.1	2.3
80 10 21	784699108.0	3.3
80 10 22	784699124.5	1.8

LENGTH:
Mean = 784699125.9 ± 2.4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 5.9 cm

Table 6.11
VLBI BASELINE LENGTH EVOLUTION
EFLSBERG TO HAYSTACK

DATE	Length (cm)	Formal Error
79 11 25	559190352.0	2.5
80 7 26	559190368.5	1.5
80 7 27	559190357.9	1.8
80 9 26	559190348.0	1.5
80 9 27	559190352.8	1.2
80 9 28	559190354.9	.9
83 5 5	559190360.6	1.3
83 5 5	559190353.7	1.8 *

LENGTH:
Mean = 559190356.2 ± 2.1 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 5.6 cm
Slope = .8 ± 1.8 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 5.5 cm

* WESTFORD - EFLSBERG results mapped to HAYSTACK - EFLSBERG

Table 6.12
VLBI BASELINE LENGTH EVOLUTION
EFLSBERG TO HRAS 085

DATE	Length (cm)	Formal Error
80 7 26	808418494.4	3.3
80 7 27	808418478.8	3.9
80 9 26	808418481.1	5.4
80 9 27	808418490.7	3.9
80 9 28	808418489.5	3.4
83 5 5	808418489.8	1.8

LENGTH:
Mean = 808418489.0 ± 1.9 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 4.3 cm
Slope = .6 ± 1.4 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 4.2 cm

Table 6.13
VLBI BASELINE LENGTH EVOLUTION
EFLSBERG TO NRAO 140

DATE	Length (cm)	Formal Error
79 11 25	633464843.0	2.9

Table 6.14
VLBI BASELINE LENGTH EVOLUTION
EFLSBERG TO ONSALA60

DATE	Length (cm)	Formal Error
80 7 26	83221052.6	.9
80 7 27	83221050.8	.9
80 9 26	83221050.1	.6
80 9 27	83221052.3	.5
80 9 28	83221050.9	.5
83 5 5	83221050.9	.7

LENGTH:

Mean = 83221051.2 ± .4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .9 cm
Slope = -.1 ± .4 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .9 cm

Table 6.15
VLBI BASELINE LENGTH EVOLUTION
EFLSBERG TO OVRO 130

DATE	Length (cm)	Formal Error
79 11 25	820374246.3	3.1
80 7 26	820374262.1	2.3
80 7 27	820374239.5	2.4
80 9 26	820374243.9	3.0
80 9 27	820374250.6	2.5
80 9 28	820374250.4	1.7

LENGTH:

Mean = 820374249.6 ± 3.1 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 7.0 cm

Table 6.16
VLBI BASELINE LENGTH EVOLUTION
EFLSBERG TO ROBLED32

DATE	Length (cm)	Formal Error
83 5 5	141409245.8	1.1

Table 6.17
VLBI BASELINE LENGTH EVOLUTION
EFLSBERG TO WESTFORD

DATE	Length (cm)	Formal Error
83 5 5	559285106.2	1.8

Table 6.18
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO HATCREEK

DATE			Length (cm)	Formal Error
85	5	7	312675289.3	.9
85	5	15	312675291.5	.4
85	9	30	312675291.1	.4
86	4	1	312675292.7	.7
86	4	8	312675290.3	.5
86	10	23	312675289.6	.5
86	10	31	312675288.3	.9

LENGTH:

Mean = 312675290.7 ± .4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.1 cm
Slope = -1.1 ± .7 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .9 cm

Table 6.19
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO HAYSTACK

DATE			Length (cm)	Formal Error
84	8	28	503948220.0	.8 *
84	8	30	503948225.9	1.1
84	9	2	503948225.0	1.2
85	5	7	503948217.6	.6 *
85	6	19	503948221.1	1.0 *
85	8	24	503948222.6	.7 *
85	11	21	503948222.7	.9 *
86	4	1	503948218.5	.9 *
86	6	18	503948221.4	1.0 *
86	10	31	503948220.4	.5 *
86	11	5	503948220.4	.7 *

LENGTH:

Mean = 503948220.8 ± .7 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.1 cm
Slope = -.6 ± .8 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.0 cm

* WESTFORD - GILCREEK results mapped to HAYSTACK - GILCREEK

Table 6.20
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO HRAS 085

DATE			Length (cm)	Formal Error
84	8	24	472581234.3	.5
84	8	28	472581231.5	.5
85	5	7	472581232.3	.7
85	8	24	472581230.5	1.1
85	9	4	472581235.5	.7
86	4	1	472581236.2	.8
86	10	31	472581230.0	.6

LENGTH:

Mean = 472581232.8 ± .9 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.1 cm
Slope = -.6 ± 1.0 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.0 cm

Table 6.21
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO KASHIMA

DATE			Length (cm)	Formal Error
84	7	29	542710439.1	1.3
84	8	4	542710436.5	.8
84	8	5	542710441.0	1.2
84	8	30	542710447.0	1.3
84	9	2	542710438.8	1.3
85	5	15	542710437.6	.7
85	6	19	542710435.9	1.6
85	7	6	542710442.5	1.6
85	7	20	542710436.3	.7
85	7	27	542710438.2	1.1
85	8	10	542710443.4	.7
85	9	30	542710438.5	.6
85	11	21	542710436.4	1.3
86	3	13	542710437.2	.7
86	4	8	542710438.2	.9
86	5	2	542710437.4	.7
86	6	13	542710431.2	2.8
86	6	18	542710436.0	1.2
86	7	5	542710436.4	1.1
86	7	12	542710436.3	.7
86	7	26	542710437.7	.8
86	8	2	542710437.8	.5
86	9	5	542710438.1	.9
86	10	23	542710435.5	.8
86	11	5	542710437.3	.8
86	11	7	542710438.4	.7
86	12	5	542710435.2	.7

LENGTH:

Mean = 542710437.8 ± .4 cm (scaled 1 sigma)

Weighted RMS scatter about the mean = 2.2 cm

Slope = -1.3 ± .6 cm/yr (scaled 1 sigma)

Weighted RMS scatter about the line = 2.0 cm

Table 6.22
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO KAUAI

DATE	Length (cm)	Formal Error
84 7 7	472811475.4	1.0
84 7 21	472811472.2	1.2
84 7 22	472811474.2	1.0
84 7 29	472811477.7	1.1
84 8 4	472811477.7	1.0
84 8 5	472811479.1	1.0
85 5 15	472811473.2	.6
85 7 6	472811473.1	.9
85 7 20	472811473.3	.7
85 7 27	472811470.9	1.0
85 8 10	472811478.1	.7
85 9 30	472811468.1	.6
86 3 13	472811466.5	.8
86 4 8	472811466.3	.8
86 5 2	472811467.4	.7
86 6 13	472811467.0	1.4
86 7 5	472811464.6	.8
86 7 12	472811466.7	.7
86 7 26	472811467.0	.7
86 8 2	472811467.4	.6
86 9 5	472811466.6	.8
86 10 23	472811465.5	.6
86 11 7	472811464.0	.8
86 12 5	472811463.6	.8

LENGTH:

Mean = 472811469.4 ± .9 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 4.5 cm
Slope = -5.3 ± .6 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.1 cm

Table 6.23
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO KWAJAL26

DATE			Length (cm)	Formal Error
84	7	7	671967667.9	1.7
84	7	21	671967660.5	2.1
84	7	22	671967660.4	1.9
84	7	29	671967665.9	2.2
84	8	4	671967666.0	1.0
84	8	5	671967667.2	1.8
85	7	6	671967659.5	1.9
85	7	20	671967659.4	1.4
85	7	27	671967663.7	1.6
85	8	10	671967661.8	1.2
86	7	5	671967657.2	1.3
86	7	12	671967656.9	1.9
86	7	26	671967659.5	1.7
86	8	2	671967659.0	1.3

LENGTH:

Mean = 671967661.8 ± 1.0 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.5 cm
Slope = -3.5 ± .7 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.0 cm

Table 6.24
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO MOJAVE12

DATE			Length (cm)	Formal Error
84	7	7	381620920.0	.8
84	7	21	381620923.4	.8
84	7	22	381620917.4	.7
84	7	29	381620922.3	.9
84	8	4	381620922.1	.9
84	8	5	381620915.6	1.0
84	8	30	381620920.7	.7
84	9	2	381620918.6	.8
85	5	7	381620916.4	.7
85	5	15	381620917.9	.4
85	6	19	381620918.2	.6
85	7	6	381620917.1	.7
85	7	20	381620918.7	.6
85	7	27	381620917.9	.7
85	8	10	381620919.7	.5
85	8	24	381620916.8	.7
85	9	30	381620918.4	.4
85	11	21	381620917.3	.6
86	4	1	381620919.7	.7
86	4	8	381620916.5	.5
86	6	18	381620916.5	.6
86	7	5	381620916.1	.5
86	7	12	381620915.8	.6
86	7	26	381620916.2	.4
86	8	2	381620917.5	.4
86	10	23	381620916.4	.4
86	10	31	381620914.3	.4
86	11	5	381620915.3	.5

LENGTH:

Mean = 381620917.4 ± .4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.8 cm
Slope = -1.8 ± .3 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.3 cm

Table 6.25
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO ONSALA60

DATE	Length (cm)	Formal Error
85 6 19	606648812.8	1.6
85 11 21	606648810.9	1.2
86 6 18	606648811.6	1.7

LENGTH:
Mean = 606648811.6 ± .6 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .8 cm

Table 6.26
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO OVRO 130

DATE	Length (cm)	Formal Error
85 5 7	358405572.3	.6
86 4 1	358405575.5	.7
86 10 31	358405571.5	.9

LENGTH:
Mean = 358405573.2 ± 1.2 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.6 cm

Table 6.27
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO PENTICTN(7283)

DATE	Length (cm)	Formal Error
84 8 24	237417571.6	1.7
85 9 4	237417572.7	.7

LENGTH:
Mean = 237417572.5 ± .4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .4 cm

Table 6.28
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO PLATTVIL(7258)

DATE	Length (cm)	Formal Error
85 5 7	381042431.7	.8
86 4 1	381042434.7	.8

LENGTH:
Mean = 381042433.2 ± 1.5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.5 cm

Table 6.29
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO SHANGHAI

DATE	Length (cm)	Formal Error
86 6 13	661902735.9	7.8

Table 6.30
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO VNDNBERG

DATE			Length (cm)	Formal Error
84	7	7	377585165.7	1.2
84	7	21	377585168.5	1.1
84	7	22	377585166.4	.8
84	5	15	377585161.6	.6
85	7	6	377585158.9	.8
85	7	20	377585162.4	.6
85	7	27	377585160.7	.8
85	8	10	377585163.2	.6
85	9	30	377585160.2	.4
86	7	5	377585156.5	.6
86	7	12	377585154.8	.6
86	7	26	377585156.0	.4
86	8	2	377585157.2	.4
86	10	23	377585156.7	.5

LENGTH:

Mean = 377585159.1 ± .9 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.4 cm
Slope = -4.8 ± .5 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.2 cm

Table 6.31
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO WESTFORD

DATE	Length (cm)	Formal Error
84 8 28	504009986.0	.8
85 5 7	504009983.7	.6
85 6 19	504009987.1	1.0
85 8 24	504009988.6	.7
85 11 21	504009988.8	.9
86 4 1	504009984.6	.9
86 6 18	504009987.5	1.0
86 10 31	504009986.5	.5
86 11 5	504009986.4	.7

LENGTH:

Mean = 504009986.4 ± .6 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.6 cm
Slope = .3 ± .8 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.6 cm

Table 6.32
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO WETTZELL

DATE	Length (cm)	Formal Error
84 8 30	685677151.2	2.0
84 9 2	685677150.6	1.8
85 6 19	685677145.7	1.5
85 11 21	685677151.8	1.2
86 6 18	685677146.3	1.7
86 11 5	685677154.0	1.4

LENGTH:

Mean = 685677150.3 ± 1.4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.1 cm
Slope = 1.1 ± 1.7 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.9 cm

Table 6.33
VLBI BASELINE LENGTH EVOLUTION
GILCREEK TO YELLOWKN(7285)

DATE	Length (cm)	Formal Error
84 8 24	163119364.8	.8
85 9 4	163119366.2	.6

LENGTH:

Mean = 163119365.7 ± .7 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .7 cm

Table 6.34
VLBI BASELINE LENGTH EVOLUTION
HARTRAO TO ONSALA60

DATE	Length (cm)	Formal Error
86 1 15	852516560.2	3.5
86 2 11	852516567.7	3.6

LENGTH:

Mean = 852516563.8 ± 3.8 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.8 cm

Table 6.35
VLBI BASELINE LENGTH EVOLUTION
HARTRAO TO RICHMOND

DATE	Length (cm)	Formal Error
86 1 9	1081459113.	5.6
86 1 15	1081459136.	4.7
86 1 19	1081459130.	4.8
86 1 29	1081459128.	3.3
86 2 3	1081459138.	4.1
86 2 11	1081459120.	5.6

LENGTH:
Mean = 1081459129.1 ± 3.5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 7.7 cm

Table 6.36
VLBI BASELINE LENGTH EVOLUTION
HARTRAO TO WESTFORD

DATE	Length (cm)	Formal Error
86 1 9	1065865829.	4.8
86 1 15	1065865846.	4.5
86 1 19	1065865838.	4.5
86 1 29	1065865839.	2.9
86 2 3	1065865851.	3.4
86 2 11	1065865841.	4.6

LENGTH:
Mean = 1065865841.6 ± 3.0 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 6.6 cm

Table 6.37
VLBI BASELINE LENGTH EVOLUTION
HARTRAO TO WETTZELL

DATE	Length (cm)	Formal Error
86 1 9	783232246.1	3.3
86 1 19	783232261.7	2.6
86 1 29	783232263.8	2.0
86 2 3	783232265.6	2.2

LENGTH:
Mean = 783232261.6 ± 3.6 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 6.2 cm

Table 6.38
VLBI BASELINE LENGTH EVOLUTION
HATCREEK TO HAYSTACK

DATE	Length (cm)	Formal Error
83 6 6	403297673.4	.6 *
83 6 9	403297674.0	1.4 *
84 4 26	403297673.3	.6
85 5 7	403297668.2	1.0 *
86 4 1	403297674.4	.7 *
86 10 31	403297672.5	.8 *

LENGTH:
Mean = 403297672.9 ± .8 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.7 cm
Slope = -.1 ± .6 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.7 cm

* WESTFORD - HATCREEK results mapped to HAYSTACK - HATCREEK

Table 6.39
VLBI BASELINE LENGTH EVOLUTION
HATCREEK TO HRAS 085

DATE	Length (cm)	Formal Error
83 6 6	193347361.2	.5
83 6 9	193347363.4	1.6
84 4 26	193347363.2	.6
85 5 7	193347363.9	.6
86 4 1	193347366.6	.4
86 10 31	193347364.2	.6

LENGTH:

Mean = 193347364.1 ± .9 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.0 cm
Slope = 1.3 ± .4 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.1 cm

Table 6.40
VLBI BASELINE LENGTH EVOLUTION
HATCREEK TO KASHIMA

DATE	Length (cm)	Formal Error
84 2 24	755732823.5	2.0
85 5 15	755732827.7	.9
85 9 30	755732828.3	1.0
86 4 8	755732828.2	1.2
86 10 23	755732820.6	1.3

LENGTH:

Mean = 755732826.6 ± 1.4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.8 cm
Slope = -1.5 ± 2.0 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.6 cm

Table 6.41
VLBI BASELINE LENGTH EVOLUTION
HATCREEK TO KAUAI

DATE	Length (cm)	Formal Error
85 5 15	406171860.2	.6
85 9 30	406171858.3	.6
86 4 8	406171859.0	.7
86 10 23	406171859.3	.6

LENGTH:
Mean = 406171859.3 ± .4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .7 cm
Slope = -.4 ± .7 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .7 cm

Table 6.42
VLBI BASELINE LENGTH EVOLUTION
HATCREEK TO MOJAVE12

DATE	Length (cm)	Formal Error
84 2 24	72914865.6	.9
84 4 26	72914866.9	.5
85 5 7	72914866.7	.5
85 5 15	72914867.7	.3
85 9 30	72914867.6	.3
86 4 1	72914867.0	.5
86 4 8	72914867.4	.5
86 10 23	72914866.2	.4
86 10 31	72914867.1	.5

LENGTH:
Mean = 72914867.1 ± .2 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .6 cm
Slope = -.1 ± .3 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .5 cm

Table 6.43
VLBI BASELINE LENGTH EVOLUTION
HATCREEK TO OVRO 130

DATE	Length (cm)	Formal Error
83 6 6	48432153.2	.6
83 6 7	48432151.5	1.6
84 4 26	48432153.1	.5
85 5 7	48432153.1	.5
86 4 1	48432153.9	.5
86 10 31	48432152.5	.6

LENGTH:
Mean = 48432153.2 ± .2 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .5 cm
Slope = .1 ± .2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .5 cm

Table 6.44
VLBI BASELINE LENGTH EVOLUTION
HATCREEK TO PLATTVIL(7258)

DATE	Length (cm)	Formal Error
83 6 6	141631409.1	2.1
83 6 7	141631403.9	.9
83 6 9	141631404.9	1.4
84 4 26	141631402.9	.7
85 5 7	141631404.2	.6
86 4 1	141631407.3	.4

LENGTH:
Mean = 141631405.7 ± .8 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.8 cm
Slope = 1.3 ± .6 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.2 cm

Table 6.45
VLBI BASELINE LENGTH EVOLUTION
HATCREEK TO VNDNBERG

DATE	Length (cm)	Formal Error
85 5 15	69870683.9	.4
85 9 30	69870683.6	.3
86 10 23	69870679.3	.4

LENGTH:

Mean = 69870682.8 ± 1.3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.8 cm

Table 6.46
VLBI BASELINE LENGTH EVOLUTION
HATCREEK TO WESTFORD

DATE	Length (cm)	Formal Error
83 6 6	403281906.9	.6
83 6 9	403281907.4	1.4
85 5 7	403281901.7	1.0
86 4 1	403281907.8	.7
86 10 31	403281906.0	.8

LENGTH:

Mean = 403281906.3 ± 1.0 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.0 cm
Slope = -.1 ± .7 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.9 cm

Table 6.47
VLBI BASELINE LENGTH EVOLUTION
HAYSTACK TO HRAS 085

DATE			Length (cm)	Formal Error	
80	4	11	313564101.2	1.1	
80	7	26	313564103.8	1.4	
80	7	27	313564107.6	1.7	
80	9	26	313564102.1	2.3	
80	9	27	313564108.6	2.0	
80	9	28	313564103.2	1.4	
80	9	29	313564098.0	1.8	
80	9	30	313564096.6	1.8	
80	10	1	313564099.6	2.0	
80	10	2	313564098.7	1.3	
80	10	16	313564099.9	1.1	
80	10	17	313564103.8	1.3	
80	10	18	313564103.1	1.4	
80	10	19	313564101.8	1.1	
80	10	20	313564099.7	1.0	
80	10	21	313564101.0	1.3	
80	10	22	313564101.4	.8	
80	11	3	313564099.6	2.0	
80	12	1	313564100.3	1.8	
80	12	19	313564097.9	1.4	
81	1	7	313564099.9	1.0	
81	1	22	313564096.1	2.2	
81	2	12	313564097.6	.9	
81	2	27	313564097.2	3.2	
81	3	16	313564099.3	1.0	
81	5	13	313564101.4	1.7	
81	5	13	313564100.5	1.7	*
81	6	16	313564098.5	1.2	
81	6	16	313564098.0	1.2	*
81	6	24	313564100.2	2.0	*
81	7	1	313564104.9	1.5	*
81	7	8	313564103.3	1.5	*
81	7	15	313564105.3	3.2	*
81	7	22	313564103.6	.9	*
81	7	29	313564104.3	1.3	*
81	8	5	313564104.0	1.9	*
81	8	26	313564101.8	1.2	*
81	9	2	313564104.5	1.7	*
81	9	9	313564103.2	1.4	*
81	9	16	313564103.0	1.5	*
81	9	23	313564101.2	1.7	*
81	9	30	313564102.3	1.4	*
81	10	15	313564110.9	2.3	*
81	10	21	313564102.6	2.2	*
81	10	28	313564099.9	1.4	*

HAYSTACK TO HRAS 085

DATE			Length (cm)	Formal Error	
81	11	4	313564102.3	1.7	*
81	11	10	313564100.7	1.0	*
81	11	18	313564101.1	.5	
81	11	18	313564100.8	.5	*
81	11	19	313564099.9	1.0	
81	11	19	313564099.4	1.0	*
81	11	24	313564101.1	1.3	*
81	12	2	313564102.0	1.7	*
81	12	16	313564100.9	1.1	*
81	12	22	313564103.1	1.0	*
81	12	29	313564100.7	.8	*
82	1	6	313564102.3	.9	*
82	1	13	313564100.9	1.3	*
82	1	20	313564102.8	1.0	*
82	1	27	313564102.5	1.2	*
82	2	1	313564102.0	1.3	*
82	2	10	313564102.3	.9	*
82	2	17	313564101.1	1.0	*
82	2	24	313564100.6	1.5	*
82	3	3	313564101.7	1.3	*
82	3	10	313564101.6	1.7	*
82	3	17	313564102.0	2.1	*
82	3	24	313564103.7	1.4	*
82	3	29	313564098.7	1.4	*
82	4	7	313564104.0	1.8	*
82	4	13	313564102.8	2.3	*
82	4	19	313564105.0	3.4	*
82	4	26	313564099.6	2.3	*
82	5	3	313564101.6	1.2	*
82	5	10	313564101.5	1.3	*
82	5	17	313564100.4	1.3	*
82	6	2	313564100.1	1.5	*
82	6	7	313564101.9	1.5	*
82	6	20	313564100.4	1.1	
82	6	20	313564100.2	1.1	*
82	6	21	313564102.9	1.4	*
82	6	28	313564100.4	1.5	*
82	7	6	313564104.3	1.6	*
82	7	12	313564100.5	2.1	*
82	7	19	313564100.3	1.7	*
82	7	26	313564102.7	1.8	*
82	8	4	313564099.6	1.8	*
82	8	9	313564097.4	1.7	*
82	8	16	313564092.7	4.2	*
82	8	23	313564103.7	2.5	*
82	8	30	313564101.3	1.7	*
82	9	7	313564101.6	1.8	*
82	9	13	313564102.2	4.1	*

HAYSTACK TO HRAS 085

DATE			Length (cm)	Formal Error	
82	9	20	313564105.0	9.7	*
82	9	27	313564105.4	1.5	*
82	10	4	313564100.5	2.0	*
82	10	13	313564101.0	1.6	*
82	10	18	313564100.1	1.0	*
82	10	25	313564100.0	1.8	*
82	11	1	313564101.2	1.4	*
82	11	8	313564099.2	1.3	*
82	11	15	313564101.8	2.4	*
82	11	22	313564101.1	1.2	*
82	11	29	313564101.9	1.1	*
82	12	6	313564098.0	1.2	*
82	12	15	313564099.8	.9	*
82	12	16	313564098.9	.9	*
82	12	20	313564099.5	1.0	*
82	12	27	313564101.6	1.2	*
83	1	3	313564099.3	.8	*
83	1	10	313564098.5	1.0	*
83	1	17	313564101.8	.9	*
83	1	24	313564099.9	.8	*
83	1	31	313564099.9	.9	*
83	2	7	313564102.8	.8	*
83	2	14	313564101.8	.9	*
83	2	28	313564102.8	1.3	*
83	3	7	313564099.8	.7	*
83	3	14	313564102.6	2.0	*
83	3	21	313564100.6	2.4	*
83	3	28	313564098.1	1.2	*
83	4	4	313564100.2	1.2	*
83	4	11	313564099.0	1.0	*
83	4	25	313564099.8	.8	*
83	5	2	313564100.4	1.1	*
83	5	5	313564097.7	1.1	
83	5	5	313564110.2	2.2	*
83	5	9	313564100.5	1.0	*
83	5	16	313564103.5	1.9	*
83	5	23	313564096.8	1.4	*
83	5	31	313564101.0	1.7	*
83	6	6	313564101.6	.7	*
83	6	7	313564100.5	.9	*
83	6	9	313564102.5	2.1	*
83	6	13	313564104.5	2.0	*
83	6	20	313564102.4	1.1	*
83	6	28	313564102.3	1.5	*
83	7	5	313564101.5	1.7	*
83	7	11	313564099.1	1.2	*
83	7	25	313564102.7	1.3	*
83	8	1	313564104.3	1.7	*

HAYSTACK TO HRAS 085

DATE			Length (cm)	Formal Error	
83	8	8	313564101.1	1.4	*
83	8	15	313564101.2	1.4	*
83	8	22	313564100.8	1.4	*
83	8	29	313564097.9	2.3	*
83	9	2	313564102.2	1.4	*
83	9	7	313564102.9	1.3	*
83	9	12	313564100.2	2.1	*
83	9	17	313564100.9	1.3	*
83	9	22	313564101.0	1.4	*
83	9	27	313564101.5	1.1	*
83	10	2	313564101.8	1.4	*
83	10	7	313564101.5	1.3	*
83	10	12	313564101.4	1.1	*
83	10	17	313564103.3	1.7	*
83	10	22	313564101.3	1.5	*
83	10	27	313564099.7	1.1	*
83	11	1	313564098.8	1.3	*
83	11	6	313564100.1	1.1	*
83	11	11	313564099.8	1.3	*
83	11	16	313564100.0	1.0	*
83	11	21	313564100.6	.9	*
83	11	26	313564100.6	.9	*
83	12	1	313564099.3	.9	*
83	12	6	313564098.0	1.4	*
83	12	11	313564099.6	.8	*
83	12	16	313564100.8	.8	*
83	12	21	313564101.6	1.6	*
83	12	26	313564099.8	.8	*
83	12	31	313564098.7	.9	*
84	1	4	313564100.0	.8	*
84	1	9	313564100.0	.9	*
84	1	14	313564100.5	.8	*
84	1	24	313564101.9	1.1	*
84	1	29	313564100.5	1.0	*
84	2	3	313564100.6	1.1	*
84	2	8	313564102.1	1.7	*
84	2	13	313564100.7	.8	*
84	2	18	313564101.6	.9	*
84	2	23	313564102.2	1.7	*
84	2	28	313564099.7	2.0	*
84	3	4	313564103.3	1.6	*
84	3	9	313564101.4	1.9	*
84	3	14	313564102.1	1.3	*
84	3	19	313564099.2	1.4	*
84	3	25	313564101.0	1.2	*
84	4	3	313564105.2	2.3	*
84	4	8	313564100.9	1.8	*
84	4	13	313564103.5	1.6	*

HAYSTACK TO HRAS 085

DATE			Length (cm)	Formal Error	
84	4	18	313564101.7	2.0	*
84	4	23	313564103.6	2.2	*
84	4	26	313564100.9	.7	
84	4	28	313564099.7	2.0	*
84	5	3	313564092.7	5.3	*
84	5	8	313564100.7	2.1	*
84	5	13	313564095.3	2.6	*
84	5	18	313564102.7	1.5	*
84	5	23	313564103.7	2.4	*
84	5	28	313564102.6	1.2	*
84	6	2	313564100.6	1.9	*
84	6	7	313564101.0	3.4	*
84	6	12	313564104.3	1.9	*
84	6	17	313564101.3	1.2	*
84	6	22	313564100.3	2.0	*
84	6	27	313564094.8	1.7	*
84	7	2	313564102.6	1.7	*
84	7	7	313564100.5	1.6	*
84	7	12	313564103.9	1.4	*
84	7	17	313564099.8	1.5	*
84	7	22	313564098.4	2.1	*
84	7	27	313564099.2	2.4	*
84	8	1	313564099.0	1.5	*
84	8	6	313564103.9	1.3	*
84	8	11	313564105.0	1.5	*
84	8	16	313564103.5	1.7	*
84	8	21	313564102.3	1.5	*
84	8	26	313564099.3	1.6	*
84	8	28	313564098.9	.5	*
84	8	31	313564099.3	1.5	*
84	9	5	313564098.1	1.4	*
84	9	10	313564099.0	1.3	*
84	9	15	313564099.6	1.7	*
84	9	20	313564096.3	1.9	*
84	9	25	313564099.2	1.5	*
84	9	30	313564098.6	1.5	*
84	10	5	313564102.1	1.3	*
84	10	10	313564102.4	1.7	*
84	10	15	313564099.1	1.3	*
84	10	20	313564101.7	1.4	*
84	10	25	313564102.3	1.3	*
84	10	30	313564100.6	1.2	*
84	11	4	313564103.4	1.5	*
84	11	9	313564100.1	1.2	*
84	11	14	313564100.8	1.3	*
84	11	19	313564098.6	1.0	*
84	11	24	313564099.8	1.2	*
84	11	29	313564101.9	1.1	*

HAYSTACK TO HRAS 085

DATE	Length (cm)	Formal Error	
84 12 4	313564098.3	1.1	*
84 12 9	313564098.5	1.1	*
84 12 14	313564100.9	1.2	*
84 12 19	313564100.1	1.5	*
84 12 23	313564098.2	.9	*
84 12 29	313564101.7	1.5	*
85 1 3	313564098.4	.7	*
85 1 8	313564098.2	.8	*
85 1 18	313564095.6	1.1	*
85 1 23	313564097.6	.8	*
85 1 28	313564097.8	.7	*
85 2 2	313564095.3	1.2	*
85 2 7	313564098.5	.8	*
85 2 12	313564096.9	1.0	*
85 2 17	313564099.8	.9	*
85 2 22	313564098.6	1.1	*
85 2 27	313564097.8	.8	*
85 3 4	313564101.5	1.3	*
85 3 5	313564099.6	.4	
85 3 14	313564095.9	1.1	*
85 3 19	313564098.8	1.2	*
85 3 24	313564097.6	.9	*
85 3 29	313564099.7	.9	*
85 4 3	313564096.8	.7	*
85 4 8	313564098.6	.7	*
85 4 13	313564099.4	1.1	*
85 4 18	313564103.0	.9	*
85 4 23	313564098.9	.8	*
85 4 28	313564097.7	1.0	*
85 5 3	313564096.6	1.1	*
85 5 7	313564097.2	.8	*
85 5 8	313564096.4	1.5	*
85 5 9	313564099.4	.7	*
85 5 13	313564099.2	1.3	*
85 5 18	313564099.3	1.0	*
85 5 23	313564101.5	1.2	*
85 5 28	313564098.7	1.0	*
85 6 2	313564097.2	1.2	*
85 6 7	313564097.7	.9	*
85 6 17	313564095.4	1.4	*
85 6 22	313564098.8	1.1	*
85 6 27	313564096.7	1.0	*
85 7 2	313564099.7	.8	*
85 7 7	313564098.0	1.2	*
85 7 12	313564098.2	1.1	*
85 7 17	313564097.7	.9	*
85 7 22	313564098.0	1.1	*
85 7 27	313564098.8	1.1	*

HAYSTACK TO HRAS 085

DATE			Length (cm)	Formal Error	
85	8	1	313564099.0	.9	*
85	8	6	313564100.4	1.0	*
85	8	11	313564100.0	1.5	*
85	8	16	313564098.2	1.0	*
85	8	21	313564099.4	1.0	*
85	8	24	313564099.8	.8	*
85	8	26	313564098.7	1.0	*
85	8	31	313564100.4	.9	*
85	9	5	313564099.2	1.2	*
85	9	10	313564098.6	1.0	*
85	9	15	313564099.0	.9	*
85	9	20	313564101.3	1.1	*
85	9	25	313564101.6	1.1	*
85	9	30	313564102.9	1.0	*
85	10	5	313564099.8	1.0	*
85	10	10	313564095.5	1.1	*
85	10	15	313564100.9	1.0	*
85	10	20	313564096.4	.9	*
85	10	25	313564097.2	.6	*
85	10	29	313564100.6	.7	*
85	10	30	313564096.8	1.1	*
85	11	4	313564099.3	1.2	*
85	11	9	313564097.7	.7	*
85	11	14	313564101.2	1.0	*
85	11	19	313564099.1	.8	*
85	11	24	313564097.3	.7	*
85	11	29	313564096.9	.8	*
85	12	4	313564099.1	.9	*
85	12	9	313564100.6	.8	*
85	12	14	313564096.6	.8	*
85	12	19	313564098.2	.6	*
85	12	29	313564098.9	.8	*
86	1	3	313564098.0	.9	*
86	1	8	313564098.0	.7	*
86	1	13	313564098.8	.7	*
86	1	18	313564097.2	.9	*
86	1	23	313564097.8	1.2	*
86	1	28	313564099.6	.9	*
86	2	2	313564097.3	.7	*
86	2	7	313564098.6	.8	*
86	2	12	313564098.6	.8	*
86	2	17	313564098.6	.9	*
86	2	22	313564097.9	.8	*
86	2	27	313564098.8	.7	*
86	3	4	313564097.6	.8	*
86	3	9	313564099.0	.8	*
86	3	14	313564098.5	1.1	*
86	3	19	313564096.0	.9	*

HAYSTACK TO HRAS 085

DATE			Length (cm)	Formal Error	
86	3	24	313564099.2	.8	*
86	3	29	313564097.5	1.0	*
86	4	1	313564102.1	.7	*
86	4	3	313564099.5	.7	*
86	4	4	313564098.7	.6	*
86	4	8	313564098.6	.8	*
86	4	13	313564096.8	.8	*
86	4	18	313564096.8	1.1	*
86	4	23	313564099.5	.8	*
86	4	28	313564098.3	.7	*
86	5	3	313564096.8	1.3	*
86	5	8	313564096.7	1.0	*
86	5	13	313564096.5	.8	*
86	5	14	313564099.4	.5	*
86	5	17	313564096.6	1.0	*
86	5	23	313564097.6	1.0	*
86	5	28	313564100.1	.9	*
86	6	2	313564099.0	1.0	*
86	6	7	313564096.4	1.1	*
86	6	12	313564098.9	1.2	*
86	6	17	313564096.9	1.0	*
86	6	22	313564099.5	1.0	*
86	6	27	313564099.2	1.1	*
86	7	2	313564099.4	.8	*
86	7	7	313564104.3	1.3	*
86	7	12	313564097.9	1.1	*
86	7	17	313564099.4	1.1	*
86	7	22	313564098.8	1.2	*
86	7	27	313564098.5	1.0	*
86	8	1	313564098.0	1.2	*
86	8	6	313564098.0	1.2	*
86	8	11	313564098.2	1.3	*
86	8	16	313564100.1	1.3	*
86	8	21	313564098.1	1.2	*
86	8	26	313564096.5	1.3	*
86	8	31	313564100.7	1.5	*
86	9	5	313564096.0	1.5	*
86	9	10	313564099.1	1.1	*
86	9	15	313564096.2	1.1	*
86	9	20	313564103.6	1.2	*
86	9	25	313564098.9	1.3	*
86	9	30	313564100.2	1.4	*
86	10	5	313564098.2	.8	*
86	10	10	313564094.4	1.4	*
86	10	15	313564098.9	.8	*
86	10	16	313564098.9	.4	*
86	10	20	313564099.0	1.1	*
86	10	25	313564097.8	1.1	*

HAYSTACK TO HRAS 085

DATE	Length (cm)	Formal Error
86 10 30	313564098.6	.8 *
86 10 31	313564098.9	.4 *
86 11 4	313564099.3	.8 *
86 11 9	313564098.9	1.3 *
86 11 14	313564100.4	.7 *
86 11 19	313564096.2	.9 *
86 11 24	313564097.4	.9 *
86 11 29	313564099.9	.7 *
86 12 4	313564097.8	1.0 *
86 12 9	313564099.8	.8 *
86 12 14	313564097.0	.8 *
86 12 19	313564100.2	.7 *
86 12 23	313564099.6	.9 *
86 12 29	313564098.3	.8 *

LENGTH:

Mean = 313564099.6 ± .1 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.9 cm
Slope = -.6 ± .1 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.6 cm

* WESTFORD - HRAS 085 results mapped to HAYSTACK - HRAS 085

Table 6.48
VLBI BASELINE LENGTH EVOLUTION
HAYSTACK TO KASHIMA

DATE			Length (cm)	Formal Error	
84	8	30	950178016.3	2.6	
84	9	2	950178006.9	2.5	
85	6	19	950177992.6	2.8	*
85	11	21	950177993.9	2.1	*
86	6	18	950178001.0	2.2	*
86	11	5	950177996.0	1.4	*

LENGTH:

Mean = 950177999.6 ± 3.2 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 7.2 cm
Slope = -5.7 ± 2.8 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 5.3 cm

* WESTFORD - KASHIMA results mapped to HAYSTACK - KASHIMA

Table 6.49
VLBI BASELINE LENGTH EVOLUTION
HAYSTACK TO MARPOINT

DATE			Length (cm)	Formal Error	
82	6	18	67729341.2	.5	
82	6	18	67729341.8	.6	*
82	6	19	67729340.2	.8	
82	6	19	67729339.7	.9	*
82	10	18	67729340.3	.8	*
83	8	29	67729337.0	2.4	*

LENGTH:

Mean = 67729340.9 ± .4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .9 cm
Slope = -2.9 ± 1.7 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .7 cm

* WESTFORD - MARPOINT results mapped to HAYSTACK - MARPOINT

Table 6.50
VLBI BASELINE LENGTH EVOLUTION
HAYSTACK TO MOJAVE12

DATE			Length (cm)	Formal Error	
83	6	28	390414429.8	2.0	*
83	7	25	390414426.1	1.2	*
83	8	8	390414423.3	1.3	*
83	9	27	390414426.8	1.1	*
83	10	12	390414425.8	1.1	*
83	10	27	390414428.1	1.1	*
83	11	21	390414425.9	.9	*
83	12	1	390414424.9	.7	*
84	1	4	390414427.2	.7	*
84	4	26	390414425.5	.6	
84	8	30	390414429.3	.8	
84	9	2	390414429.7	.9	
85	3	5	390414425.3	.4	
85	5	7	390414422.4	.8	*
85	5	9	390414427.1	.7	*
85	6	12	390414429.5	1.9	*
85	6	19	390414427.0	.7	*
85	8	24	390414426.5	.6	*
85	10	29	390414427.2	.5	*
85	11	21	390414426.4	.6	*
86	4	1	390414427.7	.7	*
86	4	4	390414425.2	.6	*
86	5	14	390414427.2	.6	*
86	6	18	390414427.2	.7	*
86	10	16	390414425.4	.4	*
86	10	31	390414424.0	.4	*
86	11	5	390414425.2	.5	*

LENGTH:

Mean = 390414426.1 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.5 cm
Slope = -.3 ± .3 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.4 cm

* WESTFORD - MOJAVE12 results mapped to HAYSTACK - MOJAVE12

Table 6.51
VLBI BASELINE LENGTH EVOLUTION
HAYSTACK TO NRAO 140

DATE	Length (cm)	Formal Error
79 8 3	84512987.0	.7
79 11 25	84512982.9	.8
80 4 11	84512985.3	.3
81 11 18	84512984.8	.3
81 11 18	84512984.5	.3 *
81 11 19	84512986.0	.5
81 11 19	84512985.3	.5 *
82 12 15	84512984.5	.9 *
82 12 16	84512984.6	.5 *

LENGTH:

Mean = 84512985.0 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .7 cm
Slope = -.2 ± .3 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .7 cm

* WESTFORD - NRAO 140 results mapped to HAYSTACK - NRAO 140

Table 6.52
VLBI BASELINE LENGTH EVOLUTION
HAYSTACK TO ONSALA60

DATE			Length (cm)	Formal Error	
80	7	26	559971455.2	1.6	
80	7	27	559971452.5	1.9	
80	9	26	559971443.4	1.3	
80	9	27	559971443.7	1.3	
80	9	28	559971450.0	1.0	
80	9	29	559971449.3	1.8	
80	9	30	559971446.2	1.5	
80	10	1	559971440.5	4.3	
80	10	2	559971445.7	1.4	
80	10	16	559971451.4	.9	
80	10	17	559971450.9	1.4	
80	10	18	559971449.0	1.3	
80	10	19	559971447.3	.7	
80	10	20	559971446.6	.8	
80	10	21	559971452.6	1.5	
80	10	22	559971446.5	.6	
80	12	1	559971449.3	1.3	
80	12	19	559971442.6	1.0	
81	1	22	559971448.6	1.1	
81	2	27	559971440.9	1.9	
81	10	21	559971450.2	2.3	*
81	11	18	559971450.0	2.4	
81	11	18	559971450.3	2.4	*
81	11	19	559971453.8	1.3	
81	11	19	559971454.6	1.3	*
82	3	17	559971450.6	1.4	*
82	4	19	559971449.1	2.2	*
82	6	16	559971454.8	2.2	*
82	6	18	559971453.4	1.1	
82	6	18	559971454.5	1.2	*
82	6	19	559971453.3	1.5	
82	6	19	559971453.4	1.8	*
82	6	20	559971453.6	1.2	
82	6	20	559971455.0	1.3	*
82	6	21	559971454.6	2.3	*
82	9	13	559971446.5	3.5	*
82	9	20	559971464.5	5.2	*
82	10	18	559971455.2	1.6	*
82	11	15	559971454.6	2.5	*
82	12	15	559971456.9	2.5	*
82	12	16	559971449.4	1.9	*
83	2	7	559971446.9	1.9	*
83	2	28	559971447.6	1.5	*
83	3	14	559971449.9	1.9	*
83	4	18	559971454.7	1.6	*

HAYSTACK TO ONSALA60

DATE			Length (cm)	Formal Error	
83	5	5	559971454.8	1.3	
83	5	5	559971448.6	1.8	*
83	5	16	559971453.5	3.7	*
83	6	13	559971454.0	3.2	*
83	8	29	559971442.5	4.9	*
83	8	30	559971453.6	1.5	
83	9	22	559971454.2	2.8	*
83	9	23	559971455.6	2.1	
83	10	27	559971448.3	3.0	*
83	10	28	559971449.6	1.4	
83	11	16	559971457.7	1.7	*
83	11	17	559971451.1	1.1	
83	12	21	559971451.9	2.5	*
83	12	22	559971453.3	1.4	
84	1	24	559971457.9	1.6	*
84	2	23	559971456.2	1.5	*
84	2	24	559971451.3	.8	
84	3	14	559971449.9	1.4	*
84	4	18	559971455.9	1.6	*
84	4	19	559971453.3	.8	
84	5	18	559971457.2	1.9	*
84	5	19	559971451.0	1.1	
84	6	12	559971460.8	2.6	*
84	10	25	559971454.2	1.9	*
84	11	14	559971458.3	1.9	*
84	11	15	559971454.2	1.2	
84	12	19	559971459.3	2.9	*
85	1	23	559971452.5	1.3	*
85	1	24	559971453.5	.9	
85	2	27	559971454.4	1.1	*
85	3	4	559971458.2	1.6	*
85	3	5	559971455.2	.5	
85	4	23	559971455.2	1.3	*
85	4	24	559971456.1	1.1	
85	5	8	559971451.7	1.3	*
85	5	9	559971457.9	.8	*
85	6	17	559971454.2	2.2	*
85	6	18	559971454.7	1.0	*
85	6	19	559971457.9	1.3	*
85	8	16	559971455.1	2.9	*
85	9	10	559971462.0	2.2	*
85	9	11	559971455.8	.9	*
85	10	25	559971454.0	.9	*
85	10	29	559971457.3	.8	*
85	11	19	559971453.9	1.1	*
85	11	20	559971458.6	1.0	*
85	11	21	559971455.4	.9	*
85	12	9	559971454.8	.9	*

HAYSTACK TO ONSALA60

DATE			Length (cm)	Formal Error	
85	12	10	559971455.6	.7	*
86	1	14	559971456.3	.9	*
86	1	15	559971451.8	1.2	*
86	2	11	559971458.1	1.5	*
86	3	19	559971455.8	1.3	*
86	3	20	559971455.6	.8	*
86	4	3	559971459.1	1.0	*
86	4	4	559971456.5	.7	*
86	5	13	559971456.9	1.1	*
86	5	14	559971459.1	.8	*
86	6	16	559971458.6	.9	*
86	6	17	559971460.5	1.6	*
86	6	18	559971461.1	1.4	*
86	8	25	559971459.0	.8	*
86	8	26	559971456.5	1.8	*
86	9	15	559971455.0	1.3	*
86	9	16	559971455.7	.5	
86	9	16	559971456.5	.5	*
86	10	15	559971459.2	1.2	*
86	10	16	559971457.3	.4	*
86	11	3	559971456.9	.7	*
86	11	4	559971452.2	1.1	*
86	12	8	559971455.7	.7	*
86	12	9	559971452.7	1.1	*

LENGTH:

Mean = 559971454.1 ± .4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.9 cm
Slope = 1.5 ± .1 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.4 cm

* WESTFORD - ONSALA60 results mapped to HAYSTACK - ONSALA60

Table 6.53
VLBI BASELINE LENGTH EVOLUTION
HAYSTACK TO OVRO 130

DATE			Length (cm)	Formal Error	
79	8	3	392888165.1	1.2	
79	11	25	392888162.0	1.6	
80	4	11	392888164.3	.5	
80	7	26	392888167.9	1.1	
80	7	27	392888167.7	1.1	
80	9	26	392888163.9	1.6	
80	9	27	392888169.3	1.9	
80	9	28	392888163.6	.8	
80	9	29	392888159.4	1.2	
80	9	30	392888158.5	.9	
80	10	1	392888157.0	1.0	
80	10	2	392888161.1	.9	
80	10	16	392888163.8	.7	
80	10	17	392888163.1	1.0	
80	10	18	392888163.9	.8	
80	10	19	392888166.9	2.3	
80	10	20	392888161.2	.8	
80	10	21	392888164.0	.8	
80	10	22	392888162.2	.6	
81	6	16	392888161.7	.8	
81	6	16	392888161.5	.8	*
81	11	18	392888162.0	.6	
81	11	18	392888161.9	.6	*
81	11	19	392888164.2	.6	
81	11	19	392888164.0	.6	*
82	6	16	392888161.3	2.5	*
82	6	18	392888165.9	1.0	
82	6	18	392888166.9	1.0	*
82	6	19	392888161.5	1.4	
82	6	19	392888160.2	1.8	*
82	6	20	392888163.0	1.3	
82	6	20	392888163.0	1.3	*
82	6	21	392888163.4	1.9	*
82	10	18	392888164.0	1.3	*
82	10	25	392888161.6	1.5	*
82	12	15	392888163.9	1.1	*
82	12	16	392888162.8	.7	*
83	6	6	392888165.1	.9	*
84	4	19	392888161.1	.9	
84	4	26	392888164.1	.6	
84	10	26	392888162.6	1.0	
85	3	5	392888165.1	.4	
85	5	7	392888161.7	.6	*
85	5	9	392888164.1	.7	*
85	10	29	392888167.0	.5	*

HAYSTACK TO OVRO 130

DATE			Length (cm)	Formal Error
86	4	1	392888166.8	.7 *
86	4	4	392888164.3	.8 *
86	5	14	392888169.7	.7 *
86	10	16	392888163.0	.4 *
86	10	31	392888165.8	1.0 *

LENGTH:

Mean = 392888163.8 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.2 cm
Slope = .4 ± .1 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.0 cm

* WESTFORD - OVRO 130 results mapped to HAYSTACK - OVRO 130

Table 6.54
VLBI BASELINE LENGTH EVOLUTION
HAYSTACK TO PLATTVIL(7258)

DATE	Length (cm)	Formal Error
83 6 6	275320538.5	3.4 *
83 6 9	275320539.5	2.1 *
84 4 26	275320535.7	1.3
85 5 7	275320535.5	.8 *
86 4 1	275320539.5	.7 *

LENGTH:
Mean = 275320537.6 ± 1.0 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.0 cm
Slope = 1.1 ± 1.0 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.8 cm

* WESTFORD - PLATTVIL results mapped to HAYSTACK - PLATTVIL

Table 6.55
VLBI BASELINE LENGTH EVOLUTION
HAYSTACK TO ROBLED32

DATE	Length (cm)	Formal Error
83 5 5	529969925.5	2.4
83 5 5	529969917.8	2.7 *

LENGTH:
Mean = 529969922.1 ± 3.8 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.8 cm

* WESTFORD - ROBLED32 results mapped to HAYSTACK - ROBLED32

Table 6.56
VLBI BASELINE LENGTH EVOLUTION
HAYSTACK TO WESTFORD

DATE	Length (cm)	Formal Error
81 5 13	123939.7	.5
81 6 16	123939.7	.4
81 11 18	123939.5	.3
81 11 19	123940.0	.3
82 6 18	123938.2	.3
82 6 19	123938.9	.7
82 6 20	123939.8	.3
83 5 5	123931.5	1.4
86 9 16	123939.4	.2

LENGTH:

Mean = 123939.4 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .8 cm
Slope = -.0 ± .1 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .8 cm

Table 6.57
VLBI BASELINE LENGTH EVOLUTION
HAYSTACK TO WETTZELL

DATE			Length (cm)	Formal Error	
83	11	16	599739071.0	1.7	*
83	12	21	599739065.6	2.5	*
84	1	9	599739069.6	1.8	*
84	1	24	599739072.6	1.4	*
84	1	29	599739071.8	1.7	*
84	2	3	599739071.4	2.9	*
84	2	8	599739069.9	2.2	*
84	2	18	599739075.2	1.4	*
84	2	23	599739072.7	1.5	*
84	2	28	599739071.8	2.2	*
84	3	4	599739071.4	2.0	*
84	3	9	599739072.8	2.1	*
84	3	14	599739065.6	1.4	*
84	3	19	599739070.6	1.4	*
84	3	25	599739071.8	1.5	*
84	4	3	599739071.3	2.1	*
84	4	8	599739069.2	2.7	*
84	4	13	599739072.1	1.7	*
84	4	18	599739071.1	1.6	*
84	4	23	599739069.1	2.7	*
84	4	28	599739069.3	2.1	*
84	5	3	599739070.1	2.6	*
84	5	8	599739073.1	2.5	*
84	5	13	599739070.4	2.7	*
84	5	18	599739072.7	1.8	*
84	5	23	599739077.0	2.6	*
84	5	28	599739073.7	1.6	*
84	6	2	599739070.4	2.2	*
84	6	7	599739072.0	2.8	*
84	6	12	599739073.1	2.3	*
84	6	17	599739075.3	1.6	*
84	6	22	599739068.2	2.5	*
84	6	27	599739069.6	2.1	*
84	7	2	599739068.8	2.1	*
84	7	7	599739073.2	3.2	*
84	7	12	599739074.8	2.5	*
84	7	17	599739075.6	2.6	*
84	8	1	599739064.3	2.7	*
84	8	6	599739078.9	2.9	*
84	8	11	599739073.3	2.4	*
84	8	16	599739068.8	2.3	*
84	8	21	599739079.5	2.5	*
84	8	26	599739073.1	2.6	*
84	8	30	599739076.1	1.7	
84	8	31	599739071.7	2.5	*

HAYSTACK TO WETTZELL

DATE			Length (cm)	Formal Error
84	9	2	599739077.8	1.5
84	9	5	599739070.6	2.4 *
84	9	10	599739076.0	2.3 *
84	9	15	599739070.5	2.7 *
84	9	20	599739069.2	3.0 *
84	9	25	599739072.3	2.6 *
84	9	30	599739072.6	2.6 *
84	10	5	599739070.1	2.3 *
84	10	10	599739070.2	2.2 *
84	10	15	599739067.6	2.3 *
84	10	20	599739071.8	2.3 *
84	10	25	599739073.7	1.9 *
84	10	30	599739074.2	1.9 *
84	11	4	599739079.6	2.2 *
84	11	9	599739073.9	2.0 *
84	11	14	599739077.4	1.9 *
84	11	19	599739068.3	1.7 *
84	11	24	599739074.1	2.1 *
84	11	29	599739074.4	1.8 *
84	12	4	599739072.8	1.7 *
84	12	9	599739070.8	2.2 *
84	12	14	599739070.3	2.2 *
84	12	19	599739076.5	2.5 *
84	12	23	599739076.5	1.6 *
84	12	29	599739073.3	2.4 *
85	1	3	599739072.5	1.2 *
85	1	8	599739069.7	1.5 *
85	1	13	599739069.4	1.9 *
85	1	18	599739072.5	1.5 *
85	1	23	599739069.3	1.3 *
85	1	24	599739071.0	.9
85	1	28	599739073.3	1.1 *
85	2	2	599739075.0	1.4 *
85	2	7	599739070.7	1.2 *
85	2	12	599739069.6	1.5 *
85	2	17	599739070.8	1.3 *
85	2	22	599739071.9	1.5 *
85	2	27	599739068.9	1.0 *
85	3	4	599739074.8	1.6 *
85	3	5	599739071.7	.5
85	3	14	599739072.5	1.1 *
85	3	19	599739073.7	1.5 *
85	3	24	599739071.4	1.0 *
85	3	29	599739070.1	1.4 *
85	4	3	599739070.9	1.3 *
85	4	8	599739071.1	1.4 *
85	4	13	599739073.8	1.5 *
85	4	18	599739076.1	1.6 *

HAYSTACK TO WETTZELL

DATE			Length (cm)	Formal Error
85	4	23	599739070.4	1.4 *
85	4	24	599739073.5	1.1
85	4	28	599739071.6	1.5 *
85	5	3	599739071.8	1.6 *
85	5	8	599739069.8	1.3 *
85	5	9	599739074.3	.8 *
85	5	13	599739073.4	2.0 *
85	5	18	599739069.7	1.7 *
85	5	23	599739073.4	1.8 *
85	5	28	599739074.1	1.6 *
85	6	2	599739072.5	1.8 *
85	6	7	599739075.0	1.4 *
85	6	12	599739077.6	2.5 *
85	6	17	599739068.0	2.3 *
85	6	18	599739072.2	1.0 *
85	6	19	599739071.3	1.3 *
85	6	22	599739077.1	1.9 *
85	6	27	599739073.2	1.7 *
85	7	2	599739072.7	1.4 *
85	7	7	599739074.0	1.7 *
85	7	12	599739075.0	2.1 *
85	7	17	599739073.0	1.5 *
85	7	22	599739064.2	1.9 *
85	7	27	599739079.1	2.0 *
85	8	1	599739072.3	1.7 *
85	8	6	599739078.8	2.1 *
85	8	11	599739070.6	2.7 *
85	8	16	599739077.7	1.7 *
85	8	21	599739074.3	1.8 *
85	8	26	599739066.4	1.7 *
85	8	31	599739082.1	2.2 *
85	9	5	599739078.3	2.4 *
85	9	10	599739077.0	1.6 *
85	9	11	599739072.0	.9 *
85	9	15	599739075.8	1.7 *
85	9	20	599739078.7	1.8 *
85	9	25	599739076.2	1.8 *
85	9	30	599739074.4	1.5 *
85	10	5	599739074.5	1.4 *
85	10	10	599739074.0	1.5 *
85	10	15	599739075.0	1.7 *
85	10	20	599739076.9	1.3 *
85	10	25	599739071.6	.9 *
85	10	29	599739075.7	.8 *
85	10	30	599739072.5	1.7 *
85	11	4	599739075.0	2.3 *
85	11	9	599739070.0	1.4 *
85	11	14	599739075.5	1.4 *

HAYSTACK TO WETTZELL

DATE			Length (cm)	Formal Error	
85	11	19	599739071.5	1.2	*
85	11	20	599739075.7	1.0	*
85	11	21	599739075.7	.9	*
85	11	24	599739075.1	1.1	*
85	11	29	599739071.9	1.5	*
85	12	4	599739074.5	1.4	*
85	12	9	599739071.9	1.0	*
85	12	10	599739073.0	.8	*
85	12	14	599739073.5	1.1	*
85	12	19	599739072.1	1.0	*
85	12	23	599739074.8	1.7	*
85	12	29	599739072.3	1.1	*
86	1	3	599739073.6	1.4	*
86	1	8	599739073.3	1.4	*
86	1	9	599739071.2	1.6	*
86	1	13	599739074.3	1.3	*
86	1	14	599739073.8	.9	*
86	1	18	599739072.4	1.5	*
86	1	19	599739068.2	1.9	*
86	1	23	599739072.3	1.3	*
86	1	28	599739073.3	1.0	*
86	1	29	599739071.9	.9	*
86	2	2	599739071.5	.9	*
86	2	3	599739074.9	1.2	*
86	2	7	599739070.9	1.2	*
86	2	12	599739072.4	1.1	*
86	2	17	599739074.5	1.2	*
86	2	22	599739073.3	1.2	*
86	2	27	599739076.1	1.0	*
86	3	4	599739073.3	1.4	*
86	3	9	599739071.6	1.0	*
86	3	14	599739068.8	1.7	*
86	3	19	599739071.8	1.3	*
86	3	20	599739070.3	.9	*
86	3	24	599739074.3	1.2	*
86	3	29	599739076.2	1.5	*
86	4	3	599739075.1	1.0	*
86	4	4	599739072.7	.7	*
86	4	8	599739074.3	1.2	*
86	4	13	599739073.6	1.1	*
86	4	18	599739073.2	1.2	*
86	4	23	599739076.3	1.4	*
86	4	28	599739076.3	1.4	*
86	5	8	599739075.2	1.4	*
86	5	13	599739075.5	1.4	*
86	5	14	599739074.6	.8	*
86	5	17	599739074.3	1.8	*
86	5	23	599739074.7	1.7	*

HAYSTACK TO WETTZELL

DATE			Length (cm)	Formal Error	
86	5	28	599739075.1	1.3	*
86	6	2	599739076.4	1.3	*
86	6	7	599739071.6	1.4	*
86	6	12	599739073.6	1.8	*
86	6	16	599739076.6	1.0	*
86	6	17	599739076.3	1.5	*
86	6	18	599739076.6	1.4	*
86	6	22	599739073.7	1.5	*
86	6	27	599739078.7	1.9	*
86	7	2	599739072.3	1.3	*
86	7	7	599739075.7	2.2	*
86	7	12	599739076.1	1.4	*
86	7	17	599739077.1	1.6	*
86	7	22	599739072.1	2.3	*
86	7	27	599739075.9	1.5	*
86	8	1	599739075.3	2.0	*
86	8	6	599739076.6	1.9	*
86	8	11	599739076.0	2.1	*
86	8	16	599739075.6	1.8	*
86	8	21	599739080.3	2.0	*
86	8	25	599739075.7	.8	*
86	8	26	599739072.5	2.0	*
86	8	31	599739077.5	1.9	*
86	9	5	599739074.7	2.2	*
86	9	10	599739074.3	1.6	*
86	9	15	599739073.9	1.4	*
86	9	16	599739073.0	.5	
86	9	16	599739073.9	.6	*
86	9	20	599739075.6	1.5	*
86	9	25	599739075.2	1.6	*
86	9	30	599739079.0	2.1	*
86	10	5	599739075.5	1.6	*
86	10	10	599739073.4	1.3	*
86	10	15	599739075.2	1.1	*
86	10	16	599739073.9	.4	*
86	10	20	599739074.1	1.6	*
86	10	25	599739076.3	1.3	*
86	10	30	599739075.4	1.5	*
86	11	3	599739074.5	.7	*
86	11	4	599739072.4	1.1	*
86	11	5	599739078.8	1.0	*
86	11	9	599739076.6	1.4	*
86	11	14	599739076.3	1.0	*
86	11	19	599739072.8	1.1	*
86	11	24	599739073.6	1.5	*
86	11	29	599739073.8	.9	*
86	12	4	599739077.3	1.2	*
86	12	8	599739073.4	.6	*

HAYSTACK TO WETTZELL

DATE	Length (cm)	Formal Error
86 12 9	599739070.1	1.1 *
86 12 14	599739072.7	1.2 *
86 12 19	599739072.3	1.0 *
86 12 23	599739076.1	1.3 *
86 12 29	599739075.3	1.1 *

LENGTH:

Mean = 599739073.4 ± .1 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.3 cm
Slope = 1.1 ± .2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.1 cm

* WESTFORD - WETTZELL results mapped to HAYSTACK - WETTZELL

Table 6.58
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO MARPOINT

DATE	Length (cm)	Formal Error
82 10 18	257081338.1	1.0
83 8 29	257081339.9	1.7

LENGTH:

Mean = 257081338.6 ± .8 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .8 cm

Table 6.59
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO MOJAVE12

DATE	Length (cm)	Formal Error
83 6 28	131336815.4	.9
83 7 25	131336815.8	.7
83 8 8	131336814.0	.7
83 9 27	131336814.4	.5
83 10 12	131336815.1	.5
83 10 27	131336815.6	.6
83 11 21	131336815.6	.5
83 12 1	131336815.3	.5
84 1 4	131336815.0	.5
84 4 26	131336814.5	.5
85 3 5	131336816.6	.3
85 5 7	131336816.2	.3
85 5 9	131336816.1	.4
85 8 24	131336814.6	.4
85 10 29	131336816.5	.4
86 4 1	131336818.1	.3
86 4 4	131336818.2	.6
86 5 14	131336817.4	.5
86 10 16	131336817.8	.4
86 10 31	131336815.1	.3

LENGTH:

Mean = 131336816.1 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.2 cm
Slope = .5 ± .2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.0 cm

Table 6.60
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO NRAO 140

DATE	Length (cm)	Formal Error
80 4 11	235463400.8	.9
81 11 18	235463401.0	.4
81 11 19	235463398.9	.9
82 12 15	235463400.8	.9
82 12 16	235463399.0	.7

LENGTH:

Mean = 235463400.4 ± .5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .9 cm
Slope = -.5 ± .5 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .8 cm

Table 6.61
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO ONSALA60

DATE	Length (cm)	Formal Error
80 7 26	794073222.5	3.2
80 7 27	794073220.3	3.8
80 9 26	794073219.1	5.2
80 9 27	794073221.7	3.9
80 9 28	794073227.8	3.4
80 9 29	794073213.1	4.6
80 9 30	794073217.5	4.5
80 10 1	794073213.9	5.6
80 10 2	794073220.3	2.9
80 10 16	794073217.0	2.7
80 10 17	794073236.2	3.1
80 10 18	794073225.5	3.3
80 10 19	794073213.8	2.5
80 10 20	794073220.7	2.5
80 10 21	794073225.8	3.3
80 10 22	794073221.0	1.9
80 12 1	794073229.7	4.6
80 12 19	794073214.8	3.5
81 1 22	794073220.3	5.4
81 2 27	794073211.6	7.9
81 10 21	794073225.0	5.2
81 11 18	794073239.3	5.4
81 11 19	794073221.9	2.6
82 3 17	794073225.3	5.2
82 4 19	794073227.2	8.4
82 6 20	794073223.6	2.8
82 6 21	794073228.5	3.2
82 9 13	794073236.8	11.
82 9 20	794073253.4	25.
82 10 18	794073221.5	2.4
82 11 15	794073242.5	7.1
82 12 15	794073233.8	3.9
82 12 16	794073220.0	2.7
83 2 7	794073226.6	3.2
83 2 28	794073218.9	3.3
83 3 14	794073218.2	5.1
83 5 5	794073228.9	1.7
83 5 16	794073218.7	7.0
83 6 13	794073234.3	6.4
83 8 29	794073188.8	6.6
83 9 22	794073228.8	5.1
83 10 27	794073218.1	4.2
83 11 16	794073223.5	2.4
83 12 21	794073223.4	4.5
84 1 24	794073229.1	2.9

HRAS 085 TO ONSALA60

DATE			Length (cm)	Formal Error
84	2	23	794073220.4	3.9
84	3	14	794073225.6	3.3
84	4	18	794073228.6	5.0
84	5	18	794073227.7	4.1
84	6	12	794073238.5	5.5
84	10	25	794073229.2	3.6
84	11	14	794073229.8	3.7
84	12	19	794073224.3	5.3
85	1	23	794073221.4	2.3
85	2	27	794073223.8	2.1
85	3	4	794073221.6	2.7
85	3	5	794073226.4	.9
85	4	23	794073227.4	2.2
85	5	8	794073219.0	3.7
85	5	9	794073225.0	1.2
85	6	17	794073224.2	3.1
85	8	16	794073223.7	4.6
85	9	10	794073232.0	3.4
85	10	25	794073218.0	1.4
85	10	29	794073226.3	1.5
85	11	19	794073228.9	2.1
85	12	9	794073231.2	1.9
86	3	19	794073227.4	2.1
86	4	3	794073229.4	1.7
86	4	4	794073227.6	1.4
86	5	13	794073222.9	2.0
86	5	14	794073225.7	1.4
86	6	17	794073224.6	2.9
86	8	26	794073223.7	3.2
86	9	15	794073223.6	2.2
86	10	15	794073231.5	2.1
86	10	16	794073226.8	.9
86	11	4	794073217.5	1.8
86	12	9	794073231.9	1.8

LENGTH:

Mean = 794073225.1 ± .5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 4.6 cm
Slope = .8 ± .2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 4.4 cm

Table 6.62
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO OVRO 130

DATE			Length (cm)	Formal Error
80	4	11	150819537.0	.6
80	7	26	150819536.5	1.1
80	7	27	150819535.3	1.1
80	9	26	150819537.3	1.5
80	9	27	150819538.5	1.1
80	9	28	150819537.2	.8
80	9	29	150819534.6	1.2
80	9	30	150819535.4	1.1
80	10	1	150819536.7	1.2
80	10	2	150819537.1	.8
80	10	16	150819537.1	.7
80	10	17	150819539.5	.8
80	10	18	150819538.4	.9
80	10	19	150819535.4	1.8
80	10	20	150819535.6	.7
80	10	21	150819537.3	.8
80	10	22	150819537.1	.6
81	6	16	150819537.2	.7
81	11	18	150819538.5	.4
81	11	19	150819537.5	.6
82	6	20	150819537.7	.8
82	6	21	150819538.3	1.0
82	10	18	150819538.3	.7
82	10	25	150819539.3	1.2
82	12	15	150819539.4	.6
82	12	16	150819537.6	.6
83	6	6	150819536.9	.4
84	4	26	150819538.5	.5
85	3	5	150819541.1	.3
85	5	7	150819540.6	.3
85	5	9	150819539.1	.4
85	10	29	150819541.3	.4
86	4	1	150819542.1	.4
86	4	4	150819542.9	.7
86	5	14	150819542.4	.6
86	10	16	150819542.0	.4
86	10	31	150819541.3	.6

LENGTH:

Mean = 150819539.4 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.0 cm
Slope = .8 ± .1 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.0 cm

Table 6.63
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO PENTICTN(7283)

DATE	Length (cm)	Formal Error
84 8 24	244335456.9	1.4
85 8 28	244335455.0	2.2
85 9 4	244335456.7	.7

LENGTH:
Mean = 244335456.6 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .4 cm

Table 6.64
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO PLATTVIL(7258)

DATE	Length (cm)	Formal Error
83 6 6	106049963.5	3.3
83 6 9	106049963.3	1.8
84 4 26	106049965.3	1.0
85 5 7	106049964.9	.8
86 4 1	106049965.8	.5

LENGTH:
Mean = 106049965.4 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .6 cm
Slope = .6 ± .2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .3 cm

Table 6.65
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO RICHMOND

DATE	Length (cm)	Formal Error
83 12 21	236263259.7	6.8
84 1 4	236263281.8	1.0
84 1 14	236263282.8	1.2
84 1 24	236263282.1	1.5
84 2 3	236263284.9	2.1
84 2 13	236263282.8	1.7
84 2 18	236263288.5	1.3
84 3 4	236263284.1	1.4
84 3 19	236263282.0	1.3
84 3 25	236263282.5	1.3
84 4 3	236263288.7	2.3
84 4 8	236263282.7	1.7
84 4 13	236263287.6	1.6
84 4 18	236263282.3	1.7
84 4 23	236263283.9	1.9
84 4 28	236263280.0	1.8
84 5 28	236263282.0	1.2
84 6 2	236263284.3	1.5
84 6 7	236263276.7	3.3
84 6 12	236263282.5	1.8
84 6 17	236263283.9	1.1
84 6 22	236263285.2	2.0
84 6 27	236263280.5	1.5
84 7 2	236263280.1	1.5
84 7 7	236263283.0	1.3
84 7 12	236263282.8	1.3
84 7 17	236263279.8	1.3
84 7 22	236263278.3	1.8
84 7 27	236263280.8	2.8
84 8 1	236263282.6	1.5
84 8 6	236263282.4	1.2
84 8 11	236263285.9	1.5
84 8 16	236263285.6	1.4
84 8 21	236263282.4	1.4
84 8 26	236263282.2	1.4
84 8 31	236263282.1	1.4
84 9 5	236263281.9	1.3
84 9 10	236263280.6	1.0
84 9 15	236263282.8	3.5
84 9 25	236263283.1	1.4
84 9 30	236263283.2	1.2
84 10 5	236263284.7	1.3
84 10 10	236263285.1	1.7
84 10 15	236263279.6	1.3
84 10 20	236263283.8	1.2

HRAS 085 TO RICHMOND

DATE			Length (cm)	Formal Error
84	10	25	236263283.4	1.2
84	10	30	236263283.8	1.2
84	11	9	236263282.0	1.2
84	11	19	236263284.0	.9
84	11	24	236263281.2	1.0
84	11	29	236263284.1	1.0
84	12	4	236263284.3	1.1
84	12	9	236263281.6	1.0
84	12	14	236263283.5	1.2
84	12	19	236263282.8	1.6
84	12	23	236263280.3	1.0
85	1	3	236263283.9	.8
85	1	8	236263281.9	.7
85	1	18	236263283.0	1.1
85	1	28	236263281.6	.7
85	2	2	236263281.3	1.0
85	2	7	236263280.5	.8
85	2	12	236263281.1	.7
85	2	17	236263282.6	.7
85	2	22	236263281.1	.9
85	2	27	236263281.5	.7
85	3	24	236263281.6	.9
85	3	29	236263283.1	.8
85	4	3	236263281.2	.6
85	4	8	236263282.8	.8
85	4	13	236263282.2	1.0
85	4	18	236263284.6	.8
85	4	23	236263282.4	.7
85	4	28	236263282.0	1.0
85	5	13	236263282.8	1.0
85	5	18	236263281.9	1.1
85	5	23	236263284.0	1.1
85	5	28	236263281.7	.9
85	6	2	236263282.5	1.1
85	6	7	236263280.6	.8
85	6	17	236263281.5	1.0
85	6	22	236263283.8	1.1
85	6	27	236263283.7	1.1
85	7	2	236263282.9	.8
85	7	7	236263282.1	1.1
85	7	12	236263281.3	1.0
85	7	17	236263281.1	.8
85	7	22	236263281.9	1.8
85	7	27	236263282.9	.9
85	8	1	236263283.7	.8
85	8	6	236263281.2	.9
85	8	11	236263282.2	1.2
85	8	16	236263280.2	.9

HRAS 085 TO RICHMOND

DATE			Length (cm)	Formal Error
85	8	21	236263282.0	1.2
85	8	26	236263285.2	.8
85	8	31	236263284.2	1.0
85	9	5	236263280.5	1.1
85	9	10	236263280.0	1.0
85	9	15	236263280.3	.9
85	9	20	236263283.1	1.0
85	9	25	236263282.4	.9
85	9	30	236263284.1	.9
85	10	5	236263280.1	1.0
85	10	10	236263281.9	1.1
85	10	15	236263284.0	.8
85	10	20	236263280.5	1.1
85	10	25	236263281.6	.6
85	11	9	236263282.3	.7
85	11	14	236263282.6	.9
85	11	29	236263281.4	.9
85	12	4	236263282.1	.9
85	12	9	236263283.5	1.1
85	12	14	236263279.5	.9
85	12	19	236263282.0	.5
86	1	8	236263282.3	.6
86	1	13	236263281.2	.6
86	1	18	236263282.6	.9
86	1	23	236263280.0	1.2
86	1	28	236263281.3	.9
86	2	2	236263283.0	.9
86	2	7	236263283.4	.8
86	2	12	236263282.9	.9
86	2	17	236263281.3	.9
86	2	22	236263280.3	1.0
86	2	27	236263280.2	.8
86	3	4	236263281.2	.9
86	3	9	236263281.7	.7
86	3	14	236263282.0	.9
86	3	19	236263279.7	1.0
86	3	24	236263284.0	.8
86	3	29	236263280.1	.9
86	4	3	236263281.0	.9
86	4	8	236263282.7	.8
86	4	13	236263281.7	.8
86	4	18	236263280.2	1.0
86	4	23	236263281.6	.8
86	4	28	236263282.7	.8
86	5	3	236263273.4	1.7
86	5	8	236263281.0	1.0
86	5	13	236263280.2	.9
86	5	17	236263282.3	.9

HRAS 085 TO RICHMOND

DATE			Length (cm)	Formal Error
86	5	23	236263280.8	.9
86	5	28	236263282.2	.8
86	6	2	236263282.6	1.0
86	6	7	236263278.3	1.1
86	6	12	236263283.8	1.0
86	6	17	236263277.4	1.0
86	6	22	236263280.0	.8
86	6	27	236263283.7	.9
86	7	2	236263281.5	.9
86	7	7	236263282.6	1.0
86	7	12	236263281.4	1.0
86	7	17	236263282.8	1.0
86	7	22	236263280.2	1.1
86	7	27	236263283.0	.9
86	8	1	236263282.8	1.4
86	8	6	236263280.7	1.2
86	8	31	236263275.7	5.4
86	9	5	236263282.9	1.6
86	9	10	236263284.0	1.1
86	9	15	236263281.0	1.2
86	9	20	236263283.4	1.2
86	9	25	236263279.6	1.3
86	9	30	236263278.2	1.6
86	10	5	236263280.7	1.0
86	10	10	236263279.0	1.5
86	10	15	236263280.0	3.4
86	10	20	236263280.7	1.6
86	10	25	236263282.7	1.2
86	10	30	236263281.9	.9
86	11	4	236263283.1	1.8
86	11	9	236263277.2	1.4
86	11	14	236263282.5	1.0
86	11	19	236263278.1	1.0
86	11	29	236263282.1	.9
86	12	4	236263280.2	1.0
86	12	9	236263282.6	.9
86	12	14	236263281.3	1.0
86	12	19	236263283.1	.8
86	12	23	236263282.1	1.1
86	12	29	236263282.9	.8

LENGTH:

Mean = 236263282.0 ± .1 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.6 cm
Slope = -.6 ± .2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.5 cm

Table 6.66
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO ROBLED32

DATE	Length (cm)	Formal Error
83 5 5	797553026.8	3.6

Table 6.67
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO WESTFORD

DATE			Length (cm)	Formal Error
81	5	13	313492801.6	1.7
81	6	16	313492799.2	1.2
81	6	24	313492801.4	2.0
81	7	1	313492806.0	1.5
81	7	8	313492804.5	1.5
81	7	15	313492806.4	3.2
81	7	22	313492804.7	.9
81	7	29	313492805.4	1.3
81	8	5	313492805.1	1.9
81	8	26	313492802.9	1.2
81	9	2	313492805.6	1.7
81	9	9	313492804.3	1.4
81	9	16	313492804.1	1.5
81	9	23	313492802.3	1.7
81	9	30	313492803.4	1.4
81	10	15	313492812.0	2.3
81	10	21	313492803.7	2.2
81	10	28	313492801.0	1.4
81	11	4	313492803.4	1.7
81	11	10	313492801.8	1.0
81	11	18	313492801.9	.5
81	11	19	313492800.5	1.0
81	11	24	313492802.2	1.3
81	12	2	313492803.1	1.7
81	12	16	313492802.0	1.1
81	12	22	313492804.2	1.0
81	12	29	313492801.8	.8
82	1	6	313492803.4	.9
82	1	13	313492801.9	1.3
82	1	20	313492803.9	1.0
82	1	27	313492803.6	1.2
82	2	1	313492803.1	1.3
82	2	10	313492803.4	.9
82	2	17	313492802.2	1.0
82	2	24	313492801.7	1.5
82	3	3	313492802.8	1.3
82	3	10	313492802.7	1.7
82	3	17	313492803.0	2.1
82	3	24	313492804.8	1.4
82	3	29	313492799.7	1.4
82	4	7	313492805.1	1.8
82	4	13	313492803.9	2.3
82	4	19	313492806.1	3.4
82	4	26	313492800.7	2.3
82	5	3	313492802.7	1.2

HRAS 085 TO WESTFORD

DATE			Length (cm)	Formal Error
82	5	10	313492802.6	1.3
82	5	17	313492801.5	1.3
82	6	2	313492801.2	1.5
82	6	7	313492803.1	1.5
82	6	20	313492801.3	1.1
82	6	21	313492804.1	1.4
82	6	28	313492801.5	1.5
82	7	6	313492805.5	1.6
82	7	12	313492801.6	2.1
82	7	19	313492801.4	1.7
82	7	26	313492803.8	1.8
82	8	4	313492800.8	1.8
82	8	9	313492798.5	1.7
82	8	16	313492793.8	4.2
82	8	23	313492804.8	2.5
82	8	30	313492802.4	1.7
82	9	7	313492802.7	1.8
82	9	13	313492803.3	4.1
82	9	20	313492806.1	9.7
82	9	27	313492806.5	1.5
82	10	4	313492801.6	2.0
82	10	13	313492802.1	1.6
82	10	18	313492801.2	1.0
82	10	25	313492801.1	1.8
82	11	1	313492802.3	1.4
82	11	8	313492800.3	1.3
82	11	15	313492802.8	2.4
82	11	22	313492802.2	1.2
82	11	29	313492803.0	1.1
82	12	6	313492799.1	1.2
82	12	15	313492800.9	.9
82	12	16	313492800.0	.9
82	12	20	313492800.6	1.0
82	12	27	313492802.7	1.2
83	1	3	313492800.4	.8
83	1	10	313492799.6	1.0
83	1	17	313492802.9	.9
83	1	24	313492801.1	.8
83	1	31	313492801.0	.9
83	2	7	313492803.9	.8
83	2	14	313492802.9	.9
83	2	28	313492803.9	1.3
83	3	7	313492800.9	.7
83	3	14	313492803.7	2.0
83	3	21	313492801.7	2.4
83	3	28	313492799.2	1.2
83	4	4	313492801.3	1.2
83	4	11	313492800.1	1.0

HRAS 085 TO WESTFORD

DATE			Length (cm)	Formal Error
83	4	25	313492800.9	.8
83	5	2	313492801.5	1.1
83	5	5	313492811.3	2.2
83	5	9	313492801.6	1.0
83	5	16	313492804.6	1.9
83	5	23	313492797.9	1.4
83	5	31	313492802.1	1.7
83	6	6	313492802.7	.7
83	6	7	313492801.6	.9
83	6	9	313492803.6	2.1
83	6	13	313492805.6	2.0
83	6	20	313492803.4	1.1
83	6	28	313492803.4	1.5
83	7	5	313492802.6	1.7
83	7	11	313492800.2	1.2
83	7	25	313492803.8	1.3
83	8	1	313492805.4	1.7
83	8	8	313492802.2	1.4
83	8	15	313492802.3	1.4
83	8	22	313492801.9	1.4
83	8	29	313492799.0	2.3
83	9	2	313492803.3	1.4
83	9	7	313492804.1	1.3
83	9	12	313492801.3	2.1
83	9	17	313492802.1	1.3
83	9	22	313492802.1	1.4
83	9	27	313492802.6	1.1
83	10	2	313492802.9	1.4
83	10	7	313492802.6	1.3
83	10	12	313492802.5	1.1
83	10	17	313492804.5	1.7
83	10	22	313492802.4	1.5
83	10	27	313492800.8	1.1
83	11	1	313492799.9	1.3
83	11	6	313492801.2	1.1
83	11	11	313492800.9	1.3
83	11	16	313492801.1	1.0
83	11	21	313492801.7	.9
83	11	26	313492801.7	.9
83	12	1	313492800.4	.9
83	12	6	313492799.1	1.4
83	12	11	313492800.7	.8
83	12	16	313492801.9	.8
83	12	21	313492802.7	1.6
83	12	26	313492800.9	.8
83	12	31	313492799.8	.9
84	1	4	313492801.1	.8
84	1	9	313492801.1	.9

HRAS 085 TO WESTFORD

DATE			Length (cm)	Formal Error
84	1	14	313492801.6	.8
84	1	24	313492803.0	1.1
84	1	29	313492801.6	1.0
84	2	3	313492801.7	1.1
84	2	8	313492803.2	1.7
84	2	13	313492801.8	.8
84	2	18	313492802.7	.9
84	2	23	313492803.3	1.7
84	2	28	313492800.8	2.0
84	3	4	313492804.4	1.6
84	3	9	313492802.5	1.9
84	3	14	313492803.2	1.3
84	3	19	313492800.3	1.4
84	3	25	313492802.1	1.2
84	4	3	313492806.2	2.3
84	4	8	313492802.0	1.8
84	4	13	313492804.6	1.6
84	4	18	313492802.8	2.0
84	4	23	313492804.7	2.2
84	4	28	313492800.8	2.0
84	5	3	313492793.8	5.3
84	5	8	313492801.8	2.1
84	5	13	313492796.4	2.6
84	5	18	313492803.8	1.5
84	5	23	313492804.8	2.4
84	5	28	313492803.7	1.2
84	6	2	313492801.7	1.9
84	6	7	313492802.1	3.4
84	6	12	313492805.4	1.9
84	6	17	313492802.4	1.2
84	6	22	313492801.4	2.0
84	6	27	313492795.9	1.7
84	7	2	313492803.7	1.7
84	7	7	313492801.6	1.6
84	7	12	313492805.0	1.4
84	7	17	313492800.9	1.5
84	7	22	313492799.5	2.1
84	7	27	313492800.3	2.4
84	8	1	313492800.1	1.5
84	8	6	313492805.0	1.3
84	8	11	313492806.1	1.5
84	8	16	313492804.6	1.7
84	8	21	313492803.4	1.5
84	8	26	313492800.4	1.6
84	8	28	313492800.0	.5
84	8	31	313492800.4	1.5
84	9	5	313492799.2	1.4
84	9	10	313492800.1	1.3

HRAS 085 TO WESTFORD

DATE			Length (cm)	Formal Error
84	9	15	313492800.7	1.7
84	9	20	313492797.4	1.9
84	9	25	313492800.3	1.5
84	9	30	313492799.7	1.5
84	10	5	313492803.2	1.3
84	10	10	313492803.5	1.7
84	10	15	313492800.2	1.3
84	10	20	313492802.8	1.4
84	10	25	313492803.4	1.3
84	10	30	313492801.7	1.2
84	11	4	313492804.5	1.5
84	11	9	313492801.2	1.2
84	11	14	313492801.9	1.3
84	11	19	313492799.7	1.0
84	11	24	313492800.9	1.2
84	11	29	313492803.0	1.1
84	12	4	313492799.4	1.1
84	12	9	313492799.6	1.1
84	12	14	313492802.0	1.2
84	12	19	313492801.2	1.5
84	12	23	313492799.3	.9
84	12	29	313492802.8	1.5
85	1	3	313492799.5	.7
85	1	8	313492799.3	.8
85	1	18	313492796.7	1.1
85	1	23	313492798.7	.8
85	1	28	313492798.9	.7
85	2	2	313492796.4	1.2
85	2	7	313492799.6	.8
85	2	12	313492798.0	1.0
85	2	17	313492800.9	.9
85	2	22	313492799.7	1.1
85	2	27	313492798.9	.8
85	3	4	313492802.6	1.3
85	3	14	313492797.1	1.1
85	3	19	313492799.9	1.2
85	3	24	313492798.7	.9
85	3	29	313492800.8	.9
85	4	3	313492797.9	.7
85	4	8	313492799.7	.7
85	4	13	313492800.5	1.1
85	4	18	313492804.1	.9
85	4	23	313492800.0	.8
85	4	28	313492798.8	1.0
85	5	3	313492797.7	1.1
85	5	7	313492798.3	.8
85	5	8	313492797.5	1.5
85	5	9	313492800.5	.7

HRAS 085 TO WESTFORD

DATE			Length (cm)	Formal Error
85	5	13	313492800.3	1.3
85	5	18	313492800.4	1.0
85	5	23	313492802.6	1.2
85	5	28	313492799.8	1.0
85	6	2	313492798.3	1.2
85	6	7	313492798.8	.9
85	6	17	313492796.5	1.4
85	6	22	313492799.9	1.1
85	6	27	313492797.8	1.0
85	7	2	313492800.8	.8
85	7	7	313492799.2	1.2
85	7	12	313492799.3	1.1
85	7	17	313492798.8	.9
85	7	22	313492799.1	1.1
85	7	27	313492799.9	1.1
85	8	1	313492800.1	.9
85	8	6	313492801.5	1.0
85	8	11	313492801.1	1.5
85	8	16	313492799.3	1.0
85	8	21	313492800.5	1.0
85	8	24	313492800.9	.8
85	8	26	313492799.8	1.0
85	8	31	313492801.5	.9
85	9	5	313492800.3	1.2
85	9	10	313492799.7	1.0
85	9	15	313492800.1	.9
85	9	20	313492802.4	1.1
85	9	25	313492802.7	1.1
85	9	30	313492804.0	1.0
85	10	5	313492800.9	1.0
85	10	10	313492796.6	1.1
85	10	15	313492802.0	1.0
85	10	20	313492797.5	.9
85	10	25	313492798.3	.6
85	10	29	313492801.7	.7
85	10	30	313492797.9	1.1
85	11	4	313492800.4	1.2
85	11	9	313492798.8	.7
85	11	14	313492802.3	1.0
85	11	19	313492800.2	.8
85	11	24	313492798.4	.7
85	11	29	313492798.0	.8
85	12	4	313492800.2	.9
85	12	9	313492801.7	.8
85	12	14	313492797.7	.8
85	12	19	313492799.3	.6
85	12	29	313492800.0	.8
86	1	3	313492799.1	.9

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HRAS 085 TO WESTFORD

DATE			Length (cm)	Formal Error
86	1	8	313492799.1	.7
86	1	13	313492799.9	.7
86	1	18	313492798.3	.9
86	1	23	313492798.9	1.2
86	1	28	313492800.7	.9
86	2	2	313492798.4	.7
86	2	7	313492799.8	.8
86	2	12	313492799.7	.8
86	2	17	313492799.7	.9
86	2	22	313492799.0	.8
86	2	27	313492799.9	.7
86	3	4	313492798.7	.8
86	3	9	313492800.1	.8
86	3	14	313492799.6	1.1
86	3	19	313492797.1	.9
86	3	24	313492800.3	.8
86	3	29	313492798.6	1.0
86	4	1	313492803.2	.7
86	4	3	313492800.7	.7
86	4	4	313492799.8	.6
86	4	8	313492799.7	.8
86	4	13	313492797.9	.8
86	4	18	313492797.9	1.1
86	4	23	313492800.6	.8
86	4	28	313492799.4	.7
86	5	3	313492797.9	1.3
86	5	8	313492797.8	1.0
86	5	13	313492797.6	.8
86	5	14	313492800.5	.5
86	5	17	313492797.7	1.0
86	5	23	313492798.7	1.0
86	5	28	313492801.2	.9
86	6	2	313492800.1	1.0
86	6	7	313492797.5	1.1
86	6	12	313492800.0	1.2
86	6	17	313492798.0	1.0
86	6	22	313492800.6	1.0
86	6	27	313492800.3	1.1
86	7	2	313492800.5	.8
86	7	7	313492805.4	1.3
86	7	12	313492799.0	1.1
86	7	17	313492800.5	1.1
86	7	22	313492799.9	1.2
86	7	27	313492799.6	1.0
86	8	1	313492799.1	1.2
86	8	6	313492799.1	1.2
86	8	11	313492799.3	1.3
86	8	16	313492801.2	1.3

HRAS 085 TO WESTFORD

DATE			Length (cm)	Formal Error
86	8	21	313492799.2	1.2
86	8	26	313492797.6	1.3
86	8	31	313492801.8	1.5
86	9	5	313492797.1	1.5
86	9	10	313492800.2	1.1
86	9	15	313492797.3	1.1
86	9	20	313492804.7	1.2
86	9	25	313492800.0	1.3
86	9	30	313492801.3	1.4
86	10	5	313492799.3	.8
86	10	10	313492795.5	1.4
86	10	15	313492800.0	.8
86	10	16	313492800.0	.4
86	10	20	313492800.0	1.1
86	10	25	313492798.9	1.1
86	10	30	313492799.7	.8
86	10	31	313492800.0	.4
86	11	4	313492800.4	.8
86	11	9	313492800.0	1.3
86	11	14	313492801.5	.7
86	11	19	313492797.3	.9
86	11	24	313492798.5	.9
86	11	29	313492801.0	.7
86	12	4	313492798.9	1.0
86	12	9	313492800.9	.8
86	12	14	313492798.1	.8
86	12	19	313492801.3	.7
86	12	23	313492800.7	.9
86	12	29	313492799.4	.8

LENGTH:

Mean = 313492800.6 ± .1 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.9 cm
Slope = -.7 ± .1 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.6 cm

Table 6.68
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO WETTZELL

DATE			Length (cm)	Formal Error
83	11	16	841756142.8	2.4
83	12	21	841756143.8	4.6
84	1	9	841756148.0	2.9
84	1	24	841756150.5	2.6
84	1	29	841756152.4	2.9
84	2	3	841756148.4	4.4
84	2	8	841756151.5	4.9
84	2	18	841756153.3	2.5
84	2	23	841756143.5	4.1
84	2	28	841756149.8	4.5
84	3	4	841756161.2	4.4
84	3	9	841756149.1	5.1
84	3	14	841756148.0	3.4
84	3	19	841756141.9	3.4
84	3	25	841756148.1	3.3
84	3	30	841756140.6	12.
84	4	3	841756158.0	5.9
84	4	8	841756146.2	5.3
84	4	13	841756154.8	4.0
84	4	18	841756150.7	5.2
84	4	23	841756147.7	5.3
84	4	28	841756139.7	5.2
84	5	3	841756137.9	13.
84	5	8	841756147.8	5.0
84	5	13	841756137.7	6.8
84	5	18	841756149.5	4.1
84	5	23	841756147.8	6.3
84	5	28	841756146.4	3.1
84	6	2	841756151.8	4.8
84	6	7	841756138.4	8.9
84	6	12	841756156.1	5.2
84	6	17	841756154.5	3.3
84	6	22	841756151.6	5.6
84	6	27	841756142.3	4.6
84	7	2	841756158.1	4.6
84	7	7	841756154.4	4.9
84	7	12	841756152.7	4.1
84	7	17	841756148.1	4.4
84	8	1	841756152.1	4.1
84	8	6	841756156.2	4.5
84	8	11	841756152.2	4.3
84	8	16	841756154.5	4.4
84	8	21	841756161.0	4.3
84	8	26	841756144.5	4.6
84	8	31	841756153.4	4.2

HRAS 085 TO WETTZELL

DATE			Length (cm)	Formal Error
84	9	5	841756142.1	4.0
84	9	10	841756152.8	3.5
84	9	15	841756147.5	4.7
84	9	20	841756142.9	5.5
84	9	25	841756149.5	4.4
84	9	30	841756151.0	3.8
84	10	5	841756154.0	3.9
84	10	10	841756156.1	4.8
84	10	15	841756146.0	3.8
84	10	20	841756153.7	3.8
84	10	25	841756156.8	3.6
84	10	30	841756157.9	3.4
84	11	4	841756151.9	3.9
84	11	9	841756149.4	3.4
84	11	14	841756156.5	3.8
84	11	19	841756143.9	2.9
84	11	24	841756156.6	3.5
84	11	29	841756154.7	3.2
84	12	4	841756145.9	3.0
84	12	9	841756139.9	3.5
84	12	14	841756155.5	3.6
84	12	19	841756149.2	4.7
84	12	23	841756147.6	2.8
84	12	29	841756160.9	4.0
85	1	3	841756144.3	2.0
85	1	8	841756147.6	2.3
85	1	18	841756144.5	3.1
85	1	23	841756146.1	2.4
85	1	28	841756148.7	2.1
85	2	2	841756147.8	3.0
85	2	7	841756146.1	2.2
85	2	12	841756145.0	2.2
85	2	17	841756144.1	2.4
85	2	22	841756141.7	2.8
85	2	27	841756145.0	2.1
85	3	4	841756145.1	2.7
85	3	5	841756150.0	.9
85	3	9	841756157.0	5.2
85	3	14	841756143.9	2.9
85	3	19	841756146.3	3.2
85	3	24	841756145.8	2.2
85	3	29	841756150.0	2.7
85	4	3	841756147.8	2.2
85	4	8	841756151.1	2.3
85	4	13	841756152.3	3.1
85	4	18	841756150.7	2.6
85	4	23	841756149.7	2.2
85	4	28	841756148.3	2.8

HRAS 085 TO WETTZELL

DATE			Length (cm)	Formal Error
85	5	3	841756145.4	3.2
85	5	8	841756144.4	4.0
85	5	9	841756148.3	1.2
85	5	13	841756150.2	3.3
85	5	18	841756150.0	3.1
85	5	23	841756151.7	3.4
85	5	28	841756139.3	2.7
85	6	2	841756139.7	3.2
85	6	7	841756147.0	2.4
85	6	17	841756144.1	3.1
85	6	22	841756157.4	3.1
85	6	27	841756151.3	2.8
85	7	2	841756152.2	2.3
85	7	7	841756152.3	3.1
85	7	12	841756154.2	3.3
85	7	17	841756149.5	2.6
85	7	22	841756137.3	3.3
85	7	27	841756153.1	3.0
85	8	1	841756152.6	2.7
85	8	6	841756157.8	3.2
85	8	11	841756152.2	4.0
85	8	16	841756156.2	2.8
85	8	21	841756154.4	3.0
85	8	26	841756158.4	2.7
85	8	31	841756158.6	3.3
85	9	5	841756142.7	3.6
85	9	10	841756153.0	2.6
85	9	15	841756152.5	2.9
85	9	20	841756150.8	3.2
85	9	25	841756148.2	3.0
85	9	30	841756158.6	2.6
85	10	5	841756153.1	2.7
85	10	10	841756150.2	2.8
85	10	15	841756154.4	2.6
85	10	20	841756142.3	2.5
85	10	25	841756142.6	1.5
85	10	29	841756151.4	1.5
85	10	30	841756146.4	3.3
85	11	4	841756140.3	3.7
85	11	9	841756146.6	2.3
85	11	14	841756153.6	2.4
85	11	19	841756153.0	2.2
85	11	24	841756150.6	2.1
85	11	29	841756144.7	2.5
85	12	4	841756151.6	2.4
85	12	9	841756155.5	2.0
85	12	14	841756148.3	2.5
85	12	19	841756151.2	1.9

HRAS 085 TO WETTZELL

DATE			Length (cm)	Formal Error
85	12	29	841756153.2	2.3
86	1	3	841756152.1	2.4
86	1	8	841756150.5	2.3
86	1	13	841756154.4	2.1
86	1	18	841756148.8	2.7
86	1	23	841756146.3	3.2
86	1	28	841756156.1	2.4
86	2	2	841756144.5	1.8
86	2	7	841756148.6	2.4
86	2	12	841756151.1	2.1
86	2	17	841756151.7	2.4
86	2	22	841756150.1	2.2
86	2	27	841756152.0	2.0
86	3	4	841756146.2	2.5
86	3	9	841756151.2	2.2
86	3	14	841756149.8	2.8
86	3	19	841756150.2	2.0
86	3	24	841756151.8	2.2
86	3	29	841756151.8	2.7
86	4	3	841756151.4	1.7
86	4	4	841756149.6	1.5
86	4	8	841756146.5	2.2
86	4	13	841756148.6	2.1
86	4	18	841756145.0	2.9
86	4	23	841756153.0	2.5
86	4	28	841756151.1	2.3
86	5	8	841756141.6	2.5
86	5	13	841756148.7	2.4
86	5	14	841756147.1	1.4
86	5	17	841756152.3	2.9
86	5	23	841756143.1	2.9
86	5	28	841756151.5	2.3
86	6	2	841756151.6	2.7
86	6	7	841756140.3	2.8
86	6	12	841756152.7	3.2
86	6	17	841756147.5	2.7
86	6	22	841756149.1	2.6
86	6	27	841756156.1	2.9
86	7	2	841756148.3	2.3
86	7	7	841756151.2	3.3
86	7	12	841756147.8	2.9
86	7	17	841756153.9	3.0
86	7	22	841756146.9	3.5
86	7	27	841756150.4	2.7
86	8	1	841756153.3	3.3
86	8	6	841756148.1	3.2
86	8	11	841756155.9	3.6
86	8	16	841756149.8	3.5

HRAS 085 TO WETTZELL

DATE			Length (cm)	Formal Error
86	8	21	841756150.0	3.6
86	8	26	841756145.5	3.4
86	8	31	841756146.6	3.9
86	9	5	841756153.1	4.0
86	9	10	841756149.8	3.1
86	9	15	841756149.6	2.4
86	9	20	841756161.2	3.3
86	9	25	841756147.2	3.4
86	9	30	841756150.1	3.5
86	10	5	841756148.1	2.7
86	10	10	841756137.5	3.8
86	10	15	841756154.0	2.0
86	10	16	841756150.6	.9
86	10	20	841756144.2	3.0
86	10	25	841756139.6	2.7
86	10	30	841756150.9	2.6
86	11	4	841756145.9	1.9
86	11	9	841756145.2	2.8
86	11	14	841756150.9	2.0
86	11	19	841756141.3	2.4
86	11	24	841756142.6	2.7
86	11	29	841756151.2	1.8
86	12	4	841756151.3	2.6
86	12	9	841756156.2	1.8
86	12	14	841756144.6	2.1
86	12	19	841756152.4	2.0
86	12	23	841756150.7	2.4
86	12	29	841756147.2	2.3

LENGTH:

Mean = 841756149.4 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 4.2 cm
Slope = .2 ± .4 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 4.2 cm

Table 6.69
VLBI BASELINE LENGTH EVOLUTION
HRAS 085 TO YELLOWKN(7285)

DATE	Length (cm)	Formal Error
84 8 24	357206988.4	1.4
85 9 4	357206987.8	1.1

LENGTH:

Mean = 357206988.0 ± .3 cm (scaled 1 sigma)

Weighted RMS scatter about the mean = .3 cm

Table 6.70
VLBI BASELINE LENGTH EVOLUTION
KASHIMA TO KAUAI

DATE			Length (cm)	Formal Error
84	7	28	570936048.7	2.1
84	7	29	570936049.1	1.2
84	8	4	570936046.3	1.2
84	8	5	570936049.3	1.2
85	5	15	570936044.8	.8
85	7	6	570936046.7	1.4
85	7	20	570936035.0	.8
85	7	27	570936041.9	1.1
85	8	10	570936045.7	.7
85	9	30	570936038.4	.8
86	3	13	570936034.0	.8
86	4	8	570936037.8	1.0
86	5	2	570936034.3	.7
86	6	13	570936029.8	2.7
86	7	5	570936032.4	1.3
86	7	12	570936030.6	.8
86	7	26	570936037.5	1.0
86	8	2	570936032.5	.6
86	9	5	570936031.3	.9
86	10	23	570936029.3	.8
86	11	7	570936030.4	.9
86	12	5	570936030.3	.9

LENGTH:

Mean = 570936036.6 ± 1.4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 6.2 cm
Slope = -8.4 ± .9 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.7 cm

Table 6.71
VLBI BASELINE LENGTH EVOLUTION
KASHIMA TO KWAJAL26

DATE			Length (cm)	Formal Error
84	7	28	393633075.1	1.8
84	7	29	393633077.8	1.4
84	8	4	393633077.8	1.0
84	8	5	393633079.7	1.2
85	7	6	393633073.4	1.7
85	7	20	393633064.3	.9
85	7	27	393633070.7	1.2
85	8	10	393633069.4	.9
86	7	5	393633062.8	1.2
86	7	12	393633061.2	1.3
86	7	26	393633065.7	1.3
86	8	2	393633060.8	.8

LENGTH:

Mean = 393633068.7 ± 2.0 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 6.6 cm
Slope = -7.9 ± 1.0 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.5 cm

Table 6.72
VLBI BASELINE LENGTH EVOLUTION
KASHIMA TO MOJAVE12

DATE			Length (cm)	Formal Error
84	1	24	809182413.2	3.6
84	2	24	809182411.1	1.9
84	7	28	809182414.1	2.8
84	7	29	809182417.2	1.7
84	8	4	809182414.6	1.6
84	8	5	809182410.6	1.8
84	8	30	809182426.3	2.1
84	9	2	809182414.2	2.1
85	5	15	809182413.8	.9
85	6	19	809182411.4	2.3
85	7	6	809182419.9	2.0
85	7	20	809182403.8	1.1
85	7	27	809182413.7	1.4
85	8	10	809182416.5	1.1
85	9	30	809182415.9	.9
85	11	21	809182408.8	1.8
86	4	8	809182413.9	1.1
86	6	18	809182413.9	1.7
86	7	5	809182409.4	1.5
86	7	12	809182405.3	1.1
86	7	26	809182412.0	1.0
86	8	2	809182410.7	.7
86	10	23	809182408.5	1.1
86	11	5	809182410.7	1.2

LENGTH:

Mean = 809182412.1 ± .8 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 4.0 cm
Slope = -2.3 ± 1.0 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 3.6 cm

Table 6.73
VLBI BASELINE LENGTH EVOLUTION
KASHIMA TO ONSALA60

DATE	Length (cm)	Formal Error
85 6 19	796964308.3	2.8
85 11 21	796964305.4	1.8
86 6 18	796964313.7	2.5

LENGTH:
Mean = 796964308.3 ± 2.5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.5 cm

Table 6.74
VLBI BASELINE LENGTH EVOLUTION
KASHIMA TO SHANGHAI

DATE	Length (cm)	Formal Error
86 6 13	185207529.9	4.2

Table 6.75
VLBI BASELINE LENGTH EVOLUTION
KASHIMA TO VNDNBERG

DATE	Length (cm)	Formal Error
85 5 15	791389232.8	1.1
85 7 6	791389235.1	2.1
85 7 20	791389223.5	1.1
85 7 27	791389232.4	1.5
85 8 10	791389236.6	1.0
85 9 30	791389231.2	.9
86 7 5	791389225.7	1.5
86 7 12	791389220.3	1.1
86 7 26	791389227.4	1.1
86 8 2	791389226.9	.8
86 10 23	791389225.4	1.2

LENGTH:
Mean = 791389228.4 ± 1.5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 4.7 cm
Slope = -5.6 ± 2.2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 3.7 cm

Table 6.76
VLBI BASELINE LENGTH EVOLUTION
KASHIMA TO WESTFORD

DATE	Length (cm)	Formal Error
85 6 19	950231651.6	2.8
85 11 21	950231652.8	2.1
86 6 18	950231659.9	2.2
86 11 5	950231655.0	1.4

LENGTH:
Mean = 950231655.1 ± 1.5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.7 cm
Slope = 2.6 ± 2.6 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.3 cm

Table 6.77
VLBI BASELINE LENGTH EVOLUTION
KASHIMA TO WETTZELL

DATE	Length (cm)	Formal Error
84 8 30	847582715.0	2.9
84 9 2	847582710.5	2.6
85 6 19	847582691.1	2.7
85 11 21	847582697.6	1.8
86 6 18	847582699.8	2.4
86 11 5	847582704.0	1.7

LENGTH:
Mean = 847582702.3 ± 3.0 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 6.7 cm
Slope = -3.1 ± 3.5 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 6.2 cm

Table 6.78
VLBI BASELINE LENGTH EVOLUTION
KAUAI TO KWAJAL26

DATE			Length (cm)	Formal Error
84	7	7	372519631.9	1.2
84	7	21	372519626.1	1.5
84	7	22	372519629.3	1.4
84	7	28	372519628.7	1.8
84	7	29	372519634.3	1.5
84	8	4	372519633.2	1.1
84	8	5	372519632.0	1.2
85	7	6	372519629.7	1.3
85	7	20	372519627.3	.9
85	7	27	372519635.2	1.1
85	8	10	372519630.7	.8
86	7	5	372519628.8	1.4
86	7	12	372519627.1	1.2
86	7	26	372519632.7	1.2
86	8	2	372519630.1	.8

LENGTH:

Mean = 372519630.5 ± .7 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.4 cm
Slope = -.6 ± .8 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.4 cm

Table 6.79
VLBI BASELINE LENGTH EVOLUTION
KAUAI TO MOJAVE12

DATE			Length (cm)	Formal Error
84	7	7	430358123.3	.8
84	7	21	430358118.5	.8
84	7	22	430358123.1	.7
84	7	28	430358124.2	1.6
84	7	29	430358124.5	1.0
84	8	4	430358125.0	1.1
84	8	5	430358122.7	1.1
85	5	15	430358125.7	.6
85	7	6	430358127.0	.6
85	7	20	430358122.8	.9
85	7	27	430358126.6	.7
85	8	10	430358128.9	.8
85	9	30	430358124.2	.6
86	4	8	430358124.9	.7
86	7	5	430358123.8	.6
86	7	12	430358122.6	1.0
86	7	26	430358126.3	.6
86	8	2	430358125.4	.7
86	10	23	430358127.0	.5

LENGTH:

Mean = 430358125.0 ± .5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.1 cm
Slope = 1.2 ± .5 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.8 cm

Table 6.80
VLBI BASELINE LENGTH EVOLUTION
KAUAI TO VNDNBERG

DATE	Length (cm)	Formal Error
84 7 7	397252457.3	1.1
84 7 21	397252452.4	.9
84 7 22	397252455.1	.8
85 5 15	397252455.2	.7
85 7 6	397252455.4	.7
85 7 20	397252450.9	.9
85 7 27	397252456.0	.7
85 8 10	397252458.2	.8
85 9 30	397252451.7	.6
86 7 5	397252451.8	.6
86 7 12	397252449.6	1.0
86 7 26	397252453.7	.6
86 8 2	397252452.8	.7
86 10 23	397252454.7	.5

LENGTH:

Mean = 397252453.9 ± .6 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.1 cm
Slope = -.9 ± .7 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.9 cm

Table 6.81
VLBI BASELINE LENGTH EVOLUTION
KWAJAL26 TO MOJAVE12

DATE			Length (cm)	Formal Error
84	7	7	757693864.5	1.6
84	7	21	757693854.7	1.9
84	7	22	757693858.9	1.8
84	7	28	757693853.7	2.9
84	7	29	757693862.6	2.3
84	8	4	757693862.3	1.4
84	8	5	757693856.9	2.1
85	7	6	757693859.0	1.8
85	7	20	757693852.0	1.6
85	7	27	757693865.6	1.5
85	8	10	757693856.9	1.4
86	7	5	757693860.4	1.2
86	7	12	757693854.5	2.1
86	7	26	757693863.3	1.8
86	8	2	757693861.9	1.3

LENGTH:

Mean = 757693859.7 ± 1.0 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.9 cm
Slope = .2 ± 1.3 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 3.9 cm

Table 6.82
VLBI BASELINE LENGTH EVOLUTION
KWAJAL26 TO VNDNBERG

DATE	Length (cm)	Formal Error
84 7 7	729810843.6	1.9
84 7 21	729810833.8	2.0
84 7 22	729810838.1	1.8
85 7 6	729810831.8	1.8
85 7 20	729810828.1	1.5
85 7 27	729810841.3	1.6
85 8 10	729810834.1	1.3
86 7 5	729810834.4	1.3
86 7 12	729810827.7	2.0
86 7 26	729810836.5	1.8
86 8 2	729810836.0	1.3

LENGTH:

Mean = 729810835.0 ± 1.4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 4.3 cm
Slope = -1.7 ± 1.7 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 4.1 cm

Table 6.83
VLBI BASELINE LENGTH EVOLUTION
MARPOINT TO ONSALA60

DATE	Length (cm)	Formal Error
82 6 18	619844105.1	1.4
82 6 19	619844111.6	2.0
82 10 18	619844108.1	2.2
83 8 29	619844089.9	5.8

LENGTH:
Mean = 619844106.8 ± 2.3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.9 cm
Slope = -9.3 ± 8.2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 3.3 cm

Table 6.84
VLBI BASELINE LENGTH EVOLUTION
MARPOINT TO OVRO 130

DATE	Length (cm)	Formal Error
82 6 18	354082446.2	1.0
82 6 19	354082448.6	1.6
82 10 18	354082447.5	1.3

LENGTH:
Mean = 354082447.1 ± .7 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .9 cm

Table 6.85
VLBI BASELINE LENGTH EVOLUTION
MARPOINT TO WESTFORD

DATE	Length (cm)	Formal Error
82 6 18	67617892.8	.6
82 6 19	67617890.7	.9
82 10 18	67617891.2	.8
83 8 29	67617887.9	2.4

LENGTH:
Mean = 67617891.8 ± .6 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.1 cm
Slope = -3.3 ± 2.0 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .8 cm

Table 6.86
VLBI BASELINE LENGTH EVOLUTION
MOJAVE12 TO ONSALA60

DATE	Length (cm)	Formal Error
83 10 27	802111750.8	4.1
85 3 5	802111749.8	.9
85 5 9	802111753.1	.8
85 6 19	802111755.6	1.8
85 10 29	802111753.2	1.1
85 11 21	802111749.1	1.2
86 4 4	802111752.7	1.3
86 5 14	802111752.4	1.4
86 6 18	802111755.1	1.9
86 10 16	802111752.7	.8

LENGTH:
Mean = 802111752.2 ± .6 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.7 cm
Slope = .8 ± .9 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.6 cm

Table 6.87
VLBI BASELINE LENGTH EVOLUTION
MOJAVE12 TO OVRO 130

DATE	Length (cm)	Formal Error
84 4 26	24527644.8	.3
85 3 5	24527645.0	.3
85 5 7	24527644.7	.4
85 5 9	24527644.6	.4
85 10 29	24527645.0	.2
86 4 1	24527643.9	.4
86 4 4	24527645.3	.7
86 5 14	24527644.0	.6
86 10 16	24527645.2	.3
86 10 31	24527646.2	.5

LENGTH:

Mean = 24527644.9 ± .2 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .5 cm
Slope = .2 ± .2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .4 cm

Table 6.88
VLBI BASELINE LENGTH EVOLUTION
MOJAVE12 TO PLATTVIL(7258)

DATE	Length (cm)	Formal Error
84 4 26	119631694.0	.7
85 5 7	119631694.8	.6
86 4 1	119631696.4	.4

LENGTH:

Mean = 119631695.6 ± .7 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.0 cm

Table 6.89
VLBI BASELINE LENGTH EVOLUTION
MOJAVE12 TO RICHMOND

DATE	Length (cm)	Formal Error
84 1 4	359469298.8	1.2
85 6 12	359469291.8	1.6

LENGTH:

Mean = 359469296.4 ± 3.3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.3 cm

Table 6.90
VLBI BASELINE LENGTH EVOLUTION
MOJAVE12 TO VNDNBERG

DATE	Length (cm)	Formal Error
84 7 7	35128253.2	1.2
84 7 21	35128253.5	.8
84 7 22	35128257.0	.6
85 5 15	35128257.9	.4
85 7 6	35128256.7	.5
85 7 20	35128260.8	1.0
85 7 27	35128258.1	.7
85 8 10	35128259.7	.8
85 9 30	35128258.7	.3
86 7 5	35128259.5	.4
86 7 12	35128260.4	.8
86 7 26	35128259.4	.2
86 8 2	35128260.6	.6
86 10 23	35128260.6	.3

LENGTH:

Mean = 35128259.0 ± .4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.5 cm
Slope = 1.9 ± .3 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .8 cm

Table 6.91
VLBI BASELINE LENGTH EVOLUTION
MOJAVE12 TO WESTFORD

DATE			Length (cm)	Formal Error
83	6	28	390376779.5	2.0
83	7	25	390376775.8	1.2
83	8	8	390376773.0	1.3
83	9	27	390376776.5	1.1
83	10	12	390376775.4	1.1
83	10	27	390376777.8	1.1
83	11	21	390376775.6	.9
83	12	1	390376774.6	.7
84	1	4	390376776.9	.7
85	5	7	390376772.1	.8
85	5	9	390376776.8	.7
85	6	12	390376779.2	1.9
85	6	19	390376776.7	.7
85	8	24	390376776.2	.6
85	10	29	390376776.9	.5
85	11	21	390376776.1	.6
86	4	1	390376777.4	.7
86	4	4	390376774.8	.6
86	5	14	390376776.9	.6
86	6	18	390376776.9	.7
86	10	16	390376775.1	.4
86	10	31	390376773.7	.4
86	11	5	390376774.9	.5

LENGTH:

Mean = 390376775.7 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.4 cm
Slope = -.3 ± .3 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.3 cm

Table 6.92
VLBI BASELINE LENGTH EVOLUTION
MOJAVE12 TO WETTZELL

DATE			Length (cm)	Formal Error
84	8	30	858897645.5	2.3
84	9	2	858897646.4	2.2
85	3	5	858897640.6	.9
85	5	9	858897644.0	.6
85	6	12	858897639.3	3.5
85	6	19	858897641.6	1.7
85	10	29	858897645.7	1.0
85	11	21	858897644.7	1.1
86	4	4	858897642.0	1.3
86	5	14	858897641.1	1.4
86	6	18	858897643.8	1.9
86	10	16	858897644.0	.9
86	11	5	858897648.1	1.5

LENGTH:

Mean = 858897643.6 ± .6 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.9 cm
Slope = .8 ± .9 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.9 cm

Table 6.93
VLBI BASELINE LENGTH EVOLUTION
NRAO 140 TO ONSALA60

DATE			Length (cm)	Formal Error
81	11	18	631931755.7	3.1
81	11	19	631931756.4	1.6
82	12	15	631931761.3	2.9
82	12	16	631931751.3	2.0

LENGTH:

Mean = 631931755.5 ± 1.8 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 3.2 cm
Slope = -1.6 ± 3.3 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 3.0 cm

Table 6.94
VLBI BASELINE LENGTH EVOLUTION
NRAO 140 TO OVRO 130

DATE	Length (cm)	Formal Error
79 8 3	332424415.6	1.3
79 11 25	332424420.2	1.7
80 4 11	332424419.9	.5
81 11 18	332424418.5	.5
81 11 19	332424418.8	.8
82 12 15	332424421.3	1.1
82 12 16	332424418.5	.6

LENGTH:

Mean = 332424419.0 ± .4 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.1 cm
Slope = -.1 ± .4 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.1 cm

Table 6.95
VLBI BASELINE LENGTH EVOLUTION
NRAO 140 TO WESTFORD

DATE	Length (cm)	Formal Error
81 11 18	84414808.3	.3
81 11 19	84414809.1	.5
82 12 15	84414808.3	.9
82 12 16	84414808.4	.5

LENGTH:

Mean = 84414808.5 ± .2 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .3 cm
Slope = -.1 ± .4 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .3 cm

Table 6.96
VLBI BASELINE LENGTH EVOLUTION
ONSALA60 TO OVRO 130

DATE			Length (cm)	Formal Error
80	7	26	791413103.6	2.2
80	7	27	791413095.1	2.2
80	9	26	791413095.5	2.7
80	9	27	791413094.7	2.6
80	9	28	791413102.2	1.7
80	9	29	791413087.8	3.1
80	9	30	791413097.0	2.4
80	10	1	791413081.1	3.5
80	10	2	791413097.3	1.7
80	10	16	791413097.2	1.5
80	10	17	791413106.7	2.2
80	10	18	791413099.0	1.8
80	10	19	791413100.7	4.4
80	10	20	791413099.8	1.6
80	10	21	791413103.6	2.4
80	10	22	791413095.6	1.4
81	11	18	791413121.4	7.1
81	11	19	791413103.5	1.7
82	6	16	791413092.2	4.9
82	6	18	791413100.6	1.8
82	6	19	791413102.6	3.1
82	6	20	791413097.9	2.7
82	6	21	791413100.1	4.0
82	10	18	791413099.5	2.8
82	12	15	791413112.7	4.3
82	12	16	791413098.9	2.2
84	4	19	791413101.5	1.8
85	3	5	791413103.8	.6
85	5	9	791413101.9	1.1
85	10	29	791413105.9	1.0
86	4	4	791413104.0	1.7
86	5	14	791413109.9	1.6
86	10	16	791413100.7	.9

LENGTH:

Mean = 791413101.6 ± .7 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 4.2 cm
Slope = 1.0 ± .3 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 3.5 cm

Table 6.97
VLBI BASELINE LENGTH EVOLUTION
ONSALA60 TO RICHMOND

DATE	Length (cm)	Formal Error
83 12 21	730715258.7	16.
84 1 24	730715257.5	4.1
84 4 18	730715252.2	2.9
84 6 12	730715260.7	4.6
84 10 25	730715247.7	3.3
84 12 19	730715250.3	4.4
85 2 27	730715254.1	1.6
85 4 23	730715256.3	1.9
85 6 17	730715253.4	2.6
85 8 16	730715254.2	4.1
85 9 10	730715260.6	3.1
85 10 25	730715253.1	1.5
85 12 9	730715256.8	2.5
86 1 15	730715254.2	1.6
86 2 11	730715254.9	2.6
86 3 19	730715252.9	2.7
86 4 3	730715254.0	2.4
86 5 13	730715253.6	2.3
86 6 17	730715254.8	2.5
86 9 15	730715253.7	2.5
86 10 15	730715248.9	8.6
86 11 4	730715246.1	4.5
86 12 9	730715255.4	2.0

LENGTH:
Mean = 730715254.2 ± .5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.3 cm
Slope = -.1 ± .7 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.3 cm

Table 6.98
VLBI BASELINE LENGTH EVOLUTION
ONSALA60 TO ROBLED32

DATE	Length (cm)	Formal Error
83 5 5	220478331.4	1.4

Table 6.99
VLBI BASELINE LENGTH EVOLUTION
ONSALA60 TO WESTFORD

DATE	Length (cm)	Formal Error
81 10 21	560074144.4	2.3
81 11 18	560074144.5	2.4
81 11 19	560074148.7	1.3
82 3 17	560074144.7	1.4
82 4 19	560074143.2	2.2
82 6 16	560074148.9	2.2
82 6 18	560074148.7	1.2
82 6 19	560074147.5	1.8
82 6 20	560074149.1	1.3
82 6 21	560074148.7	2.3
82 9 13	560074140.6	3.5
82 9 20	560074158.6	5.2
82 10 18	560074149.3	1.6
82 11 15	560074148.7	2.5
82 12 15	560074151.1	2.5
82 12 16	560074143.5	1.9
83 2 7	560074141.0	1.9
83 2 28	560074141.8	1.5
83 3 14	560074144.0	1.9
83 4 18	560074148.8	1.6
83 5 5	560074142.7	1.8
83 5 16	560074147.6	3.7
83 6 13	560074148.1	3.2
83 8 29	560074136.6	4.9
83 9 22	560074148.3	2.8
83 10 27	560074142.4	3.0
83 11 16	560074151.8	1.7
83 12 21	560074146.1	2.5
84 1 24	560074152.1	1.6
84 2 23	560074150.3	1.5
84 3 14	560074144.0	1.4
84 4 18	560074150.0	1.6
84 5 18	560074151.3	1.9
84 6 12	560074154.9	2.6
84 10 25	560074148.3	1.9
84 11 14	560074152.4	1.9
84 12 19	560074153.5	2.9
85 1 23	560074146.6	1.3
85 2 27	560074148.5	1.1
85 3 4	560074152.3	1.6
85 4 23	560074149.3	1.3
85 5 8	560074145.9	1.3
85 5 9	560074152.0	.8
85 6 17	560074148.3	2.2
85 6 18	560074148.8	1.0

ONSALA60 TO WESTFORD

DATE			Length (cm)	Formal Error
85	6	19	560074152.0	1.3
85	8	16	560074149.2	2.9
85	9	10	560074156.2	2.2
85	9	11	560074149.9	.9
85	10	25	560074148.2	.9
85	10	29	560074151.5	.8
85	11	19	560074148.0	1.1
85	11	20	560074152.8	1.0
85	11	21	560074149.6	.9
85	12	9	560074149.0	.9
85	12	10	560074149.8	.7
86	1	14	560074150.4	.9
86	1	15	560074145.9	1.2
86	2	11	560074152.2	1.5
86	3	19	560074149.9	1.3
86	3	20	560074149.7	.8
86	4	3	560074153.2	1.0
86	4	4	560074150.7	.7
86	5	13	560074151.0	1.1
86	5	14	560074153.2	.8
86	6	16	560074152.7	.9
86	6	17	560074154.6	1.6
86	6	18	560074155.2	1.4
86	8	25	560074153.1	.8
86	8	26	560074150.6	1.8
86	9	15	560074149.1	1.3
86	9	16	560074150.6	.5
86	10	15	560074153.3	1.2
86	10	16	560074151.4	.4
86	11	3	560074151.0	.7
86	11	4	560074146.3	1.1
86	12	8	560074149.9	.7
86	12	9	560074146.8	1.1

LENGTH:

Mean = 560074150.0 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.6 cm
Slope = 1.0 ± .2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.2 cm

Table 6.100
VLBI BASELINE LENGTH EVOLUTION
ONSALA60 TO WETTZELL

DATE	Length (cm)	Formal Error
83 11 16	91966100.4	.5
83 12 21	91966098.5	.8
84 1 24	91966099.9	.7
84 2 23	91966100.3	.5
84 3 14	91966100.1	.8
84 4 18	91966099.9	.5
84 5 18	91966099.9	.6
84 6 12	91966101.8	1.2
84 10 25	91966101.6	.9
84 11 14	91966101.6	.8
84 12 19	91966098.3	.9
85 1 23	91966099.3	.5
85 1 24	91966101.1	.4
85 2 27	91966100.4	.3
85 3 4	91966101.1	.4
85 3 5	91966099.7	.2
85 4 23	91966100.7	.4
85 4 24	91966099.6	.4
85 5 8	91966100.0	.5
85 5 9	91966100.9	.3
85 6 17	91966099.5	.5
85 6 18	91966099.9	.4
85 6 19	91966099.9	.7
85 8 16	91966101.0	1.2
85 9 10	91966103.1	1.2
85 9 11	91966099.6	.4
85 10 25	91966100.0	.3
85 10 29	91966100.8	.3
85 11 19	91966101.0	.5
85 11 20	91966100.3	.4
85 11 21	91966101.1	.3
85 12 9	91966100.4	.5
85 12 10	91966100.7	.3
86 1 14	91966099.6	.5
86 3 19	91966101.1	.7
86 3 20	91966100.7	.4
86 4 3	91966100.8	.5
86 4 4	91966100.9	.4
86 5 13	91966100.4	.6
86 5 14	91966100.2	.5
86 6 16	91966100.3	.4
86 6 17	91966099.9	.8
86 6 18	91966099.6	.7
86 8 25	91966100.2	.3
86 8 26	91966099.9	.7

ONSALA60 TO WETTZELL

DATE	Length (cm)	Formal Error
86 9 15	91966100.6	.5
86 9 16	91966100.3	.3
86 10 15	91966100.8	.6
86 10 16	91966099.9	.2
86 11 3	91966100.6	.3
86 11 4	91966099.0	.5
86 12 8	91966100.2	.4
86 12 9	91966100.4	.4

LENGTH:

Mean = 91966100.3 ± .1 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = .6 cm
Slope = .0 ± .1 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .6 cm

Table 6.101
VLBI BASELINE LENGTH EVOLUTION
OVRO 130 TO PLATTVIL(7258)

DATE			Length (cm)	Formal Error
83	6	6	122081878.7	2.3
83	6	7	122081874.4	1.5
84	4	26	122081873.2	.7
85	5	7	122081875.5	.5
86	4	1	122081877.9	.4

LENGTH:

Mean = 122081876.4 ± .9 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.7 cm
Slope = 1.8 ± .5 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = .9 cm

Table 6.102
VLBI BASELINE LENGTH EVOLUTION
OVRO 130 TO WESTFORD

DATE			Length (cm)	Formal Error
81	6	16	392857933.8	.8
81	11	18	392857934.3	.6
81	11	19	392857936.3	.6
82	6	16	392857933.6	2.5
82	6	18	392857939.3	1.0
82	6	19	392857932.5	1.8
82	6	20	392857935.3	1.3
82	6	21	392857935.7	1.9
82	10	18	392857936.3	1.3
82	10	25	392857933.9	1.5
82	12	15	392857936.2	1.1
82	12	16	392857935.2	.7
83	6	6	392857937.4	.9
85	5	7	392857934.1	.6
85	5	9	392857936.4	.7
85	10	29	392857939.4	.5
86	4	1	392857939.1	.7
86	4	4	392857936.7	.8
86	5	14	392857942.0	.7
86	10	16	392857935.3	.4
86	10	31	392857938.1	1.0

LENGTH:

Mean = 392857936.5 ± .5 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.2 cm
Slope = .5 ± .2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.0 cm

Table 6.103
VLBI BASELINE LENGTH EVOLUTION
OVRO 130 TO WETTZELL

DATE	Length (cm)	Formal Error
85 3 5	850020501.4	.6
85 5 9	850020499.3	1.0
85 10 29	850020505.0	1.0
86 4 4	850020500.0	1.8
86 5 14	850020505.5	1.7
86 10 16	850020498.4	.9

LENGTH:
Mean = 850020501.3 ± 1.0 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.3 cm
Slope = -.8 ± 1.6 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.2 cm

Table 6.104
VLBI BASELINE LENGTH EVOLUTION
PLATTVIL(7258) TO WESTFORD

DATE	Length (cm)	Formal Error
83 6 6	275286267.8	3.4
83 6 9	275286268.8	2.1
85 5 7	275286264.7	.8
86 4 1	275286268.8	.7

LENGTH:
Mean = 275286267.2 ± 1.1 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.0 cm
Slope = .8 ± 1.3 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.9 cm

Table 6.105
VLBI BASELINE LENGTH EVOLUTION
RICHMOND TO WESTFORD

DATE	Length (cm)	Formal Error
83 12 21	204450177.5	7.0
84 1 4	204450175.8	1.2
84 1 14	204450175.2	1.4
84 1 24	204450176.7	1.9
84 2 3	204450177.7	2.3
84 2 13	204450176.2	1.5
84 2 18	204450179.8	1.7
84 3 4	204450173.9	1.1
84 3 19	204450177.4	1.4
84 3 25	204450175.4	1.3
84 4 3	204450179.3	1.9
84 4 8	204450177.2	1.8
84 4 13	204450174.2	1.7
84 4 18	204450176.1	1.4
84 4 23	204450176.4	1.8
84 4 28	204450174.7	1.7
84 5 28	204450178.5	1.3
84 6 2	204450177.1	1.4
84 6 7	204450172.8	3.0
84 6 12	204450176.0	1.8
84 6 17	204450173.8	1.1
84 6 22	204450176.9	1.8
84 6 27	204450176.7	1.4
84 7 2	204450174.4	1.3
84 7 7	204450176.4	1.4
84 7 12	204450176.0	1.4
84 7 17	204450178.9	1.4
84 7 22	204450175.2	1.8
84 7 27	204450172.8	2.5
84 8 1	204450172.9	1.6
84 8 6	204450177.8	1.3
84 8 11	204450177.5	1.5
84 8 16	204450173.9	1.4
84 8 21	204450175.8	1.5
84 8 26	204450177.9	1.4
84 8 31	204450174.6	1.5
84 9 5	204450174.7	1.3
84 9 10	204450174.4	1.2
84 9 15	204450175.9	3.0
84 9 25	204450175.7	1.5
84 9 30	204450174.7	1.4
84 10 5	204450175.0	1.3
84 10 10	204450176.2	1.4
84 10 15	204450172.8	1.4
84 10 20	204450173.5	1.2

RICHMOND TO WESTFORD

DATE	Length (cm)	Formal Error
84 10 25	204450174.1	1.3
84 10 30	204450173.3	1.2
84 11 9	204450174.4	1.2
84 11 19	204450173.9	.9
84 11 24	204450172.2	.9
84 11 29	204450174.8	1.0
84 12 4	204450176.5	1.3
84 12 9	204450175.2	1.1
84 12 14	204450173.9	1.3
84 12 19	204450174.7	1.9
84 12 23	204450174.8	1.4
85 1 3	204450174.8	1.0
85 1 8	204450175.7	1.0
85 1 13	204450174.9	1.9
85 1 18	204450177.6	1.2
85 1 28	204450176.3	.6
85 2 2	204450176.0	1.0
85 2 7	204450174.0	.9
85 2 12	204450175.7	1.0
85 2 17	204450176.8	.7
85 2 22	204450175.0	1.0
85 2 27	204450174.6	.6
85 3 24	204450176.2	.8
85 3 29	204450176.1	.9
85 4 3	204450175.0	.7
85 4 8	204450176.5	.8
85 4 13	204450176.3	.8
85 4 18	204450179.0	.9
85 4 23	204450175.2	.6
85 4 28	204450175.4	1.0
85 5 13	204450177.5	1.2
85 5 18	204450174.7	1.0
85 5 23	204450176.1	.8
85 5 28	204450178.1	.9
85 6 2	204450178.4	1.0
85 6 7	204450177.6	.8
85 6 12	204450174.8	1.6
85 6 17	204450174.5	1.3
85 6 22	204450176.5	1.2
85 6 27	204450178.4	1.2
85 7 2	204450176.1	.7
85 7 7	204450176.1	1.1
85 7 12	204450175.5	1.1
85 7 17	204450175.1	.8
85 7 22	204450175.0	1.5
85 7 27	204450175.4	1.0
85 8 1	204450175.6	1.0
85 8 6	204450174.8	1.1

RICHMOND TO WESTFORD

DATE			Length (cm)	Formal Error
85	8	11	204450175.6	1.2
85	8	16	204450175.2	1.0
85	8	21	204450173.4	1.4
85	8	26	204450174.8	1.0
85	8	31	204450177.5	.9
85	9	5	204450176.4	1.2
85	9	10	204450175.2	1.1
85	9	15	204450175.2	1.0
85	9	20	204450178.5	1.0
85	9	25	204450174.1	1.0
85	9	30	204450175.4	1.1
85	10	5	204450174.7	1.1
85	10	10	204450175.3	1.2
85	10	15	204450176.9	.9
85	10	20	204450177.2	1.1
85	10	25	204450176.5	.7
85	11	9	204450175.1	.8
85	11	14	204450176.3	1.0
85	11	29	204450173.1	1.2
85	12	4	204450175.5	1.2
85	12	9	204450178.0	1.2
85	12	14	204450176.7	.9
85	12	19	204450175.4	.6
86	1	8	204450177.0	.8
86	1	9	204450176.5	1.2
86	1	13	204450175.0	.6
86	1	15	204450177.8	.8
86	1	18	204450176.7	1.0
86	1	19	204450174.2	1.2
86	1	23	204450176.3	.9
86	1	28	204450175.3	.8
86	1	29	204450176.8	.8
86	2	2	204450178.7	.9
86	2	3	204450179.7	1.1
86	2	7	204450177.9	.9
86	2	11	204450175.5	1.2
86	2	12	204450175.8	1.1
86	2	17	204450176.2	1.0
86	2	22	204450171.6	1.2
86	2	27	204450173.8	.9
86	3	4	204450176.2	1.0
86	3	9	204450175.8	.7
86	3	14	204450176.1	1.2
86	3	19	204450174.0	1.1
86	3	24	204450178.3	.9
86	3	29	204450174.8	1.0
86	4	3	204450175.3	.9
86	4	8	204450176.8	.8

RICHMOND TO WESTFORD

DATE			Length (cm)	Formal Error
86	4	13	204450175.1	1.0
86	4	18	204450174.9	1.1
86	4	23	204450175.1	.9
86	4	28	204450177.7	.8
86	5	3	204450169.5	2.2
86	5	8	204450179.7	1.1
86	5	13	204450175.8	1.0
86	5	17	204450174.3	.8
86	5	23	204450175.3	1.0
86	5	28	204450174.9	.9
86	6	2	204450177.5	.9
86	6	7	204450172.3	1.1
86	6	12	204450175.8	1.0
86	6	17	204450175.1	.9
86	6	22	204450176.0	.9
86	6	27	204450175.8	1.1
86	7	2	204450175.3	.9
86	7	7	204450175.0	1.2
86	7	12	204450176.8	1.0
86	7	17	204450176.3	.9
86	7	22	204450174.5	1.1
86	7	27	204450177.1	.8
86	8	1	204450174.6	1.3
86	8	6	204450177.1	1.3
86	8	31	204450173.0	6.5
86	9	5	204450173.2	1.9
86	9	10	204450179.3	1.2
86	9	15	204450174.6	1.3
86	9	20	204450175.6	1.1
86	9	25	204450175.3	1.4
86	9	30	204450173.7	1.5
86	10	5	204450177.7	1.0
86	10	10	204450179.4	1.2
86	10	15	204450173.9	3.3
86	10	20	204450173.7	1.4
86	10	25	204450177.7	1.5
86	10	30	204450176.2	1.0
86	11	4	204450173.2	1.7
86	11	9	204450176.0	1.3
86	11	14	204450176.9	.9
86	11	19	204450175.5	1.0
86	11	29	204450174.8	1.0
86	12	4	204450176.0	.9
86	12	9	204450174.9	1.1
86	12	14	204450175.8	.9
86	12	19	204450174.6	1.0
86	12	23	204450175.3	1.1
86	12	29	204450176.8	.9

RICHMOND TO WESTFORD

LENGTH:

Mean = 204450175.8 ± .1 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 1.5 cm
Slope = .2 ± .1 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 1.4 cm

Table 6.106
VLBI BASELINE LENGTH EVOLUTION
RICHMOND TO WETTZELL

DATE	Length (cm)	Formal Error
83 12 21	758839854.9	17.
84 1 24	758839852.1	4.0
84 2 3	758839855.8	6.1
84 2 18	758839862.4	3.3
84 3 4	758839851.7	2.7
84 3 19	758839851.2	2.6
84 3 25	758839851.8	3.0
84 4 3	758839853.6	3.7
84 4 8	758839847.6	4.2
84 4 13	758839854.6	3.3
84 4 18	758839847.1	2.8
84 4 23	758839848.1	4.3
84 4 28	758839845.6	3.3
84 5 28	758839851.9	2.8
84 6 2	758839856.6	3.0
84 6 7	758839836.5	6.8
84 6 12	758839851.6	4.2
84 6 17	758839854.0	2.5
84 6 22	758839856.4	4.3
84 6 27	758839856.9	3.5
84 7 2	758839846.8	3.2
84 7 7	758839853.9	4.0
84 7 12	758839848.3	3.8
84 7 17	758839856.7	3.7
84 8 1	758839841.3	3.7
84 8 6	758839851.8	3.9
84 8 11	758839850.3	3.9
84 8 16	758839843.9	3.3
84 8 21	758839857.7	3.5
84 8 26	758839853.2	3.5
84 8 31	758839848.9	3.6
84 9 5	758839851.0	3.4
84 9 10	758839851.1	2.9
84 9 15	758839851.6	5.1
84 9 25	758839853.7	3.8
84 9 30	758839854.2	3.2
84 10 5	758839852.0	3.7
84 10 10	758839845.7	3.5
84 10 15	758839836.5	3.3
84 10 20	758839848.7	3.3
84 10 25	758839847.4	3.3
84 10 30	758839853.1	3.0
84 11 9	758839848.8	2.7
84 11 19	758839849.3	2.4
84 11 24	758839846.1	2.8

RICHMOND TO WETTZELL

DATE			Length (cm)	Formal Error
84	11	29	758839854.3	2.7
84	12	4	758839855.8	2.7
84	12	9	758839849.0	2.9
84	12	14	758839848.1	3.3
84	12	19	758839847.9	3.9
84	12	23	758839855.6	2.6
85	1	3	758839850.8	2.0
85	1	8	758839849.6	2.1
85	1	13	758839852.6	3.3
85	1	18	758839859.6	2.8
85	1	28	758839855.9	1.6
85	2	2	758839857.5	2.2
85	2	7	758839845.9	2.1
85	2	12	758839849.6	1.7
85	2	17	758839849.1	1.8
85	2	22	758839845.2	2.3
85	2	27	758839848.4	1.6
85	3	24	758839850.7	1.8
85	3	29	758839847.4	2.1
85	4	3	758839849.5	1.9
85	4	8	758839853.3	2.3
85	4	13	758839853.8	2.4
85	4	18	758839855.1	2.3
85	4	23	758839851.5	1.9
85	4	28	758839850.7	2.2
85	5	13	758839853.4	2.6
85	5	18	758839847.4	2.9
85	5	23	758839851.4	2.7
85	5	28	758839852.7	2.4
85	6	2	758839853.8	2.7
85	6	7	758839854.4	2.1
85	6	12	758839840.4	3.3
85	6	17	758839846.5	2.6
85	6	22	758839860.2	3.1
85	6	27	758839861.7	3.3
85	7	2	758839853.1	1.9
85	7	7	758839854.6	2.4
85	7	12	758839857.5	2.7
85	7	17	758839851.8	2.0
85	7	22	758839843.7	4.8
85	7	27	758839855.9	2.5
85	8	1	758839855.0	2.3
85	8	6	758839856.7	2.6
85	8	11	758839852.5	3.1
85	8	16	758839858.8	2.6
85	8	21	758839853.1	2.9
85	8	26	758839857.4	2.2
85	8	31	758839864.7	3.3

RICHMOND TO WETTZELL

DATE			Length (cm)	Formal Error
85	9	5	758839849.7	3.1
85	9	10	758839854.6	2.4
85	9	15	758839854.5	2.4
85	9	20	758839857.2	2.4
85	9	25	758839845.3	2.3
85	9	30	758839849.9	2.3
85	10	5	758839849.0	2.3
85	10	10	758839856.7	2.6
85	10	15	758839854.7	2.0
85	10	20	758839854.7	2.5
85	10	25	758839850.8	1.5
85	11	9	758839849.4	1.9
85	11	14	758839849.7	2.0
85	11	29	758839853.0	2.3
85	12	4	758839854.0	2.4
85	12	9	758839853.7	2.5
85	12	14	758839857.5	2.0
85	12	19	758839850.1	1.4
86	1	8	758839857.4	2.1
86	1	9	758839850.1	2.6
86	1	13	758839853.5	1.8
86	1	18	758839852.3	2.3
86	1	19	758839851.9	2.5
86	1	23	758839850.8	2.0
86	1	28	758839852.7	2.0
86	1	29	758839856.2	1.6
86	2	2	758839856.1	2.0
86	2	3	758839858.3	2.2
86	2	7	758839854.4	2.2
86	2	12	758839850.6	2.1
86	2	17	758839854.3	2.0
86	2	22	758839842.2	2.6
86	2	27	758839848.8	1.9
86	3	4	758839849.3	2.5
86	3	9	758839850.5	1.7
86	3	14	758839854.9	2.1
86	3	19	758839848.5	2.7
86	3	24	758839859.8	1.9
86	3	29	758839854.4	2.5
86	4	3	758839849.1	2.4
86	4	8	758839856.3	2.0
86	4	13	758839853.7	1.9
86	4	18	758839850.9	2.1
86	4	23	758839851.1	2.2
86	4	28	758839862.1	2.3
86	5	8	758839859.2	2.4
86	5	13	758839852.3	2.6
86	5	17	758839856.2	2.5

RICHMOND TO WETTZELL

DATE			Length (cm)	Formal Error
86	5	23	758839851.3	2.7
86	5	28	758839854.1	2.0
86	6	2	758839862.4	2.0
86	6	7	758839844.2	2.6
86	6	12	758839856.6	2.3
86	6	17	758839850.8	2.4
86	6	22	758839852.9	2.0
86	6	27	758839859.5	2.4
86	7	2	758839848.1	2.2
86	7	7	758839848.3	2.8
86	7	12	758839859.5	2.1
86	7	17	758839859.6	2.1
86	7	22	758839846.4	3.0
86	7	27	758839858.1	2.0
86	8	1	758839854.2	3.9
86	8	6	758839860.4	2.7
86	8	31	758839857.2	14.
86	9	5	758839860.5	3.4
86	9	10	758839860.1	2.6
86	9	15	758839852.8	2.7
86	9	20	758839852.1	2.7
86	9	25	758839848.8	2.9
86	9	30	758839847.8	4.0
86	10	5	758839857.1	2.6
86	10	10	758839860.2	3.2
86	10	15	758839844.0	8.8
86	10	20	758839846.5	4.0
86	10	25	758839860.7	3.3
86	10	30	758839855.9	2.6
86	11	4	758839847.4	4.6
86	11	9	758839846.8	2.9
86	11	14	758839852.9	2.3
86	11	19	758839847.3	2.4
86	11	29	758839847.8	2.2
86	12	4	758839858.3	1.9
86	12	9	758839852.9	2.0
86	12	14	758839852.4	2.2
86	12	19	758839852.5	2.1
86	12	23	758839850.6	2.5
86	12	29	758839857.4	1.9

LENGTH:

Mean - 758839852.7 ± .3 cm (scaled 1 sigma)
Weighted RMS scatter about the mean - 4.3 cm
Slope - 1.4 ± .4 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line - 4.2 cm

Table 6.107
VLBI BASELINE LENGTH EVOLUTION
ROBLED32 TO WESTFORD

DATE	Length (cm)	Formal Error
83 5 5	530046293.4	2.7

Table 6.108
VLBI BASELINE LENGTH EVOLUTION
WESTFORD TO WETTZELL

DATE	Length (cm)	Formal Error
83 11 16	599832534.8	1.7
83 12 21	599832529.5	2.5
84 1 9	599832533.5	1.8
84 1 24	599832536.4	1.4
84 1 29	599832535.6	1.7
84 2 3	599832535.2	2.9
84 2 8	599832533.8	2.2
84 2 18	599832539.1	1.4
84 2 23	599832536.5	1.5
84 2 28	599832535.7	2.2
84 3 4	599832535.2	2.0
84 3 9	599832536.7	2.1
84 3 14	599832529.4	1.4
84 3 19	599832534.4	1.4
84 3 25	599832535.6	1.5
84 4 3	599832535.1	2.1
84 4 8	599832533.1	2.7
84 4 13	599832536.0	1.7
84 4 18	599832535.0	1.6
84 4 23	599832532.9	2.7
84 4 28	599832533.2	2.1
84 5 3	599832533.9	2.6
84 5 8	599832536.9	2.5
84 5 13	599832534.3	2.7
84 5 18	599832536.6	1.8
84 5 23	599832540.8	2.6
84 5 28	599832537.5	1.6
84 6 2	599832534.2	2.2
84 6 7	599832535.9	2.8
84 6 12	599832537.0	2.3
84 6 17	599832539.1	1.6
84 6 22	599832532.0	2.5
84 6 27	599832533.5	2.1
84 7 2	599832532.6	2.1
84 7 7	599832537.0	3.2
84 7 12	599832538.6	2.5
84 7 17	599832539.4	2.6
84 8 1	599832528.1	2.7
84 8 6	599832542.8	2.9
84 8 11	599832537.1	2.4
84 8 16	599832532.6	2.3
84 8 21	599832543.3	2.5
84 8 26	599832536.9	2.6
84 8 31	599832535.5	2.5
84 9 5	599832534.4	2.4

WESTFORD TO WETTZELL

DATE			Length (cm)	Formal Error
84	9	10	599832539.8	2.3
84	9	15	599832534.3	2.7
84	9	20	599832533.0	3.0
84	9	25	599832536.1	2.6
84	9	30	599832536.5	2.6
84	10	5	599832533.9	2.3
84	10	10	599832534.1	2.2
84	10	15	599832531.4	2.3
84	10	20	599832535.6	2.3
84	10	25	599832537.6	1.9
84	10	30	599832538.0	1.9
84	11	4	599832543.4	2.2
84	11	9	599832537.7	2.0
84	11	14	599832541.2	1.9
84	11	19	599832532.1	1.7
84	11	24	599832538.0	2.1
84	11	29	599832538.2	1.8
84	12	4	599832536.7	1.7
84	12	9	599832534.6	2.2
84	12	14	599832534.1	2.2
84	12	19	599832540.3	2.5
84	12	23	599832540.4	1.6
84	12	29	599832537.1	2.4
85	1	3	599832536.4	1.2
85	1	8	599832533.5	1.5
85	1	13	599832533.2	1.9
85	1	18	599832536.4	1.5
85	1	23	599832533.2	1.3
85	1	28	599832537.2	1.1
85	2	2	599832538.8	1.4
85	2	7	599832534.5	1.2
85	2	12	599832533.5	1.5
85	2	17	599832534.6	1.3
85	2	22	599832535.7	1.5
85	2	27	599832532.7	1.0
85	3	4	599832538.7	1.6
85	3	14	599832536.3	1.1
85	3	19	599832537.5	1.5
85	3	24	599832535.3	1.0
85	3	29	599832534.0	1.4
85	4	3	599832534.8	1.3
85	4	8	599832534.9	1.4
85	4	13	599832537.7	1.5
85	4	18	599832540.0	1.6
85	4	23	599832534.2	1.4
85	4	28	599832535.4	1.5
85	5	3	599832535.6	1.6
85	5	8	599832533.6	1.3

WESTFORD TO WETTZELL

DATE			Length (cm)	Formal Error
85	5	9	599832538.1	.8
85	5	13	599832537.2	2.0
85	5	18	599832533.6	1.7
85	5	23	599832537.2	1.8
85	5	28	599832537.9	1.6
85	6	2	599832536.3	1.8
85	6	7	599832538.9	1.4
85	6	12	599832541.4	2.5
85	6	17	599832531.8	2.3
85	6	18	599832536.1	1.0
85	6	19	599832535.1	1.3
85	6	22	599832540.9	1.9
85	6	27	599832537.0	1.7
85	7	2	599832536.5	1.4
85	7	7	599832537.9	1.7
85	7	12	599832538.9	2.1
85	7	17	599832536.8	1.5
85	7	22	599832528.1	1.9
85	7	27	599832542.9	2.0
85	8	1	599832536.1	1.7
85	8	6	599832542.7	2.1
85	8	11	599832534.4	2.7
85	8	16	599832541.5	1.7
85	8	21	599832538.2	1.8
85	8	26	599832530.3	1.7
85	8	31	599832545.9	2.2
85	9	5	599832542.2	2.4
85	9	10	599832540.8	1.6
85	9	11	599832535,9	.9
85	9	15	599832539.7	1.7
85	9	20	599832542.6	1.8
85	9	25	599832540.0	1.8
85	9	30	599832538.2	1.5
85	10	5	599832538.3	1.4
85	10	10	599832537.9	1.5
85	10	15	599832538.8	1.7
85	10	20	599832540.7	1.3
85	10	25	599832535.4	.9
85	10	29	599832539.6	.8
85	10	30	599832536.3	1.7
85	11	4	599832538.8	2.3
85	11	9	599832533.9	1.4
85	11	14	599832539.3	1.4
85	11	19	599832535.3	1.2
85	11	20	599832539.5	1.0
85	11	21	599832539.5	.9
85	11	24	599832539.0	1.1
85	11	29	599832535.7	1.5

WESTFORD TO WETTZELL

DATE			Length (cm)	Formal Error
85	12	4	599832538.3	1.4
85	12	9	599832535.8	1.0
85	12	10	599832536.9	.8
85	12	14	599832537.4	1.1
85	12	19	599832535.9	1.0
85	12	23	599832538.6	1.7
85	12	29	599832536.1	1.1
86	1	3	599832537.4	1.4
86	1	8	599832537.1	1.4
86	1	9	599832535.0	1.6
86	1	13	599832538.1	1.3
86	1	14	599832537.7	.9
86	1	18	599832536.2	1.5
86	1	19	599832532.1	1.9
86	1	23	599832536.1	1.3
86	1	28	599832537.2	1.0
86	1	29	599832535.8	.9
86	2	2	599832535.3	.9
86	2	3	599832538.7	1.2
86	2	7	599832534.7	1.2
86	2	12	599832536.3	1.1
86	2	17	599832538.3	1.2
86	2	22	599832537.2	1.2
86	2	27	599832540.0	1.0
86	3	4	599832537.1	1.4
86	3	9	599832535.5	1.0
86	3	14	599832532.7	1.7
86	3	19	599832535.7	1.3
86	3	20	599832534.2	.9
86	3	24	599832538.1	1.2
86	3	29	599832540.1	1.5
86	4	3	599832538.9	1.0
86	4	4	599832536.5	.7
86	4	8	599832538.2	1.2
86	4	13	599832537.4	1.1
86	4	18	599832537.0	1.2
86	4	23	599832540.1	1.4
86	4	28	599832540.2	1.4
86	5	8	599832539.0	1.4
86	5	13	599832539.3	1.4
86	5	14	599832538.4	.8
86	5	17	599832538.1	1.8
86	5	23	599832538.5	1.7
86	5	28	599832539.0	1.3
86	6	2	599832540.2	1.3
86	6	7	599832535.4	1.4
86	6	12	599832537.5	1.8
86	6	16	599832540.5	1.0

WESTFORD TO WETTZELL

DATE			Length (cm)	Formal Error
86	6	17	599832540.2	1.5
86	6	18	599832540.4	1.4
86	6	22	599832537.5	1.5
86	6	27	599832542.5	1.9
86	7	2	599832536.2	1.3
86	7	7	599832539.6	2.2
86	7	12	599832539.9	1.4
86	7	17	599832540.9	1.6
86	7	22	599832536.0	2.3
86	7	27	599832539.7	1.5
86	8	1	599832539.2	2.0
86	8	6	599832540.5	1.9
86	8	11	599832539.9	2.1
86	8	16	599832539.4	1.8
86	8	21	599832544.1	2.0
86	8	25	599832539.6	.8
86	8	26	599832536.4	2.0
86	8	31	599832541.4	1.9
86	9	5	599832538.5	2.2
86	9	10	599832538.1	1.6
86	9	15	599832537.7	1.4
86	9	16	599832537.7	.6
86	9	20	599832539.5	1.5
86	9	25	599832539.0	1.6
86	9	30	599832542.8	2.1
86	10	5	599832539.3	1.6
86	10	10	599832537.3	1.3
86	10	15	599832539.1	1.1
86	10	16	599832537.8	.4
86	10	20	599832537.9	1.6
86	10	25	599832540.1	1.3
86	10	30	599832539.2	1.5
86	11	3	599832538.3	.7
86	11	4	599832536.3	1.1
86	11	5	599832542.6	1.0
86	11	9	599832540.4	1.4
86	11	14	599832540.1	1.0
86	11	19	599832536.6	1.1
86	11	24	599832537.5	1.5
86	11	29	599832537.6	.9
86	12	4	599832541.2	1.2
86	12	8	599832537.3	.6
86	12	9	599832534.0	1.1
86	12	14	599832536.5	1.2
86	12	19	599832536.2	1.0
86	12	23	599832539.9	1.3
86	12	29	599832539.2	1.1

WESTFORD TO WETTZELL

LENGTH:

Mean = 599832537.3 ± .2 cm (scaled 1 sigma)
Weighted RMS scatter about the mean = 2.3 cm
Slope = 1.2 ± .2 cm/yr (scaled 1 sigma)
Weighted RMS scatter about the line = 2.2 cm

Table 7
VLBI Earth Orientation Results
from Solution GLB121

Date	Values* X-pole	Y-pole	UT1-TAI	Formal Errors X	Y	UT1	Correlations X-Y	X-U	Y-U
79 8 4	-361.0	3969.8	-1798498.6	14.6	59.2	11.5	-.117	.826	.310
79 11 26	1455.4	3162.6	-1826213.6	13.7	13.6	8.1	-.476	.868	-.654
80 4 12	53.3	1903.9	-1861214.5	7.3	22.0	4.9	.035	.792	.306
80 7 27	-263.0	3029.1	-1883585.2	7.7	8.4	3.8	-.009	.780	-.442
80 7 28	-270.8	3047.3	-1883742.8	8.4	9.2	4.0	-.004	.785	-.436
80 9 27	-152.9	3388.7	-1896067.5	10.3	9.1	3.9	.182	.752	-.311
80 9 28	-165.8	3388.9	-1896357.9	9.1	8.3	3.9	.106	.797	-.335
80 9 29	-130.1	3401.5	-1896636.3	7.2	7.3	3.2	.030	.781	-.342
80 9 30	-85.7	3362.1	-1896899.9	9.9	11.3	4.7	.019	.807	-.253
80 10 1	-155.3	3398.1	-1897092.9	8.3	10.4	4.1	-.091	.785	-.371
80 10 2	-213.2	3342.7	-1897264.0	12.7	24.7	7.8	-.336	.898	-.306
80 10 3	-137.4	3437.8	-1897515.8	8.7	9.7	4.5	-.294	.793	-.541
80 10 17	-40.0	3510.0	-1900810.0	Reference Day					
80 10 18	-35.4	3529.8	-1901043.7	7.7	8.4	3.5	.155	.788	-.236
80 10 19	-25.7	3557.2	-1901303.2	7.5	8.5	3.6	.086	.805	-.278
80 10 20	-45.8	3548.1	-1901566.6	8.1	7.2	3.2	.211	.751	-.263
80 10 21	-24.7	3541.7	-1901862.5	6.6	6.7	2.9	.103	.783	-.290
80 10 22	-49.1	3560.9	-1902161.8	7.7	8.9	3.8	.060	.790	-.246
80 10 23	-3.7	3535.8	-1902508.4	5.9	6.3	2.6	.162	.764	-.240
80 11 4	22.6		-1905687.9	15.7		11.4		.914	
80 12 2	460.8	3644.8	-1912607.2	11.2	9.2	5.0	.020	.787	-.364
80 12 20	676.6	3591.1	-1916982.3	9.2	7.8	3.7	.152	.736	-.309
81 1 8	840.9		-1921222.7	16.0		12.8		.929	
81 1 23	894.2	3305.7	-1925043.5	11.7	8.5	4.6	.140	.760	-.305
81 2 13	1034.1		-1929699.8	15.1		11.8		.929	
81 2 28	995.7	3013.8	-1933052.2	17.6	13.7	7.5	.091	.745	-.399
81 3 17	973.5		-1937923.4	19.3		15.4		.930	
81 5 14	1088.2		-1953117.0	24.1		19.3		.916	
81 6 17	838.4	2163.5	-1960723.7	9.3	23.0	7.1	-.057	.816	.193
81 6 25	780.4		-1961985.3	41.4		35.4		.961	
81 7 2	777.9		-1963127.0	30.9		27.0		.931	
81 7 9	784.8		-1964069.2	31.2		26.2		.956	
81 7 16	915.7		-1964801.0	90.5		53.6		.798	
81 7 23	699.1		-1965593.8	18.4		14.5		.947	
81 7 30	661.7		-1966747.4	25.6		21.2		.945	
81 8 6	515.6		-1967916.5	35.7		30.8		.948	
81 8 27	155.3		-1971123.6	27.1		21.8		.957	
81 9 3	-51.0		-1972089.4	35.6		29.2		.958	
81 9 10	-101.1		-1973119.5	26.0		20.3		.942	
81 9 17	-147.0		-1974590.6	28.3		22.1		.950	
81 9 24	-276.4		-1976121.9	32.1		24.9		.948	
81 10 1	-504.0		-1977786.0	28.1		19.6		.932	
81 10 16	-639.7		-1981271.8	27.2		21.1		.947	
81 10 22	-735.3	2297.6	-1982644.3	16.6	13.4	7.0	.091	.775	-.363
81 10 29	-747.4		-1984425.4	22.0		17.8		.948	

Date	X-pole	Values* Y-pole	UT1-TAI	Formal Errors X	Y	UT1	Correlations X-Y	X-U	Y-U
81 11 5	-775.7		-1985892.3	27.1		20.9		.927	
81 11 11	-942.2		-1987308.9	16.3		12.8		.930	
81 11 19	-1005.3	2713.3	-1989119.4	7.2	17.2	5.1	.197	.808	.357
81 11 20	-975.4	2778.7	-1989380.8	6.2	8.3	3.2	-.094	.800	-.378
81 11 25	-970.1		-1990506.8	27.7		23.5		.964	
81 12 3	-984.3		-1991988.1	31.0		25.3		.954	
81 12 17	-955.9		-1995272.5	21.3		16.8		.945	
81 12 23	-887.1		-1996712.2	20.5		16.2		.936	
81 12 30	-825.0		-1997956.6	15.5		11.9		.933	
82 1 7	-731.2		-1999850.3	17.3		13.5		.938	
82 1 14	-602.4		-2001359.6	21.8		16.2		.940	
82 1 21	-493.8		-2002838.9	17.5		13.9		.945	
82 1 28	-429.3		-2003932.5	25.7		21.1		.964	
82 2 2	-349.7		-2005009.3	28.2		24.2		.967	
82 2 11	-41.2		-2006921.3	16.7		13.3		.939	
82 2 18	37.1		-2008463.9	21.1		18.3		.958	
82 2 25	242.7		-2009925.1	28.7		24.9		.969	
82 3 4	471.9		-2011836.5	27.7		24.2		.972	
82 3 11	744.6		-2013527.2	33.9		29.5		.965	
82 3 18	858.3	4293.3	-2015053.2	11.2	9.6	4.7	.090	.767	-.337
82 3 25	1000.2		-2016600.3	25.3		19.8		.957	
82 3 30	1096.7		-2018008.5	34.5		29.7		.978	
82 4 8	1294.9		-2020396.2	33.6		27.1		.963	
82 4 14	1290.2		-2021873.1	45.6		38.7		.973	
82 4 20	1548.1	3990.3	-2023300.1	14.9	13.4	7.1	-.055	.798	-.442
82 4 27	1610.4		-2025282.5	46.5		40.6		.967	
82 5 4	1842.2		-2027210.3	21.9		17.8		.947	
82 5 11	1951.0		-2028941.7	24.7		20.0		.947	
82 5 18	2035.1		-2030208.2	23.3		18.9		.951	
82 6 3	2218.4		-2033955.8	26.8		22.0		.949	
82 6 8	2429.4		-2035066.4	27.5		23.0		.946	
82 6 17	2424.6	2699.9	-2036647.1	13.3	12.9	5.3	.124	.782	-.278
82 6 19	2415.6	2662.3	-2037082.9	9.8	7.6	4.3	-.133	.856	-.431
82 6 20	2369.0	2655.7	-2037269.9	14.4	11.1	5.6	.054	.712	-.486
82 6 21	2394.8	2594.2	-2037473.3	7.6	7.7	3.4	.050	.766	-.310
82 6 22	2391.6	2589.4	-2037633.1	9.9	11.3	4.8	-.062	.809	-.337
82 6 29	2403.0		-2038870.5	25.9		21.1		.959	
82 7 7	2296.8		-2039875.2	32.5		27.8		.974	
82 7 13	2247.2		-2040668.9	41.8		36.6		.970	
82 7 20	2284.3		-2041875.4	33.9		27.2		.957	
82 7 27	2199.9		-2042962.2	31.8		25.6		.947	
82 8 5	1979.4		-2043839.6	37.0		31.4		.968	
82 8 10	1999.6		-2044557.3	36.3		30.8		.976	
82 8 17	1744.4		-2045547.6	92.4		79.6		.921	
82 8 24	1678.6		-2047084.4	51.0		43.9		.946	
82 8 31	1434.1		-2048224.5	33.6		29.3		.970	
82 9 8	1205.0		-2049987.8	38.3		32.9		.972	
82 9 14	1159.4	862.1	-2051405.5	17.1	16.7	8.1	-.060	.749	-.532
82 9 21	939.9	812.9	-2053161.2	49.0	31.3	16.4	.048	.718	-.354

Date	X-pole	Values* Y-pole	UT1-TAI	Formal Errors X	Y	UT1	Correlations X-Y	X-U	Y-U
82 9 28	511.7		-2054465.7	26.9		21.1		.954	
82 10 5	305.3		-2056220.8	38.8		32.8		.968	
82 10 14	-105.7		-2058227.9	27.3		21.7		.962	
82 10 19	-231.5	712.0	-2059525.2	8.1	9.2	4.0	-.029	.803	-.308
82 10 26	-515.4	798.2	-2060825.6	16.9	51.9	14.2	.186	.913	.339
82 11 2	-728.0		-2062486.2	21.0		16.7		.950	
82 11 9	-949.3		-2064067.8	27.0		22.8		.970	
82 11 16	-1089.1	1088.2	-2065986.6	14.1	15.0	8.3	-.035	.847	-.275
82 11 23	-1319.3		-2067495.7	19.5		15.1		.944	
82 11 30	-1518.7		-2069352.5	25.0		20.7		.967	
82 12 7	-1727.7		-2071062.4	22.4		17.4		.943	
82 12 16	-1800.6	1908.6	-2073395.4	8.4	11.6	5.3	-.147	.807	-.221
82 12 17	-1814.1	1959.2	-2073605.1	7.1	9.9	4.0	-.206	.819	-.425
82 12 21	-1907.0		-2074431.4	19.4		15.8		.952	
82 12 28	-1903.4		-2076672.6	25.8		20.8		.963	
83 1 4	-2012.1		-2078134.0	16.0		12.9		.945	
83 1 11	-2030.6		-2080024.9	21.4		17.5		.951	
83 1 18	-1981.7		-2081684.9	17.1		13.8		.915	
83 1 25	-1920.9		-2083981.8	17.8		14.6		.952	
83 2 1	-1872.5		-2086110.0	19.4		15.9		.953	
83 2 8	-1780.9	3856.9	-2088360.4	8.9	10.8	5.0	-.091	.810	-.393
83 2 15	-1663.6		-2090175.0	18.7		15.2		.953	
83 3 1	-1508.2	4527.8	-2094392.6	10.5	9.6	4.8	.049	.798	-.341
83 3 8	-1432.8		-2096466.0	14.2		11.2		.935	
83 3 15	-1194.8	4918.6	-2098394.2	10.9	10.8	5.2	.046	.773	-.349
83 3 22	-1010.8		-2100461.5	48.4		38.5		.954	
83 3 29	-685.8		-2102663.9	25.2		20.7		.963	
83 4 5	-404.2		-2104783.3	24.6		20.0		.957	
83 4 12	-74.0		-2106722.5	22.1		18.5		.959	
83 4 19		5488.3	-2108665.0		18.5	6.5			-.894
83 4 26	461.7		-2110677.6	16.3		13.5		.947	
83 5 3	766.8		-2112352.7	24.1		20.6		.963	
83 5 6	861.6	5490.9	-2112966.6	7.7	8.1	4.0	-.033	.727	-.542
83 5 10	1086.3		-2114041.3	19.0		15.6		.957	
83 5 17	1254.6	5432.3	-2115714.5	14.2	18.5	7.1	-.134	.697	-.255
83 5 24	1664.0		-2117586.9	29.8		25.7		.973	
83 6 1	1966.7		-2119250.0	37.7		32.7		.974	
83 6 7	2137.4	4916.5	-2120548.4	8.5	14.1	5.6	-.153	.715	.070
83 6 8	2354.8	5038.4		197.1	322.0		-.846		
83 6 8	2122.1		-2120742.4	17.3		13.7		.945	
83 6 10	2195.5	4851.0	-2121213.2	11.9	28.5	10.6	.092	.815	.307
83 6 14	2299.0	4727.2	-2121997.3	12.6	13.5	6.6	.010	.782	-.321
83 6 21	2613.4		-2123689.1	21.5		17.2		.948	
83 6 29	2716.7	4329.7	-2124809.2	22.1	46.8	18.6	.145	.908	.246
83 7 6	2975.0		-2126000.0	34.5		27.2		.950	
83 7 12	3041.8		-2126658.9	22.7		17.6		.929	
83 7 26	3213.1	3295.5	-2128532.3	13.8	35.3	11.2	-.037	.846	.224
83 8 2	3318.0		-2129661.1	35.7		30.6		.942	
83 8 9	3340.9	2563.7	-2130703.1	13.2	29.7	10.9	-.038	.845	.226

Date	Values* X-pole	Y-pole	UT1-TAI	Formal Errors X	Y	UT1	Correlations X-Y	X-U	Y-U
83 8 16	3376.6		-2132175.2	27.6		23.4		.954	
83 8 23	3256.5		-2133080.1	29.2		23.8		.952	
83 8 30	3131.1	1827.8	-2134359.2	21.9	28.4	13.7	-.191	.808	-.545
83 8 31		1774.8	-2134560.0		16.9	6.4			-.905
83 9 3	3147.1		-2135119.5	24.5		19.4		.940	
83 9 8	2990.6		-2135993.8	23.3		18.2		.943	
83 9 13	2784.8		-2136981.4	38.0		31.2		.956	
83 9 18	2707.8		-2137752.6	22.2		17.1		.930	
83 9 23	2535.7	829.1	-2138633.6	14.9	20.8	8.8	-.228	.819	-.565
83 9 24		787.0	-2138872.0		20.2	8.2			-.890
83 9 28	2371.8	635.0	-2139639.0	11.9	29.3	9.2	-.150	.799	.159
83 10 3	2231.9		-2140622.5	24.7		19.0		.930	
83 10 8	2065.2		-2141939.2	25.1		19.7		.940	
83 10 13	1822.0	321.6	-2142911.5	11.4	27.9	9.1	-.127	.804	.174
83 10 18	1633.7		-2143832.8	37.9		23.1		.788	
83 10 23	1443.8		-2144982.0	25.9		19.6		.923	
83 10 28	1144.6	169.0	-2145941.2	10.3	15.7	5.6	-.132	.832	-.308
83 10 29		164.0	-2146160.8		15.8	6.4			-.899
83 11 2	1028.8		-2147305.6	21.7		16.7		.919	
83 11 7	735.9		-2148722.4	18.6		14.5		.928	
83 11 12	489.3		-2149755.0	21.9		17.0		.919	
83 11 17	306.9	109.1	-2150988.1	8.9	10.6	4.1	-.120	.718	-.478
83 11 18		122.2	-2151247.3		12.6	5.0			-.873
83 11 22	60.2	143.7	-2152192.3	13.2	29.4	9.5	.069	.803	.262
83 11 27	-105.1		-2153261.2	16.8		13.3		.927	
83 12 2	-355.4	252.2	-2154514.1	9.8	27.6	7.5	.148	.838	.364
83 12 7	-512.6		-2155488.4	23.5		18.6		.923	
83 12 12	-686.3		-2156342.7	15.1		11.5		.919	
83 12 17	-820.0		-2157434.9	14.0		10.6		.906	
83 12 22	-980.4	610.0	-2158344.7	14.4	12.8	5.9	.047	.727	-.381
83 12 23		735.7	-2158481.0		15.3	6.2			-.870
83 12 27	-1136.5		-2159421.3	15.0		11.7		.927	
84 1 1	-1236.0		-2160557.9	16.3		12.4		.905	
84 1 5	-1382.3	972.8	-2161147.2	9.5	23.5	7.0	.086	.829	.242
84 1 10	-1496.2	1102.8	-2162025.0	10.5	9.8	4.6	.105	.722	-.320
84 1 15	-1585.6	1281.9	-2162900.2	18.1	38.3	14.2	.637	.940	.603
84 1 25		1562.8	-2164328.1		12.6	7.0			.777
84 1 25	-1831.8	1576.5	-2164533.9	10.3	8.9	4.3	.175	.695	-.370
84 1 30	-1945.6	1727.4	-2165192.0	10.6	10.6	4.5	.115	.720	-.332
84 2 4	-2056.7	1885.9	-2165736.1	11.4	13.1	6.1	.067	.703	-.339
84 2 9	-2091.9	2043.0	-2166575.9	12.4	11.8	5.9	.024	.792	-.329
84 2 14	-2164.4	2444.8	-2167346.6	22.0	53.4	17.4	.733	.963	.726
84 2 19	-2254.8	2405.2	-2168210.5	9.4	11.3	4.8	.062	.795	-.204
84 2 24	-2289.0	2548.3	-2169285.2	12.6	9.7	4.8	.121	.738	-.386
84 2 25		2588.4	-2169403.9		9.2	3.4			-.825
84 2 25	-2365.5	2622.2	-2169399.6	31.7	11.1	5.3	-.559	.040	.504
84 2 29	-2341.9	2806.5	-2169856.7	17.2	13.7	7.0	.122	.767	-.370
84 3 5	-2393.2	2988.9	-2170745.6	10.2	11.3	5.5	.077	.739	-.371
84 3 10	-2357.0	3206.6	-2171739.7	13.2	12.8	6.6	-.040	.771	-.410

Date	Values* X-pole	Y-pole	UT1-TAI	Formal Errors X	Y	UT1	Correlations X-Y	X-U	Y-U
84 3 15	-2296.6	3408.7	-2172576.8	9.1	8.4	3.9	.021	.776	-.394
84 3 20	-2240.7	3622.5	-2173871.6	9.9	9.3	4.7	.088	.748	-.371
84 3 26	-2179.3	3812.3	-2174866.6	8.9	8.5	4.3	.055	.749	-.386
84 3 31		3918.2	-2175717.0		56.4	13.3			-.896
84 4 4	-1993.7	4178.4	-2176778.3	12.3	10.9	5.7	.097	.748	-.404
84 4 9	-1843.7	4332.0	-2177605.7	12.6	14.1	6.9	.005	.789	-.337
84 4 14	-1746.4	4547.7	-2178638.3	10.8	9.7	5.3	.071	.747	-.399
84 4 19	-1600.7	4723.2	-2179852.3	10.2	8.9	4.5	.108	.731	-.380
84 4 20	-1600.4	4736.7	-2180018.5	8.1	6.9	3.4	.022	.799	-.345
84 4 24	-1471.5	4827.2	-2180704.2	12.7	13.2	6.2	.120	.664	-.485
84 4 27	-1352.9	4920.4	-2181296.4	6.7	19.3	4.0	-.103	.615	.344
84 4 29	-1315.7	4986.2	-2181708.0	11.6	10.8	5.1	.202	.676	-.403
84 5 4	-1073.5	5146.2	-2182682.2	41.5	21.9	8.9	.660	.609	-.108
84 5 9	-892.3	5229.8	-2183422.3	16.7	13.9	7.0	.140	.749	-.401
84 5 14	-764.0	5331.9	-2184544.6	16.6	14.1	7.1	.171	.745	-.377
84 5 19	-546.8	5406.7	-2185289.6	12.2	9.6	5.1	.058	.773	-.412
84 5 20		5411.0	-2185396.6		12.4	4.9			-.887
84 5 24	-345.5	5488.5	-2185945.1	15.8	12.8	6.5	.179	.772	-.346
84 5 29	-145.8	5528.3	-2186728.6	8.7	8.4	4.0	.171	.713	-.385
84 6 3	90.1	5549.5	-2187273.0	11.0	10.9	5.6	.128	.689	-.460
84 6 8	291.9	5550.2	-2187961.6	16.7	12.6	7.1	.074	.722	-.501
84 6 13	526.3	5519.5	-2188655.3	10.9	9.9	4.9	.098	.717	-.442
84 6 18	711.8	5501.4	-2189008.2	8.3	8.2	4.2	.081	.719	-.430
84 6 23	898.4	5481.3	-2189575.9	11.5	10.8	5.7	.056	.711	-.474
84 6 28	1101.4	5429.0	-2190105.8	10.1	10.3	5.2	.076	.716	-.474
84 7 3	1337.7	5362.4	-2190439.0	10.1	10.0	5.2	.068	.717	-.474
84 7 8	1558.4	5279.5	-2190978.7	10.6	11.8	6.1	.023	.705	-.520
84 7 8	1536.3	5326.1	-2190966.3	8.0	7.9	4.6	.026	.466	.485
84 7 13	1749.5	5145.6	-2191177.8	9.6	9.7	5.1	.016	.730	-.484
84 7 18	1946.6	5038.1	-2191398.1	10.7	10.6	5.8	-.003	.749	-.484
84 7 22	2071.4	5005.8	-2191734.5	8.7	8.6	5.1	-.089	.360	.531
84 7 23	2103.7	4981.9	-2191809.5	7.9	7.5	4.2	-.031	.467	.406
84 7 23	2032.3	4873.2	-2191738.5	29.7	50.7	25.8	.449	.952	.353
84 7 28	2346.2	4773.8	-2192091.0	51.1	82.4	41.1	.721	.974	.655
84 7 29	2381.5	4782.5	-2192167.1	12.1	10.1	8.0	.185	.417	.682
84 7 30	2405.3	4753.0	-2192257.7	8.0	7.8	4.7	.067	.380	.511
84 8 2	2489.2	4633.7	-2192719.8	10.4	10.6	5.5	.017	.735	-.494
84 8 5	2617.9	4558.9	-2193116.2	7.8	7.1	4.1	.022	.320	.412
84 8 6	2645.3	4534.9	-2193189.5	8.0	7.6	4.5	.110	.411	.489
84 8 7	2659.3	4466.9	-2193261.4	9.7	10.2	5.5	.013	.749	-.450
84 8 12	2790.0	4295.0	-2193545.5	10.2	9.9	5.1	.049	.735	-.445
84 8 17	2928.8	4122.1	-2194212.4	10.8	11.1	5.4	.128	.675	-.480
84 8 22	3025.5	3943.0	-2194822.2	10.8	10.7	5.5	.086	.718	-.453
84 8 25	2982.9	3835.7	-2195032.6	11.0	7.8	4.9	-.327	.892	-.288
84 8 27	3053.6	3762.9	-2195346.8	10.6	10.7	5.4	.099	.697	-.451
84 8 29	3063.6	3700.7	-2195754.6	8.5	7.7	4.0	-.210	.857	-.211
84 8 31	3072.7	3606.3	-2196153.3	5.5	5.6	2.3	.139	.740	-.199
84 9 1	3100.4	3566.6	-2196350.9	10.8	10.8	5.9	.017	.733	-.493
84 9 3	3084.8	3504.9	-2196626.0	5.5	5.5	2.3	.145	.732	-.210

Date	X-pole	Values* Y-pole	UT1-TAI	Formal Errors X	Y	UT1	Correlations X-Y	X-U	Y-U
84 9 6	3120.5	3381.4	-2196946.8	9.8	10.5	5.2	.066	.695	-.492
84 9 11	3176.1	3191.6	-2197546.6	8.9	9.6	4.9	.046	.709	-.475
84 9 16	3196.5	2976.1	-2198326.5	12.5	12.1	6.4	.029	.730	-.500
84 9 21	3221.9	2814.3	-2198913.5	14.8	12.8	6.9	-.090	.794	-.518
84 9 26	3230.4	2593.3	-2199887.5	10.0	10.3	5.3	.053	.717	-.480
84 10 1	3224.1	2402.3	-2200863.7	10.5	10.2	5.3	.171	.731	-.392
84 10 6	3155.3	2231.4	-2201578.0	9.6	10.2	5.2	-.004	.738	-.490
84 10 11	3088.4	2019.3	-2202531.7	10.8	9.9	5.3	.047	.722	-.497
84 10 16	2960.6	1836.8	-2203312.8	10.4	10.4	5.6	.035	.740	-.458
84 10 21	2903.1	1703.8	-2204068.8	9.5	10.3	5.1	.075	.704	-.484
84 10 26	2840.0	1526.2	-2205309.0	9.9	9.2	4.7	.112	.735	-.413
84 10 27	2768.0		-2205499.9	14.9		9.5		.872	
84 10 31	2696.4	1387.4	-2206075.1	9.3	9.4	4.7	.055	.732	-.460
84 11 5	2587.6	1225.9	-2206936.0	13.0	10.9	5.9	.059	.761	-.441
84 11 10	2478.8	1076.1	-2207857.8	9.5	9.0	4.8	.082	.740	-.428
84 11 15	2341.6	944.7	-2208446.8	11.2	9.3	4.8	.031	.794	-.379
84 11 16		913.5	-2208585.5		14.2	5.5			-.897
84 11 20	2226.7	843.6	-2209449.4	8.4	8.6	4.5	.081	.734	-.406
84 11 25	2064.4	745.8	-2210427.1	8.6	9.2	4.7	.052	.726	-.454
84 11 30	1871.4	626.3	-2211116.3	8.6	8.9	4.5	.072	.743	-.405
84 12 5	1699.6	500.7	-2212014.6	9.9	9.6	5.0	.108	.716	-.419
84 12 10	1507.6	406.1	-2212731.4	9.2	10.2	5.3	.029	.732	-.466
84 12 15	1272.6	357.9	-2213428.3	9.4	10.3	5.3	.024	.735	-.462
84 12 20	1015.4	275.6	-2214355.7	11.7	11.8	6.5	-.029	.780	-.459
84 12 24	850.0	224.4	-2214686.4	8.8	8.8	4.7	.037	.792	-.327
84 12 30	554.2	172.6	-2215595.6	14.3	12.6	6.7	.045	.762	-.442
85 1 4	429.2	188.9	-2216494.2	7.5	7.0	3.5	.099	.746	-.382
85 1 9	193.6	219.7	-2217167.2	7.7	7.9	3.8	.089	.729	-.402
85 1 14	-17.4	255.0	-2218213.3	16.0	13.3	6.8	.210	.587	-.561
85 1 19	-126.5	319.5	-2219043.4	8.7	8.5	4.2	.107	.720	-.420
85 1 24	-308.6	390.8	-2219667.8	8.5	7.5	3.9	.010	.788	-.380
85 1 25	-295.9	422.3	-2219829.2	31.0	14.7	5.4	.787	.704	.207
85 1 29	-496.7	477.4	-2220457.7	6.8	7.2	3.5	.070	.746	-.376
85 2 3	-619.0	541.8	-2220990.7	8.1	8.0	3.9	.154	.711	-.378
85 2 8	-726.0	621.7	-2221598.6	7.3	7.2	3.6	.089	.762	-.351
85 2 13	-860.8	752.8	-2222480.3	8.4	8.3	4.1	.152	.727	-.378
85 2 18	-1017.5	859.4	-2223072.5	7.4	7.8	3.9	.065	.738	-.404
85 2 23	-1193.3	955.4	-2223963.0	8.2	8.5	4.1	.130	.706	-.411
85 2 28	-1362.3	1069.5	-2224793.4	6.5	6.5	3.0	.142	.734	-.339
85 3 5	-1500.3	1187.5	-2225416.3	10.9	9.0	4.3	.219	.759	-.300
85 3 6	-1529.9	1253.3	-2225580.9	5.5	5.4	2.4	.143	.775	-.255
85 3 15	-1764.6	1528.4	-2227568.1	8.0	7.2	3.5	.129	.721	-.376
85 3 20	-1865.4	1736.0	-2228494.5	9.2	8.1	4.1	.084	.765	-.367
85 3 25	-1890.6	1939.4	-2229569.9	7.0	6.7	3.3	.115	.738	-.365
85 3 30	-1910.1	2157.6	-2230381.1	7.7	7.6	3.9	.078	.744	-.392
85 4 4	-1932.4	2334.2	-2231312.9	7.0	7.1	3.4	.080	.732	-.387
85 4 9	-1917.1	2528.1	-2232443.7	7.3	7.1	3.5	.075	.753	-.364
85 4 14	-1899.5	2734.5	-2233166.7	7.9	7.9	3.8	.133	.701	-.420
85 4 19	-1890.4	2895.3	-2234196.0	8.0	7.7	3.8	.134	.742	-.367

		Values*		Formal Errors			Correlations		
Date	X-pole	Y-pole	UT1-TAI	X	Y	UT1	X-Y	X-U	Y-U
85 4 24	-1857.4	3084.2	-2235143.3	6.7	7.0	3.3	.078	.730	-.411
85 4 25	-1859.8	3142.0	-2235286.3	32.3	16.0	5.5	.780	.636	.099
85 4 29	-1861.7	3263.2	-2235859.4	7.9	7.5	3.8	.146	.730	-.349
85 5 4	-1799.8	3433.2	-2237032.6	9.0	8.3	4.1	.056	.768	-.401
85 5 8	-1747.0	3595.0	-2237796.5	7.9	7.4	3.9	-.081	.815	-.038
85 5 9	-1711.6	3627.4	-2237931.4	8.5	7.3	3.7	.046	.773	-.397
85 5 10	-1700.0	3646.6	-2238070.9	6.2	6.1	2.5	.251	.767	-.164
85 5 14	-1603.9	3804.2	-2238697.7	8.9	8.4	4.4	.092	.741	-.423
85 5 16	-1584.6	3858.9	-2239058.3	6.1	5.9	2.8	.119	.645	.066
85 5 19	-1528.7	3937.6	-2239552.9	7.9	7.8	3.8	.099	.726	-.409
85 5 24	-1340.1	4072.8	-2240094.5	8.1	8.5	4.2	.055	.721	-.457
85 5 29	-1212.9	4198.2	-2240831.5	7.9	8.0	3.9	.140	.701	-.417
85 6 3	-1089.4	4312.9	-2241846.8	8.7	8.5	4.4	.102	.700	-.451
85 6 8	-972.3	4423.6	-2242428.3	7.3	7.3	3.5	.107	.722	-.411
85 6 13	-881.3	4522.0	-2243171.2	9.1	9.5	4.2	.058	.785	-.393
85 6 18	-758.8	4628.4	-2243698.4	9.1	9.0	4.2	.213	.686	-.398
85 6 19	-739.6	4634.7	-2243773.4	24.3	12.7	4.8	.699	.631	-.007
85 6 20	-708.0	4635.0	-2243845.8	5.4	5.6	2.3	.143	.746	-.213
85 6 23	-621.6	4683.1	-2244101.2	8.7	8.8	4.3	.112	.728	-.414
85 6 28	-471.7	4742.2	-2244922.9	8.1	7.8	3.8	.131	.736	-.381
85 7 3	-324.5	4788.2	-2245356.9	7.3	7.3	3.6	.107	.722	-.399
85 7 7	-225.0	4816.1	-2245539.6	7.7	7.0	4.0	.047	.560	.333
85 7 8	-166.3	4829.4	-2245638.5	8.7	8.3	4.2	.118	.729	-.398
85 7 13	27.2	4846.1	-2245962.8	8.9	9.2	4.7	.120	.718	-.401
85 7 18	209.3	4880.9	-2246061.6	7.9	7.7	3.9	.085	.730	-.401
85 7 21	293.5	4908.5	-2246224.3	6.8	6.2	3.2	.113	.531	.200
85 7 23	350.7	4926.8	-2246456.5	8.3	8.5	4.1	.056	.720	-.451
85 7 28	517.9	4898.0	-2246910.9	7.2	6.6	3.7	.089	.570	.283
85 7 28	529.2	4920.5	-2246924.3	9.0	8.5	4.4	.118	.737	-.386
85 8 2	664.9	4926.9	-2247086.7	8.4	7.8	3.9	.100	.739	-.384
85 8 7	846.6	4881.4	-2247551.8	9.3	9.5	4.9	.040	.749	-.396
85 8 11	979.8	4875.0	-2247770.5	6.7	6.2	3.3	.122	.541	.208
85 8 12	1029.1	4860.5	-2247784.6	10.2	10.1	5.5	.131	.715	-.411
85 8 17	1177.8	4799.3	-2247990.1	8.6	8.4	4.3	.131	.734	-.374
85 8 22	1329.0	4760.4	-2248675.2	9.2	8.8	4.3	.113	.739	-.392
85 8 25	1423.9	4720.9	-2248918.4	7.3	7.9	3.7	-.018	.824	.035
85 8 27	1482.5	4725.9	-2249000.7	8.3	8.3	4.1	.124	.721	-.399
85 8 29	1687.2		-2249640.5	22.9		17.0		.909	
85 9 1	1626.3	4602.1	-2249464.7	8.5	9.6	5.1	.007	.772	-.340
85 9 5	1709.0	4549.2	-2249986.6	10.8	8.5	5.1	-.226	.879	-.115
85 9 6	1757.0	4530.5	-2250091.8	9.5	9.8	5.2	.064	.738	-.441
85 9 11	1902.7	4445.8	-2250434.7	8.9	9.0	4.5	.140	.711	-.419
85 9 12	1917.0	4450.5	-2250506.9	27.8	13.9	4.7	.793	.657	.152
85 9 16	1964.9	4338.2	-2251152.8	8.1	8.4	4.2	.095	.722	-.392
85 9 21	2042.9	4210.1	-2251970.1	8.6	8.2	4.2	.118	.717	-.400
85 9 26	2144.0	4107.0	-2252541.8	8.7	8.6	4.3	.164	.700	-.403
85 10 1	2203.6	3979.9	-2253448.6	6.1	6.0	2.8	.126	.650	.078
85 10 1	2197.5	3978.3	-2253448.5	8.5	8.2	4.1	.133	.714	-.398
85 10 6	2256.9	3807.5	-2254170.8	8.6	7.9	3.9	.119	.702	-.432

		Values*		Formal Errors			Correlations		
Date	X-pole	Y-pole	UT1-TAI	X	Y	UT1	X-Y	X-U	Y-U
85 10 11	2340.4	3712.0	-2254907.8	8.6	8.3	3.8	.151	.709	-.407
85 10 16	2327.4	3539.0	-2256119.5	8.5	8.8	4.2	.080	.706	-.468
85 10 21	2374.8	3396.3	-2256938.8	8.5	7.6	3.7	.194	.716	-.343
85 10 26	2392.9	3247.9	-2257946.6	6.5	6.4	2.9	.128	.746	-.346
85 10 30	2411.8	3118.6	-2258809.8	5.9	5.9	2.6	.147	.790	-.244
85 10 31	2379.5	3126.8	-2258964.5	10.5	9.1	4.8	.041	.773	-.396
85 11 5	2378.0	2967.0	-2259638.7	11.1	10.2	5.5	-.034	.768	-.481
85 11 10	2372.2	2859.0	-2260596.5	7.1	7.2	3.4	.111	.738	-.369
85 11 15	2360.4	2727.9	-2261594.1	8.4	8.3	3.8	.211	.693	-.380
85 11 20	2354.8	2605.3	-2262374.5	8.6	7.4	3.6	.064	.758	-.409
85 11 21	2357.3	2571.7	-2262585.0	26.1	13.6	5.0	.727	.603	-.013
85 11 22	2377.3	2527.8	-2262806.6	5.3	5.5	2.2	.152	.754	-.228
85 11 25	2377.0	2466.5	-2263406.5	7.6	7.0	3.4	.076	.762	-.360
85 11 30	2347.1	2365.1	-2264119.7	7.7	7.2	3.6	.144	.738	-.320
85 12 5	2277.2	2247.8	-2264850.7	8.1	7.7	3.7	.190	.721	-.352
85 12 10	2239.0	2144.4	-2265966.7	7.9	7.4	3.6	.055	.759	-.432
85 12 11	2214.8	2103.5	-2266151.0	24.2	12.3	4.4	.743	.653	.086
85 12 15	2153.6	2021.3	-2266673.5	7.4	7.1	3.4	.131	.702	-.402
85 12 20	2136.5	1923.4	-2267497.9	6.4	6.4	3.1	.109	.752	-.323
85 12 24		1810.7	-2268055.6		21.1	6.5			-.719
85 12 30	1988.0	1718.2	-2268609.3	7.7	7.1	3.4	.064	.755	-.382
86 1 4	1893.1	1597.2	-2269308.6	8.5	7.5	3.7	.112	.753	-.365
86 1 9	1793.0	1533.0	-2269976.3	7.2	7.5	3.7	.031	.723	-.355
86 1 10	1767.7	1483.2	-2270065.8	7.9	6.5	4.9	.073	.588	-.352
86 1 14	1687.8	1412.8	-2270575.7	6.8	7.1	3.4	.103	.736	-.361
86 1 15	1722.0	1397.7	-2270771.6	35.6	17.3	5.3	.855	.690	.282
86 1 16	1662.6	1361.5	-2270948.6	7.6	6.4	4.0	.065	.724	-.350
86 1 19	1605.2	1322.7	-2271441.2	8.3	8.0	3.9	.174	.703	-.377
86 1 20	1551.5	1299.4	-2271570.3	7.5	6.3	4.6	.113	.562	-.326
86 1 24	1450.7	1267.7	-2271990.9	8.2	7.6	3.7	.098	.711	-.427
86 1 29	1316.0	1233.8	-2272676.0	7.7	7.7	3.6	.060	.689	-.495
86 1 30	1295.3	1206.6	-2272885.4	7.2	6.2	3.7	.102	.680	-.342
86 2 3	1160.9	1185.0	-2273720.6	7.0	6.8	3.1	.119	.745	-.357
86 2 4	1131.8	1164.5	-2273881.9	7.6	6.3	4.2	.111	.598	-.363
86 2 8	1033.7	1161.8	-2274386.6	8.0	8.1	4.0	.118	.713	-.398
86 2 12	941.2	1095.9	-2275097.4	8.7	7.0	4.4	-.003	.663	-.432
86 2 13	928.2	1114.8	-2275289.4	8.0	7.6	3.6	.132	.706	-.399
86 2 18	811.1	1106.1	-2276041.9	7.8	7.3	3.5	.122	.741	-.347
86 2 23	662.5	1109.8	-2276488.0	8.4	7.8	3.7	.120	.733	-.388
86 2 28	484.7	1118.6	-2277329.0	7.2	7.2	3.3	.086	.730	-.397
86 3 5	350.1	1118.6	-2278047.7	8.2	8.1	4.0	.087	.740	-.386
86 3 10	195.6	1145.4	-2278679.0	7.2	7.2	3.4	.088	.730	-.384
86 3 14	40.1	1161.7	-2279350.7	9.1	7.2	3.9	-.032	.111	.424
86 3 15	51.4	1146.1	-2279458.6	9.5	8.8	4.7	.181	.721	-.364
86 3 20	-48.7	1190.1	-2279806.9	8.2	7.8	3.8	.139	.729	-.383
86 3 21	-144.5	1136.9	-2279869.9	28.9	13.8	4.9	.787	.725	.229
86 3 25	-169.6	1249.9	-2280381.4	7.6	7.3	3.6	.082	.741	-.379
86 3 30	-290.3	1296.9	-2281408.1	8.5	7.9	4.1	.085	.727	-.404
86 4 2	-354.6	1328.6	-2281808.1	7.8	8.1	4.2	.023	.812	.160

Date			Values* X-pole	Y-pole	UT1-TAI	Formal Errors X	Y	UT1	Correlations X-Y	X-U	Y-U
86	4	4	-387.1	1366.2	-2282051.7	7.2	7.0	3.2	.113	.749	-.363
86	4	5	-423.1	1374.6	-2282202.9	6.1	5.7	2.6	.094	.790	-.285
86	4	9	-506.2	1440.4	-2282976.0	6.4	6.3	3.0	.102	.599	.162
86	4	9	-494.9	1452.1	-2282975.3	7.5	7.0	3.4	.142	.738	-.348
86	4	14	-552.8	1567.4	-2283758.5	7.7	7.4	3.6	.060	.750	-.377
86	4	19	-619.0	1659.1	-2284381.8	8.2	7.5	3.8	.108	.721	-.393
86	4	24	-698.2	1751.5	-2285401.5	7.4	8.7	3.8	.104	.727	-.353
86	4	29	-739.0	1855.0	-2286207.4	7.4	7.3	3.7	.065	.759	-.357
86	5	3	-780.2	1953.7	-2286818.9	8.6	6.7	3.5	.036	.225	.336
86	5	4	-856.8	1780.1	-2286937.6	27.0	55.2	21.0	.660	.957	.636
86	5	9	-833.6	2069.3	-2287992.6	8.2	7.7	3.8	.090	.743	-.397
86	5	14	-854.6	2156.3	-2288586.2	7.5	7.2	3.5	.066	.753	-.405
86	5	15	-846.2	2157.6	-2288691.4	5.9	5.8	2.7	.090	.790	-.279
86	5	18	-882.3	2255.3	-2288886.3	8.0	8.2	4.4	.050	.740	-.413
86	5	24	-916.1	2361.0	-2290044.1	8.3	8.1	4.3	.061	.730	-.422
86	5	29	-939.9	2489.5	-2290470.1	7.3	7.3	3.5	.113	.719	-.405
86	6	3	-932.0	2574.6	-2291068.9	8.3	7.6	3.8	.147	.729	-.354
86	6	8	-920.5	2711.5	-2291347.7	8.6	7.8	4.0	.073	.742	-.423
86	6	13	-893.6	2812.6	-2291409.6	8.9	8.8	4.5	.127	.703	-.419
86	6	14	-968.4	2792.6	-2291490.2	14.1	7.5	4.1	.186	.074	.384
86	6	17	-849.8	2852.2	-2291791.0	25.3	12.9	4.8	.713	.654	.034
86	6	18	-827.6	2888.7	-2291911.6	7.9	7.8	3.7	.092	.739	-.401
86	6	19	-812.7	2908.4	-2292035.4	5.5	5.5	2.3	.147	.740	-.201
86	6	23	-754.9	2995.5	-2292303.2	7.9	8.0	4.0	.113	.709	-.417
86	6	28	-669.1	3139.8	-2292710.6	9.1	9.0	4.7	.080	.739	-.428
86	7	3	-604.8	3234.5	-2293173.9	7.6	7.2	3.6	.083	.747	-.385
86	7	6	-582.4	3276.1	-2293267.0	6.7	6.4	3.4	.103	.613	.226
86	7	8	-533.1	3310.5	-2293315.9	9.8	9.9	4.9	.097	.724	-.417
86	7	13	-474.5	3418.0	-2293677.9	6.9	6.3	3.4	.086	.470	.237
86	7	13	-482.3	3418.4	-2293667.2	8.3	7.5	3.8	.137	.740	-.350
86	7	18	-400.7	3490.6	-2294125.3	8.6	7.9	4.0	.115	.728	-.392
86	7	23	-260.0	3553.5	-2294334.7	9.7	9.8	5.1	.071	.751	-.377
86	7	27	-247.9	3584.2	-2294741.5	6.2	6.0	2.9	.141	.678	.094
86	7	28	-202.8	3625.3	-2294836.7	8.0	7.9	3.8	.078	.722	-.413
86	8	2	-129.3	3645.2	-2294994.9	9.4	9.3	4.7	.067	.717	-.451
86	8	3	-144.0	3669.8	-2294992.1	6.2	5.9	2.9	.096	.551	.101
86	8	7	-73.8	3717.1	-2295103.4	9.8	9.4	4.8	.099	.727	-.418
86	8	12	-31.5	3752.2	-2295696.6	11.9	9.7	4.9	.077	.750	-.407
86	8	17	57.3	3784.1	-2295999.6	10.6	8.8	4.3	.130	.742	-.377
86	8	22	148.8	3839.4	-2296423.5	11.0	9.5	4.9	.038	.751	-.442
86	8	26	218.8	3863.1	-2296832.9	22.5	11.5	4.2	.728	.641	.056
86	8	27	277.6	3875.6	-2296895.1	12.9	10.4	5.6	.030	.768	-.440
86	9	1	315.1	3903.2	-2297039.1	12.0	9.6	5.1	.043	.766	-.429
86	9	6	401.2	3964.0	-2297497.8	12.1	10.9	5.4	.051	.748	-.413
86	9	6	351.5	3935.0	-2297518.1	9.3	7.4	4.0	.011	.165	.455
86	9	11	471.0	3917.5	-2298161.3	9.5	8.5	4.4	.065	.745	-.421
86	9	16	548.3	3945.4	-2298597.8	9.5	8.4	4.0	.133	.769	-.365
86	9	17	550.6	3950.9	-2298737.7	19.8	10.0	3.4	.760	.702	.197
86	9	21	602.9	3928.5	-2299473.2	9.4	8.4	4.1	.129	.736	-.379

Date	X-pole	Values* Y-pole	UT1-TAI	Formal Errors X	Y	UT1	Correlations X-Y	X-U	Y-U
86 9 26	648.6	3899.8	-2300067.7	10.3	8.9	4.3	.163	.735	-.364
86 10 1	721.4	3887.2	-2300704.0	10.2	9.9	4.7	.037	.725	-.488
86 10 6	774.7	3885.3	-2301759.9	8.5	8.0	4.1	.076	.747	-.389
86 10 11	834.0	3869.7	-2302455.1	8.9	7.6	3.7	.126	.736	-.368
86 10 16	892.5	3859.4	-2303296.9	8.7	7.5	3.6	.091	.754	-.375
86 10 17	908.7	3842.1	-2303502.3	5.5	5.4	2.4	.122	.786	-.267
86 10 21	994.4	3836.6	-2304185.8	9.3	8.2	4.2	.035	.740	-.440
86 10 24	981.9	3811.5	-2304535.5	6.1	6.0	2.9	.143	.674	.099
86 10 26	1039.7	3823.2	-2304799.5	9.5	8.3	4.0	.163	.708	-.403
86 10 31	1078.2	3815.7	-2305650.9	7.7	7.2	3.7	.118	.743	-.331
86 11 1	1099.9	3811.9	-2305878.1	6.0	6.4	3.0	.094	.803	-.016
86 11 4	1041.7	3740.1	-2306379.7	27.2	13.3	4.3	.816	.687	.236
86 11 5	1146.4	3779.7	-2306500.8	8.3	7.2	3.4	.165	.754	-.329
86 11 6	1157.5	3735.6	-2306599.4	5.3	5.4	2.3	.143	.756	-.224
86 11 8	1128.6	3733.3	-2306813.7	8.6	6.8	3.6	-.000	.178	.341
86 11 10	1241.8	3721.9	-2307061.1	10.7	8.8	4.4	.147	.736	-.395
86 11 15	1313.9	3668.5	-2307950.7	7.6	7.0	3.3	.088	.757	-.367
86 11 20	1322.9	3600.0	-2308506.7	7.9	7.2	3.5	.128	.726	-.379
86 11 25	1321.1	3546.7	-2309051.5	9.3	8.2	4.0	.099	.747	-.372
86 11 30	1348.8	3476.0	-2309957.6	7.2	6.6	3.1	.128	.757	-.331
86 12 5	1416.9	3411.0	-2310489.3	8.5	7.5	3.5	.197	.733	-.308
86 12 6	1354.8	3405.2	-2310632.9	8.4	6.8	3.6	-.007	.174	.354
86 12 9	1454.4	3357.3	-2311068.0	21.3	11.2	3.7	.773	.621	.101
86 12 10	1477.1	3348.3	-2311246.6	8.4	7.5	3.5	.186	.750	-.323
86 12 15	1494.0	3260.9	-2311866.4	8.2	7.4	3.6	.162	.750	-.331
86 12 20	1523.6	3220.0	-2312203.7	7.2	6.8	3.2	.104	.755	-.347
86 12 24	1556.6	3189.1	-2312626.2	8.8	8.4	4.0	.098	.744	-.381
86 12 30	1556.7	3107.9	-2313734.6	8.2	7.5	3.6	.125	.728	-.377

* Units are 0"0001 for X- and Y-pole and 0.00001 seconds for UT1.

Table 8
Nutation Adjustments from
Solution GLB121*

Date	Nutation in Longitude 0"001	Nutation in Obliquity 0"001
79 8 4	3.39 ±1.86	-1.89 ±.66
79 11 26	5.13 ±1.45	.88 ±.51
80 4 12	9.97 ±1.07	-2.28 ±.37
80 7 27	-1.51 ±.99	-.06 ±.30
80 7 28	3.92 ±1.11	.08 ±.34
80 9 27	3.11 ±1.03	1.51 ±.35
80 9 28	-.62 ±.98	-.46 ±.32
80 9 29	1.40 ±1.06	-1.18 ±.34
80 9 30	3.06 ±1.21	4.27 ±.43
80 10 1	-4.18 ±1.47	-.48 ±.45
80 10 2	3.32 ±1.80	-3.84 ±.61
80 10 3	-.99 ±1.33	-.01 ±.51
80 10 17	0.0	0.0 Reference Day
80 10 18	6.36 ±1.06	-1.03 ±.34
80 10 19	6.05 ±1.09	-.51 ±.35
80 10 20	.72 ±.99	.28 ±.28
80 10 21	2.86 ±.98	-.32 ±.28
80 10 22	3.06 ±1.17	-.17 ±.34
80 10 23	1.19 ±.93	.27 ±.25
80 11 4	-1.79 ±2.18	.22 ±.69
80 12 2	5.60 ±1.55	-1.48 ±.49
80 12 20	2.83 ±1.26	1.12 ±.42
81 1 8	4.13 ±1.91	1.06 ±.64
81 1 23	1.95 ±1.61	2.16 ±.54
81 2 13	3.51 ±1.91	1.61 ±.74
81 2 28	4.40 ±1.84	.82 ±.69
81 3 17	5.43 ±2.20	-.40 ±.84
81 5 14	5.73 ±2.92	-1.83 ±1.17
81 6 17	.37 ±1.46	-2.49 ±.49
81 6 25	2.76 ±4.15	-4.27 ±1.43
81 7 2	-.94 ±3.29	-5.19 ±1.46
81 7 9	-3.92 ±3.58	-2.62 ±1.11
81 7 16	-8.10 ±6.74	-16.03 ±6.32
81 7 23	.50 ±1.94	-.12 ±.67
81 7 30	-6.23 ±3.12	-2.51 ±1.03
81 8 6	-3.97 ±4.50	-2.21 ±1.59
81 8 27	-2.43 ±2.92	-3.30 ±.96
81 9 3	-3.69 ±3.91	-3.06 ±1.26
81 9 10	-2.76 ±3.01	-2.12 ±1.09
81 9 17	-11.81 ±3.10	-1.13 ±1.13
81 9 24	-3.01 ±3.68	-.34 ±1.30
81 10 1	-4.05 ±2.95	-2.68 ±1.44
81 10 16	-8.76 ±3.22	-3.00 ±1.07
81 10 22	-4.08 ±1.99	-1.10 ±.59

Date	Nutation in Longitude 0".001	Nutation in Obliquity 0".001
81 10 29	-5.40 ±2.48	.95 ±.85
81 11 5	9.84 ±3.45	2.17 ±1.42
81 11 11	1.19 ±2.10	1.09 ±.67
81 11 19	-.88 ±1.11	2.19 ±.35
81 11 20	-1.83 ±.97	2.12 ±.31
81 11 25	.82 ±2.55	2.14 ±.83
81 12 3	-3.30 ±3.64	.33 ±1.28
81 12 17	-.25 ±2.41	2.03 ±.81
81 12 23	-4.43 ±2.12	1.56 ±.95
81 12 30	4.90 ±1.90	1.67 ±.62
82 1 7	1.86 ±1.97	2.79 ±.67
82 1 14	2.94 ±2.78	4.43 ±.92
82 1 21	-1.36 ±1.96	1.26 ±.66
82 1 28	1.94 ±2.18	3.82 ±.87
82 2 2	.53 ±2.41	3.09 ±.82
82 2 11	.27 ±1.93	2.90 ±.67
82 2 18	-1.75 ±2.09	1.15 ±.71
82 2 25	-3.50 ±2.48	4.99 ±.94
82 3 4	-.87 ±2.31	1.82 ±.81
82 3 11	3.92 ±3.18	.21 ±1.30
82 3 18	.81 ±1.57	1.97 ±.48
82 3 25	.12 ±2.59	-.44 ±1.00
82 3 30	-2.74 ±2.44	3.06 ±.95
82 4 8	1.22 ±2.88	-1.42 ±1.22
82 4 14	4.23 ±3.72	-.25 ±1.36
82 4 20	-.98 ±2.39	-1.58 ±.70
82 4 27	16.80 ±4.21	-2.74 ±1.51
82 5 4	1.37 ±1.37	.09 ±.60
82 5 11	-8.26 ±2.70	-1.98 ±1.04
82 5 18	2.57 ±2.41	-1.87 ±.87
82 6 3	-3.63 ±2.16	.38 ±.81
82 6 8	-1.39 ±2.96	-2.96 ±1.15
82 6 17	-4.57 ±2.31	.02 ±.69
82 6 19	-2.89 ±1.02	-.28 ±.38
82 6 20	2.64 ±1.83	-1.12 ±.54
82 6 21	-5.17 ±1.24	-.93 ±.42
82 6 22	-1.99 ±1.82	-.65 ±.56
82 6 29	-.88 ±2.56	2.44 ±.87
82 7 7	-9.80 ±2.68	-1.30 ±.97
82 7 13	-5.50 ±3.69	-.22 ±1.37
82 7 20	.64 ±3.61	-1.69 ±1.31
82 7 27	-12.46 ±3.59	.24 ±1.31
82 8 5	-9.53 ±3.53	.06 ±1.16
82 8 10	-13.04 ±2.82	1.79 ±1.02
82 8 17	-11.10 ±0.50	-4.38 ±4.27
82 8 24	-16.04 ±5.96	3.08 ±1.47
82 8 31	-.12 ±1.77	-3.06 ±.87
82 9 8	-8.11 ±3.06	-.42 ±1.12

Date	Nutation in Longitude 0".001	Nutation in Obliquity 0".001
82 9 14	-4.86 ±1.80	-1.04 ±.75
82 9 21	-17.35 ±6.35	2.94 ±1.89
82 9 28	-6.03 ±2.31	.04 ±.96
82 10 5	-8.85 ±2.65	2.57 ±1.06
82 10 14	-3.27 ±2.18	3.19 ±.92
82 10 19	-5.12 ±1.19	2.57 ±.42
82 10 26	-1.98 ±2.18	2.77 ±.82
82 11 2	-2.29 ±2.28	2.02 ±.81
82 11 9	-6.02 ±2.18	4.76 ±.77
82 11 16	-2.43 ±2.22	1.33 ±.92
82 11 23	1.35 ±2.18	3.96 ±.78
82 11 30	-8.40 ±2.09	1.90 ±.77
82 12 7	2.50 ±2.58	4.51 ±.94
82 12 16	.84 ±1.29	4.05 ±.47
82 12 17	-1.20 ±.98	2.53 ±.34
82 12 21	-4.79 ±1.90	4.83 ±.67
82 12 28	-1.44 ±2.14	1.97 ±.91
83 1 4	-.11 ±1.59	5.27 ±.59
83 1 11	1.12 ±2.08	3.01 ±.80
83 1 18	.09 ±2.32	2.08 ±.83
83 1 25	-1.58 ±1.69	3.61 ±.63
83 2 1	.96 ±1.90	3.68 ±.69
83 2 8	-.10 ±1.48	2.51 ±.51
83 2 15	-.51 ±1.78	3.85 ±.66
83 3 1	2.60 ±1.53	2.16 ±.50
83 3 8	-1.72 ±1.47	1.24 ±.56
83 3 15	1.47 ±1.39	2.22 ±.55
83 3 22	.96 ±4.96	3.60 ±1.96
83 3 29	-1.60 ±2.37	1.84 ±.84
83 4 5	1.26 ±2.34	1.50 ±.88
83 4 12	2.04 ±1.98	1.43 ±.76
83 4 19	6.73 ±2.18	.30 ±.80
83 4 26	-.02 ±1.57	-.13 ±.56
83 5 3	3.09 ±2.03	-.72 ±.78
83 5 6	1.37 ±.83	.31 ±.28
83 5 10	5.30 ±1.68	-.15 ±.59
83 5 17	1.87 ±2.13	-3.57 ±1.16
83 5 24	-5.51 ±2.10	-.75 ±.68
83 6 1	2.99 ±2.87	-.82 ±1.02
83 6 7	-3.17 ±1.47	.48 ±.43
83 6 8	-25.38 ±0.22	-16.78 ±8.47
83 6 8	-3.71 ±1.88	.74 ±.63
83 6 10	-5.32 ±1.80	1.67 ±.69
83 6 14	3.35 ±1.74	-1.18 ±.78
83 6 21	-2.02 ±2.28	-.46 ±.83
83 6 29	-2.24 ±3.26	.18 ±1.14
83 7 6	-12.16 ±3.92	.02 ±1.41
83 7 12	-9.67 ±2.92	-2.13 ±1.00

Date	Nutation in Longitude 0".001	Nutation in Obliquity 0".001
83 7 26	-13.10 ±2.28	.67 ±.68
83 8 2	-26.30 ±3.86	1.46 ±1.32
83 8 9	-5.83 ±2.04	-.32 ±.67
83 8 16	-4.88 ±1.77	-1.43 ±.90
83 8 23	-8.27 ±2.91	.71 ±1.14
83 8 30	-6.91 ±3.15	-1.65 ±1.13
83 8 31	-9.23 ±1.88	.29 ±.65
83 9 3	-1.89 ±1.79	-.93 ±.94
83 9 8	-5.86 ±2.61	1.06 ±.98
83 9 13	-19.99 ±3.87	-.02 ±1.43
83 9 18	-7.38 ±2.74	1.22 ±1.05
83 9 23	-10.30 ±1.85	2.44 ±.67
83 9 24	-7.74 ±2.39	2.58 ±.70
83 9 28	-9.93 ±1.88	.61 ±.67
83 10 3	-1.46 ±2.29	.52 ±.97
83 10 8	-13.29 ±2.51	3.28 ±1.05
83 10 13	-1.26 ±1.58	1.04 ±.59
83 10 18	-9.42 ±7.81	2.10 ±1.60
83 10 23	-12.21 ±3.57	3.22 ±1.29
83 10 28	-2.18 ±1.18	.79 ±.43
83 10 29	-2.57 ±1.69	2.64 ±.53
83 11 2	-6.32 ±2.95	3.17 ±1.13
83 11 7	-7.21 ±2.27	2.97 ±.85
83 11 12	-11.71 ±2.58	2.02 ±.74
83 11 17	-5.01 ±1.52	3.14 ±.51
83 11 18	-7.57 ±1.53	4.37 ±.47
83 11 22	-3.85 ±2.71	2.79 ±.63
83 11 27	-.22 ±2.05	5.63 ±.77
83 12 2	-2.57 ±1.56	3.99 ±.51
83 12 7	-2.03 ±3.08	2.87 ±1.21
83 12 12	-.79 ±1.89	4.36 ±.71
83 12 17	-2.82 ±1.90	5.88 ±.72
83 12 22	.27 ±1.40	4.58 ±.51
83 12 23	3.65 ±1.30	3.81 ±.48
83 12 27	-.31 ±1.77	3.61 ±.67
84 1 1	.84 ±1.40	.80 ±.55
84 1 5	.96 ±1.33	5.09 ±.42
84 1 10	-.83 ±1.31	3.54 ±.46
84 1 15	-.78 ±1.58	5.37 ±.63
84 1 25	1.99 ±1.35	4.76 ±.57
84 1 25	.86 ±1.49	4.92 ±.47
84 1 30	-.54 ±1.84	4.90 ±.56
84 2 4	3.71 ±2.24	4.83 ±.74
84 2 9	-2.13 ±1.78	4.17 ±.77
84 2 14	2.03 ±1.95	4.17 ±.64
84 2 19	2.73 ±1.51	4.09 ±.59
84 2 24	-2.31 ±1.67	2.92 ±.48
84 2 25	1.28 ±1.16	4.17 ±.37

Date	Nutation in Longitude 0".001	Nutation in Obliquity 0".001
84 2 25	1.84 ±1.21	3.16 ±.44
84 2 29	.75 ±1.58	1.66 ±.46
84 3 5	4.70 ±1.41	3.72 ±.50
84 3 10	1.73 ±1.60	3.13 ±.64
84 3 15	-.15 ±1.33	2.13 ±.44
84 3 20	1.14 ±1.25	.89 ±.42
84 3 26	-.72 ±1.20	1.30 ±.44
84 3 31	3.24 ±2.96	1.29 ±1.50
84 4 4	-2.73 ±1.49	2.21 ±.43
84 4 9	5.59 ±1.19	1.80 ±.53
84 4 14	7.55 ±1.34	.88 ±.40
84 4 19	3.13 ±1.01	1.57 ±.37
84 4 20	3.33 ±1.16	.90 ±.37
84 4 24	8.81 ±1.62	-.20 ±.44
84 4 27	2.72 ±1.17	1.27 ±.37
84 4 29	6.45 ±1.28	1.15 ±.41
84 5 4	6.47 ±1.97	1.74 ±.61
84 5 9	.12 ±1.25	.52 ±.59
84 5 14	2.51 ±1.53	.97 ±.45
84 5 19	3.18 ±1.23	1.04 ±.38
84 5 20	1.06 ±1.01	.53 ±.39
84 5 24	.94 ±1.38	-.07 ±.55
84 5 29	2.20 ±1.10	.40 ±.37
84 6 3	-.58 ±1.22	1.53 ±.43
84 6 8	-2.18 ±1.65	-.42 ±.57
84 6 13	-1.55 ±1.17	.70 ±.43
84 6 18	.62 ±1.12	-.07 ±.39
84 6 23	-3.55 ±1.56	1.15 ±.54
84 6 28	-2.73 ±1.32	.20 ±.48
84 7 3	-.44 ±1.07	.75 ±.44
84 7 8	-6.35 ±1.23	.68 ±.53
84 7 8	-3.88 ±.84	1.38 ±.27
84 7 13	-4.36 ±1.25	-.24 ±.48
84 7 18	-6.90 ±1.12	1.34 ±.49
84 7 22	-8.18 ±.90	.16 ±.30
84 7 23	-9.32 ±.83	2.44 ±.27
84 7 23	-6.88 ±2.23	-.89 ±.94
84 7 28	-1.19 ±2.63	.56 ±1.06
84 7 29	-7.08 ±1.52	-.08 ±.53
84 7 30	-4.19 ±.98	.24 ±.30
84 8 2	-5.08 ±1.37	.71 ±.48
84 8 5	-4.34 ±.94	1.05 ±.29
84 8 6	-12.09 ±.99	1.17 ±.32
84 8 7	-8.23 ±1.40	1.41 ±.47
84 8 12	-7.60 ±1.32	1.17 ±.46
84 8 17	-7.96 ±1.38	.91 ±.52
84 8 22	-5.84 ±1.36	.80 ±.44
84 8 25	-5.51 ±.96	.68 ±.29

Date			Nutation in Longitude 0".001		Nutation in Obliquity 0".001	
84	8	27	-9.88	±1.60	1.83	±.48
84	8	29	-11.28	±1.02	.58	±.31
84	8	31	-11.38	±.84	1.52	±.26
84	9	1	-13.17	±1.45	1.07	±.48
84	9	3	-11.24	±.85	.57	±.26
84	9	6	-8.71	±1.25	.86	±.41
84	9	11	-9.24	±1.22	1.60	±.41
84	9	16	-11.02	±1.49	2.35	±.50
84	9	21	-5.54	±1.64	1.46	±.68
84	9	26	-9.62	±1.23	2.01	±.40
84	10	1	-6.21	±1.15	2.04	±.35
84	10	6	-8.91	±1.34	2.41	±.48
84	10	11	-6.45	±1.34	2.26	±.40
84	10	16	-8.24	±1.44	1.66	±.45
84	10	21	-5.82	±1.31	2.92	±.43
84	10	26	-10.34	±1.28	2.60	±.34
84	10	27	-13.13	±2.04	1.13	±.78
84	10	31	-5.91	±1.29	2.67	±.44
84	11	5	-6.92	±1.54	3.33	±.51
84	11	10	-4.38	±1.19	2.49	±.42
84	11	15	-4.29	±1.36	2.84	±.49
84	11	16	-3.40	±1.35	2.97	±.47
84	11	20	-4.16	±1.24	3.50	±.41
84	11	25	-5.99	±1.27	3.47	±.41
84	11	30	-2.49	±1.22	5.19	±.43
84	12	5	-6.07	±1.31	4.73	±.44
84	12	10	-6.14	±1.36	2.84	±.44
84	12	15	-4.10	±1.44	4.18	±.46
84	12	20	-4.31	±1.53	3.97	±.57
84	12	24	-3.52	±1.19	3.54	±.43
84	12	30	-2.48	±1.36	4.57	±.53
85	1	4	-.82	±1.01	4.03	±.31
85	1	9	.08	±.95	4.32	±.36
85	1	14	-3.79	±1.13	5.23	±.52
85	1	19	-3.60	±.95	4.54	±.38
85	1	24	-1.85	±.93	5.15	±.35
85	1	25	-2.21	±1.32	5.55	±.42
85	1	29	-1.07	±.96	4.18	±.33
85	2	3	-.66	±.90	3.98	±.37
85	2	8	-1.75	±1.00	4.15	±.33
85	2	13	-2.33	±1.03	3.47	±.36
85	2	18	1.22	±1.03	4.23	±.37
85	2	23	.17	±1.05	4.01	±.36
85	2	28	-.78	±.85	2.95	±.27
85	3	5	-.74	±1.06	2.56	±.35
85	3	6	1.05	±.80	2.95	±.24
85	3	10	2.56	±1.66	2.43	±.57
85	3	15	2.15	±1.03	3.23	±.35

Date			Nutation in Longitude 0".001		Nutation in Obliquity 0".001	
85	3	20	1.44	±1.14	2.42	±.40
85	3	25	-.01	±.89	1.75	±.30
85	3	30	3.31	±1.01	1.40	±.37
85	4	4	1.94	±.98	1.61	±.31
85	4	9	1.93	±1.06	.50	±.35
85	4	14	2.74	±.97	1.55	±.34
85	4	19	2.27	±1.00	1.45	±.33
85	4	24	1.34	±.88	1.37	±.28
85	4	25	8.53	±1.24	.90	±.44
85	4	29	1.04	±1.02	-.03	±.36
85	5	4	2.86	±1.09	1.03	±.41
85	5	8	-1.03	±.96	.10	±.29
85	5	9	2.69	±1.04	.89	±.34
85	5	10	1.59	±.87	.28	±.26
85	5	14	2.45	±1.23	1.34	±.36
85	5	16	.12	±.74	1.60	±.23
85	5	19	.79	±.97	.17	±.35
85	5	24	1.15	±1.14	.69	±.37
85	5	29	2.52	±1.02	.46	±.34
85	6	3	1.24	±1.16	.83	±.37
85	6	8	-.24	±.88	.66	±.30
85	6	13	-1.57	±.94	.83	±.29
85	6	18	-1.39	±.94	-.41	±.30
85	6	19	-2.34	±.94	-.63	±.36
85	6	20	-2.17	±.81	.15	±.24
85	6	23	-.01	±.96	1.75	±.36
85	6	28	-3.87	±1.03	1.12	±.33
85	7	3	-1.47	±.99	.81	±.33
85	7	7	-2.63	±.79	1.80	±.25
85	7	8	-2.11	±1.08	-.33	±.37
85	7	13	-6.48	±1.12	1.12	±.42
85	7	18	-3.06	±1.13	.31	±.36
85	7	21	-3.31	±.78	.17	±.25
85	7	23	-3.20	±1.13	-.49	±.39
85	7	28	-8.61	±.80	.65	±.25
85	7	28	-7.73	±1.13	.47	±.40
85	8	2	-5.34	±1.13	.85	±.37
85	8	7	-10.21	±1.32	-.02	±.50
85	8	11	-6.55	±.79	1.37	±.25
85	8	12	-8.19	±1.32	.77	±.47
85	8	17	-5.70	±1.11	.66	±.37
85	8	22	-7.55	±1.22	.31	±.39
85	8	25	-9.15	±.91	.37	±.28
85	8	27	-6.33	±1.08	1.06	±.36
85	8	29	-14.15	±2.27	1.93	±.77
85	9	1	-3.83	±1.30	1.75	±.44
85	9	5	-8.17	±.92	1.77	±.28
85	9	6	-11.03	±1.15	1.69	±.38

Date	Nutation in Longitude 0".001	Nutation in Obliquity 0".001
85 9 11	-5.46 ±1.13	1.14 ±.37
85 9 12	-5.79 ±.91	1.94 ±.32
85 9 16	-9.66 ±1.14	.90 ±.38
85 9 21	-10.76 ±1.09	1.58 ±.34
85 9 26	-6.92 ±1.07	1.34 ±.35
85 10 1	-12.57 ±.78	2.40 ±.24
85 10 1	-9.75 ±1.13	2.03 ±.38
85 10 6	-5.78 ±1.08	1.42 ±.35
85 10 11	-5.43 ±1.09	1.73 ±.37
85 10 16	-8.39 ±1.15	.91 ±.39
85 10 21	-4.74 ±1.03	.26 ±.30
85 10 26	-5.56 ±.88	1.94 ±.25
85 10 30	-8.76 ±.76	3.45 ±.23
85 10 31	-3.70 ±1.34	.77 ±.39
85 11 5	-6.44 ±1.42	3.20 ±.47
85 11 10	-5.38 ±1.02	2.79 ±.32
85 11 15	-6.12 ±1.08	2.27 ±.34
85 11 20	-4.18 ±.95	3.64 ±.34
85 11 21	-3.40 ±.97	2.59 ±.32
85 11 22	-5.12 ±.78	3.78 ±.23
85 11 25	-5.41 ±1.00	3.39 ±.34
85 11 30	-3.75 ±1.11	3.91 ±.34
85 12 5	-1.55 ±1.03	3.45 ±.33
85 12 10	-3.01 ±.87	3.47 ±.30
85 12 11	-1.84 ±1.08	4.90 ±.35
85 12 15	-2.72 ±1.00	3.92 ±.32
85 12 20	-4.28 ±.92	4.60 ±.30
85 12 24	-4.55 ±1.85	1.51 ±1.36
85 12 30	-2.04 ±1.03	4.38 ±.34
86 1 4	-3.26 ±.93	4.52 ±.33
86 1 9	-2.42 ±1.03	3.20 ±.42
86 1 10	-1.40 ±.94	5.79 ±.31
86 1 14	-1.27 ±.96	5.02 ±.32
86 1 15	-2.44 ±.91	4.78 ±.29
86 1 16	-1.27 ±.88	5.09 ±.29
86 1 19	-5.31 ±1.15	4.39 ±.35
86 1 20	-2.40 ±.84	5.96 ±.28
86 1 24	-2.77 ±1.04	4.33 ±.34
86 1 29	-.48 ±.97	3.93 ±.35
86 1 30	-2.41 ±.78	4.89 ±.24
86 2 3	-.68 ±.91	3.66 ±.31
86 2 4	-1.07 ±.85	6.14 ±.28
86 2 8	.35 ±.95	4.06 ±.30
86 2 12	.08 ±1.14	5.04 ±.35
86 2 13	-3.76 ±1.04	4.04 ±.38
86 2 18	-3.77 ±1.12	4.16 ±.35
86 2 23	-.90 ±.92	3.16 ±.33
86 2 28	-3.54 ±1.01	3.14 ±.33

Date	Nutation in Longitude 0".001	Nutation in Obliquity 0".001
86 3 5	-1.39 ±1.01	3.37 ±.40
86 3 10	-.98 ±1.03	3.73 ±.36
86 3 14	-.87 ±.84	3.42 ±.28
86 3 15	-3.96 ±1.17	2.45 ±.40
86 3 20	-.88 ±1.05	2.09 ±.35
86 3 21	-1.01 ±1.12	3.24 ±.35
86 3 25	2.37 ±1.06	2.73 ±.37
86 3 30	-1.96 ±1.16	2.93 ±.39
86 4 2	.26 ±.94	.76 ±.28
86 4 4	1.64 ±.95	1.99 ±.32
86 4 5	1.17 ±.82	2.61 ±.25
86 4 9	-.89 ±.79	3.33 ±.24
86 4 9	1.83 ±.97	1.28 ±.33
86 4 14	3.24 ±1.13	.68 ±.37
86 4 19	.36 ±1.11	.56 ±.38
86 4 24	.63 ±1.16	.93 ±.42
86 4 29	2.22 ±1.05	.76 ±.37
86 5 3	2.81 ±.83	1.30 ±.26
86 5 4	.88 ±2.02	1.17 ±.92
86 5 9	1.45 ±1.09	.51 ±.37
86 5 14	4.14 ±.93	-.42 ±.29
86 5 15	.51 ±.86	1.28 ±.26
86 5 18	4.38 ±1.09	-.03 ±.39
86 5 24	.12 ±1.23	1.54 ±.40
86 5 29	3.29 ±.96	-.01 ±.32
86 6 3	2.07 ±1.07	1.13 ±.39
86 6 8	.33 ±1.10	-.23 ±.38
86 6 13	.41 ±1.20	.15 ±.40
86 6 14	-4.88 ±.84	.56 ±.30
86 6 17	-1.63 ±1.12	.92 ±.36
86 6 18	-2.89 ±1.06	.58 ±.37
86 6 19	-5.31 ±.82	1.64 ±.25
86 6 23	-.83 ±1.12	1.04 ±.38
86 6 28	-3.49 ±1.26	2.06 ±.40
86 7 3	-4.97 ±1.02	.98 ±.34
86 7 6	-5.64 ±.80	1.17 ±.26
86 7 8	-3.27 ±1.35	.05 ±.49
86 7 13	-4.73 ±.79	1.64 ±.25
86 7 13	-4.85 ±1.10	1.05 ±.36
86 7 18	-5.94 ±1.10	-.01 ±.39
86 7 23	-3.38 ±1.23	.59 ±.53
86 7 27	-7.94 ±.76	1.67 ±.23
86 7 28	-7.74 ±1.07	.57 ±.40
86 8 2	-3.35 ±1.17	.87 ±.42
86 8 3	-10.88 ±.75	.57 ±.22
86 8 7	-6.95 ±1.19	.27 ±.49
86 8 12	-9.12 ±1.32	.99 ±.52
86 8 17	-7.26 ±1.21	.54 ±.44

Date	Nutation in Longitude 0".001	Nutation in Obliquity 0".001
86 8 22	-7.26 ±1.25	2.23 ±.47
86 8 26	-11.23 ±.94	.56 ±.34
86 8 27	-8.79 ±1.36	.77 ±.52
86 9 1	-6.64 ±1.39	1.53 ±.48
86 9 6	-8.06 ±1.32	1.18 ±.63
86 9 6	-10.87 ±.88	1.70 ±.27
86 9 11	-9.75 ±1.19	1.28 ±.41
86 9 16	-5.71 ±1.06	1.08 ±.38
86 9 17	-9.74 ±.87	2.00 ±.26
86 9 21	-9.49 ±1.21	1.41 ±.40
86 9 26	-10.06 ±1.24	1.36 ±.43
86 10 1	-6.23 ±1.27	.99 ±.47
86 10 6	-8.37 ±1.13	2.77 ±.35
86 10 11	-6.36 ±1.08	1.59 ±.39
86 10 16	-7.42 ±1.06	2.38 ±.36
86 10 17	-9.69 ±.75	3.24 ±.22
86 10 21	-8.44 ±1.26	1.43 ±.40
86 10 24	-10.48 ±.78	2.70 ±.24
86 10 26	-6.25 ±1.09	2.15 ±.37
86 10 31	-7.52 ±1.03	3.81 ±.41
86 11 1	-6.48 ±.78	4.01 ±.24
86 11 4	-7.03 ±.97	1.95 ±.33
86 11 5	-4.74 ±.94	1.26 ±.28
86 11 6	-8.91 ±.75	2.50 ±.23
86 11 8	-5.48 ±.83	2.40 ±.27
86 11 10	-2.85 ±1.31	3.75 ±.40
86 11 15	-6.24 ±1.00	2.42 ±.33
86 11 20	-6.44 ±1.07	2.42 ±.33
86 11 25	.95 ±1.15	3.48 ±.41
86 11 30	-4.70 ±.95	3.00 ±.30
86 12 5	-3.73 ±1.05	3.66 ±.38
86 12 6	-6.98 ±.86	3.29 ±.27
86 12 9	-3.43 ±.91	3.17 ±.28
86 12 10	-2.74 ±.99	3.77 ±.32
86 12 15	-5.03 ±1.01	3.01 ±.34
86 12 20	-.35 ±.96	3.04 ±.33
86 12 24	.26 ±1.13	5.09 ±.43
86 12 30	-.88 ±.94	1.95 ±.33

* Adjustments to nutation in longitude and obliquity are corrections to IAU 1980 nutation model, which is the MERIT standard.

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15. Supplementary Notes

The contents are available in machine-readable form from the Crustal Dynamics Project Data Information System (CDP-DIS).

16. Abstract

The Goddard VLBI group reports the results of analyzing 466 Mark III data sets acquired from fixed observatories through the end of 1986 and available to the Crustal Dynamics Project. All full-day data from POLARIS/IRIS are included. The mobile VLBI sites at Platteville, Colorado; Penticton, British Columbia; and Yellowknife, Northwest Territories are also included since these occupations bear on the study of plate stability. Two large solutions, GLB121 and GLB122, were used to obtain earth rotation parameters and baseline evolutions, respectively. Radio source positions were estimated globally while nutation offsets were estimated from each data set. The results include 25 sites and 108 baselines.

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