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Technical Memorandum 33-585

Volume II, Addendum 1

Mariner Mars 1971 Television Picture Catalog

Sequence Design and Picture Coverage

P. E. Koskela

JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY
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July 1, 1973

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National Aeronautics and Space Administration

PREFACE

The work described in this report was performed by the Mission Analysis Division of the Jet Propulsion Laboratory.

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ABSTRACT

This addendum to the Mariner Mars 1971 Television Picture Catalog, Volume II, contains data for the Mariner 9 TV pictures taken after Rev 262. Some of the data presented in Volume II is brought up to date. The new provisional mapping pole is discussed, and tables provide the latitude and longitude with respect to the new pole, prime meridian, and rotation rate for the centerpoints of all the Mariner 9 TV pictures.

SECTION I
INTRODUCTION

This addendum to the Mariner Mars 1971 Television Picture Catalog, Volume II, Sequence Design and Picture Coverage, provides tables, plots and data for the post solar occultation portion of the extended mission. Data from Rev 416 to the final picture received from Mariner 9, taken on Rev 676, are included. No TV pictures were taken during Revs 263 to 415.

A brief discussion of the objectives of the Mariner 9 extended mission is given in Section II. Descriptive Sequence Summary Tables, along with orthographic and/or mercator plots and numerical data for all the extended mission TV pictures are presented also.

In addition to providing a record of what took place on this final portion of the mission, some of the data contained in Volume II is updated in Section III. These include updates to the TV picture index. A list of pictures that have been deleted from or added to the SEDR files since the publication of Volume II is also provided. The reader can use this list to up-date the data in Volume II, thereby obtaining a final record of all the Mariner 9 TV picture data.

All plots and data contained in Volume II (and Section II of this addendum) are based upon the standard areocentric coordinate system discussed in Reference 1. Section IV contains a discussion and formulas for adjusting latitudes and longitudes from the former pole to a new provisional mapping pole. Tables provide the latitude and longitude, with respect to the new pole, prime meridian, and rotation rate, for the center points for all the Mariner 9 TV pictures.

The mission of Mariner 9 came to an end on 27 October, 1972 as it was attempting a maneuver to get into position to play back data taken on Revs 695 and 696.

SECTION II
MARINER 9 EXTENDED MISSION

The Mariner 9 extended mission provided TV science data on selected revolutions from Rev 416 (8 June, 1972) to Rev 676 (16 October, 1972). No TV science data were taken during Revs 263 to 415 due to operational considerations and solar occultation of the spacecraft, i.e., Mariner 9 passed through the shadow of Mars on each rev from 2 April to 4 June, 1972. Since this reduced the amount of electrical power provided by the solar panels, no TV science was taken until the orbit-Mars-Sun geometry was again such that the spacecraft did not pass through the shadow of Mars.

The post-Sun occultation extended mission had to cope with the consequences of a diminishing supply of attitude control gas and the fact that it was necessary to maneuver the spacecraft off Sun-Canopus lock to return science data to the Earth. The increased rate of use of attitude control gas during each platform slew and each playback maneuver caused optimization problems in both mission planning and science sequence design. Additionally, the changing Sun-Mars-Canopus geometry made scan platform limits which were designed for the original 90 day standard mission no longer ideal for planet viewing. On some revs the stars Arcturus and Vega were used rather than Canopus for celestial reference during data-taking. This provided improved viewing of the planet near periapsis.

A. POST-SUN OCCULTATION MISSION DESCRIPTION

The primary objectives of the TV science during the post-Sun occultation period included:

- Monitoring the dynamic state of Mars; selected variable features sites were viewed repeatedly.
- Systematically mapping the region from 40°N latitude to the North Pole, a region which was previously obscured by the North Polar Hood; this completed the mapping of the entire planet.
- Photographs of about 25 proposed landing sites for the Viking Landers in 1976.
- Although it was not a part of the TV science, a general relativity experiment was performed during the weeks before and after superior conjunction of Mars (Earth and Mars on opposite sides of the Sun) on 7 September, 1972.

Initially, TV pictures during the extended mission were taken on a weekly cycle. The cycle began the first week in June, 1972 and continued for nine consecutive weeks. Each weekly cycle began with a CC&S update on Wednesday for a zenith/nadir data taking pair on Thursday/Friday. The zenith revolution on Friday was used to play the tape recorder data back to Earth. In order for the spacecraft to perform this playback, it had to execute a High Gain Antenna Maneuver (HGAM) prior to the tape playback in order to optimally point the HGA toward the Earth. After all data were returned, the spacecraft was reoriented to acquire celestial reference. The entire sequence was repeated for the next zenith/nadir pair in the same week beginning with a smaller CC&S update on Saturday and ending with a HGAM on Monday.

The structure of individual data-taking links remained unchanged during the week (2 zenith revs and 2 nadir revs). Even though the order of the links remained the same, the links were allowed to move relative to periapsis from one zenith (or nadir) revolution to the next data-taking revolution in the same week.

Operations continued at the rate of two CC&S updates, two structurally similar zenith/nadir data taking pair, and two HGAM's each week through the first week in August, 1972. From this point until the end of the mission, each week's TV sequences were tailored to suit specific requests.

Three different stars were used for roll axis reference during the extended mission. Data taking began after solar occultation with the star Arcturus as the roll reference. This

continued until late June, 1972 (Revs 416-459). By using Arcturus, the clock angle constraints were eased somewhat when viewing Mars near periapsis. The star Canopus, which had been the primary roll reference star for the mission, was used for data taking in July (Revs 473-533). The star Vega was used after superior conjunction in September (Revs 667-676) in order to again optimize viewing geometry near periapsis.

B. SEQUENCE SUMMARIES AND TV PICTURE COVERAGE AND DATA

As in Volume II, which provides data for the TV pictures taken during the first 262 Revs, orthographic projections and mercator maps are provided in this addendum for each TV picture taken during the extended mission. These plots and data for the centers of the pictures are presented on facing pages for each Rev in Section V. The headings on the tables of data are the same as in Volume II (see pages 2-4 and 2-5 in Volume II for detailed descriptions of column headings). The data is based upon the same definitions of the Mars pole and prime meridian as were used in Volume II, i.e., no adjustments for the new pole direction, prime meridian, and rotation rate. See Section IV for a description of the Tables listing the latitude and longitude of the center points of all Mariner 9 pictures as referred to both the former and the new coordinate system.

The fold-out Tables in Section V provide summaries of the extended mission TV sequences. The format of these sequence summary sheets has been changed somewhat from those presented in Volume II, since the sequences did not lend themselves as readily to systematic presentation. Table 5-1 on page 5-51 describes the sequences taken on Revs 416 to 451; Table 5-2 on page 5-53 presents the sequences from Revs 458 to 676, the last rev from which TV data were received. A key to the format of the tables is presented on each foldout sheet. The reference star used is indicated at the column heading, just below the Rev number. All TV pictures in Volume II used Canopus as the reference star.

SECTION III
UP-DATES TO DATA IN VOLUME II

Some of the tables and data presented in Volume II have been revised so as to include data for pictures taken during the extended mission.

The TV picture index of Volume II has been brought up to date. It now includes every picture for the entire mission, as contained in the SEDR files as of 23 February, 1973. An explanation of this index and its use is given on page 2-3 in Volume II. The index is given in Section VI in its entirety, rather than for the extended mission only, in order to save the reader the inconvenience of using both Volume II and the Addendum to check the same sector. Similarly, the Index Map and Table of Surface Feature Locations are repeated as Figure 6-1 and Table 6-1, respectively, as a convenience to the user. Table 6-2 contains the complete TV picture index.

The calendar date vs. day number table has been extended through October, 1972 in Table 6-3, to aid in the use of tabular data for the extended mission.

Changes that have been made to the SEDR data files since the date upon which the Volume II data was based (21 August, 1972) are noted in Table 6-4. This list contains the Rev number and DAS number for the pictures that have since been deleted from, or added to, the SEDR files. Pictures that have been deleted from the files can simply be lined out in Volume II. Data and plots for pictures that have been added to the files, and were not plotted in Volume II, are given in Figure 6-2. Plots and data are given in Volume II for all pictures considered deleted at that time, but which have since been restored to the SEDR files. It cannot be said with absolute certainty that there will be no further changes to the SEDR data. However, changes after this date (23 February, 1973) will be minimal.

Note that Table 6-4 includes the DAS reference times for 11 pictures from POS 1. These pictures do exist, but are not included in the SEDR files because the associated telemetry data are not available.

SECTION IV

LATITUDE AND LONGITUDE CORRECTIONS FOR NEW MARS COORDINATE SYSTEM

The Mariner 9 mission was conducted using the definition of the Mars pole location, rotation rate, and prime meridian from Reference 1. The computation of instrument footprints in terms of latitude and west longitude are dependent on the pole, rotation rate, and prime meridian definitions. All plots and data contained in the Mariner Mars 1971 Television Picture Catalog, Volume II, and the plots and data described in Subsection IIB of this Addendum, are based upon the standard reference system discussed in Reference 1.

As a result of data obtained during the Mariner 9 mission and recent satellite data, the Mariner 9 Geodesy/Cartography Group of the Mariner 9 TV experiment team adopted a new provisional coordinate system for preliminary mapping work (Reference 2). The following Subsections A, B, C define the new pole location, provide differential correction formulas to adjust latitudes and longitudes from the former pole to the new pole, and give tables of correction coefficients for use with the Mariner 9 data, respectively. A new prime meridian and rotation rate are defined in Subsection D. Tables described in Subsection E provide the latitude and longitude with respect to the new pole, prime meridian, and rotation rate for the center points for all the Mariner 9 TV pictures.

A. NEW MARS POLE

From Reference 2, and computing rates as indicated in Reference 1, the new pole and associated angles are (notation from Reference 1; all angular quantities are given in degrees):

$$\alpha_{50} = 317.32 - 0.1011\ T$$

$$\delta_{50} = 52.68 - 0.0570\ T$$

$$\Delta_{50} = 42.93538 - 0.09040\ T - 0.00010\ T^2$$

$$I = 25.19969 + 0.01219\ T + 0.00006\ T^2$$

where α_{50}, δ_{50} are the right ascension and declination of Mars mean north pole with respect to the mean equinox and equator of 1950.0; Δ_{50} is the angle along the equator of Mars, measured from the ascending node on the mean 1950.0 Earth equator to the autumnal equinox; I is the obliquity of Mars; and T is measured in Julian centuries from January 1.0, 1950.

Using the standard definition for the prime meridian of Mars and applying the formulas from page 334 of Reference 3, the new pole gives for the coordinates of Earth on JD 2418322.0:

$$D_E = 7.758$$

$$A_E = 161.100$$

and therefore the Mars hour angle of the equinox is

$$V = 149.56930 + 350.891962\ (JD\text{-}2418322.0)$$

or, in the system of Reference 1

$$V = 148.766801 + 350.891962\ d$$

where d is the number of days since Jan. 1.0, 1950.

A new convention for determining the Mars prime meridian has been adopted in Reference 2 and is discussed in Subsection IVD.

B. CORRECTION FORMULAS FOR NEW POLE

Figure 6-3 shows the geometry of the two Mars poles, P_0 and P_1, with respect to one another and the Earth mean equator of 1950.0. The geometry is similar to that used to describe the precession of Earth's equator. In a manner

similar to that on pp. 29-31 of Reference 3, (except that here ζ_o and z are not small angles):

$$\theta = 0.43123 - 0.00005\ T$$

$$\zeta_o = 49.04723 + 0.08962\ T$$

$$z = 49.41879 + 0.08814\ T.$$

The coordinates of a point, S, are ϕ_o, ℓ_o with respect to the former pole, and ϕ_1, ℓ_1 with respect to the new pole. From the triangle P_oP_1S (similar to the equations on p. 31 of Reference 3)

$$\sin \phi_1 = \cos\theta \sin \phi_o + \sin\theta \cos \phi_o \cos (\ell_o + \zeta_o)$$

$$\cos \phi_1 \sin (\ell_1 + z) = \cos \phi_o \sin (\ell_o + \zeta_o)$$

$$\cos \phi_1 \cos (\ell_1 + z) = \cos\theta \cos \phi_o \cos (\ell_o + \zeta_o) - \sin\theta \sin \phi_o.$$

The coordinate ϕ is simply the latitude of S. However, the coordinate ℓ is the angle from the ascending node of the Mars equator on the Earth mean equator of 1950.0, and is not immediately available. It is related to longitude, λ, by

$$\ell = \Delta_{50} + 180^\circ + V \pm \lambda$$

where the $\pm$ is for longitude positive East or West, respectively.

For the West longitude used for Mariner 9, the new longitude for the new pole is:

$$\lambda_1 = \lambda_o - (\ell_1 - \ell_o) + \left[\Delta_{50}^{(1)} - \Delta_{50}^{(0)}\right] + (V_1 - V_o)$$

or, for East longitude

$$\lambda_1 = \lambda_o + (\ell_1 - \ell_o) - \left[\Delta_{50}^{(1)} - \Delta_{50}^{(0)}\right] - (V_1 - V_o)$$

where, from Subsection IVA and Reference 1, and for the *standard* longitude convention

$$\Delta_{50}^{(1)} - \Delta_{50}^{(0)} = -0.40988 + 0.00141\ T$$

$$V_1 - V_o = 0.09430$$

Note that the quantities $\Delta_{50}^{(0)}$ and V_o are referred to the former pole; $\Delta_{50}^{(1)}$ and V_1 are referred to the new pole.

C. CORRECTION TABLES FOR MARINER 9 DATA FOR NEW POLE

The angles θ, ζ_o, z and $\left[\Delta_{50}^{(1)} - \Delta_{50}^{(0)}\right]$ are slowly varying, and for use with Mariner 9 data, correction coefficients have been prepared using constant values for the epoch January 1.0, 1972, E. T. (JED 2441317.5). Also, values of the quantity $\left[\Delta_{50}^{(0)} + 180 + V_o\right]$ have been tabulated every 12 hours during the Mariner 9 time period to save the analyst from tedious reduction of large angles down to modulo 360.

Table 6-5 gives values of $\left[\Delta_{50}^{(0)} + 180^\circ + V_o\right]$ for every 12 hours GMT. (A value of 42.2 sec was used for ET-UTC). The entries span the time period from November 1, 1971 to October 31, 1972. For the time associated with any given measurement, Table 6-5 can be readily interpolated between two entries, using the rates:

14.62050 deg/hr

0.243675 deg/min

0.004061 deg/sec

for the rotation of Mars.

The West longitude, λ_o, is now *subtracted* from the value obtained from Table 6-4, to give ℓ_o, and then used with the latitude, ϕ_o, to enter Tables 6-6 to 6-8.

Table 6-6 gives differential corrections for latitude and West longitude $\left(\frac{\Delta\phi}{\Delta\lambda}\right)$ for every ten degrees of ϕ_o and ℓ_o.

The corrections change rapidly near the pole and values are given every degree between latitudes from $\pm 80^\circ$ to $\pm 89^\circ$ in Tables 6-7 and 6-8. At the poles, $\phi_o = \pm 90^\circ$. For all longitudes, the latitude corrections are:

$$\Delta\phi = \mp 0.431.$$

For longitude, the values at $\phi_o = \pm 90^\circ$ are (note that this is *not* a $\Delta\lambda$):

$$\ell_1 = \begin{cases} 180^\circ - z = 130.562 \\ -z = -49.438 \end{cases}$$

respectively. To obtain West longitude,

$$\lambda_1 = \left[\Delta_{50}^{(1)} + 180 + V_1\right] - \ell_1$$

where

$$\left[\Delta_{50}^{(1)} + 180 + V_1\right]$$

must be computed from expressions in Subsection IVA and *not* from Table 6-5.

EXAMPLES

1. Time of observation: December 19, 1971, 12^h GMT

   Latitude: $20.^\circ000$

   West Longitude: $12.^\circ934$

   From Table 6-5, ℓ_o = $202.^\circ934 - 12.^\circ934$

   = $190.^\circ000$

   From Table 6-6, $\Delta\phi$ = $-0.^\circ222$

   $\Delta\lambda$ = $+0.^\circ190$

   New latitude = $20.^\circ000 - 0.^\circ222 = 19.^\circ778$

   New West longitude = $12.^\circ934 + 0.^\circ190 = 13.^\circ124$

2. Time of observation: January 15, 1972, $02^h11^m10^s$ GMT

   Latitude: $7.^\circ635$

   West Longitude: $149.^\circ144$

   From Table 6-5, ℓ_o = $141.^\circ571 + 2 \times 14.^\circ62050$

   $+ 11 \times 0.^\circ243675$

   $+ 10 \times 0.^\circ004061$

   $-149.^\circ144$

   = $24.^\circ389$

   From Table 6-6, $\Delta\phi$ = $+0.^\circ122$

   $\Delta\lambda$ = $0.^\circ000$

Example 2 is interesting because the values of ϕ_o and ℓ_o correspond to the inertial direction of Earth on January 15.0, 1909 GMAT, (JD 2418322.0), which defines the Mars longitudes, and therefore the longitude correction is zero for this point.

Note that Tables 6-6, 6-7 and 6-8, and the two preceding examples do not take into consideration the new Mars prime meridian and the new rotation rate.

D. NEW MARS PRIME MERIDIAN AND ROTATION RATE

Because of the detail now available in Mars maps, it has been decided (Reference 2) to redefine the Mars prime meridian to pass through a small prominent crater called Airy 0. The longitude of this feature is set to zero and is invariant. The analytic treatment in Subsection IVB and the use of Tables 6-6 to 6-8 must be modified to accommodate the new convention. In the new pole system with the standard longitude convention, the west longitude of Airy 0 was $0.^\circ178$ W. This results in a new expression to replace that in Subsection IVA:

$$V_1 = 148.588441 + 350.891962\ d$$

and similarly in Subsection IVB:

$$V_1 - V_0 = -0.08406.$$

All $\Delta\lambda$ entries in Tables 6-6 to 6-8 should be *reduced* by $0.^\circ178$ in order to use the Airy 0 convention.

An additional change in Reference 2 is the adoption of a new rotation rate for Mars. In order to preserve the 1972 longitudes when propagated forward from 1950 with the new rate, a new expression for V is needed:

$$V_1 = 148.146516 + 350.892017\ d$$

and

$$V_1 - V_0 = -0.525985 + 0.000055\ d$$

or

$$V_1 - V_0 = -0.08406 + 0.000055\ d_{72}$$

d_{72} = days from Jan. 1.0, 1972.

The $\Delta\lambda$ entries in Tables 6-6 to 6-8 should therefore be *reduced* by the nonconstant amount

$$[0.17836 - 0.000055\ d_{72}].$$

However, use of the constant correction $0.^\circ178$ will produce only errors of $0.^\circ02$ per year.

Because of uncertainties in the knowledge of the pole and the spacecraft position and camera angles, the value of longitude computed for Airy 0 will not necessarily be zero in *other* TV frames either in Mariner 9 or other projects. These residuals, however, could be used for further refinement of the pole and spacecraft data.

E. MARINER 9 TV PICTURES REFERRED TO NEW POLE, PRIME MERIDIAN AND ROTATION RATE

Table 6-9 contains the following data for each Mariner 9 TV picture: DAS Reference Time, GMT, latitude and longitude of the picture center as referred to the former pole (same values as given in Volume II, except for possible data changes since 21 August, 1972), latitude and longitude of the picture center as referred to the new pole, prime

meridian, and rotation rate, and the changes in latitude and longitude due to using the new coordinate system (taken in the sense "new" minus "old").

Strictly speaking, the adjustments $\Delta\phi$, $\Delta\lambda$ apply to the centers of the pictures only. However, especially in the B frames not too near the limb, they provide a good approximation to adjustments for features located away from the picture centers. For features off in the distant reaches of the larger A frames, the interpolation Tables 6-6 to 6-8 should be used, or the following algorithm can be used to make the computations. Table 6-9 was generated as follows:

Given latitude (ϕ_o) with respect to the former pole, the west longitude (λ_o) with respect to the former pole and prime meridian, and the GMT for the picture (day of year, hr, min, sec):

- Convert day number and GMT to days and decimal days. Call it d'. Let d represent the number of days from Jan 1.0, 1950. If the picture is in 1971, DAS $\leq$ 5, 023, 163.

  In this case $d = (d' - 1) + 7670.^d0 + 42.2/86400^d$. Otherwise, the picture is in 1972, and $d = (d' - 1) + 7670.^d0 + 365.^d0 + 42.2/86400^d$.

- Compute T:

  $T = d/36525$

- Compute the angles θ, ζ_o, z:

  $\theta = 0.°43123 - 0.°00005\ T$

  $\zeta_o = 49.°04723 + 0.°08962\ T$

  $z = 49.°41879 + 0.°08814\ T$

- Compute the angles $\Delta_{50}^{(0)}$, V_o, ℓ_o:

  $$\Delta_{50}^{(0)} = 43.°34526 - 0.°09181\ T - 0.°00010\ T^2$$

  $$V_o = 148.°672501 + 350.°891962\ d$$

  $$\ell_o = \Delta_{50}^{(0)} + 180° + V_o - \lambda_o$$

- Compute the latitude (ϕ_1) with respect to the new pole:

  $$\sin\phi_1 = \cos\theta \sin\phi_o + \sin\theta \cos\phi_o \cos(\ell_o + \zeta_o)$$

  $$(-90° \leq \phi_1 \leq 90°)$$

- Compute the angle ℓ_1:

  $$\tan(\ell_1 + z) = \frac{\cos\phi_o \sin(\ell_o + \zeta_o)}{\cos\theta \cos\phi_o \cos(\ell_o + \zeta_o) - \sin\theta \sin\phi_o}$$

  $$[0° \leq (\ell_1 + z) < 360°]$$

  The proper quadrant is obtained by inspection of the signs of the numerator (sine) and denominator (cosine).

  Then

  $$\ell_1 = (\ell_1 + z) - z.$$

- Compute the angles $(V_1 - V_o)$ and $\left[\Delta_{50}^{(1)} - \Delta_{50}^{(0)}\right]$:

  $$V_1 - V_0 = -0.°525985 + 0.°000055\ d$$

  $$\Delta_{50}^{(1)} - \Delta_{50}^{(0)} = -0.°40988 + 0.°00141\ T$$

- Compute the longitude (λ_1) with respect to the new pole and the new prime meridian:

  $$\lambda_1 = \lambda_o - (\ell_1 - \ell_o) + \left[\Delta_{50}^{(1)} - \Delta_{50}^{(0)}\right] + [V_1 - V_0]$$

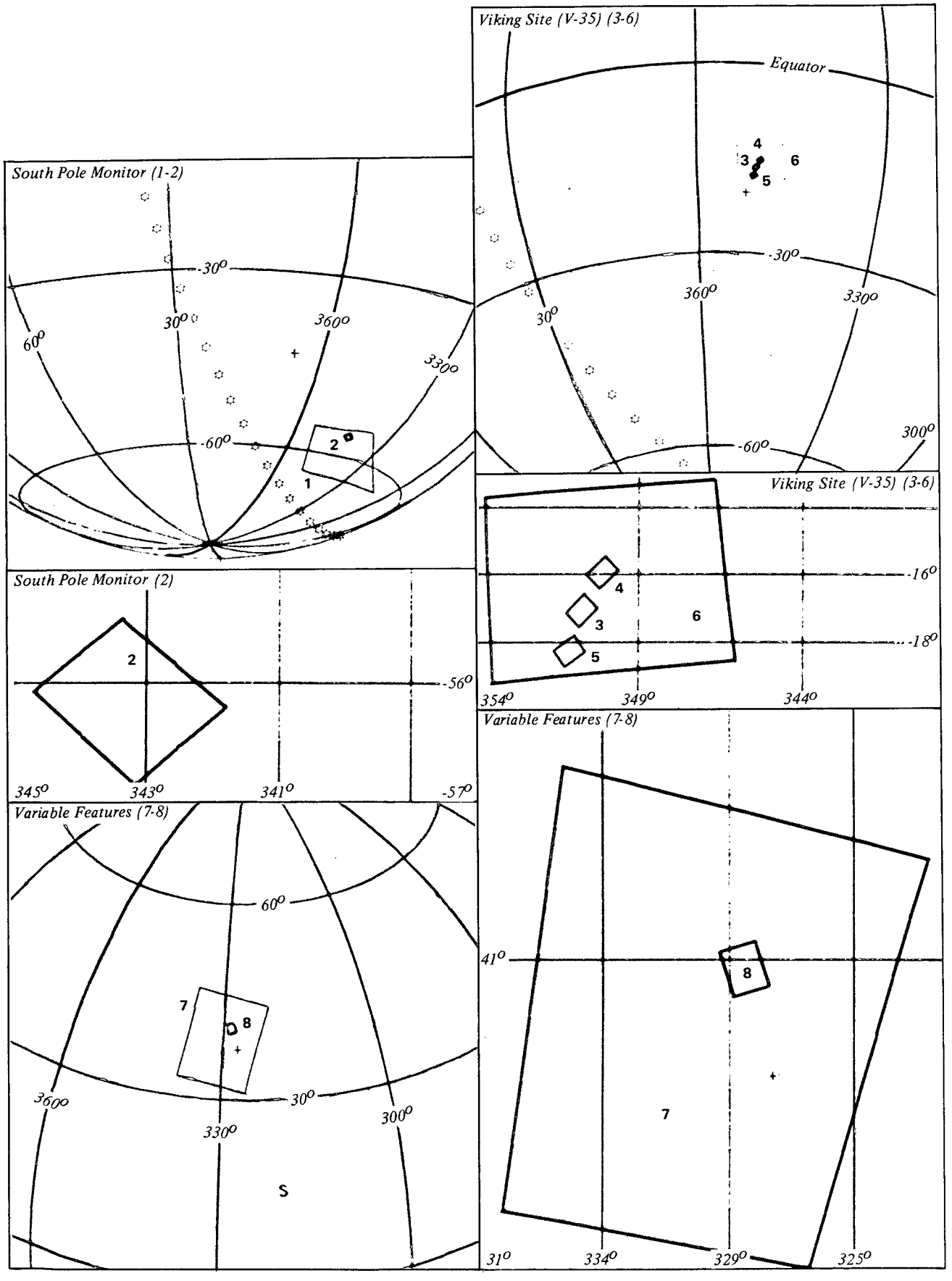
REFERENCES

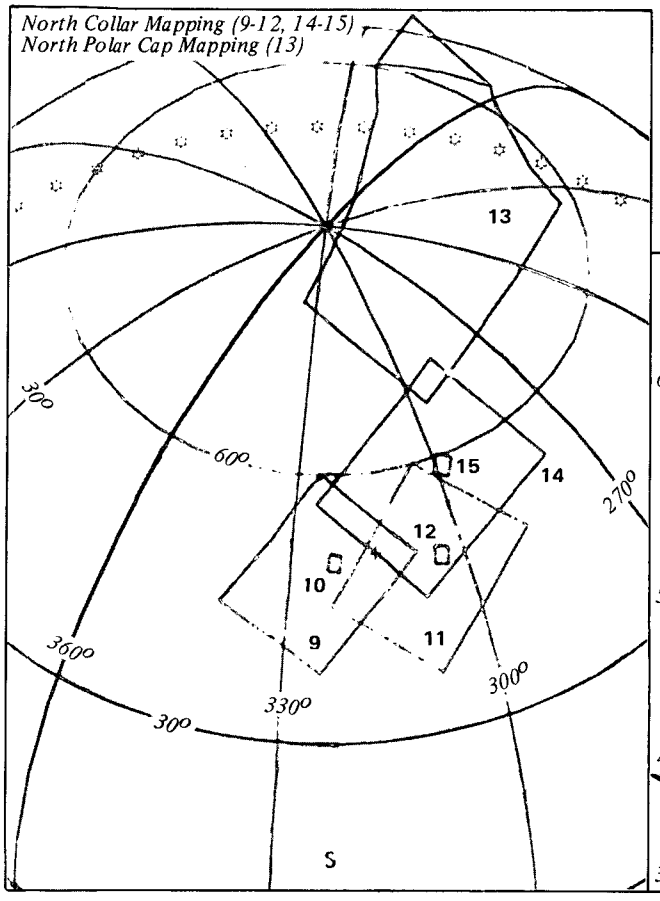
1. F. M. Sturms, Jr., "Polynominal Expressions for Planetary Equators and Orbit Elements with Respect to the Mean 1950.0 Coordinate System," Jet Propulsion Laboratory TR 32-1508, 15 January 1971.
2. G. De Vaucouleurs, M. E. Davies, and F. M. Sturms, Jr., "The Mariner 9 Areographic Coordinate System," Journal of Geophysical Research, July, 1973.
3. *Explanatory Supplement to the Astronomical Ephemeris and the American Ephemeris and Nautical Almanac*, Her Majesty's Stationery Office, London, 1961.

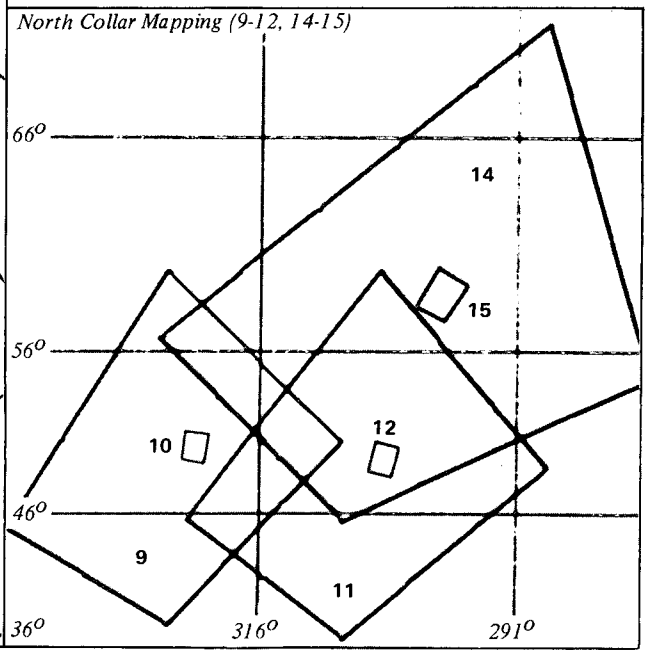
SECTION V

TV PICTURE COVERAGE AND DATA

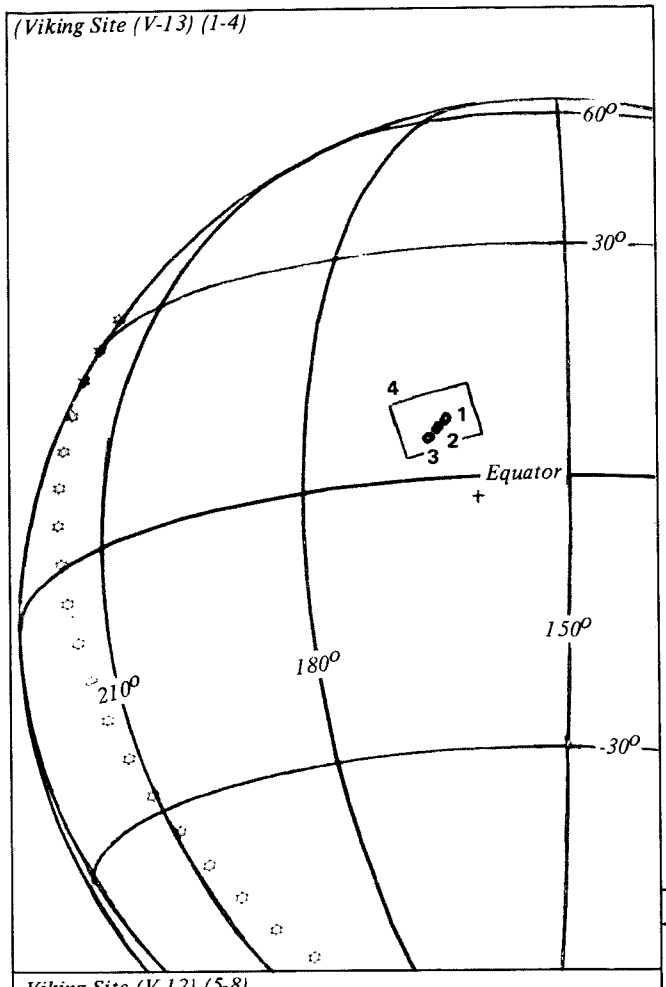
EXTENDED MISSION
REVS 416-676

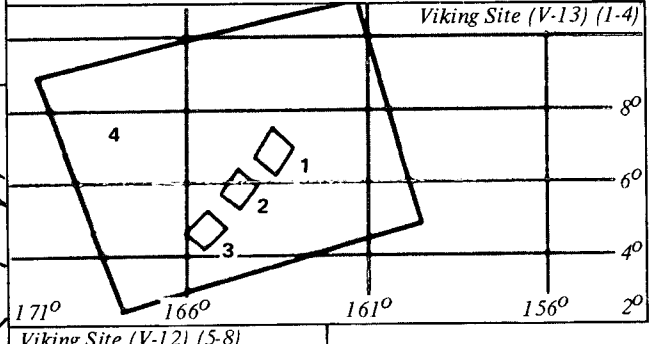

South Pole Monitor (1-2)
-30°
30°
360°
330°
60°
-60°
2
1
Viking Site (V-35) (3-6)
Equator
4
3
6
5
-30°
360°
330°
30°
300°
-60°
South Pole Monitor (2)
2
-56°
345°
343°
341°
-57°
Viking Site (V-35) (3-6)
4
3
6
5
-16°
-18°
354°
349°
344°
Variable Features (7-8)
60°
7
8
360°
30°
330°
300°
S
Variable Features (7-8)
41°
8
7
31°
334°
329°
325°

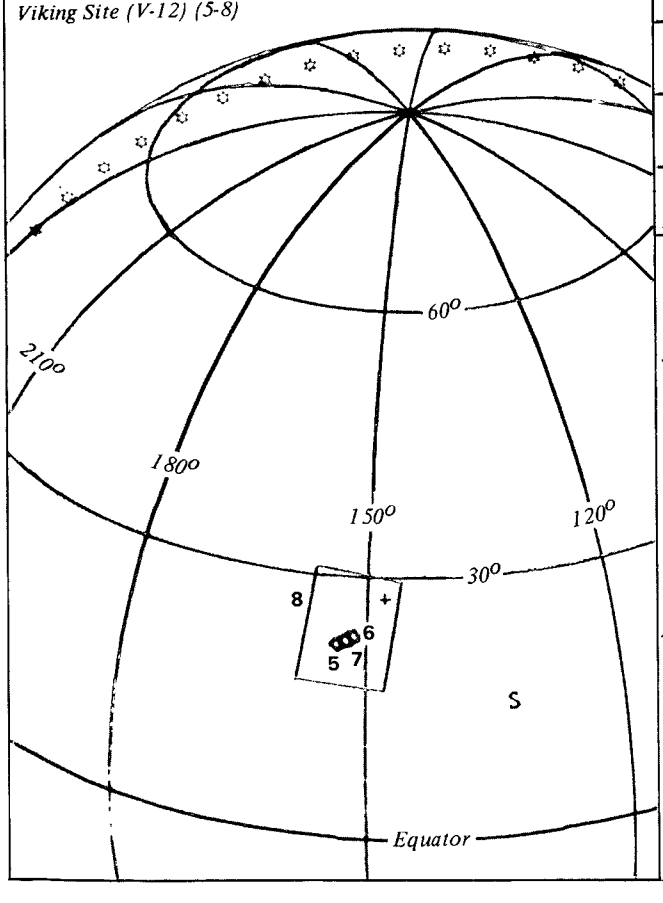


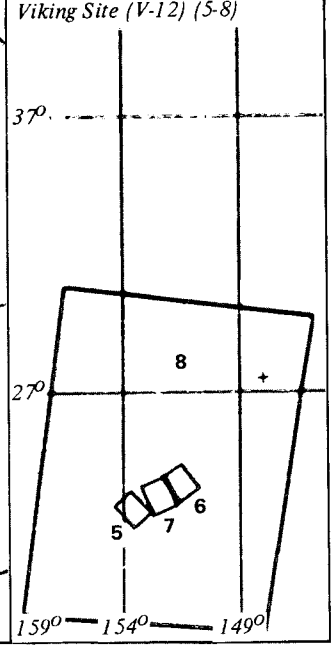


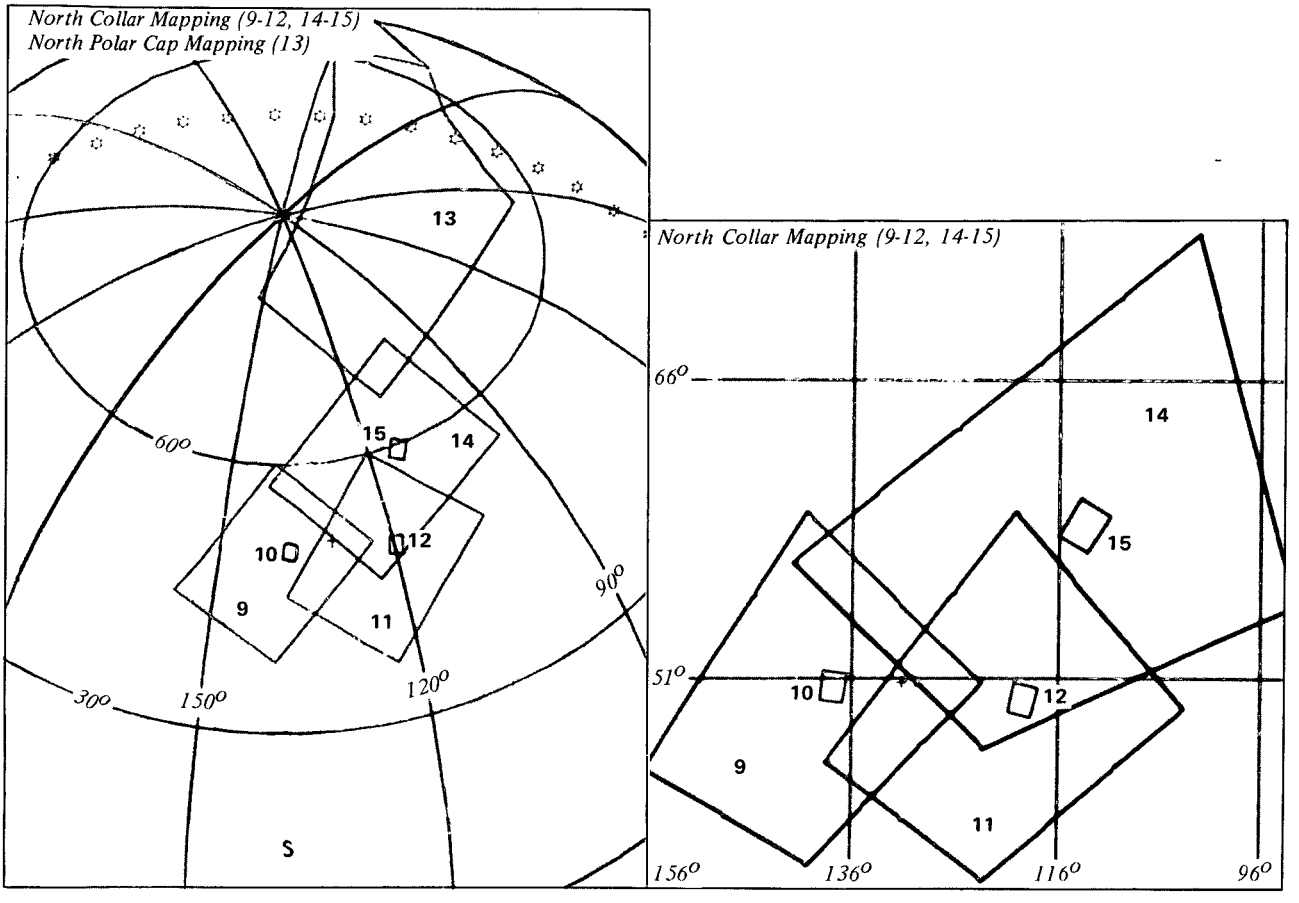
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
SOUTH POLE MONITOR														
1 A	160 21 9 24	-0 8 46	-43.16	6.16	1801	100.37	211.06	-59.26	342.83	2386	52.89	79.83	79.70	11,442,909
2 B	160 21 10 6	-0 8 4	-41.82	4.98	1780	100.41	211.17	-56.15	343.27	2300	50.35	77.31	79.58	11,442,944
VIKING SITE (V-35)														
3 B	160 21 18 30	0 0 19	-24.25	353.73	1664	109.12	241.91	-17.08	350.74	1754	22.66	50.78	70.87	11,443,364
4 B	160 21 19 54	0 1 43	-21.17	352.25	1669	115.93	238.77	-15.96	350.11	1717	16.64	49.36	64.06	11,443,434
5 B	160 21 22 42	0 4 31	-14.99	349.53	1701	138.42	224.48	-18.27	351.10	1721	10.71	51.03	41.57	11,443,574
6 A	160 21 23 24	0 5 13	-13.46	348.89	1713	138.59	224.64	-16.13	349.96	1726	8.50	48.71	41.49	11,443,609
VARIABLE FEATURES														
7 A	160 21 52 48	0 34 37	37.37	327.26	3352	159.53	113.43	38.80	330.04	3360	5.26	24.74	20.55	11,445,079
8 B	160 21 53 30	0 35 19	38.18	326.74	3407	159.55	113.41	40.71	328.40	3416	5.64	26.01	20.44	11,445,114
NORTH COLLAR MAPPING														
9 A	160 22 4 0	0 45 49	48.43	318.37	4258	147.25	90.79	49.01	324.63	4274	7.46	33.30	32.82	11,445,639
10 B	160 22 4 42	0 46 31	48.99	317.77	4316	147.17	90.88	50.30	322.30	4325	5.71	34.55	32.81	11,445,674
11 A	160 22 6 48	0 48 37	50.61	315.94	4490	144.24	101.86	48.65	306.83	4524	10.85	35.52	35.82	11,445,779
12 B	160 22 7 30	0 49 19	51.12	315.32	4548	144.18	101.80	49.53	304.02	4596	12.80	37.26	35.81	11,445,814
NORTH POLAR CAP MAPPING														
13 A	160 22 11 0	0 52 49	53.49	312.17	4838	159.33	90.97	78.27	257.24	5603	49.23	69.97	20.74	11,445,989
NORTH COLLAR MAPPING														
14 A	160 22 13 48	0 55 37	55.18	309.45	5070	141.65	91.17	57.85	302.03	5090	8.13	45.43	38.42	11,446,129
15 B	160 22 14 30	0 56 19	55.57	308.77	5127	141.83	90.90	58.87	298.49	5163	10.69	47.36	38.16	11,446,164


(Viking Site (V-13) (1-4)
60°
30°
4
1
2
3
Equator
+
150°
180°
210°
-30°

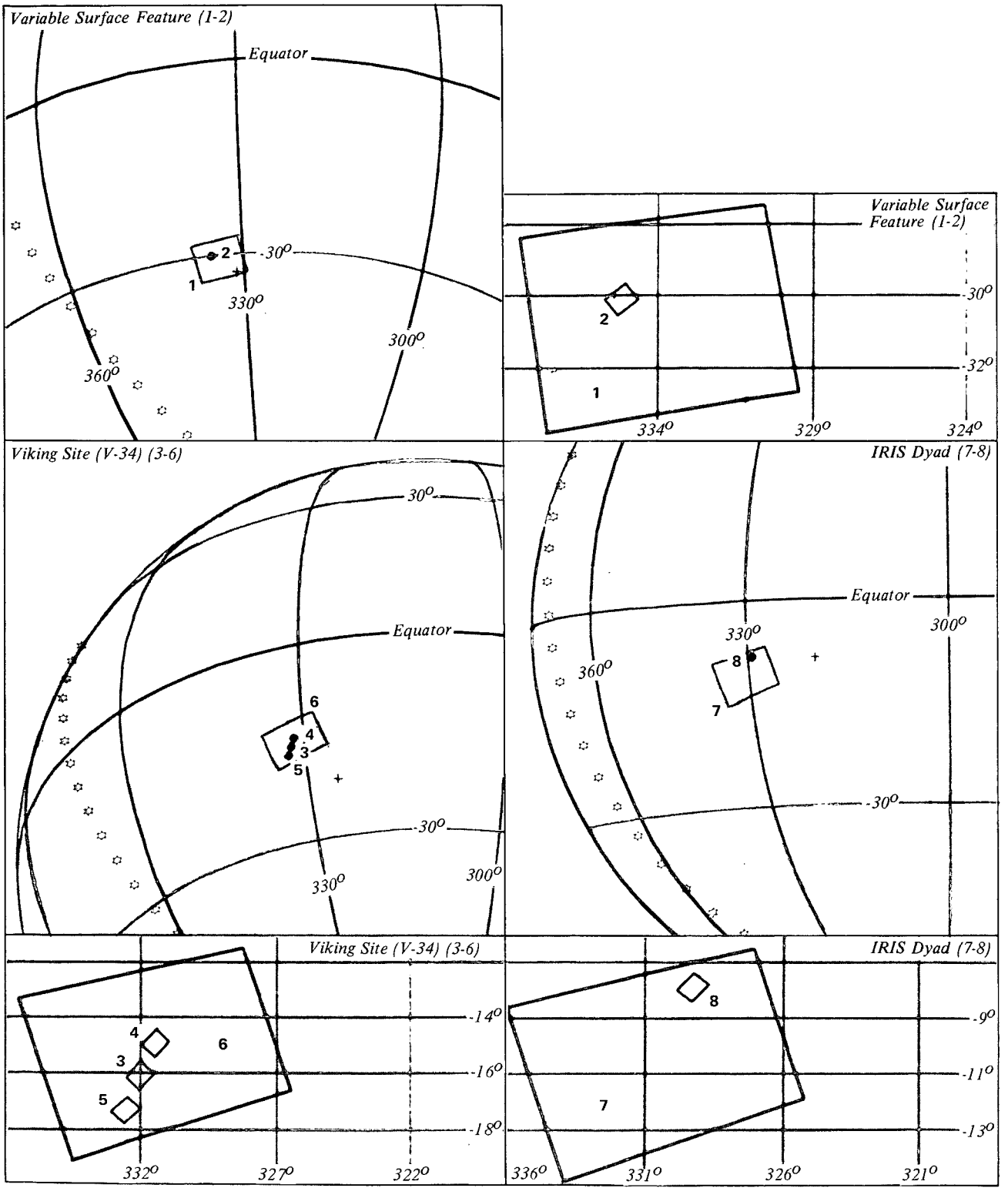

Viking Site (V-13) (1-4)
8°
6°
4°
4
1
2
3
171°
166°
161°
156°
2°

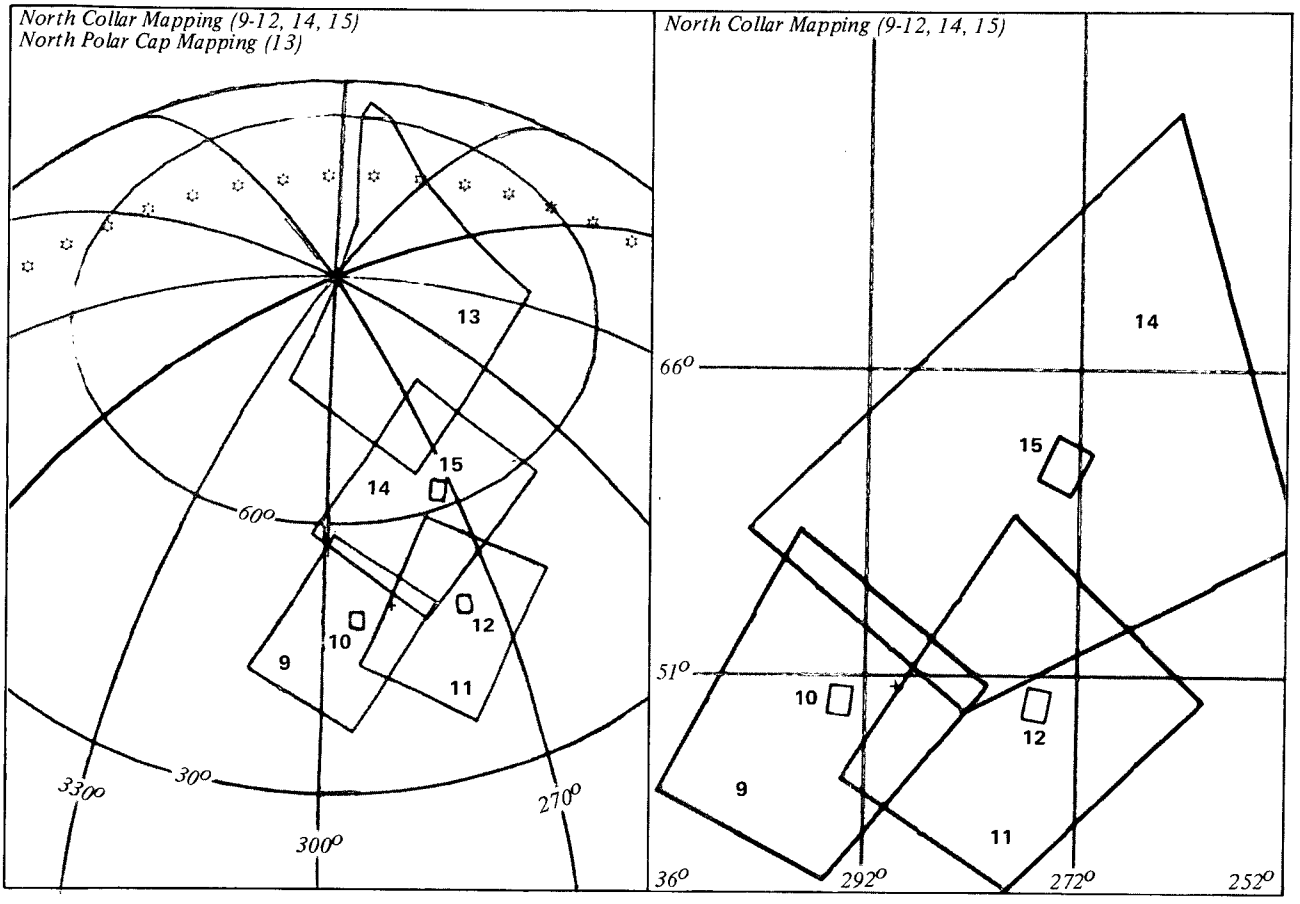

Viking Site (V-12) (5-8)
60°
210°
180°
150°
120°
30°
8
+
6
5
7
S
Equator


Viking Site (V-12) (5-8)
37°
27°
8
+
5
7
6
159°
154°
149°

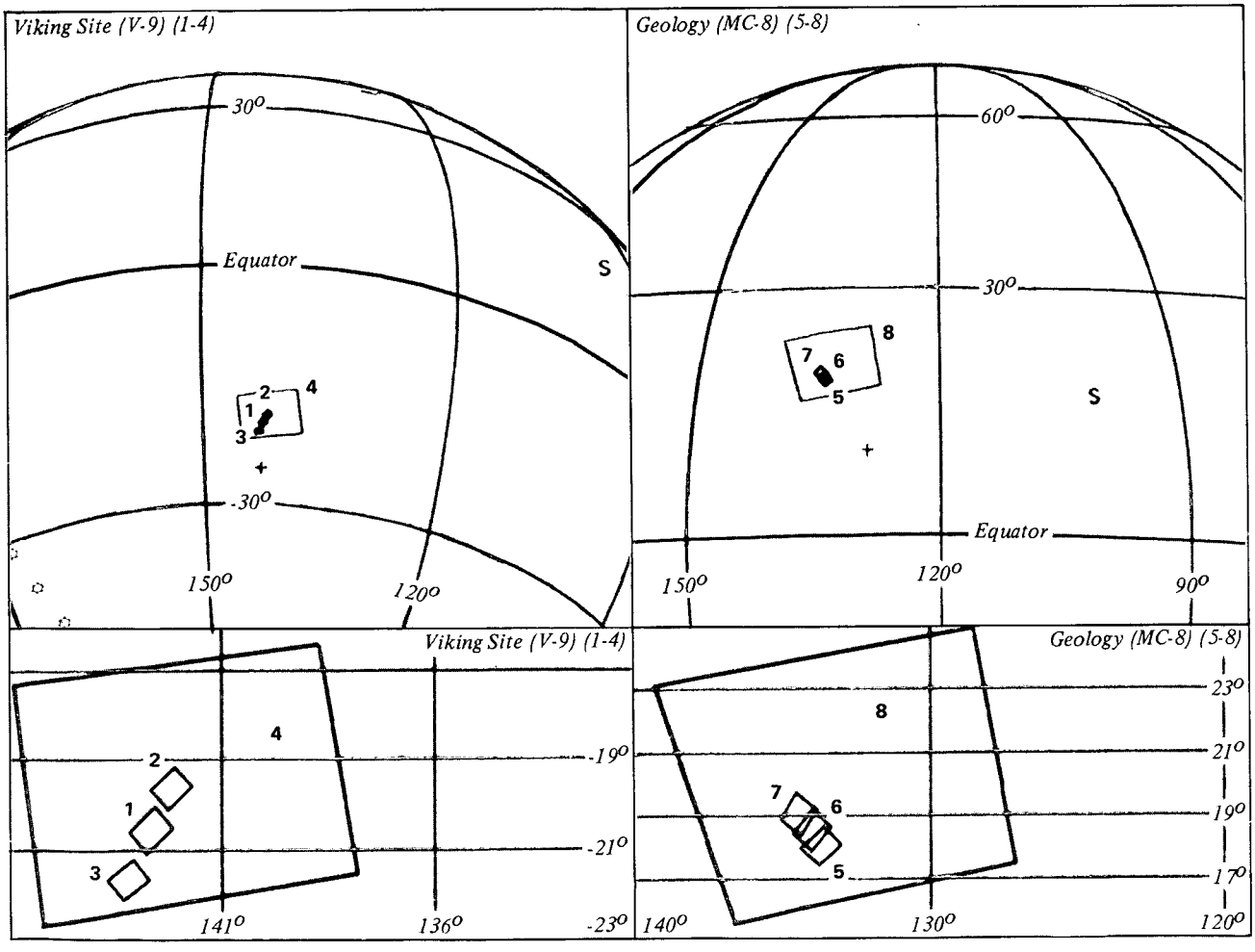


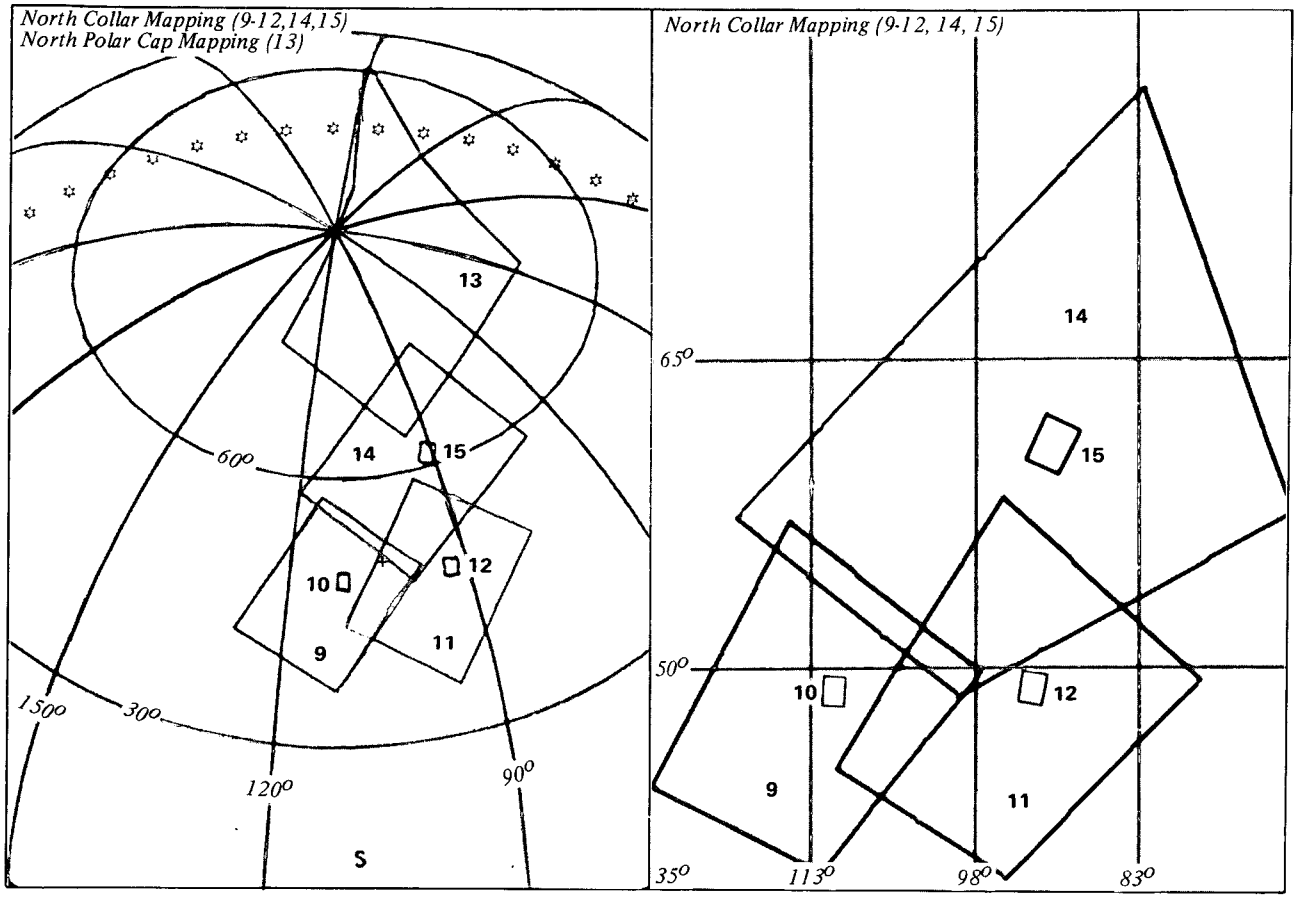
INST TYPE	TIME (GMT) D	H	M	S	PERI TIME H	M	S	SPACECRAFT LAT	LONG-W	HGT	PLATFORM CONE	CLOCK	INTERCEPTING LAT	LONG-W	RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
VIKING SITE (V-13)																			
1 B	161	9	26	30	0	8	54	-5.51	161.14	1805	129.72	248.11	6.84	163.58	2026	33.98	35.38	50.27	11,479,764
2 B	161	9	27	54	0	10	18	-2.56	160.02	1851	140.14	245.58	5.81	164.55	1979	25.96	36.29	39.85	11,479,834
3 B	161	9	30	42	0	13	6	3.18	157.88	1961	158.27	234.43	4.69	165.46	2043	20.57	36.89	21.72	11,479,974
4 A	161	9	31	24	0	13	48	4.57	157.36	1993	158.27	234.43	6.79	164.42	2067	19.49	35.06	21.80	11,480,009
VIKING SITE (V-12)																			
5 B	161	9	43	18	0	25	42	25.42	149.00	2690	163.85	135.35	22.46	153.59	2720	11.53	20.78	16.14	11,480,604
6 B	161	9	44	42	0	27	6	27.50	148.03	2788	161.10	129.25	23.48	151.58	2818	11.31	19.03	18.88	11,480,674
7 B	161	9	46	6	0	28	30	29.50	147.05	2889	158.36	115.55	22.96	152.48	2962	17.46	19.34	21.63	11,480,744
8 A	161	9	46	48	0	29	12	30.47	146.56	2940	158.36	115.55	24.53	151.97	3004	16.25	19.32	21.71	11,480,779
NORTH COLLAR MAPPING																			
9 A	161	10	3	36	0	46	0	48.56	133.61	4272	147.11	90.91	49.02	140.05	4289	7.63	33.25	32.96	11,481,619
10 B	161	10	4	18	0	46	42	49.12	133.01	4330	147.11	90.91	50.42	137.79	4341	5.95	34.59	32.88	11,481,654
11 A	161	10	6	24	0	48	48	50.73	131.17	4504	144.07	101.82	48.63	122.36	4537	10.59	35.31	36.00	11,481,759
12 B	161	10	7	6	0	49	30	51.24	130.55	4562	144.07	101.82	49.59	119.46	4609	12.57	37.13	35.92	11,481,794
NORTH POLAR CAP MAPPING																			
13 A	161	10	10	36	0	53	0	53.59	127.34	4852	158.91	91.07	78.10	76.50	5576	47.89	69.05	21.16	11,481,969
NORTH COLLAR MAPPING																			
14 A	161	10	13	24	0	55	48	55.26	124.67	5084	142.14	90.92	58.79	117.29	5109	8.88	46.13	37.93	11,482,109
15 B	161	10	14	6	0	56	30	55.65	123.99	5142	142.14	90.92	59.45	113.48	5181	11.21	47.80	37.85	11,482,144


Variable Surface Feature (1-2)
Equator
30°
330°
300°
360°
1
2
Variable Surface Feature (1-2)
30°
32°
334°
329°
324°
Viking Site (V-34) (3-6)
30°
Equator
330°
300°
1
2
3
4
5
6
IRIS Dyad (7-8)
Equator
330°
300°
360°
30°
7
8
Viking Site (V-34) (3-6)
14°
16°
18°
332°
327°
322°
IRIS Dyad (7-8)
9°
11°
13°
336°
331°
326°
321°

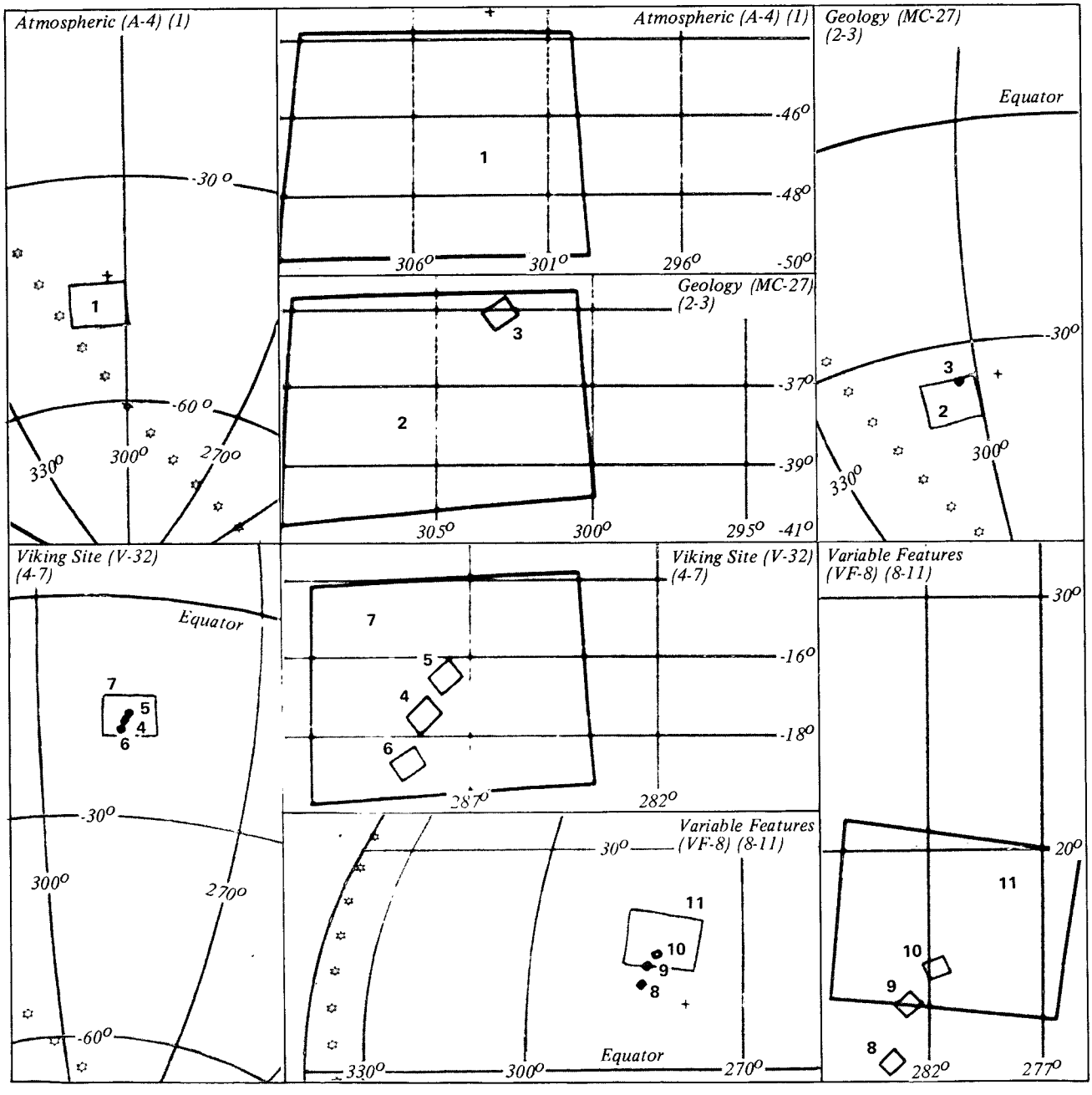


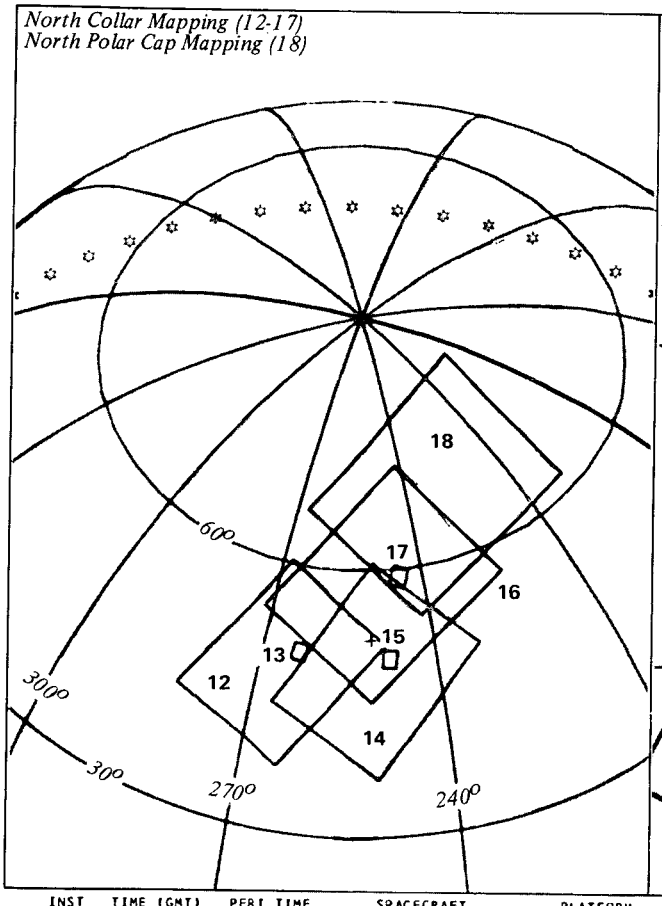
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
VARIABLE SURFACE FEATURE														
1 A	163 21 12 33	-0 3 39	-32.89	331.17	1686	112.60	245.34	-30.66	333.92	1702	9.66	68.91	67.47	11,619,965
2 B	163 21 13 15	-0 2 57	-31.40	330.27	1678	110.18	245.35	-30.11	335.15	1708	13.12	69.35	61.81	11,620,000
VIKING SITE (V-34)														
3 B	163 21 16 3	-0 0 9	-25.34	326.95	1662	114.50	255.64	-16.12	332.02	1822	29.88	58.82	65.49	11,620,140
4 B	163 21 17 27	0 1 14	-22.26	325.44	1665	121.36	253.73	-14.97	331.45	1793	26.91	57.47	58.63	11,620,210
5 B	163 21 20 15	0 4 2	-16.08	322.67	1691	144.34	244.15	-17.34	332.56	1827	27.46	59.05	35.65	11,620,350
6 A	163 21 20 57	0 4 44	-14.54	322.02	1702	144.21	244.24	-15.14	331.08	1817	25.30	56.55	35.87	11,620,385
IRIS DYAD														
7 A	163 21 23 45	0 7 32	-8.44	319.55	1764	153.59	241.73	-10.43	330.07	1924	29.38	52.72	26.48	11,620,525
8 B	163 21 24 27	0 8 14	-6.93	318.97	1783	153.44	241.95	-7.94	329.24	1933	28.36	50.65	26.55	11,620,560
NORTH COLLAR MAPPING														
9 A	163 22 1 33	0 45 20	48.04	291.46	4218	148.02	95.11	48.03	296.48	4228	6.03	31.95	32.05	11,622,415
10 B	163 22 2 15	0 46 2	48.61	290.87	4276	148.02	95.11	49.46	294.24	4281	4.23	33.26	31.97	11,622,450
11 A	163 22 4 21	0 48 8	50.26	289.04	4449	145.03	106.06	48.24	278.69	4494	12.34	34.40	35.04	11,622,555
12 B	163 22 5 3	0 48 50	50.78	288.42	4507	145.03	106.06	49.22	275.75	4569	14.40	36.25	34.96	11,622,590
NORTH POLAR CAP MAPPING														
13 A	163 22 8 33	0 52 20	53.19	285.24	4798	158.91	91.17	78.30	255.69	5397	43.80	64.92	21.16	11,622,765
NORTH COLLAR MAPPING														
14 A	163 22 11 21	0 55 8	54.91	282.60	5030	144.58	91.03	61.08	277.37	5069	11.27	46.76	35.49	11,622,905
15 B	163 22 12 3	0 55 50	55.31	281.92	5038	144.58	91.03	61.88	273.34	5142	13.15	48.38	35.41	11,622,940

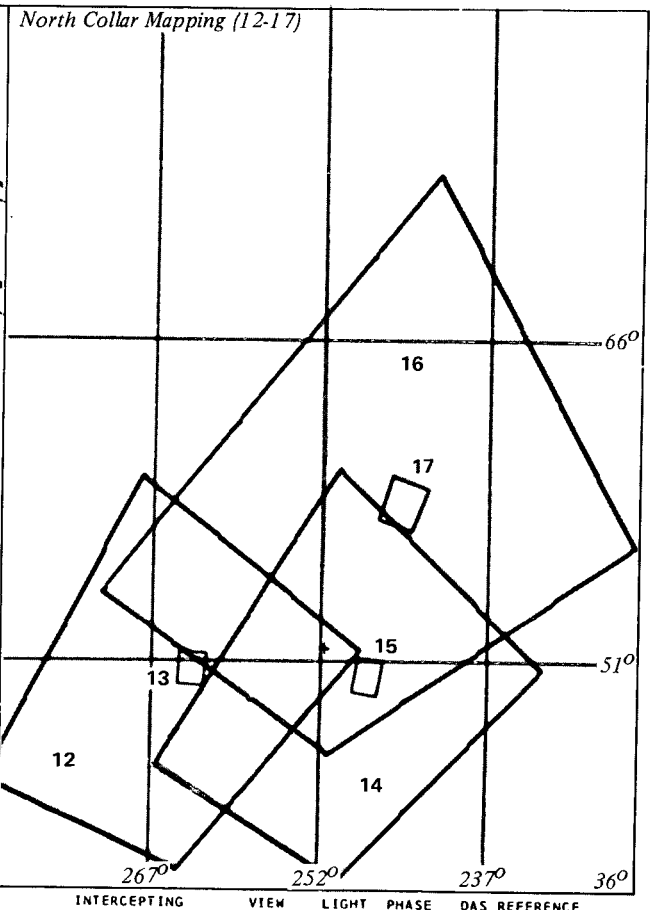

Viking Site (V-9) (1-4)
30°
Equator
S
2
4
1
3
+
-30°
150°
120°
Geology (MC-8) (5-8)
60°
30°
8
7
6
5
S
+
Equator
150°
120°
90°
Viking Site (V-9) (1-4)
4
2
-19°
1
-21°
3
141°
136°
-23°
Geology (MC-8) (5-8)
23°
8
21°
7
6
19°
5
17°
140°
130°
120°



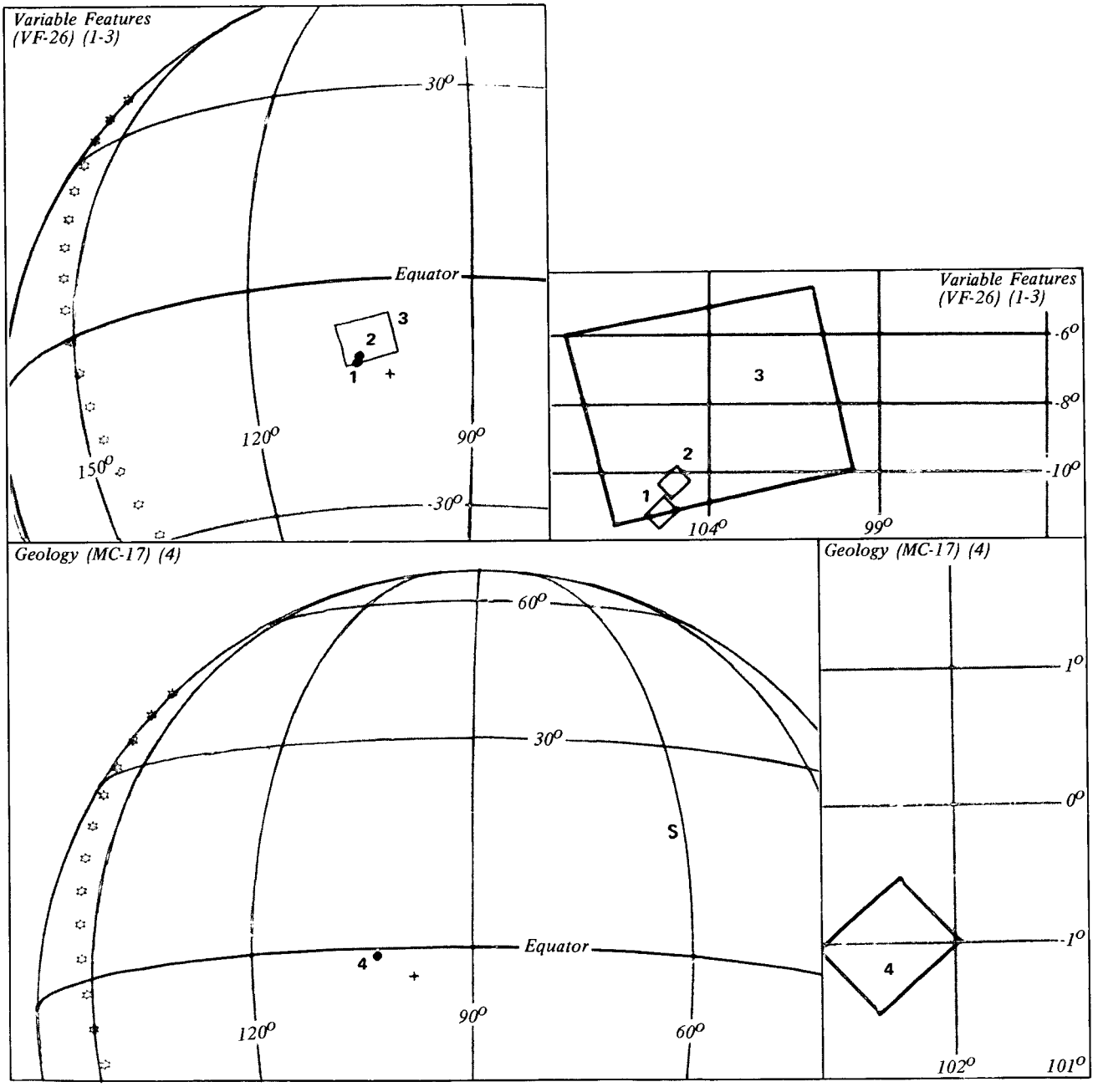
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
VIKING SITE (V-9)														
1 B	164 9 14 15	-0 1 54	-29.15	144.49	1668	102.33	247.22	-20.59	142.67	1783	25.44	58.04	77.66	11,656,050
2 B	164 9 15 39	-0 0 30	-26.11	142.86	1662	109.45	244.47	-19.65	142.19	1727	19.28	56.86	70.53	11,656,120
3 B	164 9 18 27	0 2 17	-19.95	139.88	1671	132.17	233.03	-21.65	143.18	1690	10.59	58.29	47.82	11,656,260
4 A	164 9 19 9	0 2 59	-18.40	139.19	1678	132.17	233.03	-19.51	141.82	1689	8.20	55.86	47.90	11,656,295
GEOLOGY (MC-8)														
5 B	164 9 31 3	0 14 53	6.71	129.36	2041	144.95	244.65	19.03	134.39	2269	33.26	31.82	35.04	11,656,890
6 B	164 9 32 27	0 16 17	9.40	128.35	2111	152.01	238.07	18.52	133.93	2257	26.62	31.07	27.98	11,656,960
7 B	164 9 33 51	0 17 41	12.01	127.36	2186	159.77	229.24	18.01	133.63	2279	21.24	30.47	21.22	11,657,030
8 A	164 9 34 33	0 18 23	13.29	126.86	2225	156.77	229.24	20.11	132.61	2322	21.58	29.36	21.31	11,657,065
NORTH COLLAR MAPPING														
9 A	164 10 1 9	0 44 59	47.75	107.25	4189	147.98	95.11	47.18	113.07	4203	7.16	31.15	32.09	11,658,395
10 B	164 10 1 51	0 45 41	48.33	106.66	4247	147.98	95.11	48.63	110.90	4254	5.07	32.41	32.01	11,658,430
11 A	164 10 3 57	0 47 47	49.99	104.85	4420	145.03	106.06	47.70	95.63	4458	11.40	33.32	35.04	11,658,535
12 B	164 10 4 39	0 48 29	50.52	104.23	4478	145.03	106.06	48.73	92.77	4531	13.31	35.14	34.96	11,658,570
NORTH POLAR CAP MAPPING														
13 A	164 10 8 9	0 51 59	52.97	101.06	4769	158.91	91.17	77.78	78.11	5329	42.42	63.50	21.16	11,658,745
NORTH COLLAR MAPPING														
14 A	164 10 10 57	0 54 47	54.70	98.42	5001	144.58	91.03	60.52	94.85	5033	10.23	45.72	35.49	11,658,885
15 B	164 10 11 39	0 55 29	55.11	97.75	5059	144.58	91.03	61.38	90.97	5103	11.97	47.30	35.41	11,658,920

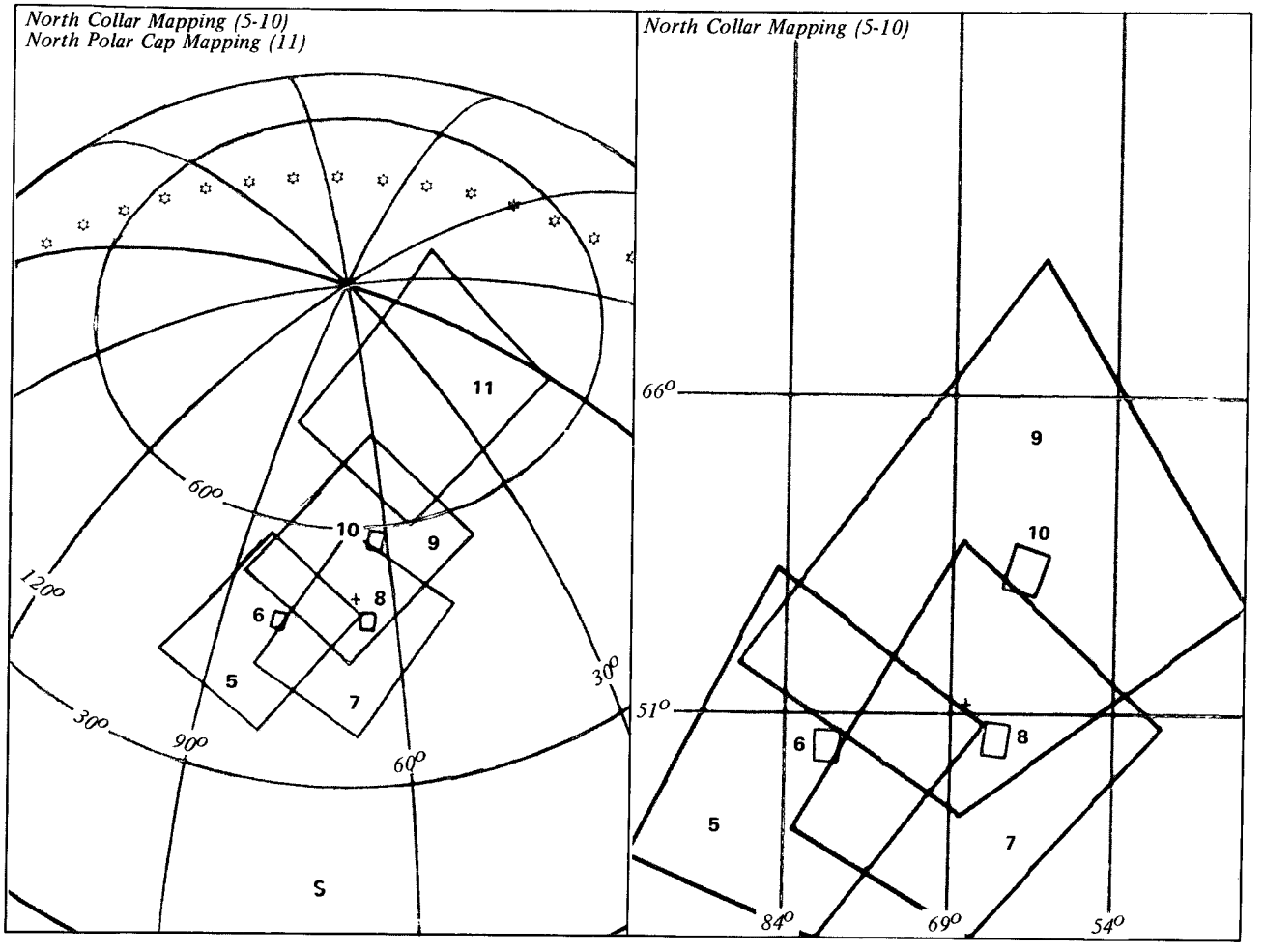

Atmospheric (A-4) (1)
-30°
-60°
330°
300°
270°
1
Atmospheric (A-4) (1)
-46°
-48°
306°
301°
296°
-50°
1
Geology (MC-27) (2-3)
-37°
-39°
305°
300°
295°
-41°
2
3
Geology (MC-27) (2-3)
Equator
-30°
3
2
300°
330°
Viking Site (V-32) (4-7)
Equator
7
5
4
6
-30°
300°
270°
-60°
Viking Site (V-32) (4-7)
7
5
4
6
-16°
-18°
287°
282°
Variable Features (VF-8) (8-11)
30°
11
10
9
8
330°
300°
Equator
270°
Variable Features (VF-8) (8-11)
30°
20°
11
10
9
8
282°
277°



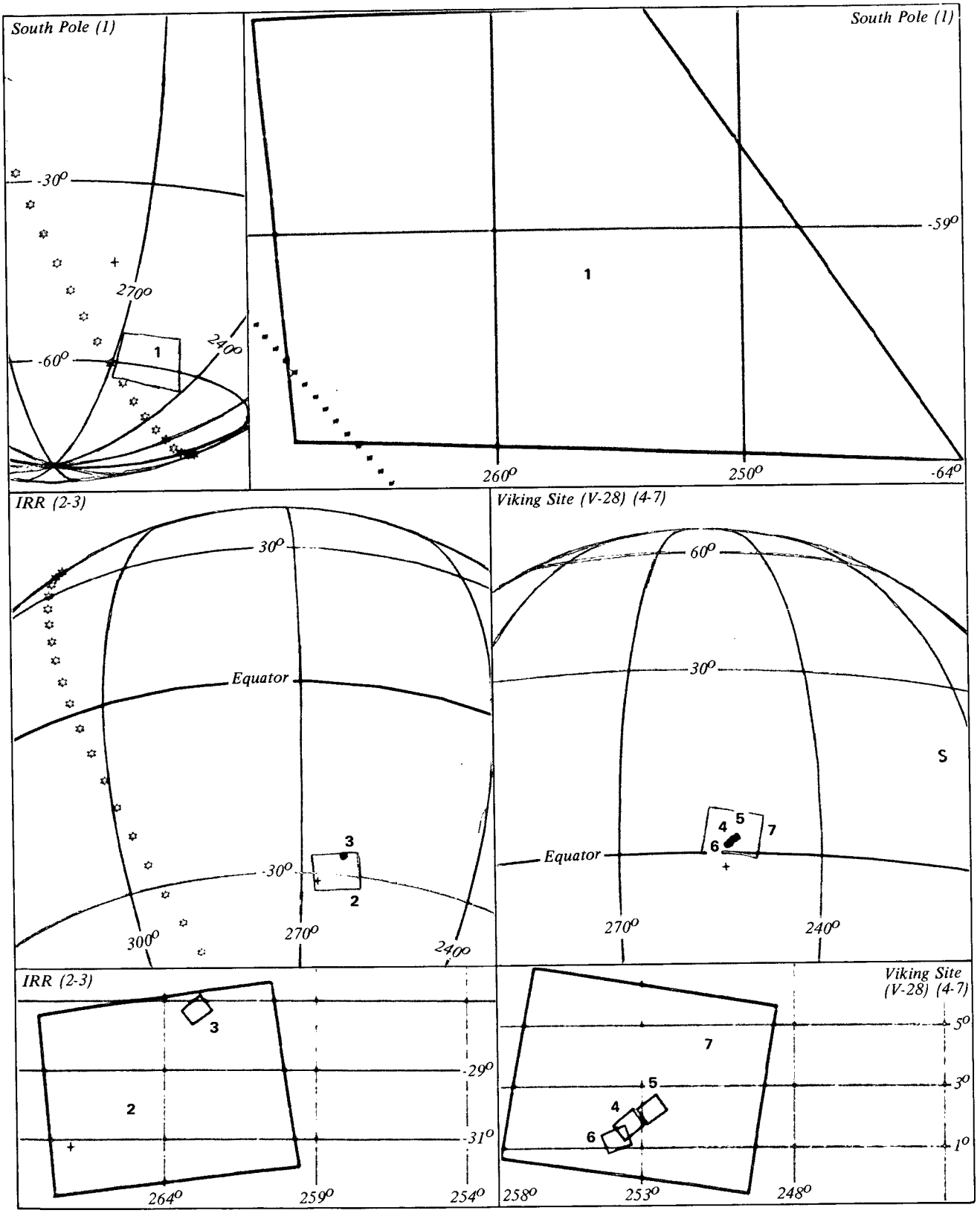


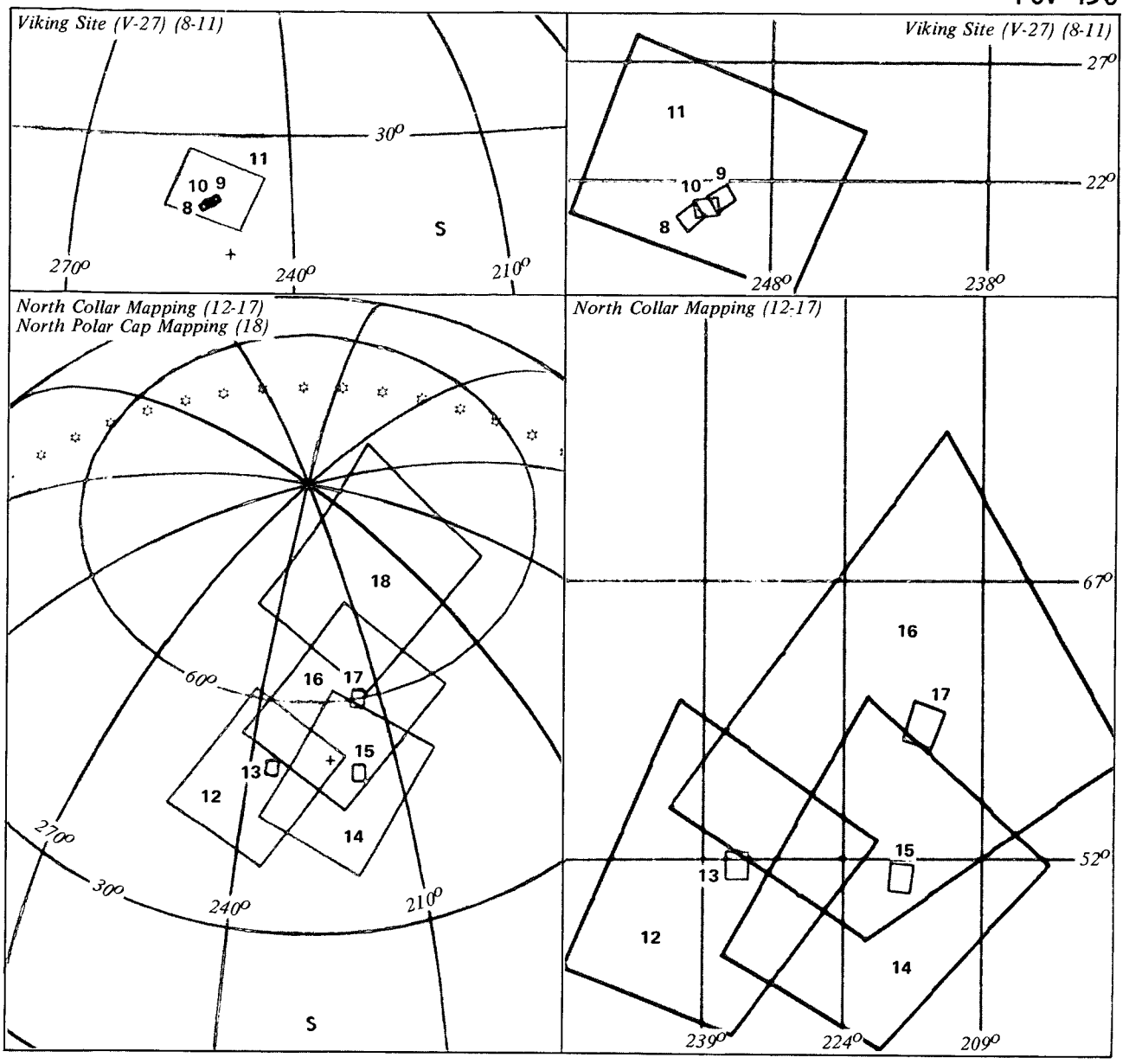
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
ATMOSPHERIC (A-4)														
1 A	167 21 7 59	-0 8 47	-43.25	303.14	1798	103.65	238.45	-46.71	305.13	1818	10.69	85.00	76.42	11,796,786
GEOLOGY (MC-27)														
2 A	167 21 12 11	-0 4 35	-34.86	296.67	1698	120.68	242.26	-37.42	304.71	1771	20.38	79.29	59.39	11,796,996
3 B	167 21 12 53	-0 3 53	-33.39	295.73	1687	120.57	242.22	-35.11	302.95	1746	18.31	76.76	59.42	11,797,031
VIKING SITE (V-32)														
4 B	167 21 17 5	0 0 18	-24.31	290.70	1660	106.85	241.47	-17.49	288.26	1739	21.27	55.25	73.14	11,797,241
5 B	167 21 18 29	0 1 42	-21.22	289.22	1665	113.83	237.91	-16.51	287.68	1703	14.78	53.95	66.16	11,797,311
6 B	167 21 21 17	0 4 30	-15.03	286.50	1696	135.80	223.20	-18.69	288.67	1723	12.48	55.48	44.19	11,797,451
7 A	167 21 21 59	0 5 12	-13.49	285.86	1709	136.09	223.02	-16.68	287.51	1728	10.56	53.27	43.98	11,797,486
VARIABLE FEATURES (VF-8)														
8 B	167 21 31 5	0 14 18	5.62	278.57	2012	149.74	231.93	11.07	283.58	2086	19.39	35.27	30.25	11,797,941
9 B	167 21 32 29	0 15 42	8.34	277.55	2080	153.10	228.68	13.52	282.89	2152	19.00	33.79	26.89	11,798,011
10 B	167 21 35 17	0 18 30	13.56	275.57	2230	161.67	208.11	15.05	281.66	2278	15.16	31.73	18.32	11,798,151
11 A	167 21 35 59	0 19 12	14.81	275.08	2270	161.73	207.90	16.89	280.72	2313	14.33	30.47	18.34	11,798,186
NORTH COLLAR MAPPING														
12 A	167 22 3 59	0 47 12	49.63	254.16	4371	146.52	91.05	49.10	265.52	4421	13.07	33.30	33.55	11,799,586
13 B	167 22 4 41	0 47 54	50.17	253.55	4429	146.52	91.05	50.56	263.39	4465	11.04	34.33	33.47	11,799,621
14 A	167 22 6 47	0 50 0	51.71	251.67	4604	143.03	99.46	48.99	250.44	4611	4.91	32.57	37.04	11,799,726
15 B	167 22 7 29	0 50 42	52.20	251.04	4662	143.03	99.46	50.10	247.80	4669	5.03	34.06	36.95	11,799,761
16 A	167 22 12 23	0 55 36	55.27	246.43	5068	142.28	91.02	58.18	248.23	5076	5.13	42.01	37.79	11,800,006
17 B	167 22 13 5	0 56 18	55.66	245.75	5126	142.28	91.02	59.13	244.84	5137	5.81	43.42	37.71	11,800,041
NORTH POLAR CAP MAPPING														
18 A	167 22 15 11	0 58 24	56.77	243.67	5300	146.03	91.04	67.52	232.05	5419	19.46	53.51	34.04	11,800,146
PHOBOS														
19 B	167 22 39 41	1 22 54	63.55	218.03	7251	103.43	131.22	******	******	*****	122.25	58.40	37.71	11,801,371


Variable Features
(VF-26) (1-3)
30°
Equator
3
2
1
120°
90°
150°
-30°
Variable Features
(VF-26) (1-3)
-6°
-8°
-10°
3
2
1
104°
99°
Geology (MC-17) (4)
60°
30°
S
Equator
4
120°
90°
60°
Geology (MC-17) (4)
1°
0°
-1°
4
102°
101°

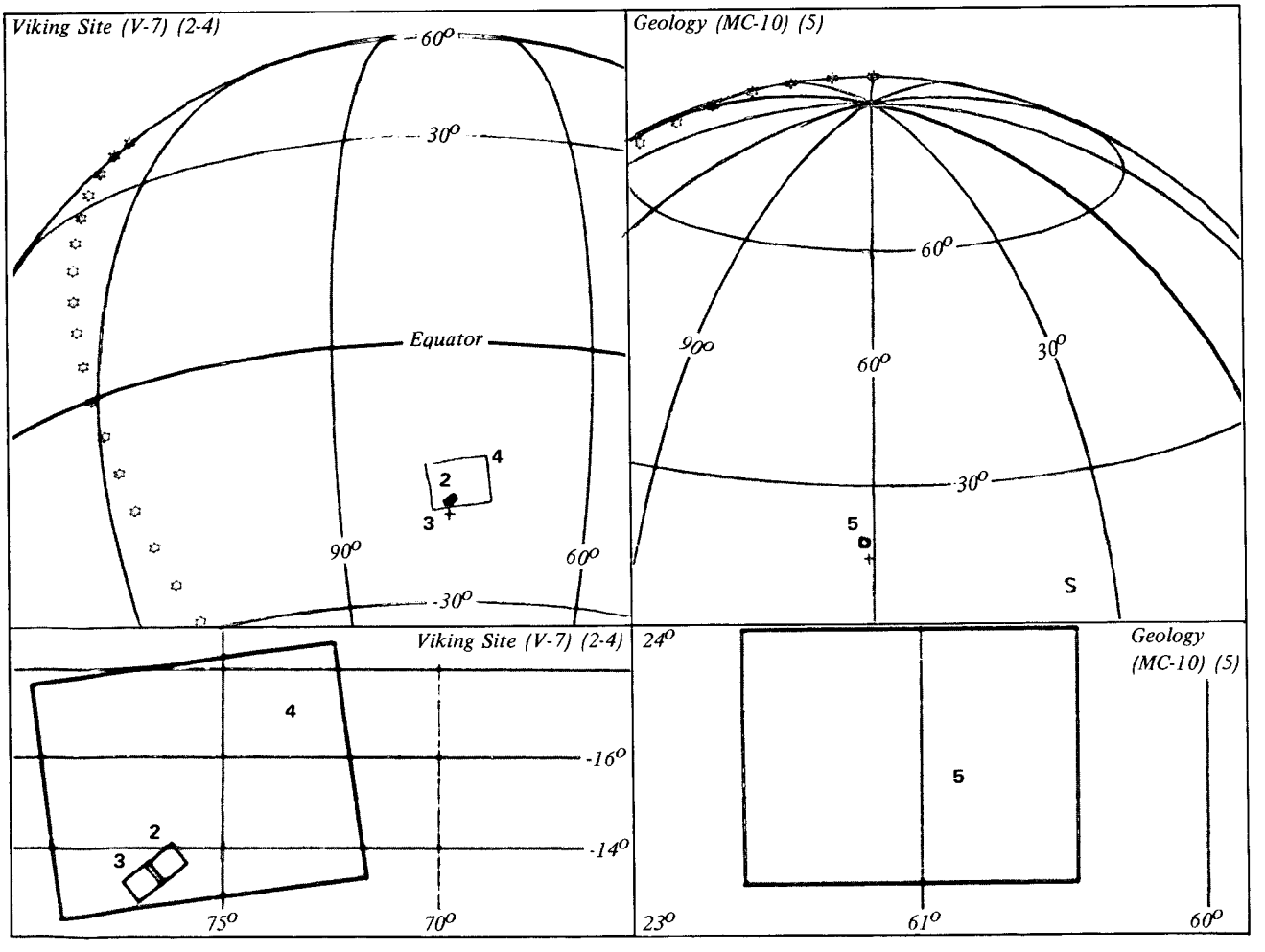


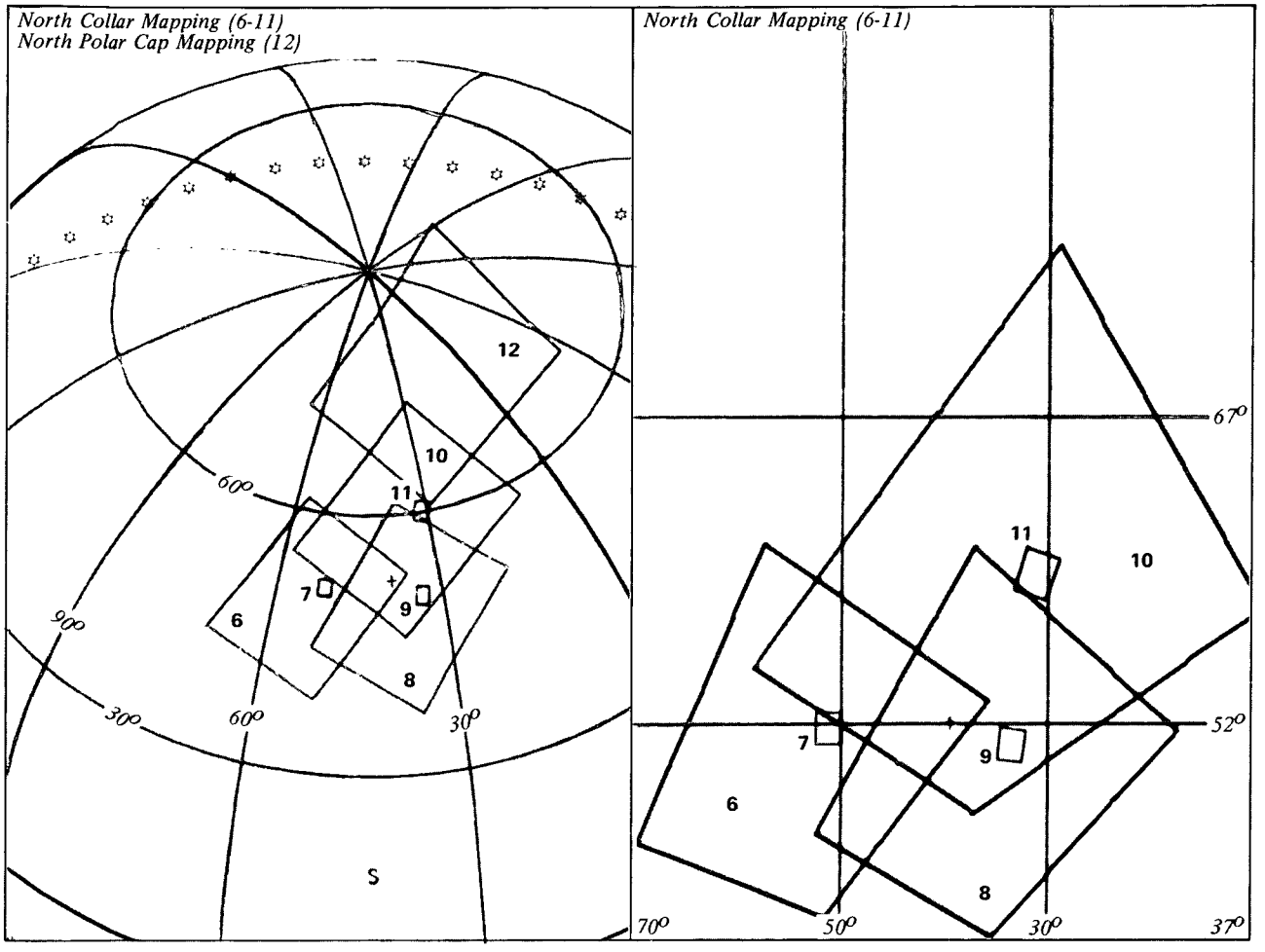
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
VARIABLE FEATURES (VF-26)														
1 B	168 9 20 53	0 4 5	-15.92	102.40	1690	125.52	241.96	-11.16	105.38	1737	16.48	52.54	54.47	11,833,431
2 B	168 9 22 17	0 5 29	-12.84	101.12	1714	132.91	237.97	-10.28	105.01	1746	13.52	51.49	47.07	11,833,501
3 A	168 9 22 59	0 6 11	-11.31	100.50	1729	132.91	237.97	-8.10	103.82	1760	13.43	49.21	47.16	11,833,536
GEOLOGY (MC-17)														
4 B	168 9 26 29	0 9 41	-3.78	97.58	1826	143.16	234.32	-1.02	102.48	1872	15.80	43.93	36.83	11,833,711
NORTH COLLAR MAPPING														
5 A	168 10 3 35	0 46 47	49.33	70.03	4338	146.03	91.04	47.52	82.19	4400	14.60	32.08	34.04	11,835,566
6 B	168 10 4 17	0 47 29	49.87	69.42	4396	146.03	91.04	49.00	80.16	4441	12.38	33.02	33.96	11,835,601
7 A	168 10 6 23	0 49 35	51.43	67.56	4570	143.03	99.46	48.28	67.38	4579	5.48	31.62	37.04	11,835,706
8 B	168 10 7 5	0 50 17	51.93	66.92	4628	143.03	99.46	49.44	64.82	4635	4.88	33.06	36.95	11,835,741
9 A	168 10 11 59	0 55 11	55.05	62.33	5034	142.28	91.02	57.50	65.56	5042	5.07	41.02	37.79	11,835,986
10 B	168 10 12 41	0 55 53	55.45	61.66	5092	142.28	91.02	58.49	62.30	5100	5.10	42.39	37.71	11,836,021
NORTH POLAR CAP MAPPING														
11 A	168 10 14 47	0 57 59	56.57	59.59	5266	149.94	91.07	72.80	39.61	>535	29.10	59.22	30.13	11,836,126


South Pole (1)
-30°
270°
-60°
240°
1
South Pole (1)
-59°
1
260°
250°
-64°
IRR (2-3)
30°
Equator
-30°
3
2
300°
270°
240°
Viking Site (V-28) (4-7)
60°
30°
S
4
5
7
6
Equator
270°
240°
IRR (2-3)
3
2
-29°
-31°
264°
259°
254°
Viking Site
(V-28) (4-7)
5°
7
5
3°
4
6
1°
258°
253°
248°

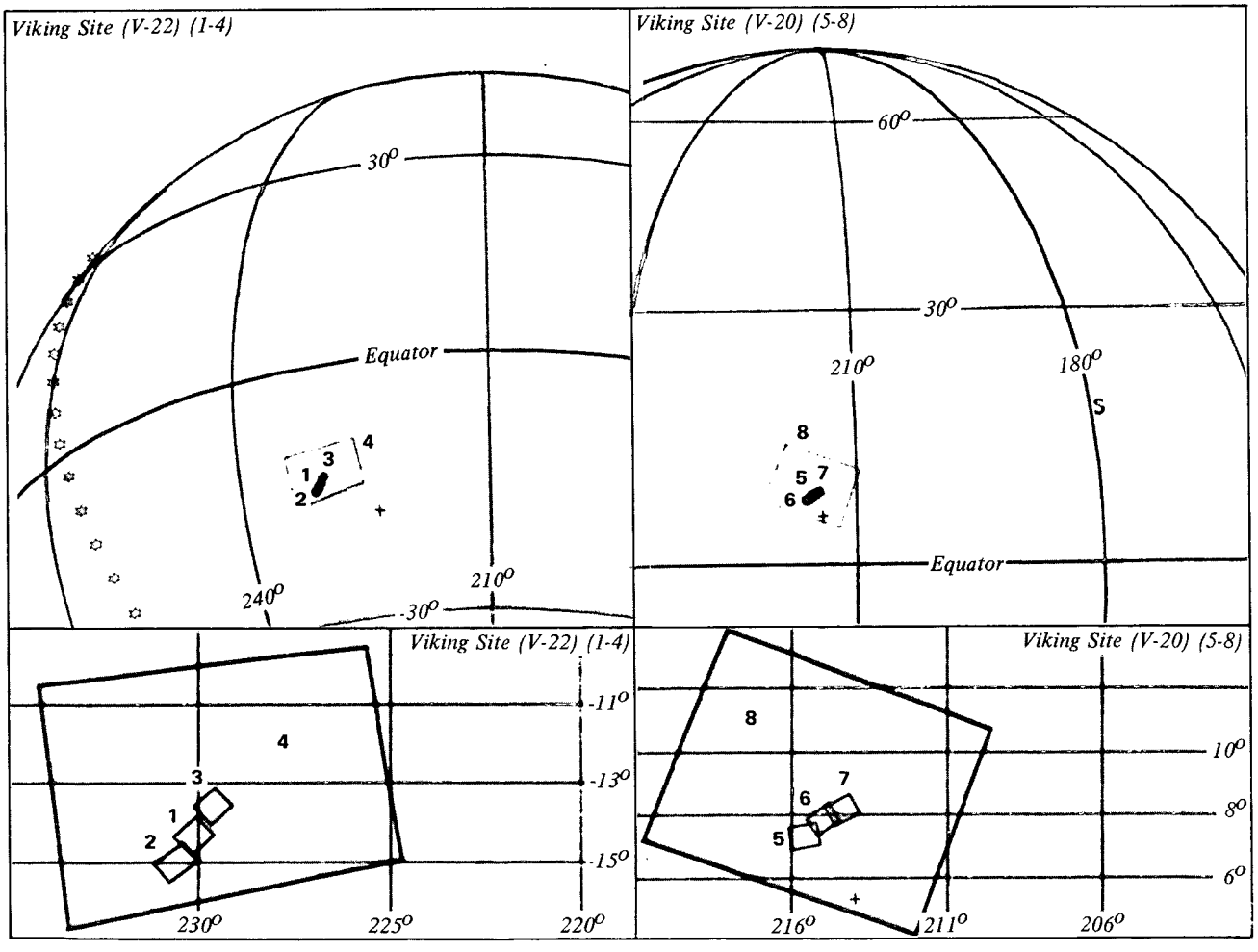


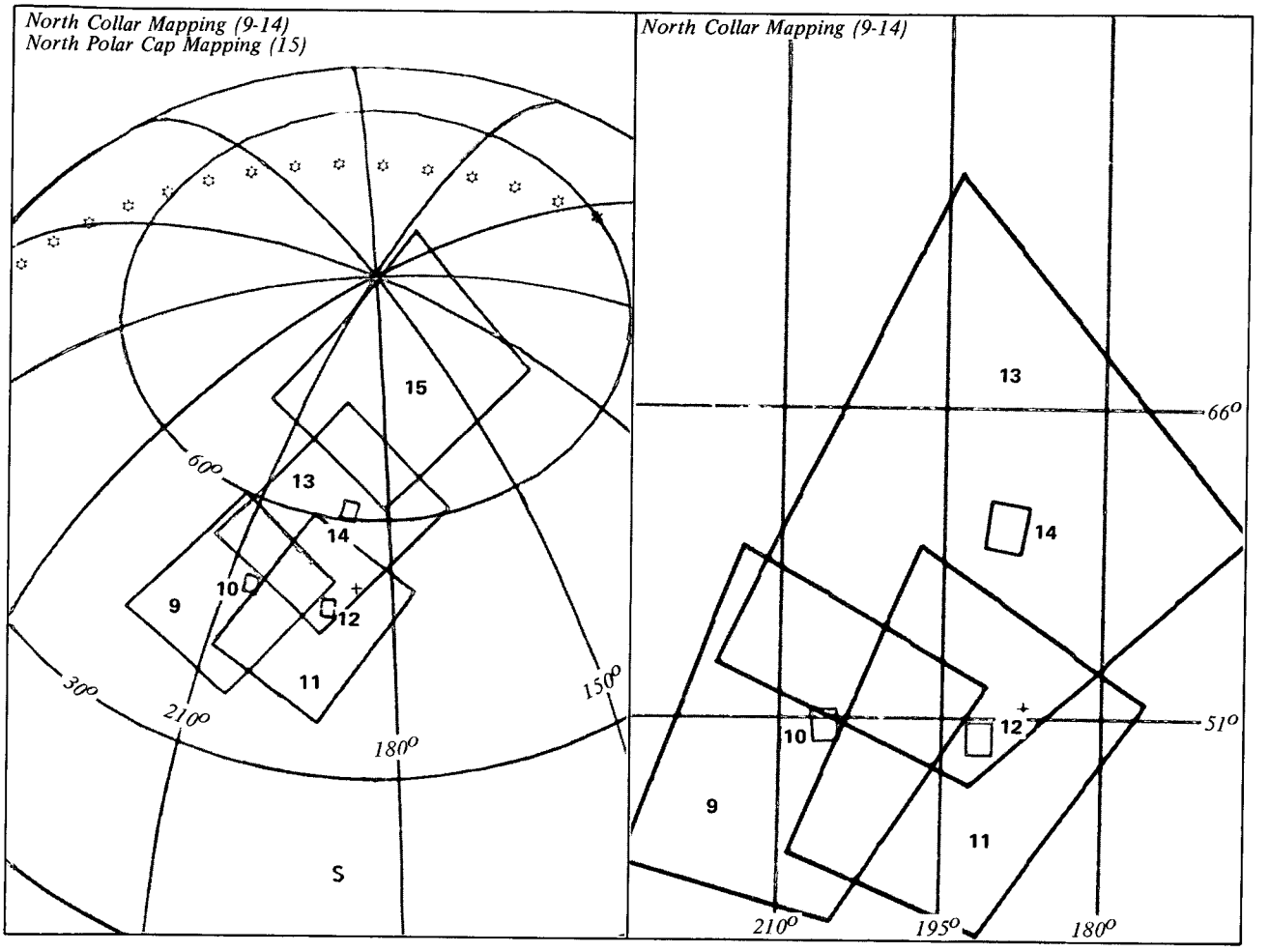
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
SOUTH POLE														
1 A	170 21 6 57	-0 8 27	-42.66	275.26	1788	99.35	213.68	-58.34	260.24	2228	46.72	84.85	80.72	11,973,784
IRR														
2 A	170 21 12 33	-0 2 51	-31.22	267.11	1675	104.00	236.33	-29.66	264.05	1690	9.22	66.90	76.07	11,974,064
3 B	170 21 13 15	-0 2 9	-29.71	266.25	1669	104.04	236.20	-27.28	262.94	1691	11.40	64.55	75.94	11,974,099
VIKING SITE (V-28)														
4 B	170 21 24 27	0 9 2	-5.20	255.37	1806	126.13	231.31	1.74	253.43	1881	20.27	38.63	53.86	11,974,659
5 B	170 21 25 51	0 10 26	-2.24	254.26	1853	132.28	225.25	2.25	252.66	1885	13.36	37.41	47.71	11,974,729
6 B	170 21 28 39	0 13 14	3.50	252.14	1964	148.36	207.22	1.25	253.82	1975	7.60	38.28	31.63	11,974,869
7 A	170 21 29 21	0 13 56	4.89	251.62	1996	148.72	207.46	3.22	253.01	2002	5.84	36.54	31.35	11,974,904
VIKING SITE (V-27)														
8 B	170 21 32 51	0 17 26	11.61	249.12	2171	148.06	226.45	20.45	251.65	2280	22.86	30.61	31.93	11,975,079
9 B	170 21 34 15	0 18 50	14.16	248.15	2250	151.59	218.25	21.25	250.24	2319	18.15	29.00	28.40	11,975,149
10 B	170 21 37 3	0 21 38	19.03	246.21	2418	161.42	192.78	20.86	250.94	2447	11.46	29.00	18.57	11,975,289
11 A	170 21 37 45	0 22 20	20.19	245.73	2463	161.80	192.47	22.52	250.29	2491	11.41	28.35	18.28	11,975,324
NORTH COLLAR MAPPING														
12 A	170 22 2 57	0 47 32	49.94	226.77	4399	147.42	93.68	50.05	237.61	4443	12.27	34.00	32.66	11,976,584
13 B	170 22 3 39	0 48 14	50.47	226.15	4457	147.41	93.99	51.53	235.30	4488	10.25	34.97	32.58	11,976,619
14 A	170 22 5 45	0 50 20	52.00	224.28	4631	143.69	103.34	49.73	220.65	4640	5.56	33.00	36.38	11,976,724
15 B	170 22 6 27	0 51 2	52.48	223.64	4689	143.61	103.38	50.71	217.84	4703	6.89	34.41	36.38	11,976,759
16 A	170 22 11 21	0 55 56	55.52	219.02	5095	143.29	93.85	59.07	218.98	5106	5.89	42.49	36.78	11,977,004
17 B	170 22 12 3	0 56 38	55.91	218.33	5153	143.29	93.85	59.99	215.40	5170	7.23	43.91	36.69	11,977,039
NORTH POLAR CAP MAPPING														
18 A	170 22 14 9	0 58 44	57.00	216.25	5327	149.94	91.08	74.07	199.21	5600	29.24	59.29	30.13	11,977,144


Viking Site (V-7) (2-4)
60°
30°
Equator
90°
60°
-30°
2
3
4
Geology (MC-10) (5)
60°
90°
60°
30°
30°
5
S
Viking Site (V-7) (2-4)
4
-16°
-14°
2
3
75°
70°
24°
5
23°
61°
Geology
(MC-10) (5)
60°

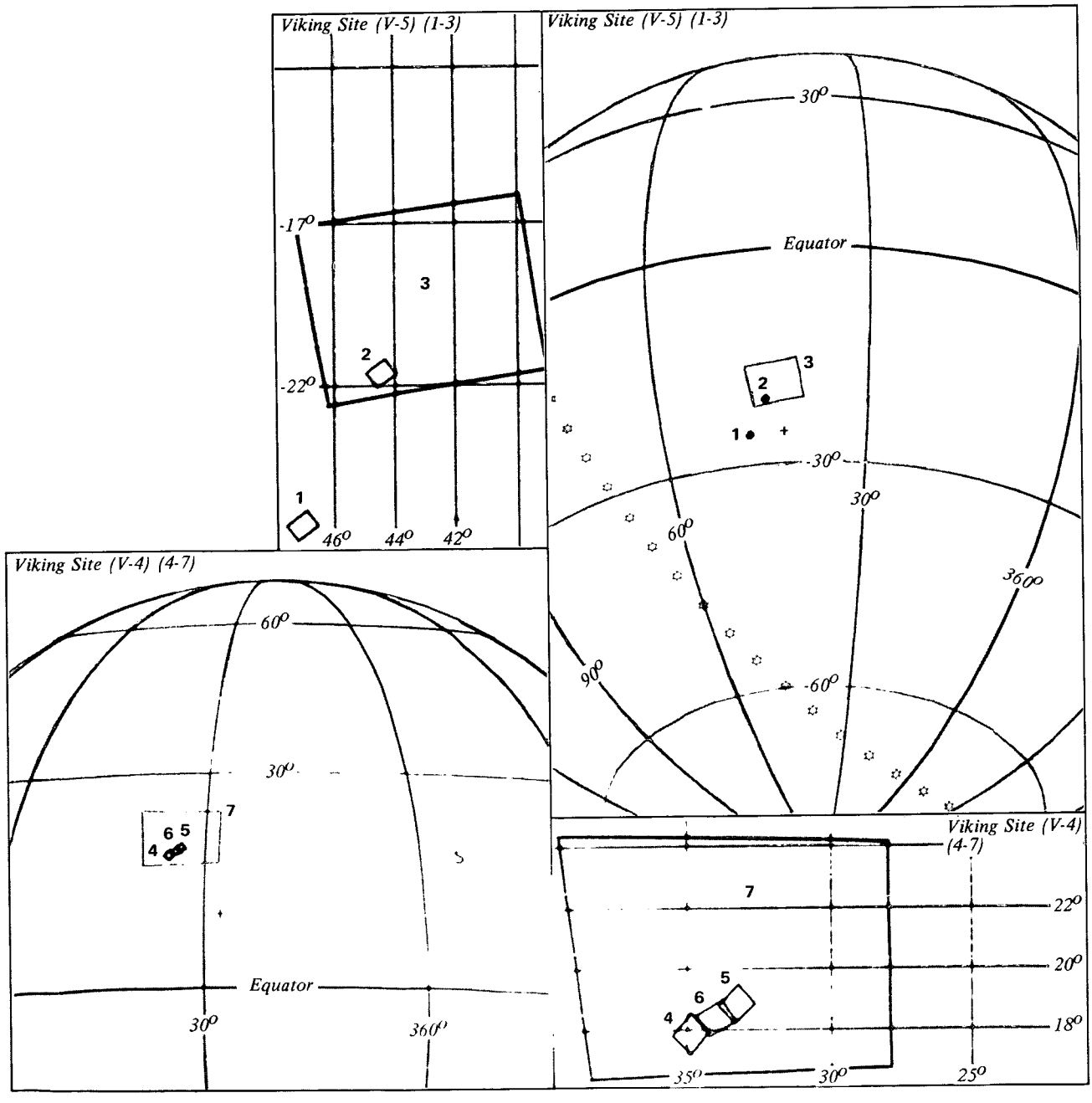


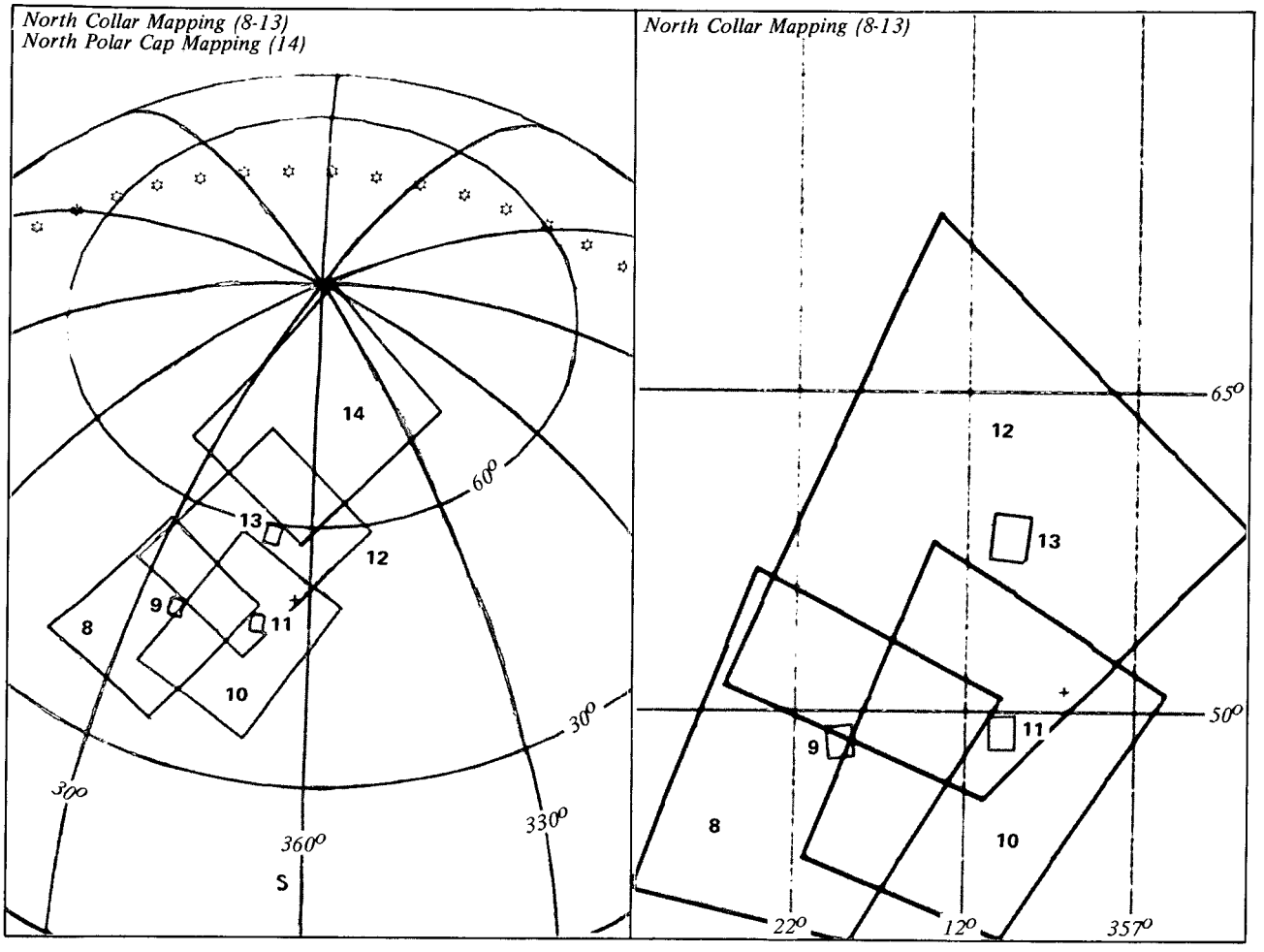
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
DEIMOS														
1 B	171 4 6 15	-5 8 36	17.88	179.81	16558	151.63	97.80	******	******	*****	183.34	134.69	36.69	11,994,749
VIKING SITE (V-7)														
2 B	171 9 15 39	0 0 47	-23.28	78.31	1662	109.16	238.33	-18.38	76.31	1704	15.70	57.46	70.83	12,010,219
3 B	171 9 17 3	0 2 11	-20.18	76.87	1669	119.53	233.39	-18.75	76.85	1673	4.33	57.83	60.46	12,010,289
4 A	171 9 17 45	0 2 53	-18.63	76.18	1676	119.53	233.39	-16.57	75.58	1683	6.46	55.44	60.54	12,010,324
GEOLOGY (MC-10)														
5 B	171 9 38 3	0 23 11	21.57	60.55	2518	157.14	185.20	23.58	61.04	2523	4.80	24.32	22.85	12,011,339
NORTH COLLAR MAPPING														
6 A	171 10 2 33	0 47 41	50.05	42.05	4411	147.48	93.87	50.27	53.30	4458	12.66	34.26	32.59	12,012,564
7 B	171 10 3 15	0 48 23	50.58	41.44	4469	147.48	93.87	51.76	51.12	4504	10.81	35.24	32.50	12,012,599
8 A	171 10 5 21	0 50 29	52.10	39.56	4643	143.53	103.36	49.67	36.24	4652	5.52	32.81	36.54	12,012,704
9 B	171 10 6 3	0 51 11	52.58	38.92	4701	143.53	103.36	50.76	33.47	4714	6.58	34.31	36.45	12,012,739
10 A	171 10 10 57	0 56 5	55.60	34.29	5107	143.29	93.85	59.20	34.70	5119	5.99	42.48	36.78	12,012,984
11 B	171 10 11 39	0 56 47	55.99	33.61	5165	143.29	93.85	60.14	31.12	5181	7.19	43.89	36.69	12,013,019
NORTH POLAR CAP MAPPING														
12 A	171 10 13 45	0 58 53	57.08	31.52	5339	149.94	91.08	74.29	15.19	5612	29.26	59.28	30.13	12,013,124


Viking Site (V-22) (1-4)
30°
Equator
240°
210°
-30°
1
2
3
4
Viking Site (V-20) (5-8)
60°
30°
210°
180°
S
Equator
5
6
7
8
Viking Site (V-22) (1-4)
-11°
-13°
-15°
230°
225°
220°
Viking Site (V-20) (5-8)
10°
8°
6°
216°
211°
206°

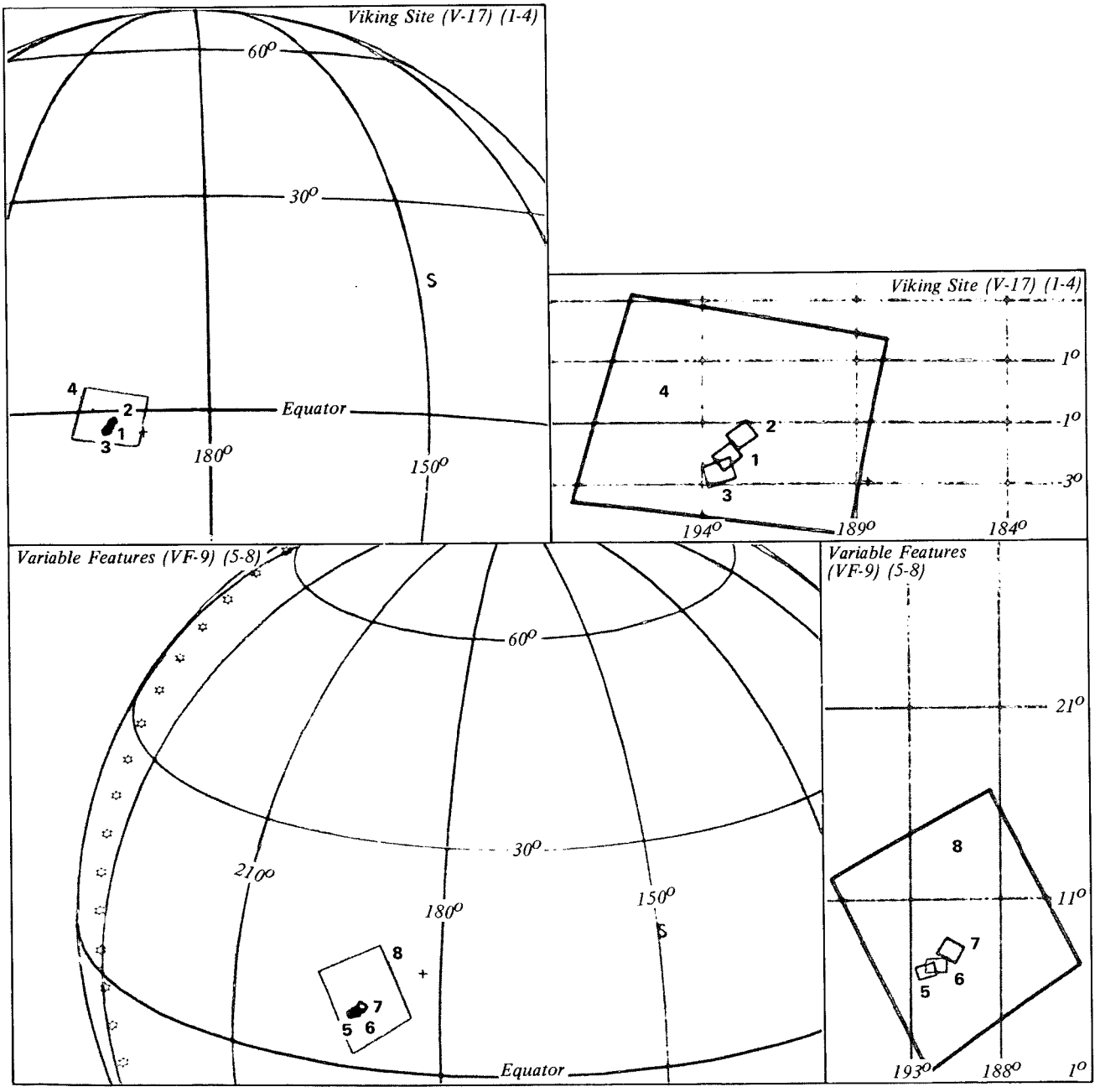


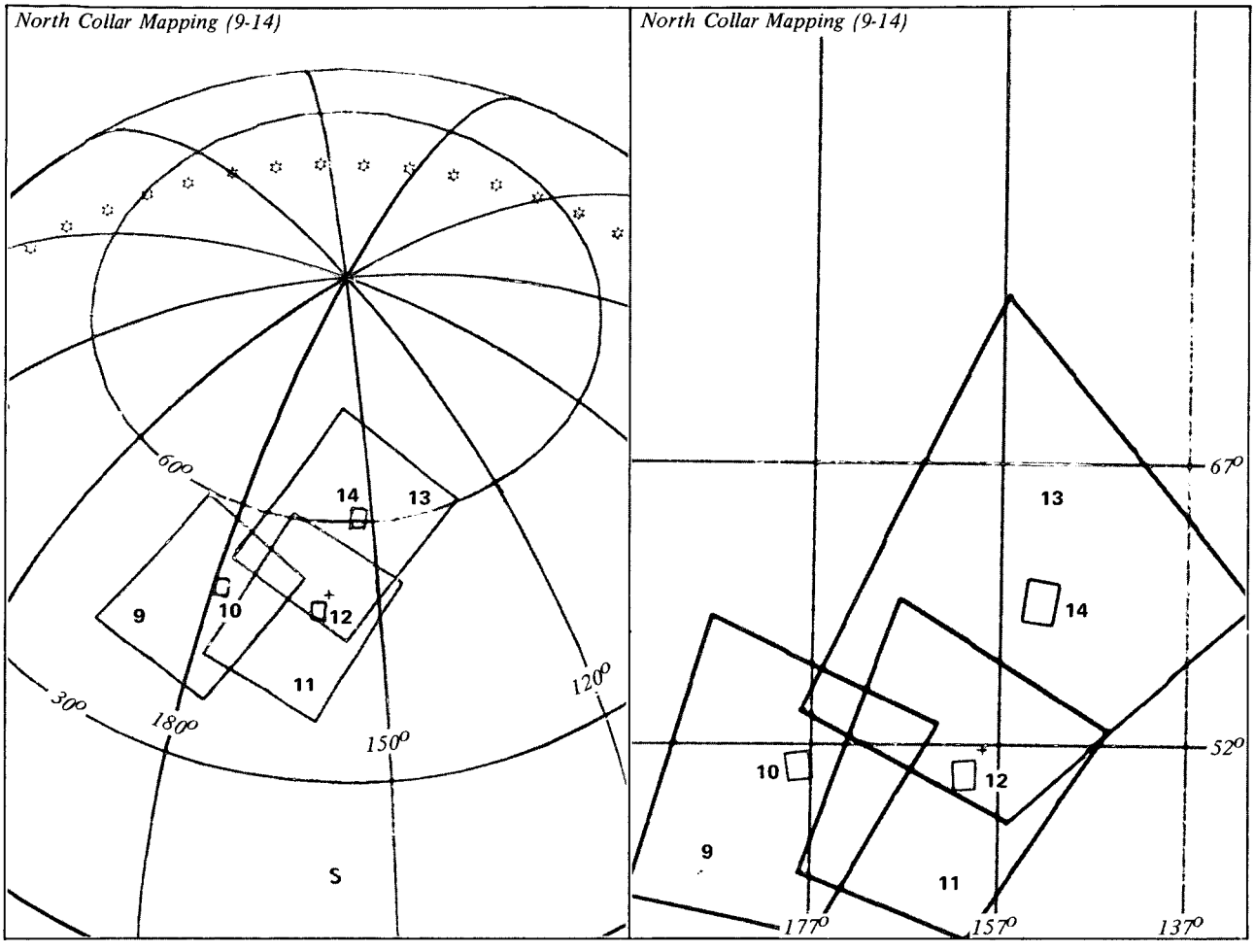
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
VIKING SITE (V-22)														
1 B	174 21 10 1	0 1 37	-21.53	224.58	1669	117.14	250.30	-14.33	230.09	1788	25.94	62.51	62.85	12,150,187
2 B	174 21 11 25	0 3 1	-18.44	223.19	1680	124.53	246.79	-13.60	229.60	1773	22.91	61.44	55.46	12,150,257
3 B	174 21 14 13	0 5 49	-12.27	220.61	1725	144.56	234.41	-15.00	230.56	1872	28.43	62.37	35.43	12,150,397
4 A	174 21 14 55	0 6 31	-10.74	220.00	1740	144.40	234.20	-12.87	229.08	1863	25.92	59.93	35.67	12,150,432
VIKING SITE (V-20)														
5 B	174 21 21 13	0 12 49	2.53	215.01	1949	136.38	224.30	7.85	214.96	1989	14.40	36.91	43.61	12,150,747
6 B	174 21 22 37	0 14 13	5.33	213.98	2012	141.89	216.65	8.15	214.36	2023	7.63	35.93	38.10	12,150,817
7 B	174 21 25 25	0 17 1	10.70	211.99	2152	154.27	193.82	7.32	215.58	2183	12.50	36.71	25.72	12,150,957
8 A	174 21 26 7	0 17 43	12.00	211.50	2189	154.79	193.78	9.09	214.98	2216	11.35	35.42	25.28	12,150,992
NORTH COLLAR MAPPING														
9 A	174 21 55 31	0 47 7	49.52	189.84	4364	148.56	91.61	48.94	207.69	4486	20.40	35.51	31.51	12,152,462
10 B	174 21 56 13	0 47 49	50.06	189.23	4422	148.56	91.61	50.56	205.80	4522	18.45	36.12	31.43	12,152,497
11 A	174 21 58 19	0 49 55	51.62	187.38	4596	143.96	99.39	48.56	193.43	4618	8.56	31.21	36.11	12,152,602
12 B	174 21 59 1	0 50 37	52.11	186.75	4654	143.89	99.14	49.79	191.40	4666	6.44	32.20	36.10	12,152,637
13 A	174 22 3 55	0 55 31	55.21	182.18	5060	144.66	91.56	59.73	192.27	5102	11.72	42.07	35.41	12,152,882
14 B	174 22 4 37	0 56 13	55.61	181.50	5118	144.65	91.50	60.93	189.17	5156	11.04	43.20	35.34	12,152,917
NORTH POLAR CAP MAPPING														
15 A	174 22 8 7	0 59 43	57.43	178.05	5406	149.83	90.25	75.47	172.04	5674	28.41	58.50	30.25	12,153,092
PHOBOS														
16 B	175 0 10 37	3 2 13	51.02	114.52	13134	115.22	94.55	******	******	*****	112.29	118.99	35.34	12,159,217


Viking Site (V-5) (1-3)
-17°
-22°
46°
44°
42°
1
2
3
Viking Site (V-5) (1-3)
30°
Equator
-30°
30°
60°
360°
90°
-60°
Viking Site (V-4) (4-7)
60°
30°
Equator
30°
360°
Viking Site (V-4) (4-7)
22°
20°
18°
35°
30°
25°

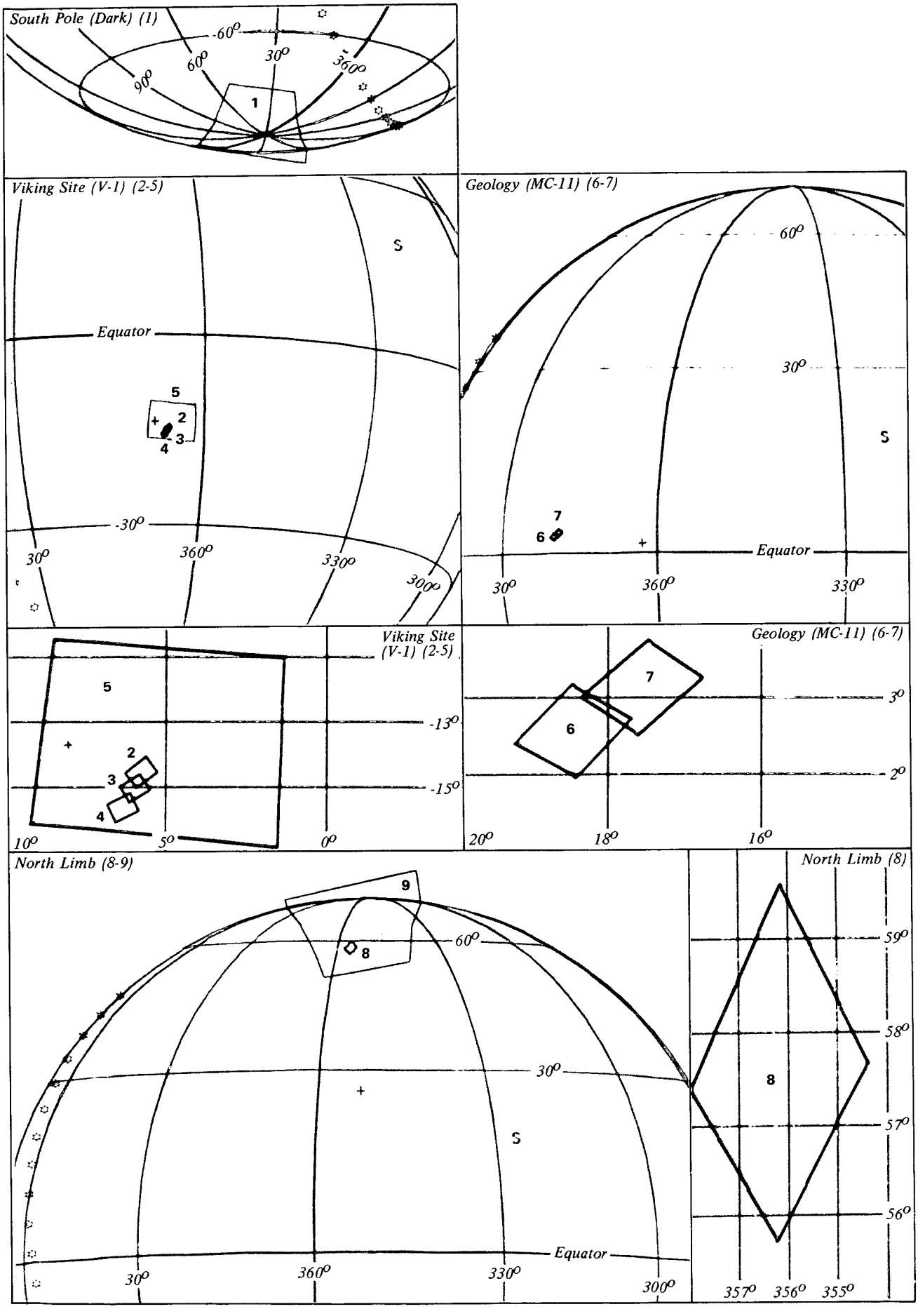


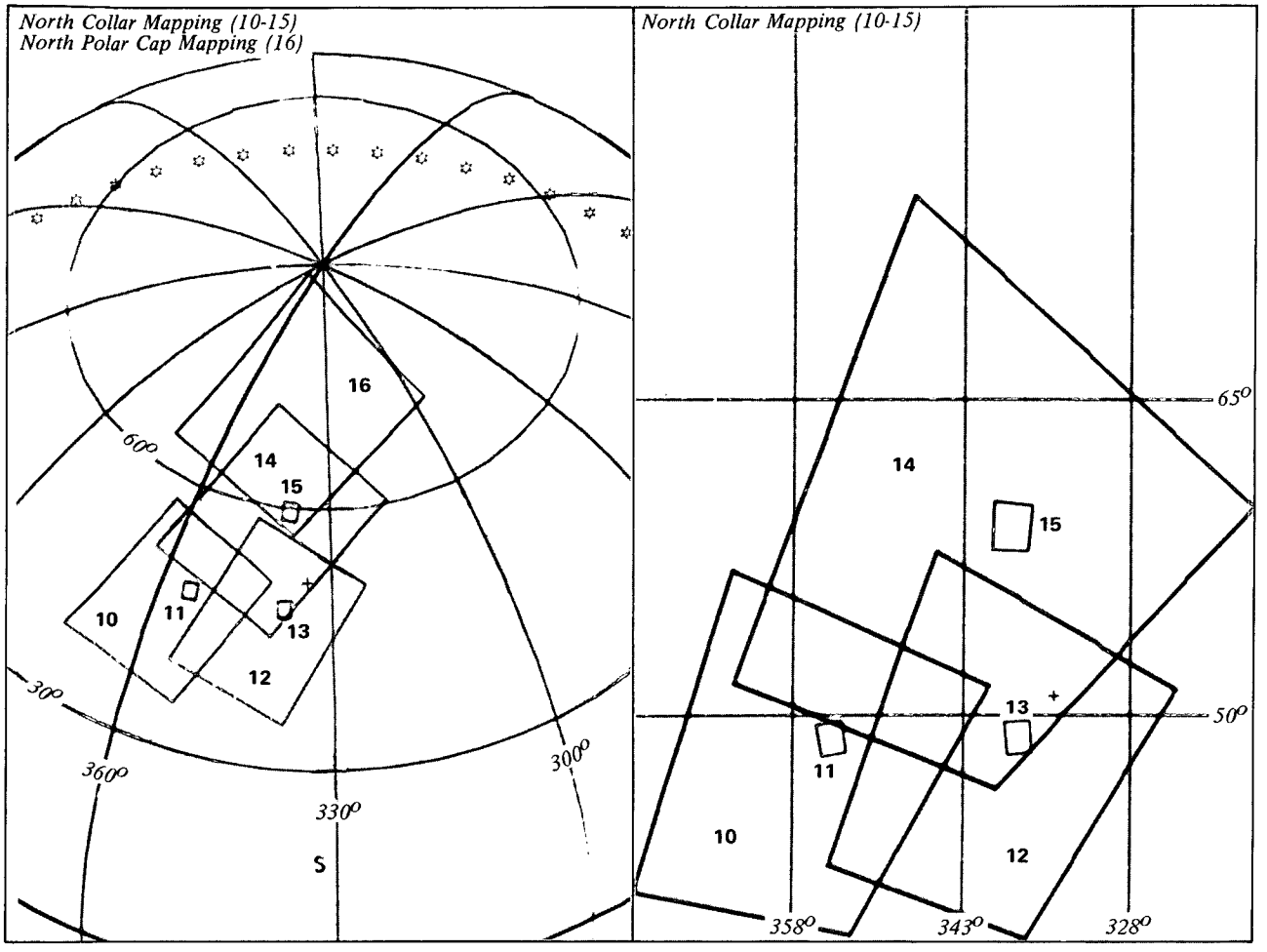
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
VIKING SITE (V-5)														
1 B	175 9 5 25	-0 1 49	-29.10	43.63	1671	111.44	243.99	-26.16	47.03	1698	12.62	70.89	68.55	12,185,957
2 B	175 9 6 49	-0 0 25	-26.05	42.02	1665	111.44	243.99	-21.66	44.45	1702	14.76	66.22	68.55	12,186,027
3 A	175 9 7 31	0 0 16	-24.52	41.25	1665	111.44	243.99	-19.51	43.06	1708	15.81	63.84	68.63	12,186,062
VIKING SITE (V-4)														
4 B	175 9 22 13	0 14 58	6.77	28.70	2048	142.16	239.41	17.85	34.88	2254	31.75	38.96	37.83	12,186,797
5 B	175 9 23 37	0 16 22	9.46	27.70	2118	146.14	233.24	18.84	33.28	2269	27.10	37.03	33.85	12,186,867
6 B	175 9 26 25	0 19 10	14.60	25.75	2272	158.97	216.83	18.38	34.00	2369	21.33	37.11	21.01	12,187,007
7 A	175 9 27 7	0 19 52	15.84	25.27	2313	158.97	216.83	20.33	33.06	2407	20.88	35.92	21.10	12,187,042
NORTH COLLAR MAPPING														
8 A	175 9 53 43	0 46 28	48.98	5.67	4311	147.99	91.06	46.50	24.78	4464	22.90	34.52	32.08	12,188,372
9 B	175 9 54 25	0 47 10	49.54	5.08	4369	147.99	91.06	48.16	23.01	4495	20.75	34.96	32.00	12,188,407
10 A	175 9 56 31	0 49 16	51.13	3.24	4543	144.07	98.99	47.35	10.95	4578	10.93	30.40	36.00	12,188,512
11 B	175 9 57 13	0 49 58	51.63	2.62	4601	144.07	98.99	48.73	8.73	4622	8.43	31.36	35.92	12,188,547
12 A	175 10 2 7	0 54 52	54.82	358.09	5006	144.09	90.90	57.57	11.09	5058	12.89	40.16	35.98	12,188,792
13 B	175 10 2 49	0 55 34	55.22	357.42	5064	144.09	90.90	58.86	8.22	5105	11.46	41.14	35.90	12,188,827
NORTH POLAR CAP MAPPING														
14 A	175 10 4 55	0 57 40	56.38	355.38	5238	149.91	90.94	71.80	359.40	5437	25.10	54.07	30.16	12,188,932


Viking Site (V-17) (1-4)
60°
30°
S
4
2
1
3
Equator
180°
150°
Viking Site (V-17) (1-4)
1°
-1°
-3°
194°
189°
184°
Variable Features (VF-9) (5-8)
60°
30°
210°
180°
150°
8
7
5
6
Equator
Variable Features (VF-9) (5-8)
21°
11°
1°
193°
188°

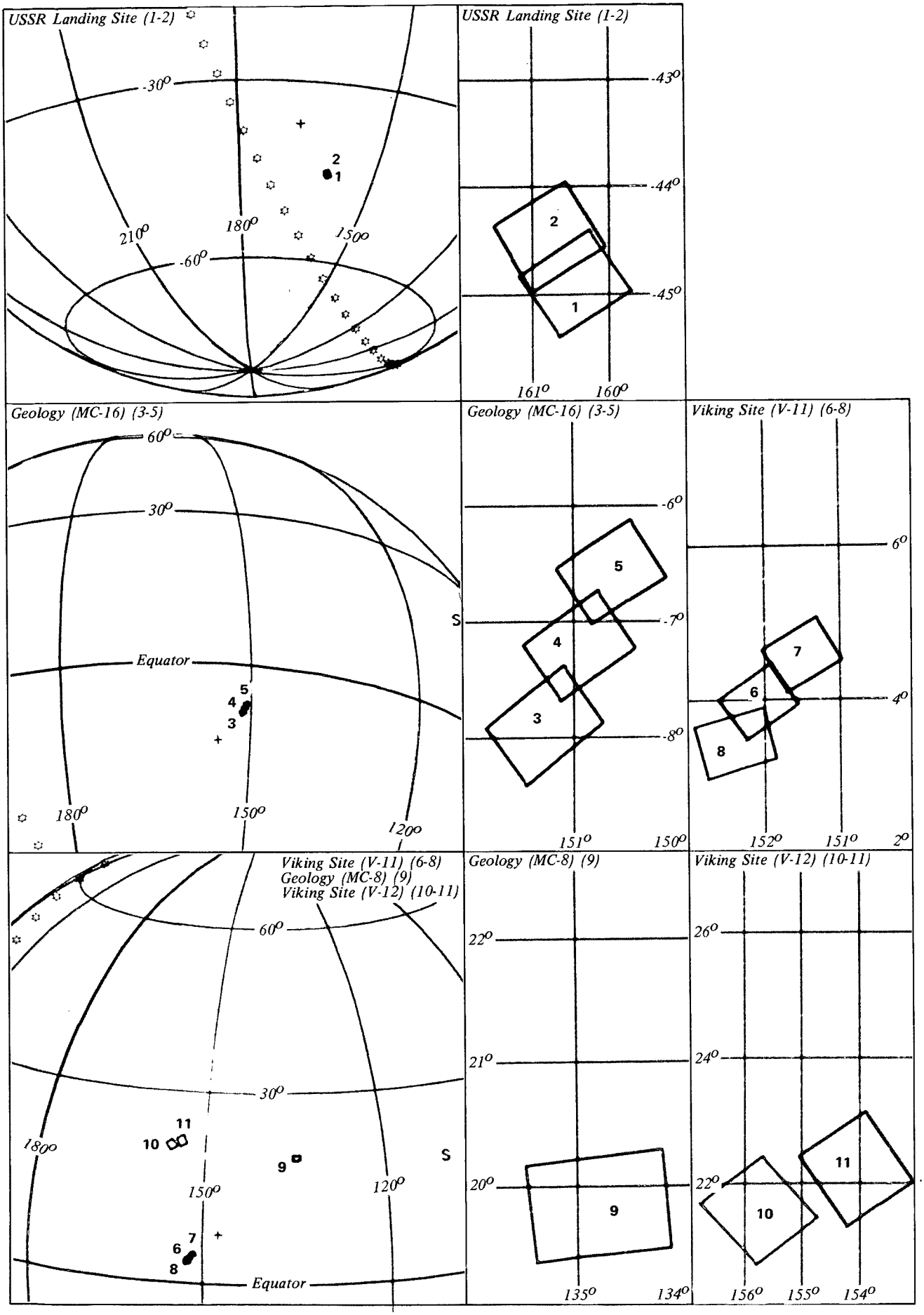


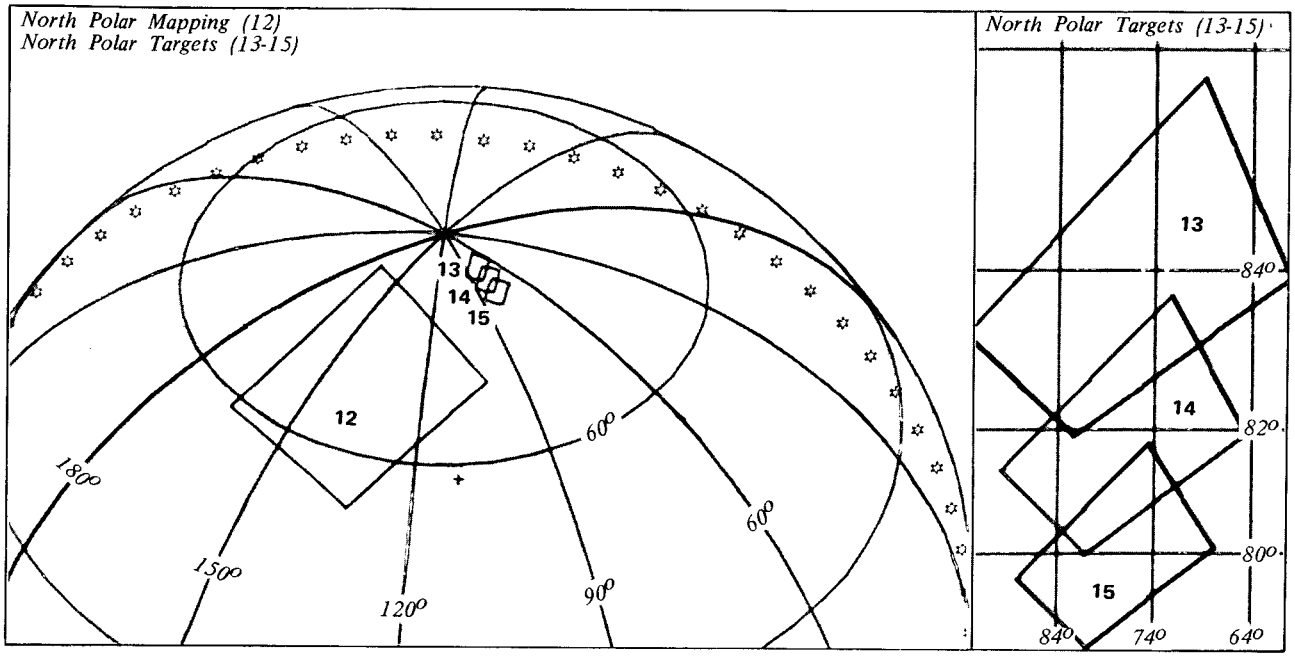
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
VIKING SITE (V-17)														
1 B	177 21 10 25	0 8 47	-5.95	189.73	1803	132.74	232.81	-2.14	193.17	1842	14.57	49.65	47.25	12,326,056
2 B	177 21 11 49	0 10 11	-2.99	188.61	1849	139.03	226.82	-1.45	192.69	1876	12.24	48.62	40.96	12,326,126
3 B	177 21 14 37	0 12 59	2.76	186.49	1958	153.41	204.86	-2.63	193.43	2064	23.33	49.20	26.58	12,326,266
4 A	177 21 15 19	0 13 41	4.16	185.97	1989	153.81	205.08	-.70	192.68	2082	21.82	47.51	26.27	12,326,301
VARIABLE FEATURES (VF-9)														
5 B	177 21 18 49	0 17 11	10.90	183.47	2162	159.84	197.13	7.15	192.10	2274	23.24	43.19	20.15	12,326,476
6 B	177 21 20 13	0 18 35	13.46	182.49	2239	161.64	180.89	7.47	191.56	2384	26.08	42.26	18.35	12,326,546
7 B	177 21 23 1	0 21 23	18.35	180.57	2406	161.47	149.94	8.27	190.79	2642	32.41	40.64	18.51	12,326,686
8 A	177 21 23 43	0 22 5	19.53	180.09	2450	161.40	150.19	9.99	190.05	2665	30.85	39.27	18.67	12,326,721
NORTH COLLAR MAPPING														
9 A	177 21 48 55	0 47 17	49.52	161.31	4378	149.24	93.31	48.76	180.24	4515	21.61	36.16	30.84	12,327,981
10 B	177 21 49 37	0 47 59	50.06	160.71	4436	149.30	93.41	50.52	178.30	4548	19.54	36.69	30.69	12,328,016
11 A	177 21 51 43	0 50 5	51.61	158.86	4609	144.86	103.35	49.13	164.02	4621	6.28	31.36	35.21	12,328,121
12 B	177 21 52 25	0 50 47	52.10	158.23	4667	144.47	103.28	49.91	160.65	4674	4.59	31.89	35.52	12,328,156
13 A	177 21 57 19	0 55 41	55.18	153.67	5073	145.50	98.44	59.39	156.01	5090	7.30	41.29	34.57	12,328,401
14 B	177 21 58 1	0 56 23	55.58	152.99	5131	145.45	98.24	60.44	152.86	5151	8.05	42.51	34.53	12,328,436


South Pole (Dark) (1)
-60°
60°
30°
360°
90°
1
Viking Site (V-1) (2-5)
S
Equator
5
2
3
4
-30°
30°
360°
330°
300°
Geology (MC-11) (6-7)
60°
30°
S
7
6
Equator
30°
360°
330°
Viking Site
(V-1) (2-5)
5
-13°
2
3
-15°
4
10°
5°
0°
Geology (MC-11) (6-7)
7
6
3°
2°
20°
18°
16°
North Limb (8-9)
9
8
60°
30°
S
Equator
30°
360°
330°
300°
North Limb (8)
59°
58°
8
57°
56°
357°
356°
355°

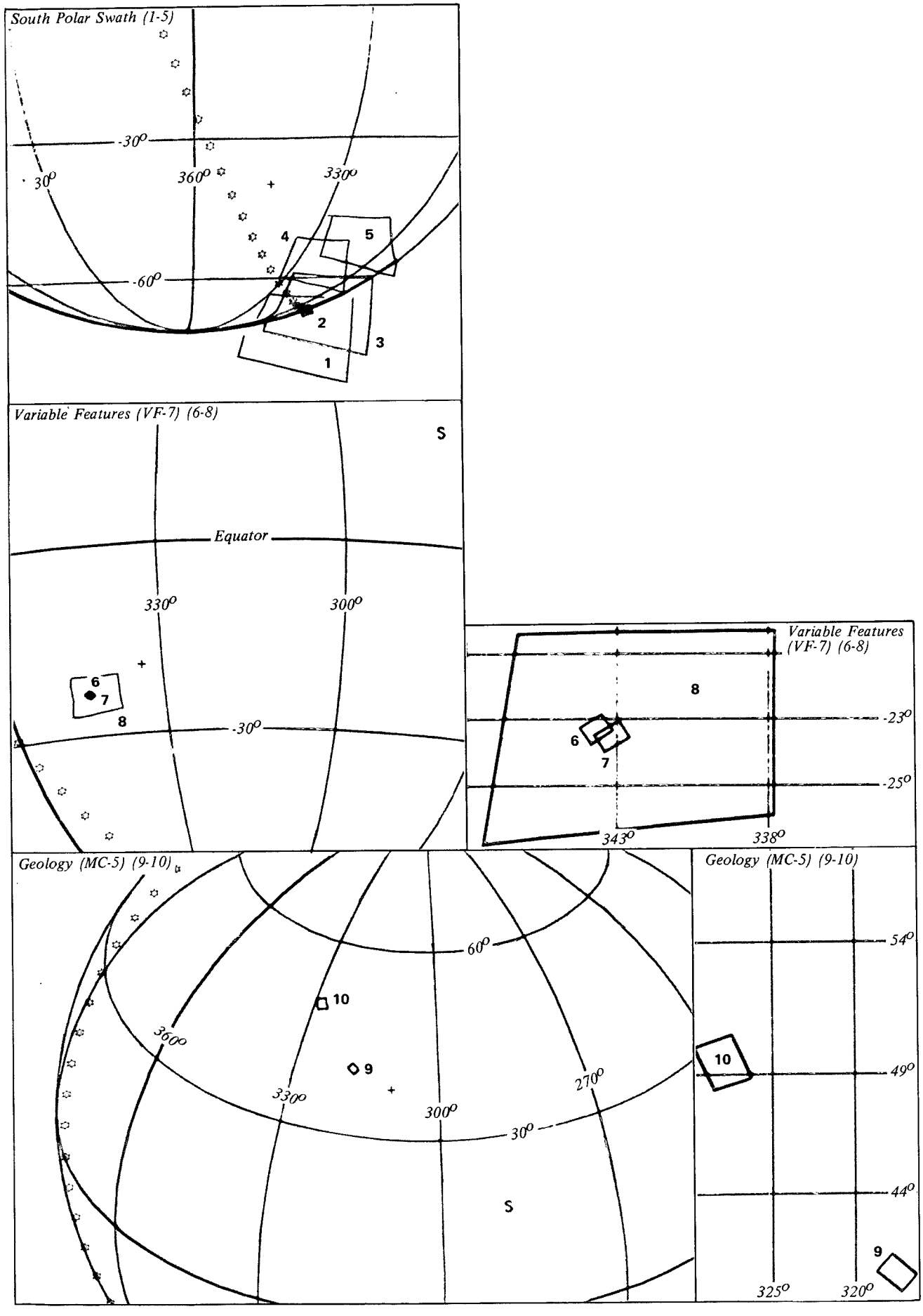


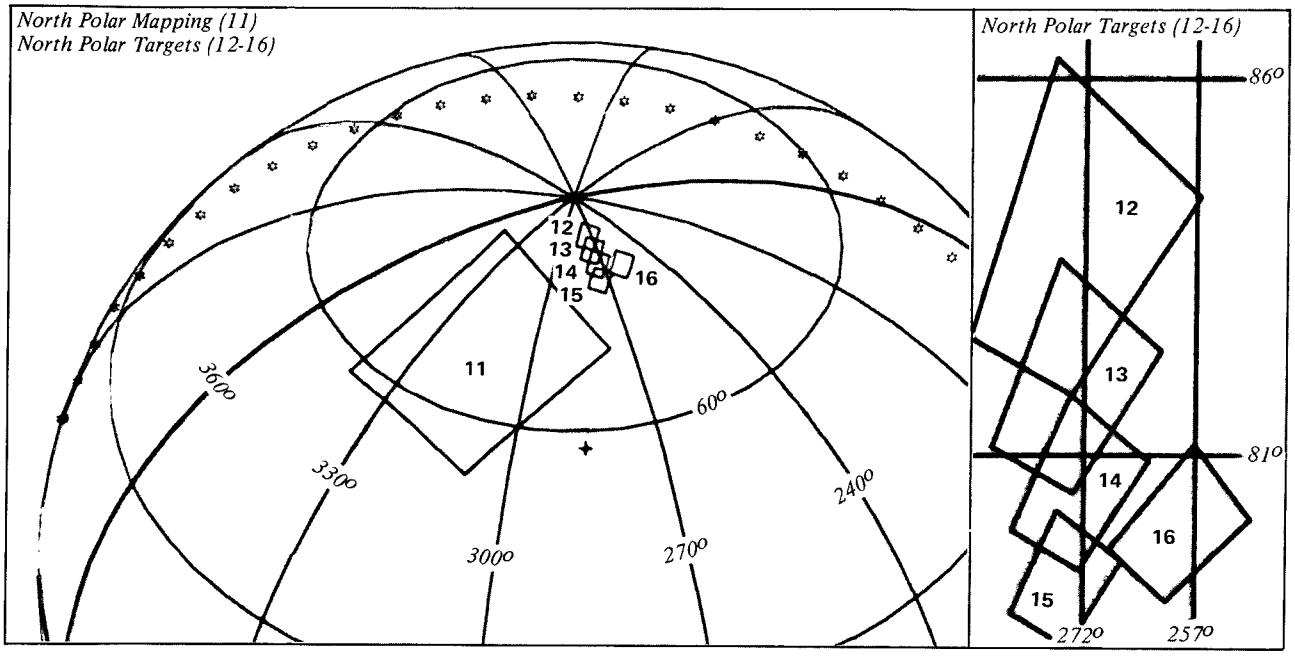
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
SOUTH POLE (DARK)														
1 A	178 8 46 55	-0 13 41	-51.91	35.13	1989	96.09	215.70	-80.87	41.72	2921	63.27	107.18	83.97	12,360,881
VIKING SITE (V-1)														
2 B	178 9 3 1	0 2 24	-19.87	10.70	1677	104.34	232.93	-14.57	5.79	1753	20.84	55.34	75.65	12,361,686
3 B	178 9 5 49	0 5 12	-13.70	8.06	1715	121.94	220.63	-15.05	5.99	1724	7.15	55.24	58.05	12,361,826
4 B	178 9 7 13	0 6 36	-10.65	6.83	1745	130.67	212.49	-15.63	6.35	1782	14.53	55.59	49.32	12,361,896
5 A	178 9 7 55	0 7 18	-9.13	6.23	1762	130.67	212.49	-13.52	5.20	1792	13.05	53.33	49.40	12,361,931
GEOLOGY (MC-11)														
6 B	178 9 12 49	0 12 12	1.18	2.35	1926	155.74	245.45	2.57	18.44	2265	40.71	56.55	24.25	12,362,176
7 B	178 9 14 13	0 13 36	4.00	1.31	1986	160.78	237.47	3.14	17.54	2322	40.26	55.19	19.21	12,362,246
NORTH LIMB														
8 B	178 9 26 49	0 26 12	26.02	352.55	2726	148.10	232.94	57.53	356.18	3685	60.42	45.11	31.89	12,362,876
9 A	178 9 27 31	0 26 54	27.66	352.07	2775	148.10	232.94	61.25	353.95	3864	63.74	47.21	31.97	12,362,911
NORTH COLLAR MAPPING														
10 A	178 9 47 7	0 46 30	48.89	337.27	4314	149.22	93.89	46.90	356.35	4464	22.66	35.32	30.85	12,363,891
11 B	178 9 47 49	0 47 12	49.44	336.67	4372	149.22	93.89	48.58	354.58	4496	20.57	35.70	30.77	12,363,926
12 A	178 9 49 55	0 49 18	51.03	334.84	4546	144.62	103.37	47.29	340.32	4570	9.01	28.89	35.45	12,364,031
13 B	178 9 50 37	0 50 0	51.54	334.22	4604	144.62	103.37	48.66	338.05	4616	6.54	30.84	35.36	12,364,066
14 A	178 9 55 31	0 54 54	54.72	329.70	5009	145.53	93.86	58.30	341.63	5057	12.47	40.57	34.54	12,364,311
15 B	178 9 56 13	0 55 36	55.12	329.04	5067	145.53	93.86	59.61	338.66	5108	11.38	41.58	34.46	12,364,346
NORTH POLAR CAP MAPPING														
16 A	178 9 58 19	0 57 42	56.28	327.00	5241	149.94	91.08	70.70	338.40	5433	24.65	52.57	30.13	12,364,451


USSR Landing Site (1-2)
-30°
210°
180°
150°
-60°
2
1
USSR Landing Site (1-2)
-43°
-44°
-45°
161°
160°
Geology (MC-16) (3-5)
60°
30°
Equator
S
180°
150°
120°
5
4
3
Geology (MC-16) (3-5)
-6°
-7°
-8°
151°
150°
Viking Site (V-11) (6-8)
6°
4°
152°
151°
2°
7
6
8
Viking Site (V-11) (6-8)
Geology (MC-8) (9)
Viking Site (V-12) (10-11)
60°
30°
180°
150°
120°
11
10
9
S
6
7
8
Equator
Geology (MC-8) (9)
22°
21°
20°
135°
134°
Viking Site (V-12) (10-11)
26°
24°
22°
156°
155°
154°

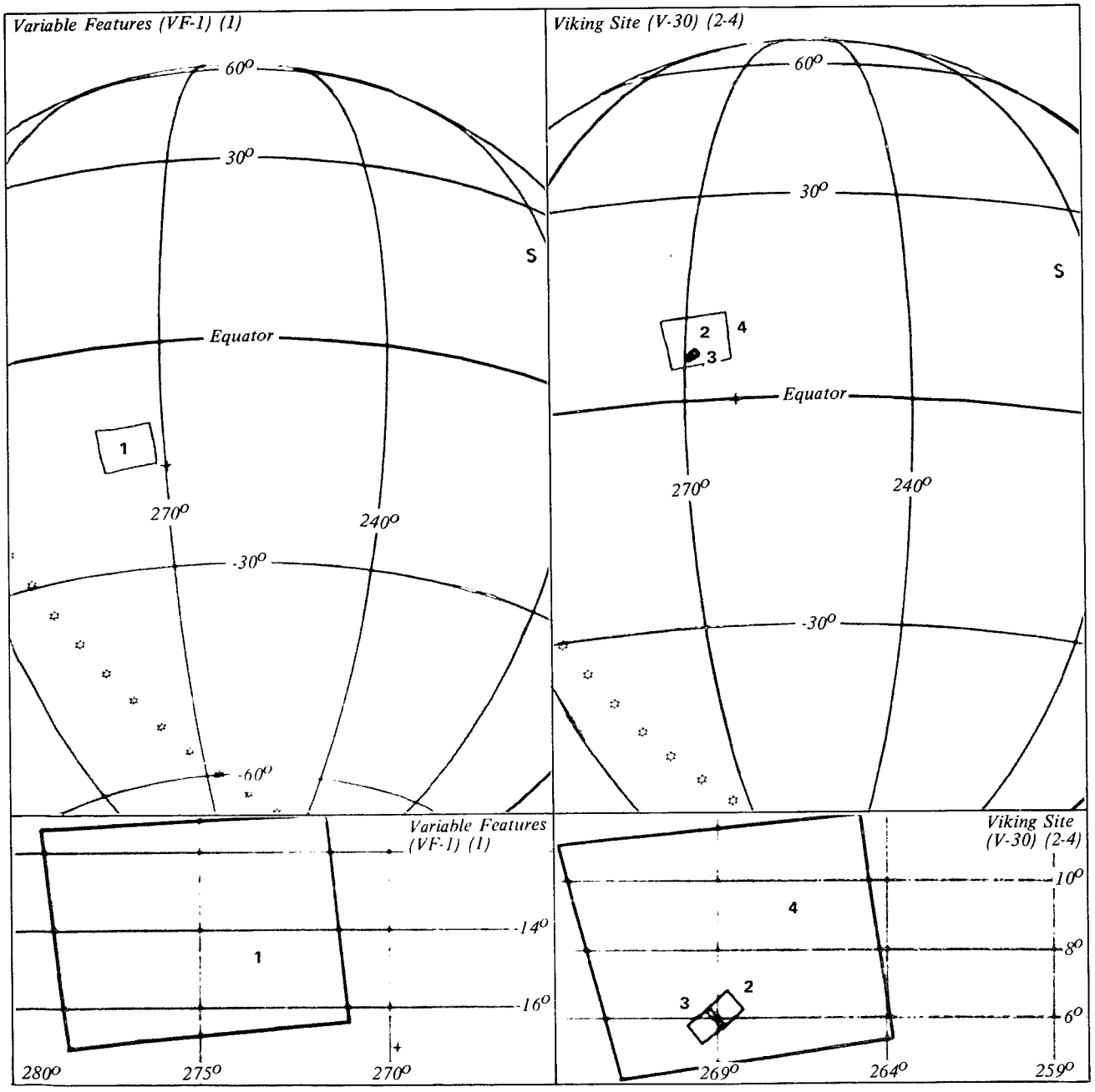


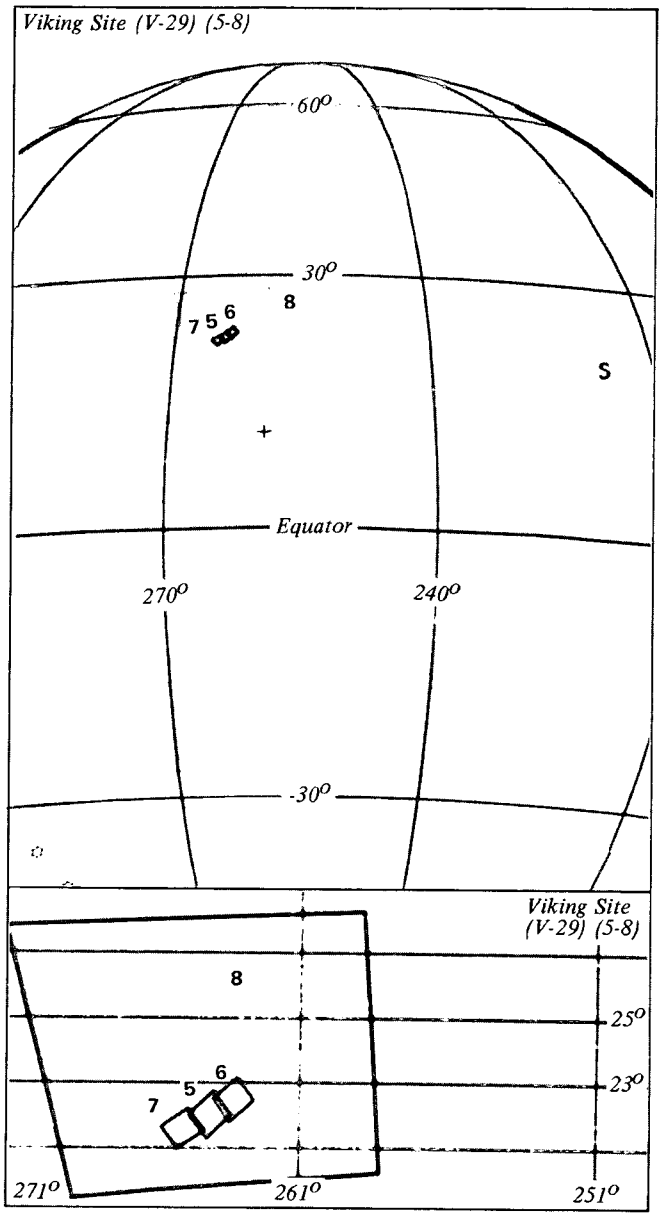
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
USSR LANDING SITE														
1 B	181 20 50 25	-0 5 29	-36.94	167.75	1719	97.36	220.75	-44.91	160.45	1857	27.54	81.64	82.63	12,499,155
2 B	181 20 51 49	-0 4 5	-34.03	165.80	1695	105.13	216.65	-44.47	160.78	1877	31.51	81.37	74.85	12,499,225
GEOLOGY (MC-16)														
3 B	181 21 0 13	0 4 18	-15.74	156.49	1699	103.62	233.80	-7.90	151.26	1829	26.88	51.58	76.37	12,499,645
4 B	181 21 1 37	0 5 42	-12.66	155.21	1724	110.50	229.38	-7.22	150.96	1794	19.91	50.69	69.49	12,499,715
5 B	181 21 3 1	0 7 6	-9.62	154.00	1755	117.41	224.40	-6.58	150.68	1785	12.98	49.83	62.58	12,499,785
VIKING SITE (V-11)														
6 B	181 21 7 13	0 11 18	-.71	150.62	1889	131.88	226.79	3.97	152.08	1924	13.58	45.37	48.11	12,499,995
7 B	181 21 8 37	0 12 42	2.14	149.56	1946	137.46	220.31	4.59	151.51	1959	8.52	44.30	42.53	12,500,065
8 B	181 21 11 25	0 15 30	7.66	147.52	2075	150.52	199.09	3.45	152.37	2130	16.62	44.90	29.47	12,500,205
GEOLOGY (MC-8)														
9 B	181 21 17 1	0 21 6	17.82	143.61	2389	136.94	193.75	19.83	134.83	2478	20.27	22.98	43.05	12,500,485
VIKING SITE (V-12)														
10 B	181 21 24 1	0 28 6	28.73	138.81	2861	163.89	124.08	21.57	155.74	3164	35.00	40.86	16.09	12,500,835
11 B	181 21 25 25	0 29 30	30.68	137.83	2963	161.02	119.13	22.23	154.05	3257	34.22	38.94	18.97	12,500,905
NORTH POLAR MAPPING														
12 A	181 21 52 43	0 56 48	55.71	115.46	5167	149.86	90.86	67.22	136.60	5358	24.64	49.84	30.21	12,502,270
NORTH POLAR TARGETS														
13 B	181 21 57 37	1 1 42	58.14	110.59	5570	154.13	93.14	83.82	77.98	6129	41.28	66.84	25.86	12,502,515
14 B	181 21 59 1	1 3 6	58.74	109.17	5684	152.14	92.82	81.83	77.85	6156	37.85	65.46	27.85	12,502,585
15 B	181 22 0 25	1 4 30	59.30	107.72	5798	150.16	92.42	79.93	78.37	6191	34.46	64.11	29.83	12,502,655


South Polar Swath (1-5)
-30°
30°
360°
330°
-60°
1
2
3
4
5
Variable Features (VF-7) (6-8)
S
Equator
330°
300°
6
7
8
-30°
Variable Features
(VF-7) (6-8)
8
6
7
-23°
-25°
343°
338°
Geology (MC-5) (9-10)
60°
10
360°
9
330°
300°
270°
30°
S
Geology (MC-5) (9-10)
54°
10
49°
44°
9
325°
320°

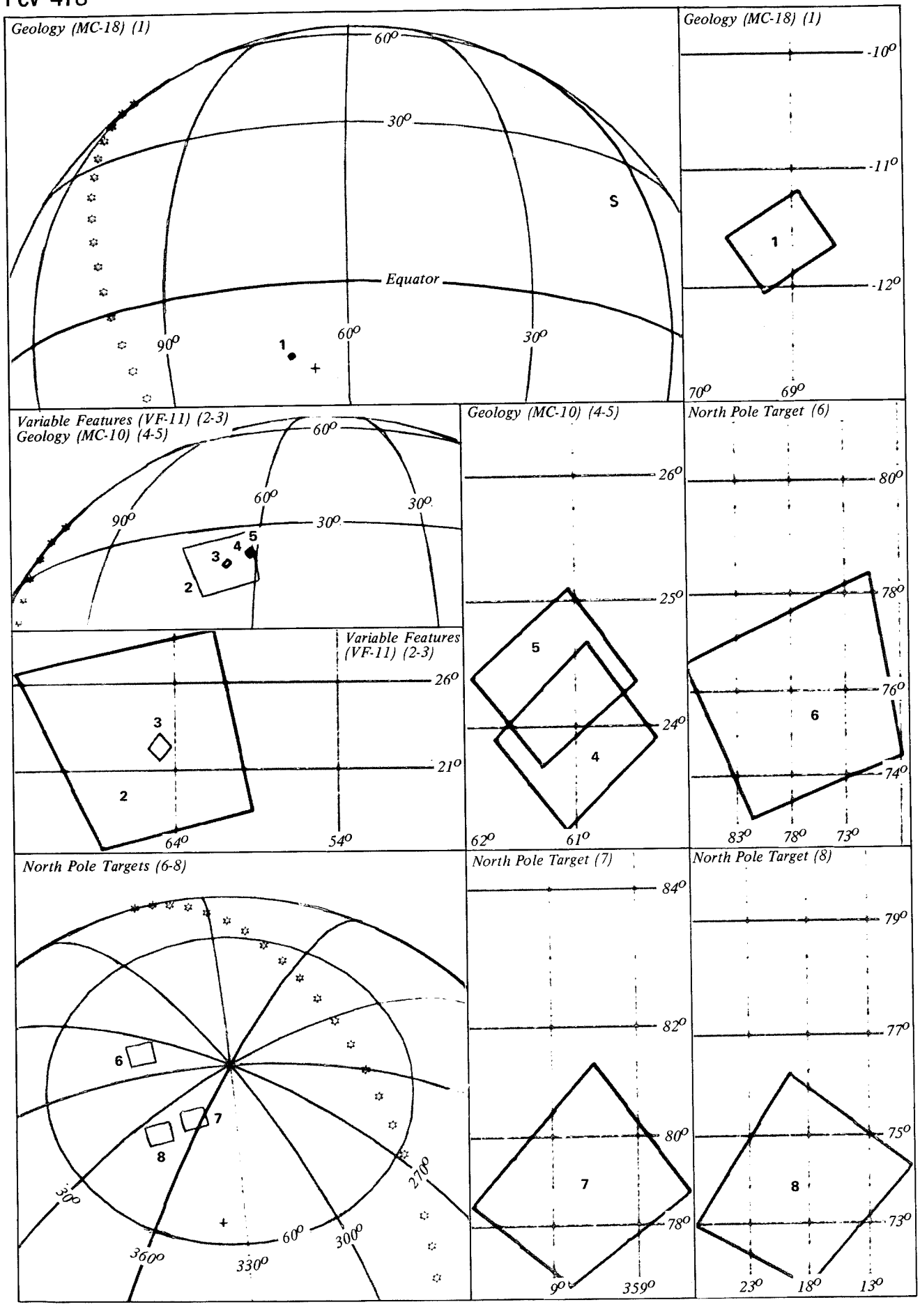


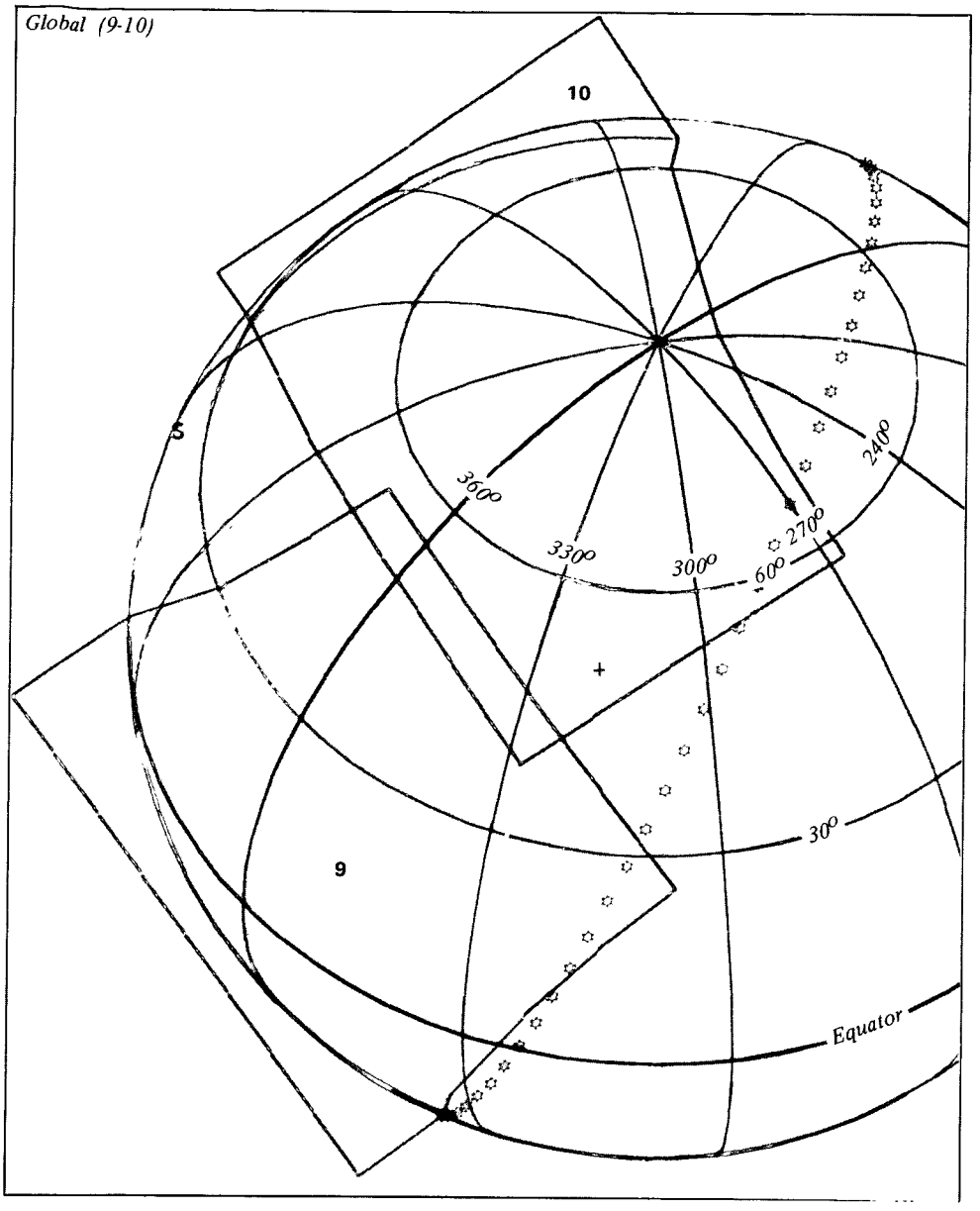
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
SOUTH POLAR SWATH														
1 A	182 8 47 54	-0 7 43	-41.40	346.65	1771	96.34	198.85	******	******	*****	91.62	92.24	30.21	12,535,030
2 B	182 8 48 36	-0 7 1	-40.03	345.53	1753	96.34	198.85	******	******	*****	90.15	90.23	29.83	12,535,065
3 A	182 8 49 18	-0 6 19	-38.63	344.45	1736	96.34	198.85	-68.04	289.43	3437	82.68	87.08	83.73	12,535,100
4 A	182 8 50 42	-0 4 55	-35.77	342.42	1708	99.91	204.50	-54.89	324.50	2367	56.33	83.01	80.16	12,535,170
5 A	182 8 52 6	-0 3 31	-32.83	340.52	1687	96.34	201.99	-49.78	316.96	2428	59.35	76.02	83.72	12,535,240
VARIABLE FEATURES (VF-7)														
6 B	182 8 57 0	0 1 22	-22.20	334.83	1668	127.53	238.74	-23.33	343.67	1771	24.11	74.32	52.46	12,535,485
7 B	182 8 58 24	0 2 46	-19.11	333.42	1679	135.11	231.45	-23.54	343.16	1830	29.01	73.74	44.88	12,535,555
8 A	182 8 59 6	0 3 28	-17.57	332.74	1686	137.06	227.73	-23.23	341.92	1843	29.46	72.46	43.01	12,535,590
GEOLOGY (MC-5)														
9 B	182 9 30 36	0 34 58	37.58	309.38	3380	160.62	139.20	40.41	317.52	3429	13.76	32.67	19.37	12,537,165
10 B	182 9 37 36	0 41 58	44.90	304.02	3942	160.38	99.62	49.45	327.97	4203	30.31	42.78	19.61	12,537,515
NORTH POLAR MAPPING														
11 A	182 9 52 18	0 56 40	55.66	291.03	5156	149.97	90.98	66.91	313.04	5351	24.88	49.70	30.10	12,538,250
NORTH POLAR TARGETS														
12 B	182 9 55 48	1 0 10	57.44	287.59	5445	155.35	93.73	84.07	274.20	6007	41.55	65.77	24.63	12,538,425
13 B	182 9 57 12	1 1 34	58.08	286.17	5559	153.10	92.65	82.09	274.01	6021	37.57	63.95	26.89	12,538,495
14 B	182 9 58 36	1 2 58	58.69	284.75	5674	150.92	91.65	80.20	273.03	6048	33.80	62.31	29.07	12,538,565
15 B	182 10 0 0	1 4 22	59.25	283.31	5788	148.49	90.97	77.96	274.51	6071	29.36	60.17	31.50	12,538,635
16 B	182 10 1 24	1 5 46	59.77	281.85	5901	148.49	90.97	79.33	259.40	6237	31.81	62.93	31.50	12,538,705


Variable Features (VF-1) (1)
60°
30°
S
Equator
1
270°
240°
-30°
-60°
Viking Site (V-30) (2-4)
60°
30°
S
2
3
4
Equator
270°
240°
-30°
Variable Features
(VF-1) (1)
1
-14°
-16°
280°
275°
270°
Viking Site
(V-30) (2-4)
4
3
2
10°
8°
6°
269°
264°
259°

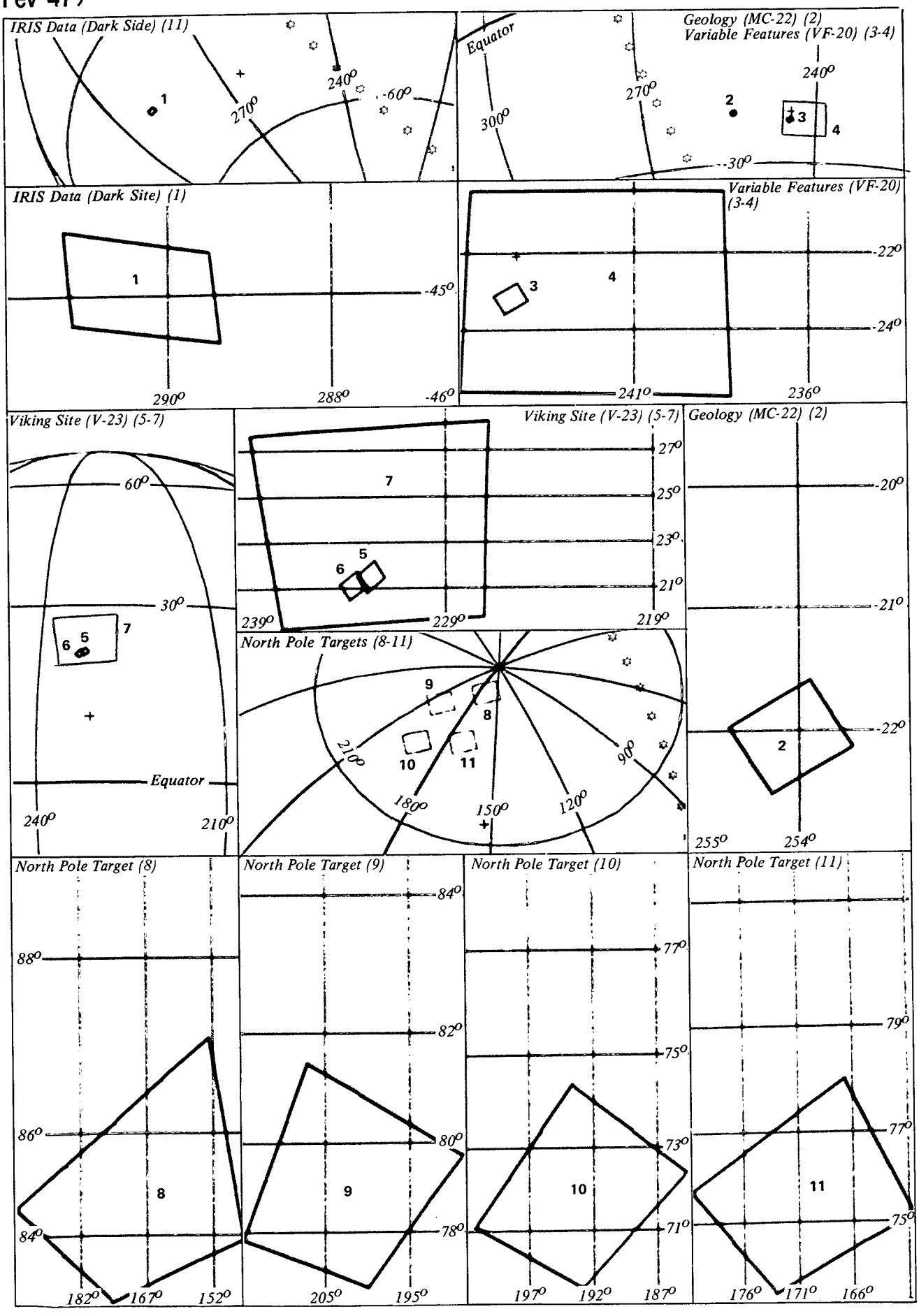


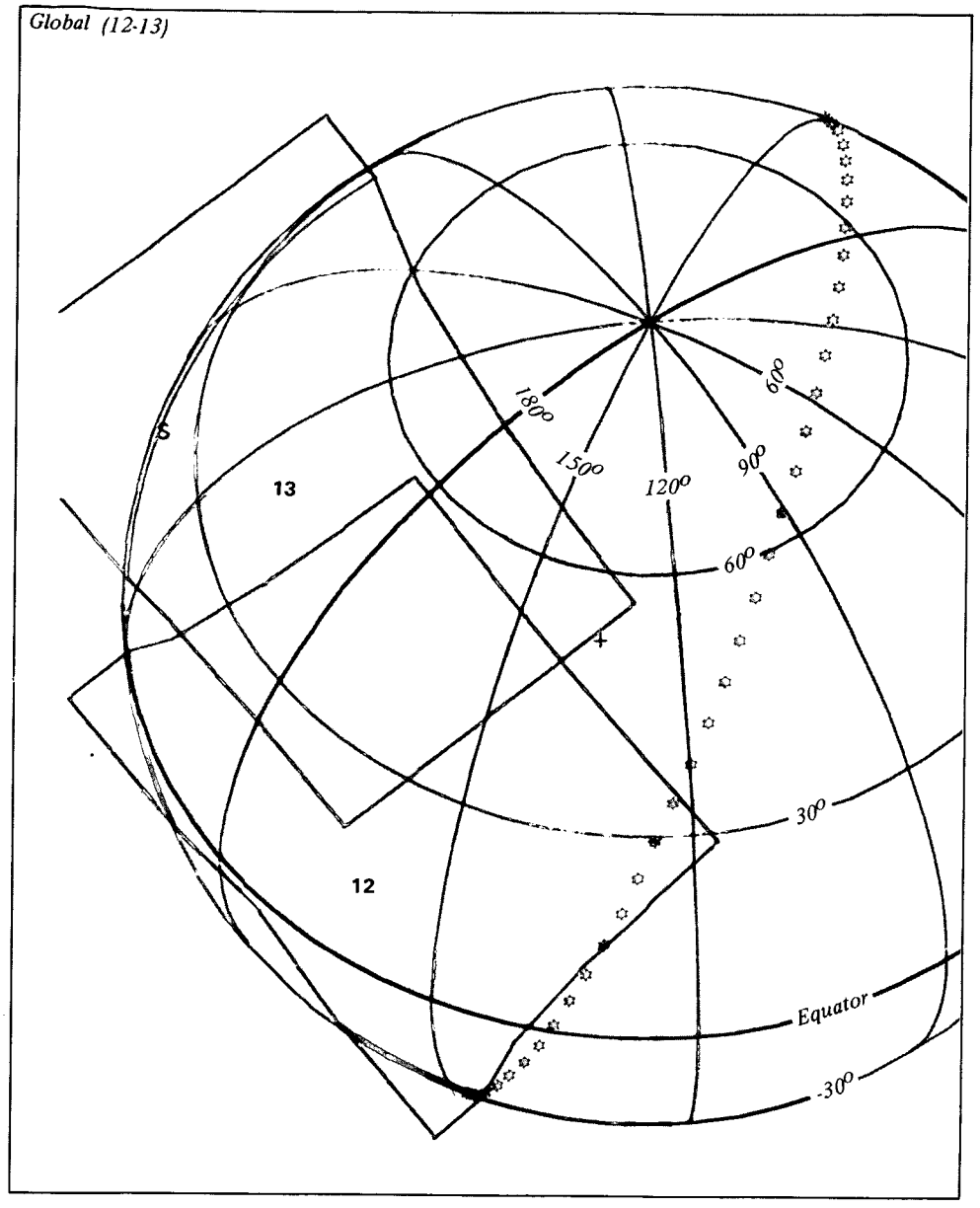
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
VARIABLE FEATURES (VF-1)														
1 A	189 8 59 4	0 3 39	-17.04	269.83	1686	119.33	108.71	-14.06	274.92	1736	16.97	68.34	60.74	12,685,638
VIKING SITE (V-30)														
2 B	189 9 5 22	0 9 57	-3.39	264.39	1837	124.05	109.08	6.23	268.77	1994	28.73	52.92	55.94	12,685,953
3 B	189 9 6 46	0 11 21	-.47	263.29	1888	132.70	103.95	5.77	269.33	1993	23.53	53.28	47.29	12,686,023
4 A	189 9 7 28	0 12 3	.96	262.76	1915	132.70	103.95	7.98	268.31	2026	23.98	51.43	47.37	12,686,058
VIKING SITE (V-29)														
5 B	189 9 10 58	0 15 33	7.90	260.18	2074	130.76	104.66	22.01	263.91	2343	35.86	43.44	49.23	12,686,233
6 B	189 9 12 22	0 16 57	10.55	259.18	2146	135.63	99.69	22.49	263.14	2345	30.76	42.37	44.36	12,686,303
7 B	189 9 13 46	0 18 21	13.13	258.20	2223	143.99	94.45	21.58	264.83	2363	25.76	43.70	36.00	12,686,373
8 A	189 9 14 28	0 19 3	14.39	257.71	2263	143.99	94.45	23.70	263.84	2413	26.44	42.45	36.08	12,686,408


Geology (MC-18) (1)
60°
30°
S
Equator
90°
60°
30°
1
Geology (MC-18) (1)
-10°
-11°
-12°
1
70°
69°
Variable Features (VF-11) (2-3)
Geology (MC-10) (4-5)
60°
60°
30°
90°
30°
2
3
4
5
Geology (MC-10) (4-5)
26°
25°
24°
5
4
62°
61°
North Pole Target (6)
80°
78°
76°
74°
6
83°
78°
73°
Variable Features
(VF-11) (2-3)
26°
21°
3
2
64°
54°
North Pole Targets (6-8)
6
7
8
300°
270°
360°
330°
60°
300°
North Pole Target (7)
84°
82°
80°
78°
7
9°
359°
North Pole Target (8)
79°
77°
75°
73°
8
23°
18°
13°

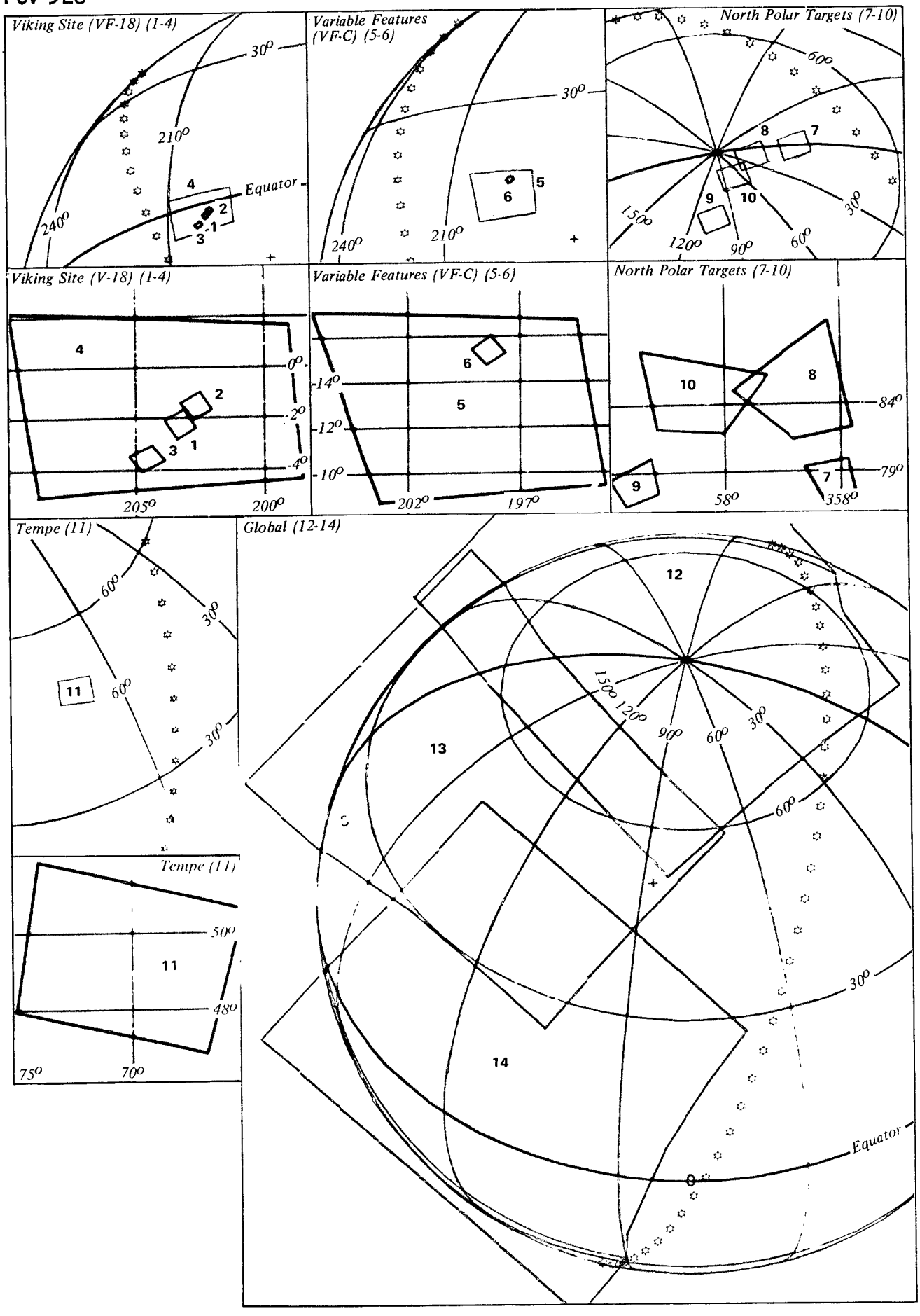


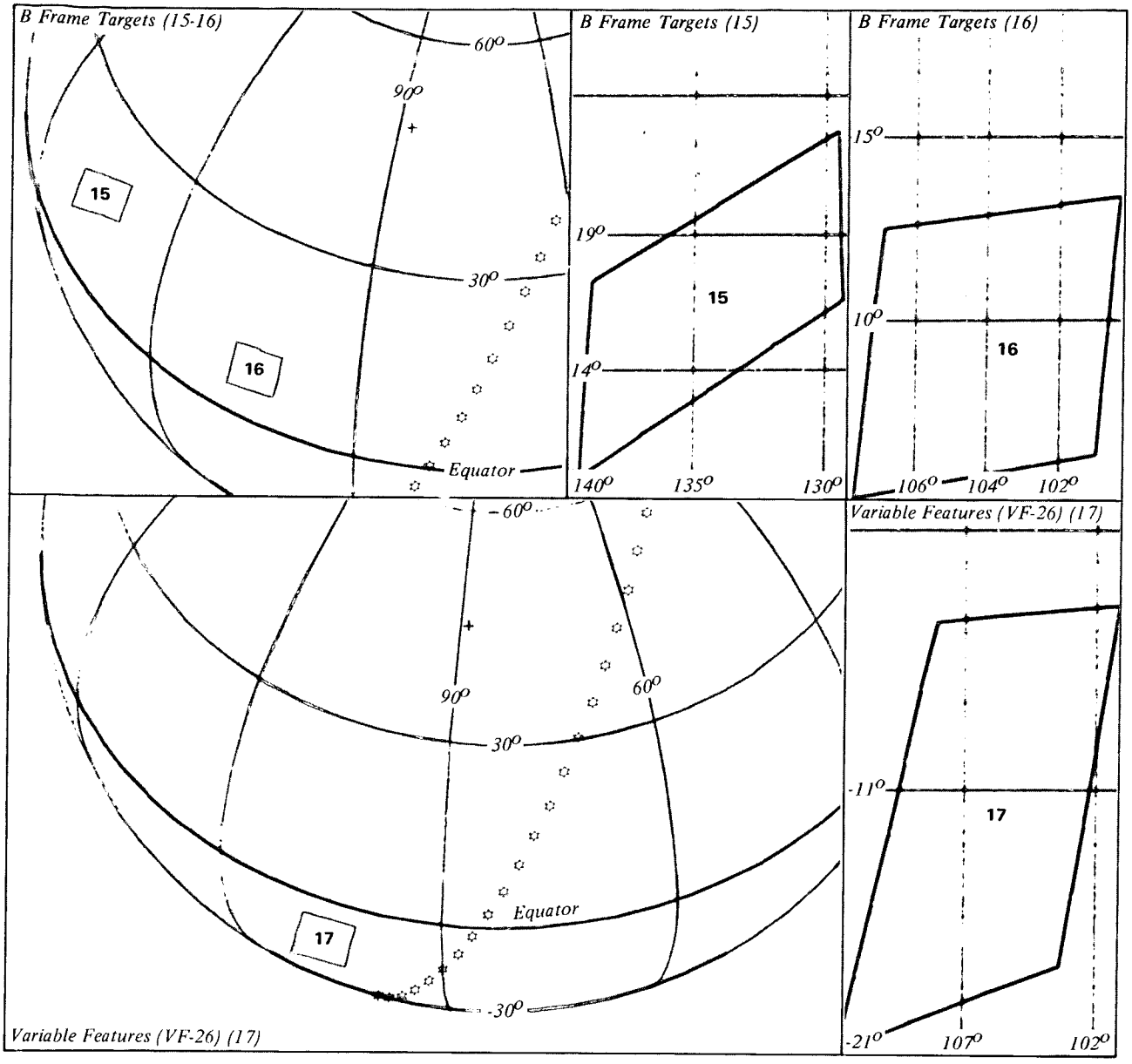
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
GEOLOGY (NC-18)														
1 B	191 20 57 45	0 5 7	-13.83	65.40	1710	119.78	102.61	-11.62	69.10	1738	12.49	65.93	60.21	12,865,573
VARIABLE FEATURES (VF-11)														
2 A	191 21 6 51	0 14 13	5.28	58.10	2011	128.19	112.60	21.83	65.33	2415	43.61	49.22	51.88	12,866,028
3 B	191 21 7 33	0 14 55	6.65	57.60	2045	130.43	110.27	22.31	64.95	2413	41.70	48.65	49.56	12,866,063
GEOLOGY (MC-10)														
4 B	191 21 8 57	0 16 19	9.33	56.59	2115	131.29	103.68	23.91	61.00	2402	36.82	44.56	48.70	12,866,133
5 B	191 21 10 21	0 17 43	11.95	55.61	2189	136.96	99.75	24.38	61.19	2416	32.62	44.38	43.03	12,866,203
NORTH POLE TARGETS														
6 B	191 22 37 9	1 44 31	63.28	339.31	8812	121.52	298.07	75.76	76.86	9484	42.43	60.00	58.47	12,870,543
7 B	191 22 38 33	1 45 55	63.15	338.36	8908	122.84	302.64	78.87	5.69	9126	24.12	60.53	57.15	12,870,613
8 B	191 22 39 57	1 47 19	63.01	337.44	9003	120.05	302.68	73.82	18.66	9229	24.53	54.71	59.93	12,870,683
GLOBAL														
9 A	191 23 56 15	3 3 37	50.76	318.83	13198	98.20	303.11	27.42	345.55	13789	36.12	62.11	81.86	12,874,498
10 A	191 23 57 39	3 5 1	50.53	318.82	13259	98.10	292.24	71.27	351.24	13663	31.49	62.61	81.96	12,874,568


IRIS Data (Dark Side) (11)
1
270°
240°
-60°
Geology (MC-22) (2)
Variable Features (VF-20) (3-4)
Equator
300°
270°
240°
2
3
4
-30°
IRIS Data (Dark Site) (1)
1
-45°
290°
288°
-46°
Variable Features (VF-20) (3-4)
3
4
-22°
-24°
241°
236°
Viking Site (V-23) (5-7)
60°
30°
5
6
7
Equator
240°
210°
Viking Site (V-23) (5-7)
7
5
6
27°
25°
23°
21°
239°
229°
219°
Geology (MC-22) (2)
-20°
-21°
2
-22°
255°
254°
North Pole Targets (8-11)
9
8
10
11
210°
90°
180°
150°
120°
North Pole Target (8)
88°
86°
8
84°
182°
167°
152°
North Pole Target (9)
84°
82°
80°
9
78°
205°
195°
North Pole Target (10)
77°
75°
73°
10
71°
197°
192°
187°
North Pole Target (11)
79°
77°
11
75°
176°
171°
166°

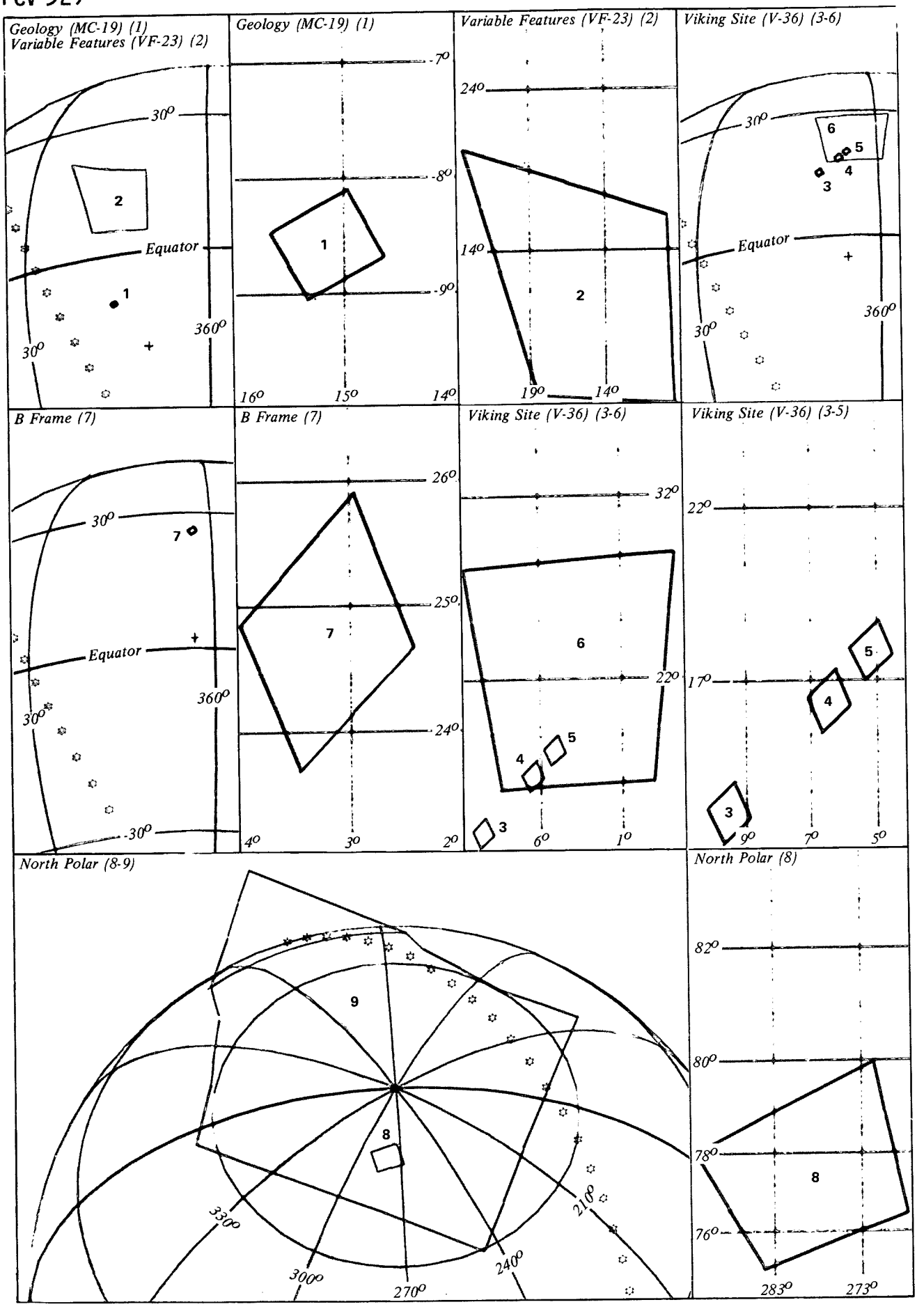


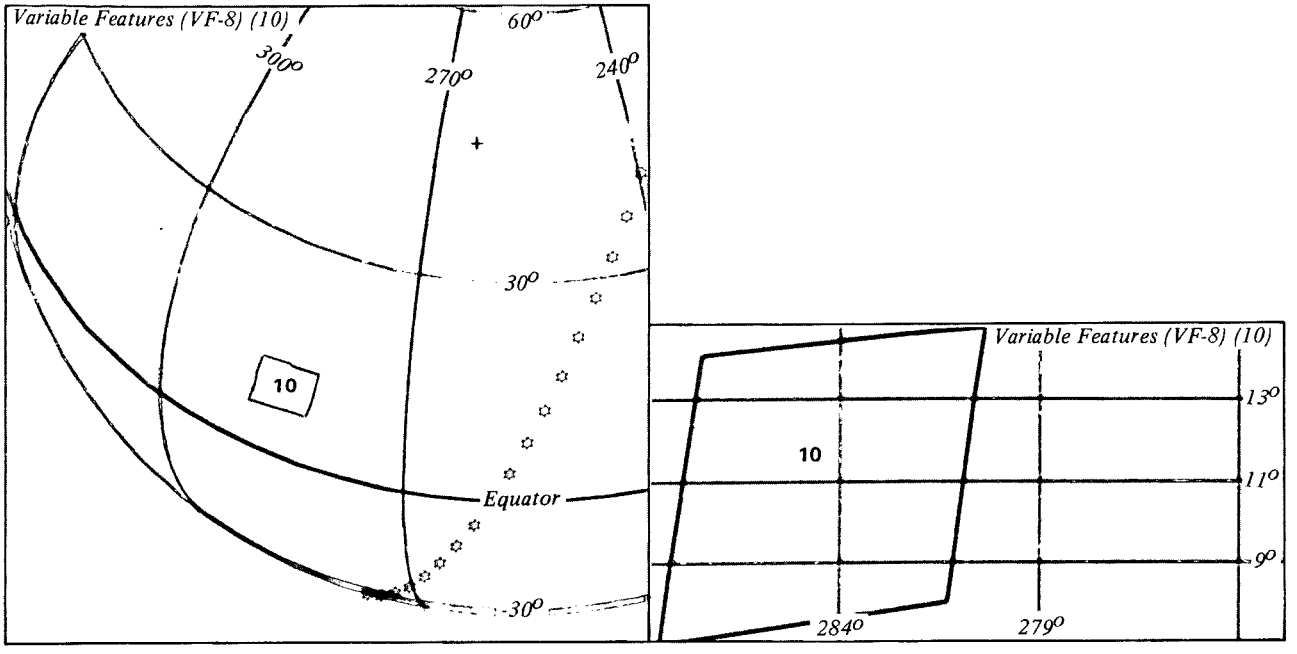
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
IRIS DATA (DARK SIDE)														
1 B	192 8 39 9	-0 12 35	-50.14	265.36	1939	101.93	126.97	-44.95	290.33	2332	43.49	117.49	78.06	12,900,643
GEOLOGY (MC-22)														
2 B	192 8 50 21	-0 1 23	-28.21	247.42	1667	105.70	119.55	-22.06	254.07	1779	25.14	80.55	74.29	12,901,203
VARIABLE FEATURES (VF-20)														
3 B	192 8 53 9	0 1 24	-22.07	244.33	1667	109.31	97.43	-23.20	244.47	1669	3.42	72.77	70.68	12,901,343
4 A	192 8 53 51	0 2 6	-20.53	243.61	1671	109.56	92.77	-23.00	242.09	1694	8.58	70.68	70.51	12,901,378
VIKING SITE (V-23)														
5 B	192 9 7 9	0 15 24	7.54	232.58	2068	124.87	99.91	21.47	232.54	2316	34.54	41.80	55.12	12,902,043
6 B	192 9 8 33	0 16 48	10.20	231.54	2139	132.05	95.28	21.08	233.37	2295	27.38	42.29	47.94	12,902,113
7 A	192 9 9 15	0 17 30	11.50	231.09	2177	132.05	95.28	23.35	232.22	2356	29.13	40.87	48.02	12,902,148
NORTH POLE TARGETS														
8 B	192 10 38 9	1 46 24	63.11	153.38	8939	124.63	301.21	84.75	169.01	9269	39.69	66.15	55.36	12,906,593
9 B	192 10 39 33	1 47 48	62.07	152.47	9034	121.35	300.94	79.03	202.50	9354	29.19	59.22	58.64	12,906,663
10 B	192 10 40 57	1 49 12	62.82	151.59	9128	118.93	302.79	71.92	193.15	9350	24.25	52.97	61.06	12,906,733
11 B	192 10 42 21	1 50 36	62.66	150.75	9222	120.86	303.03	75.65	170.39	9370	19.80	54.52	59.13	12,906,803
GLOBAL														
12 A	192 11 46 3	2 54 18	52.35	134.41	12782	101.13	303.87	31.36	155.83	13213	32.63	63.62	78.94	12,909,988
13 A	192 11 47 27	2 55 42	52.11	134.35	12845	96.26	297.68	49.02	188.56	13548	41.74	42.11	83.80	12,910,058


Viking Site (VF-18) (1-4)
30°
210°
240°
Equator
4
2
1
3
Variable Features (VF-C) (5-6)
30°
240°
210°
6
5
North Polar Targets (7-10)
60°
8
7
9
10
150°
120°
90°
60°
30°
Viking Site (V-18) (1-4)
4
0°
2
-2°
-4°
3
1
205°
200°
Variable Features (VF-C) (5-6)
6
-14°
5
-12°
-10°
202°
197°
North Polar Targets (7-10)
10
8
84°
9
7
79°
58°
358°
Tempe (11)
60°
30°
11
60°
30°
Tempe (11)
50°
11
48°
75°
70°
Global (12-14)
12
150°
120°
90°
60°
30°
13
60°
30°
14
Equator



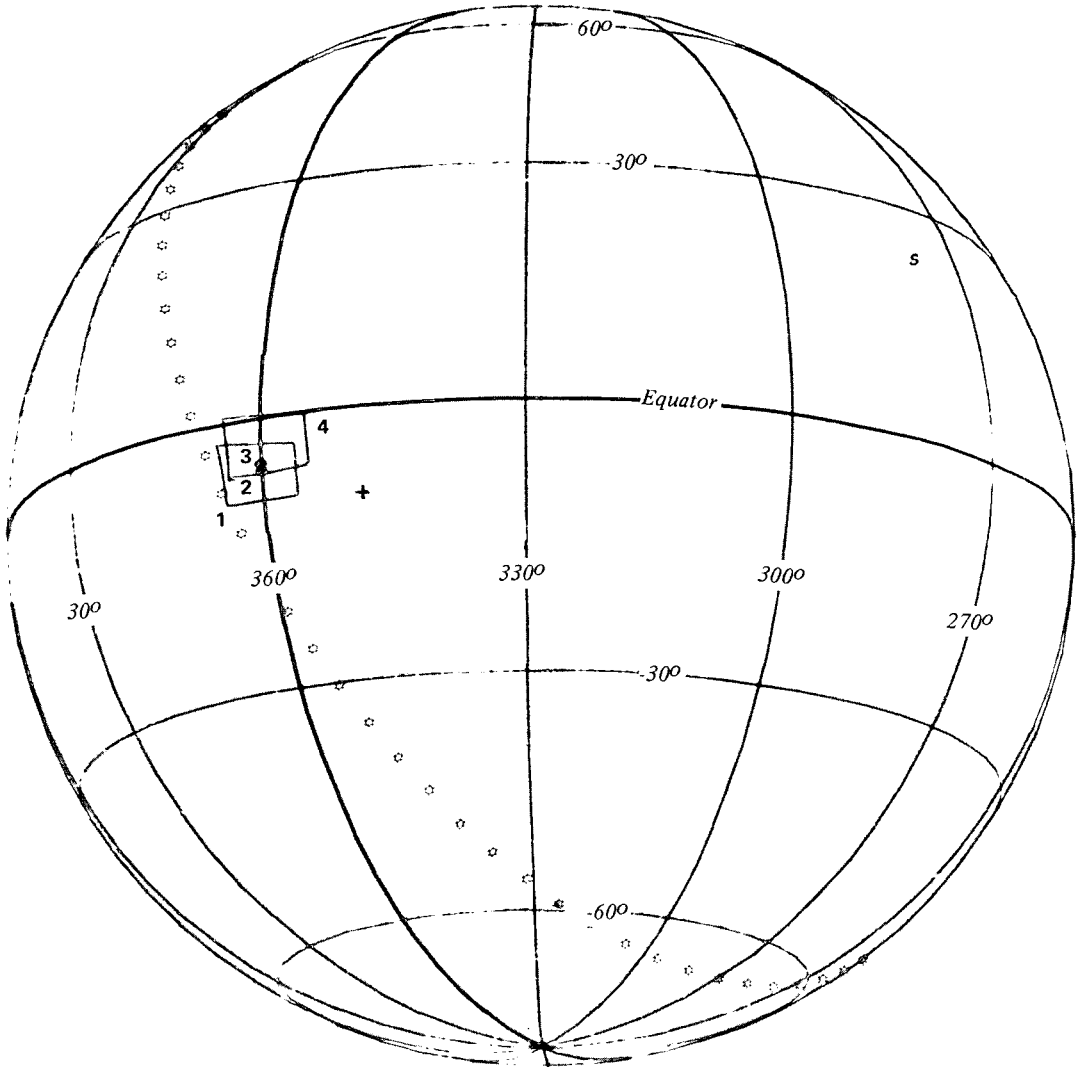
INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	OAS REFERENCE TIME
VIKING SITE (V-18)														
1 B	216 20 25 2	0 4 58	-14.67	194.09	1713	104.45	116.93	-2.25	203.23	2041	41.39	81.72	75.54	12,985,387
2 B	216 20 26 26	0 6 22	-11.61	192.85	1741	109.94	112.60	-1.52	202.61	2015	37.92	80.55	70.04	12,985,457
3 B	216 20 29 14	0 9 10	-5.59	190.52	1817	127.95	100.19	-3.57	204.53	2089	37.37	82.49	52.04	12,985,597
4 A	216 20 29 56	0 9 52	-4.11	189.97	1840	127.91	100.09	-1.53	203.33	2092	35.94	80.44	52.16	12,985,632
VARIABLE FEATURES (VF-C)														
5 A	216 20 34 8	0 14 4	4.46	186.80	2008	127.30	100.14	12.69	198.63	2272	35.86	69.94	52.77	12,985,842
6 B	216 20 34 50	0 14 46	5.84	186.30	2041	127.36	100.15	15.34	198.38	2335	37.54	68.69	52.63	12,985,877
NORTH POLAR TARGETS														
7 B	216 22 21 14	2 1 10	61.55	99.24	9901	134.03	301.69	77.61	1.29	10584	42.22	78.50	45.95	12,991,197
8 B	216 22 22 38	2 2 34	61.35	98.62	9989	131.33	300.91	84.53	18.38	10513	36.94	71.46	48.66	12,991,267
9 B	216 22 24 2	2 3 58	61.15	98.02	10076	127.89	303.54	77.75	104.12	10265	22.16	59.81	52.10	12,991,337
10 B	216 22 25 26	2 5 22	60.94	97.44	10162	129.14	300.91	84.58	72.21	10553	31.83	66.84	50.85	12,991,407
TEMPE														
11 B	216 22 57 38	2 37 34	55.62	89.40	11968	122.37	303.31	49.38	70.25	12081	16.81	73.23	57.61	12,993,017
GLOBAL														
12 A	216 23 22 8	3 2 4	51.46	87.68	13125	112.63	288.53	84.95	177.19	14032	47.46	62.70	68.03	12,994,242
13 A	216 23 23 32	3 3 28	51.24	87.65	13186	108.02	295.69	53.03	131.02	13618	32.58	40.86	72.04	12,994,312
14 A	216 23 24 56	3 4 52	51.00	87.64	13246	110.05	303.58	25.07	107.72	13809	37.23	53.82	70.02	12,994,382
B FRAME TARGETS														
15 B	216 23 39 38	3 19 34	48.59	87.76	13845	103.17	299.96	17.24	133.86	15209	58.29	34.74	76.82	12,995,117
16 B	216 23 42 26	3 22 22	48.14	87.85	13952	108.52	302.81	9.62	104.89	14941	49.34	65.42	71.46	12,995,257
VARIABLE FEATURES (VF-26														
17 B	216 23 59 14	3 39 10	45.49	88.71	14551	106.74	302.29	-10.00	105.58	16371	67.58	75.49	73.25	12,996,097

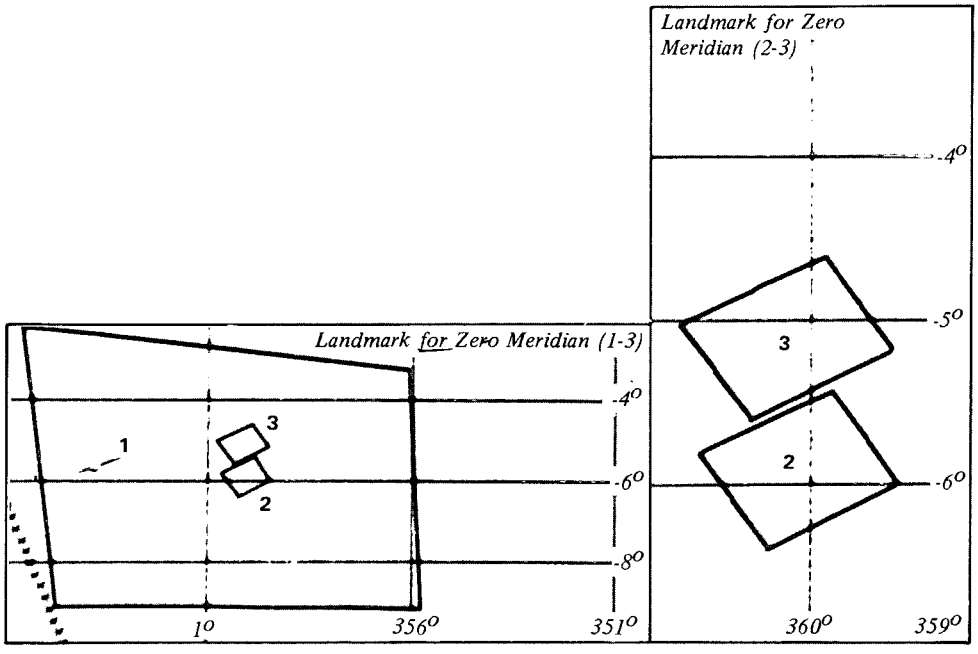

Geology (MC-19) (1)
Variable Features (VF-23) (2)
30°
Equator
360°
30°
Geology (MC-19) (1)
-7°
-8°
-9°
16°
15°
14°
Variable Features (VF-23) (2)
24°
14°
19°
14°
Viking Site (V-36) (3-6)
30°
Equator
360°
30°
B Frame (7)
30°
Equator
360°
30°
-30°
B Frame (7)
26°
25°
24°
4°
3°
2°
Viking Site (V-36) (3-6)
32°
22°
6°
1°
Viking Site (V-36) (3-5)
22°
17°
9°
7°
5°
North Polar (8-9)
330°
300°
270°
240°
210°
North Polar (8)
82°
80°
78°
76°
283°
273°



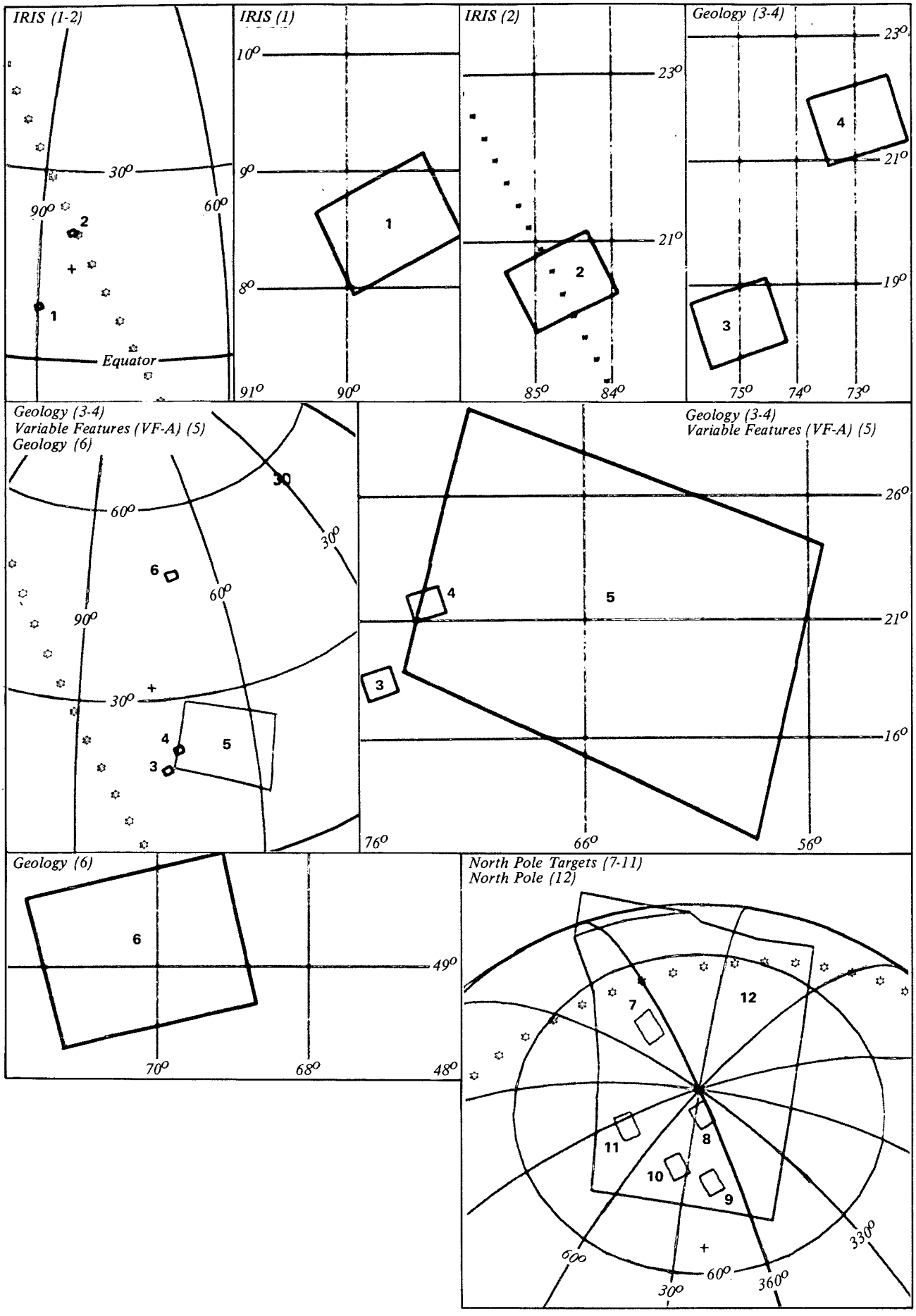
INST TYPE	TIME (GMT) D	H	M	S	PERI TIME H	M	S	SPACECRAFT LAT	LONG-W	HGT	PLATFORM CONE	CLOCK	INTERCEPTING LAT	LONG-W	RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
GEOLOGY (MC-19)																			
1 B	217	8	23	14	0	4	12	-16.36	10.08	1700	100.86	108.94	-8.58	15.14	1826	26.47	81.66	79.12	13,021,297
VARIABLE FEATURES (VF-23)																			
2 A	217	8	25	20	0	6	18	-11.76	8.19	1740	96.27	121.06	9.39	14.54	2361	54.70	73.69	83.79	13,021,402
VIKING SITE (V-36)																			
3 B	217	8	27	26	0	8	24	-7.23	6.42	1794	96.53	114.43	13.11	9.54	2336	51.21	67.34	83.46	13,021,507
4 B	217	8	28	50	0	9	48	-4.25	5.30	1838	96.77	110.88	16.38	6.45	2379	50.85	63.17	83.22	13,021,577
5 B	217	8	30	14	0	11	12	-1.33	4.21	1888	100.13	107.23	17.86	5.15	2357	47.44	61.24	79.86	13,021,647
6 A	217	8	30	56	0	11	54	.10	3.68	1915	100.13	107.23	20.82	3.97	2448	50.04	59.22	79.94	13,021,682
B FRAME																			
7 B	217	8	31	38	0	12	36	1.52	3.16	1944	100.13	107.23	24.76	3.21	2590	54.28	57.51	79.86	13,021,717
NORTH POLAR																			
8 B	217	10	23	38	2	4	36	61.06	273.07	10116	127.89	303.54	77.49	279.17	10301	21.92	59.62	52.10	13,027,317
9 A	217	10	39	44	2	20	42	58.49	267.83	11065	123.62	295.89	88.30	331.43	11671	39.32	65.91	56.45	13,028,122
VARIABLE FEATURES (VF-8)																			
10 B	217	11	58	50	3	39	48	45.40	264.06	14573	105.48	299.40	11.23	284.29	15445	46.09	63.77	74.51	13,032,077

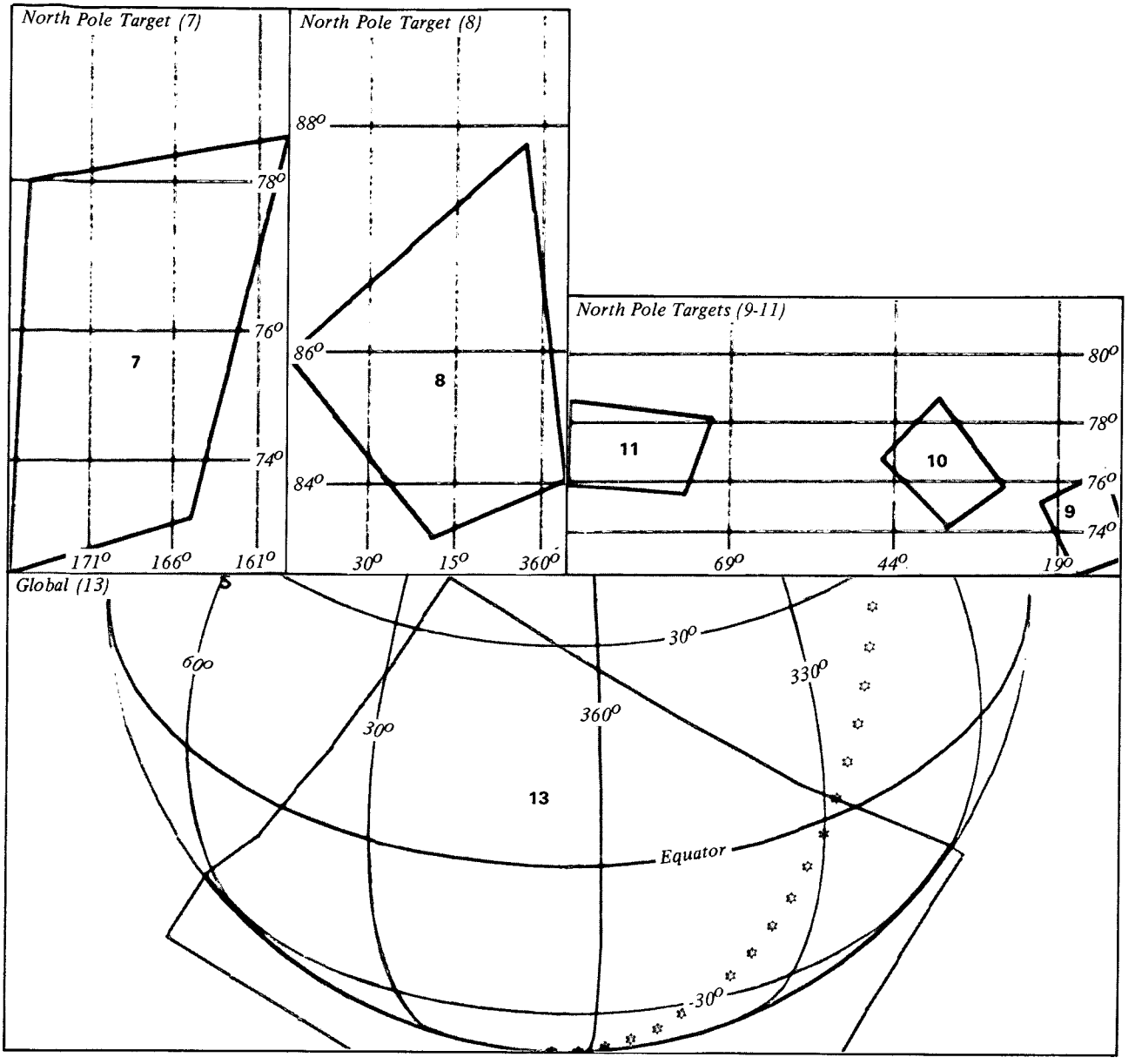
Landmark for Zero Meridian (1-4)



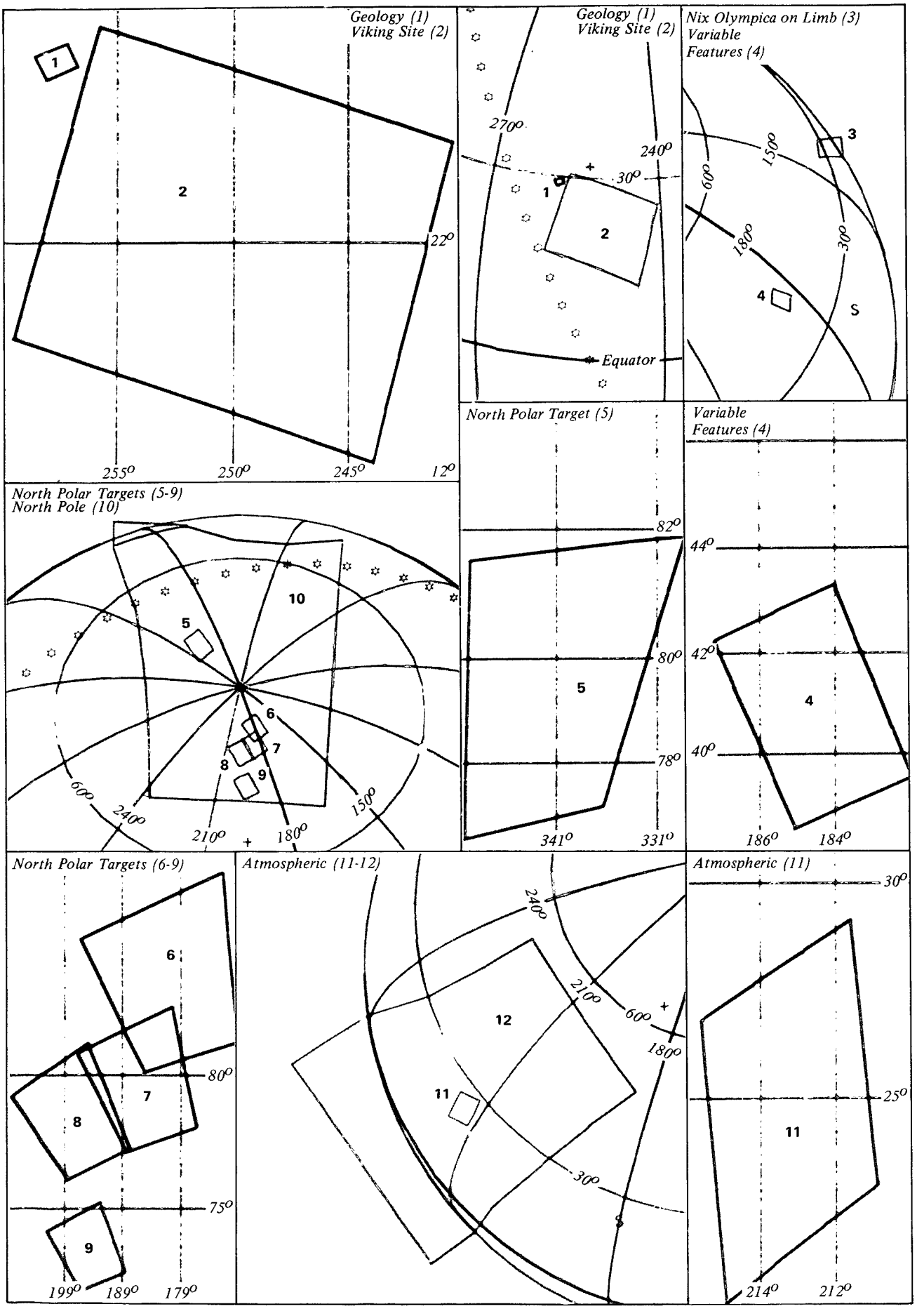


INST	TYPE	TIME (GMT) D	H	M	S	PERI TIME H	M	S	SPACECRAFT LAT	LONG-W	HGT	PLATFORM CONE	CLOCK	INTERCEPTING LAT	LONG-W	RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
LANDMARK FOR ZERO MERIDIAN																				
1	A	219	8	22	19	0	6	36	-11.15	349.27	1746	115.48	105.86	-6.13	.07	1945	32.63	84.59	64.59	13,165,251
2	B	219	8	23	1	0	7	18	-9.63	348.67	1763	118.67	102.81	-5.92	.07	1964	32.66	84.35	61.32	13,165,286
3	B	219	8	24	25	0	8	42	-6.63	347.52	1802	124.62	98.17	-5.11	.14	2025	34.13	83.79	55.36	13,165,356
4	A	219	8	25	7	0	9	24	-5.14	346.95	1824	124.62	98.17	-3.04	359.00	2031	32.81	81.76	55.44	13,165,391


IRIS (1-2)
30°
90°
60°
2
1
Equator
IRIS (1)
10°
9°
8°
1
91°
90°
IRIS (2)
23°
21°
2
85°
84°
Geology (3-4)
23°
4
21°
19°
3
75°
74°
73°
Geology (3-4)
Variable Features (VF-A) (5)
Geology (6)
30
60°
30°
6
60°
90°
30°
4
5
3
Geology (3-4)
Variable Features (VF-A) (5)
26°
4
5
21°
3
16°
76°
66°
56°
Geology (6)
6
49°
70°
68°
48°
North Pole Targets (7-11)
North Pole (12)
12
7
8
11
10
9
330°
60°
60°
30°
360°



INST TYPE	TIME (GMT) D	H	M	S	PERI TIME H	M	S	SPACECRAFT LAT	LONG-W	HGT	PLATFORM CONE	CLOCK	INTERCEPTING LAT	LONG-W	RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
IRIS																			
1 B	286	7	31	22	0	19	48	14.69	84.54	2306	97.02	223.98	8.55	89.64	2384	19.19	100.53	82.97	13,313,240
2 B	286	7	35	34	0	24	0	21.72	81.70	2571	97.02	223.98	20.51	84.65	2582	6.95	89.92	82.97	13,313,450
GEOLOGY																			
3 B	286	7	41	10	0	29	36	29.98	77.91	2967	102.39	205.03	18.37	75.02	3119	24.85	81.40	77.60	13,313,730
4 B	286	7	42	34	0	31	0	31.85	76.95	3072	102.39	205.03	21.64	72.95	3196	22.28	78.05	77.60	13,313,800
VARIABLE FEATURES (VF-A)																			
5 A	286	7	44	40	0	33	6	34.53	75.49	3232	99.84	200.79	22.00	65.29	3472	30.40	70.83	80.22	13,313,905
GEOLOGY																			
6 B	286	7	55	10	0	43	36	45.64	67.71	4074	116.19	209.07	49.15	70.20	4088	7.11	65.62	63.80	13,314,430
NORTH POLE TARGETS																			
7 B	286	8	42	46	1	31	12	63.91	22.32	7870	151.36	178.52	75.66	168.86	8875	52.64	79.39	28.63	13,316,810
8 B	286	8	44	10	1	32	36	63.93	21.07	7972	146.00	176.58	85.38	15.15	8300	30.06	60.87	33.99	13,316,880
9 B	286	8	45	34	1	34	0	63.94	19.84	8074	142.49	172.21	74.19	14.21	8153	14.74	49.97	37.50	13,316,950
10 B	286	8	46	58	1	35	24	63.93	18.65	8175	144.77	168.28	76.41	36.39	8310	19.27	54.41	35.22	13,317,020
11 B	286	8	48	22	1	36	48	63.90	17.48	8275	148.42	163.72	77.22	83.27	8668	32.72	63.94	31.57	13,317,090
NORTH POLE																			
12 A	286	8	57	28	1	45	54	63.41	10.62	8910	150.37	164.20	89.63	200.53	9403	36.33	65.70	29.70	13,317,545
GLOBAL																			
13 A	286	12	41	28	5	29	53	30.18	4.01	16760	131.66	94.84	-4.29	4.22	17461	40.78	60.80	48.41	13,328,745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2
22°
255°
250°
245°
12°
Geology (1)
Viking Site (2)
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240°
30°
1
2
Equator
Nix Olympica on Limb (3)
Variable
Features (4)
3
150°
60°
180°
300°
4
S
North Polar Target (5)
82°
80°
78°
5
341°
331°
Variable
Features (4)
44°
42°
40°
4
186°
184°
North Polar Targets (5-9)
North Pole (10)
10
5
6
7
8
9
60°
240°
210°
180°
150°
North Polar Targets (6-9)
6
80°
7
8
75°
9
199°
189°
179°
Atmospheric (11-12)
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11
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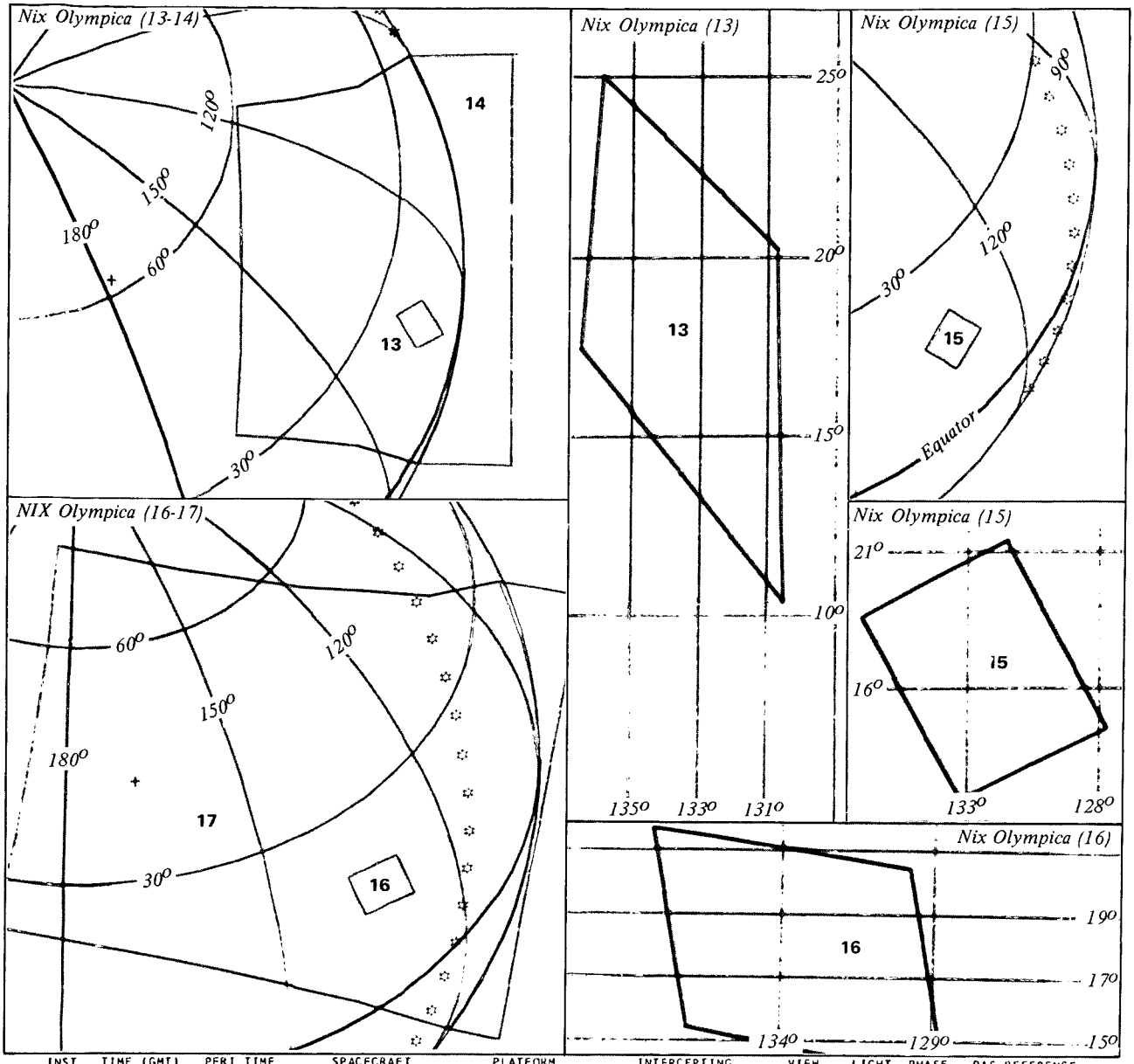
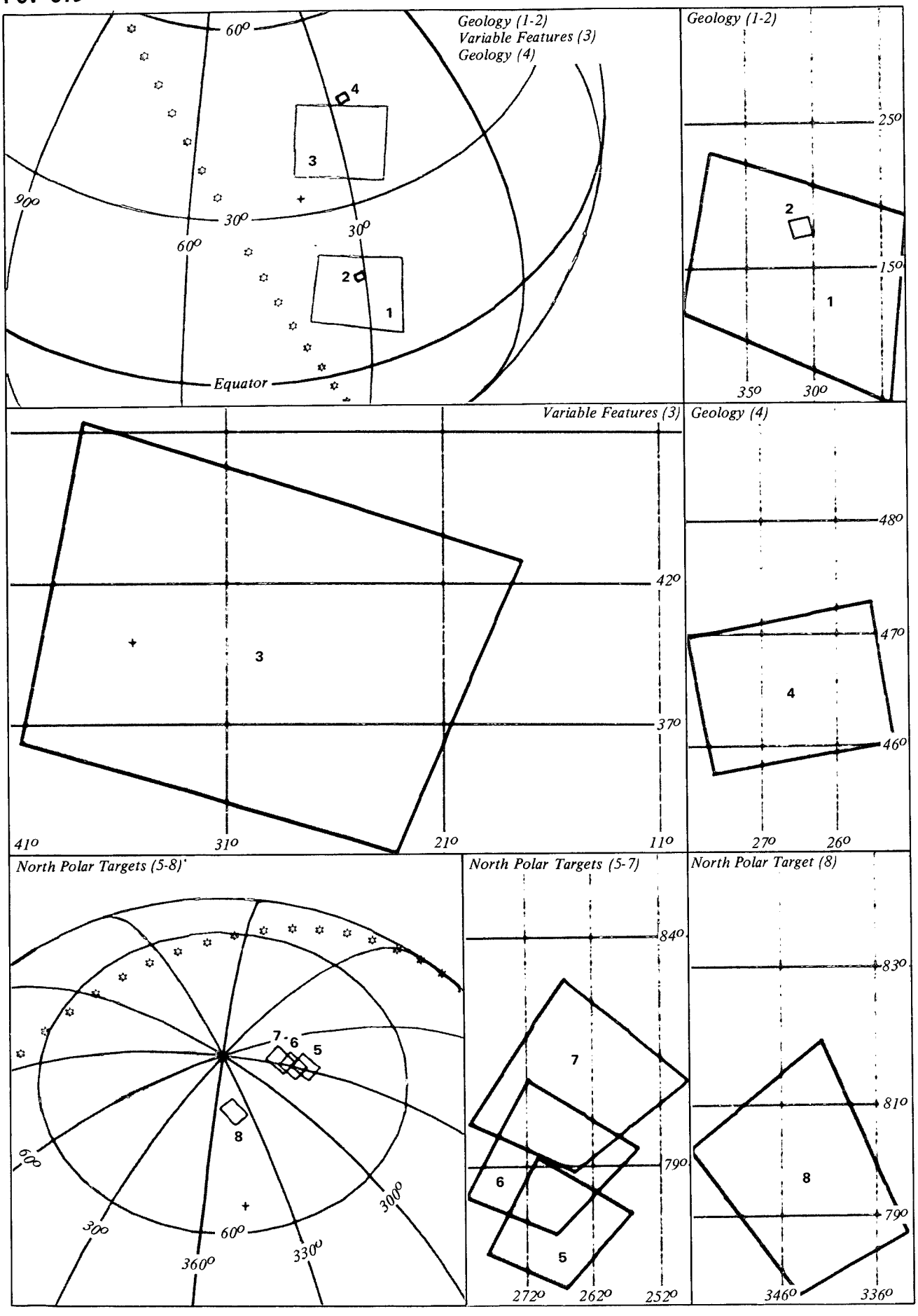


INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
GEOLOGY														
1 B	286 19 42 9	0 30 49	31.62	252.55	3058	107.42	216.30	29.16	257.65	3086	10.57	83.09	72.57	13,349,780
VIKING SITE														
2 A	286 19 47 3	0 35 43	37.64	249.11	3437	111.93	199.11	22.93	249.84	3651	28.36	78.08	68.14	13,350,025
NIX OLYMPICA														
3 B	286 20 25 33	1 14 13	61.87	214.49	6577	116.28	194.17	26.66	139.21	8765	79.33	29.74	63.71	13,351,950
VARIABLE FEATURES														
4 B	286 20 36 45	1 25 25	63.61	203.21	7440	126.34	173.37	40.97	184.59	7893	35.62	18.20	53.64	13,352,510
NORTH POLAR TARGETS														
5 B	286 20 42 21	1 31 1	63.91	197.95	7856	150.19	179.11	79.46	341.45	8692	48.02	76.57	29.80	13,352,790
6 B	286 20 43 45	1 32 25	63.93	196.70	7959	144.61	177.10	82.33	180.61	8213	26.44	57.71	35.38	13,352,860
7 B	286 20 45 9	1 33 49	63.94	195.47	8060	144.16	174.62	79.58	185.29	8243	22.36	55.07	35.83	13,352,930
8 B	286 20 46 33	1 35 13	63.94	194.27	8161	144.58	171.50	76.55	197.08	8316	20.54	54.66	36.41	13,353,000
9 B	286 20 47 57	1 36 37	63.91	193.10	8262	142.92	168.78	73.03	194.79	8422	12.84	49.29	37.07	13,353,070
NORTH POLE														
10 A	286 20 52 51	1 41 31	63.72	189.23	8608	149.41	169.28	89.72	157.04	9074	35.47	65.10	30.66	13,353,315
ATMOSPHERIC														
11 B	286 20 57 45	1 46 25	63.37	185.73	8945	131.28	147.87	25.01	213.18	10093	55.48	29.98	48.70	13,353,560
12 A	286 20 58 27	1 47 7	63.31	185.26	8992	133.24	148.66	33.04	212.78	9791	46.20	29.59	46.82	13,353,595
NIX OLYMPICA														
13 B	286 21 11 45	2 0 25	61.81	177.73	9863	135.35	169.44	19.03	133.72	11506	66.01	46.26	44.64	13,354,260
14 A	286 21 12 27	2 1 7	61.71	177.40	9907	138.61	168.41	35.06	134.73	10815	48.75	43.23	41.46	13,354,295
15 B	286 22 11 57	3 0 37	52.08	165.46	13074	144.22	138.88	16.93	132.55	14208	53.14	61.23	35.77	13,357,270
16 B	286 23 12 9	4 0 49	42.66	168.04	15230	144.58	112.52	18.06	133.60	16088	45.58	71.02	35.41	13,360,280
17 A	286 23 14 15	4 2 55	42.35	168.24	15288	142.80	106.18	37.89	145.48	15487	21.76	58.19	37.27	13,360,385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Variable Features (3)
Geology (4)
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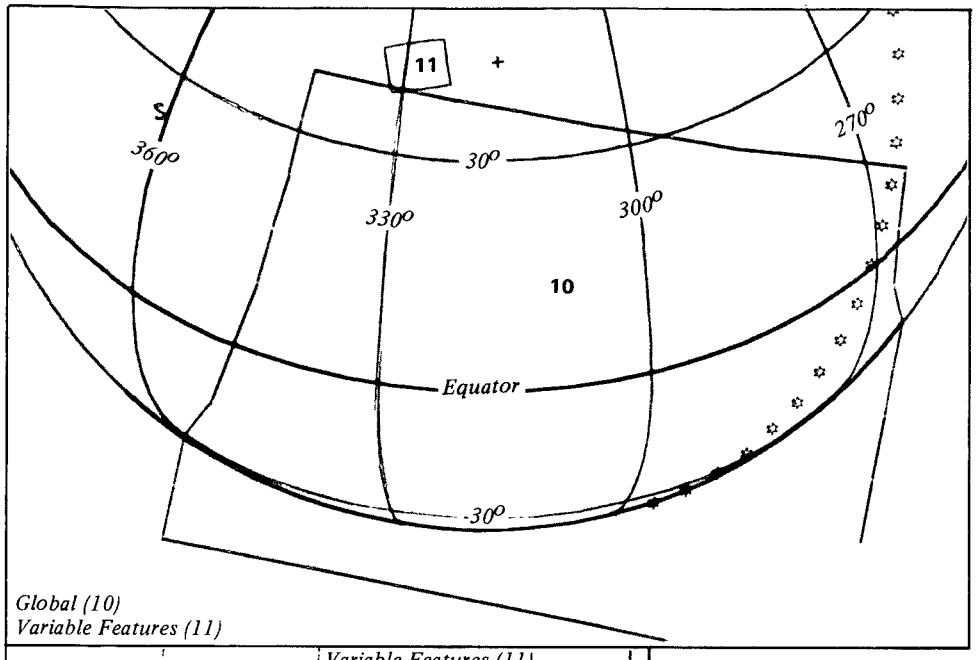
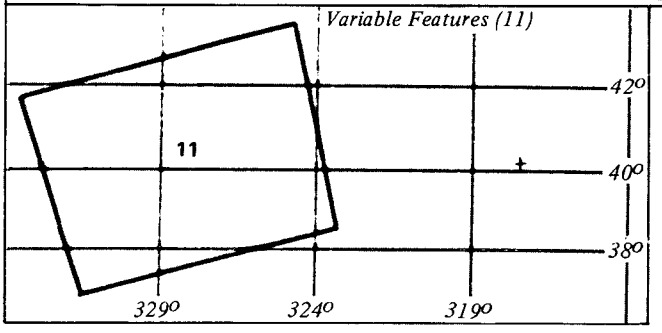
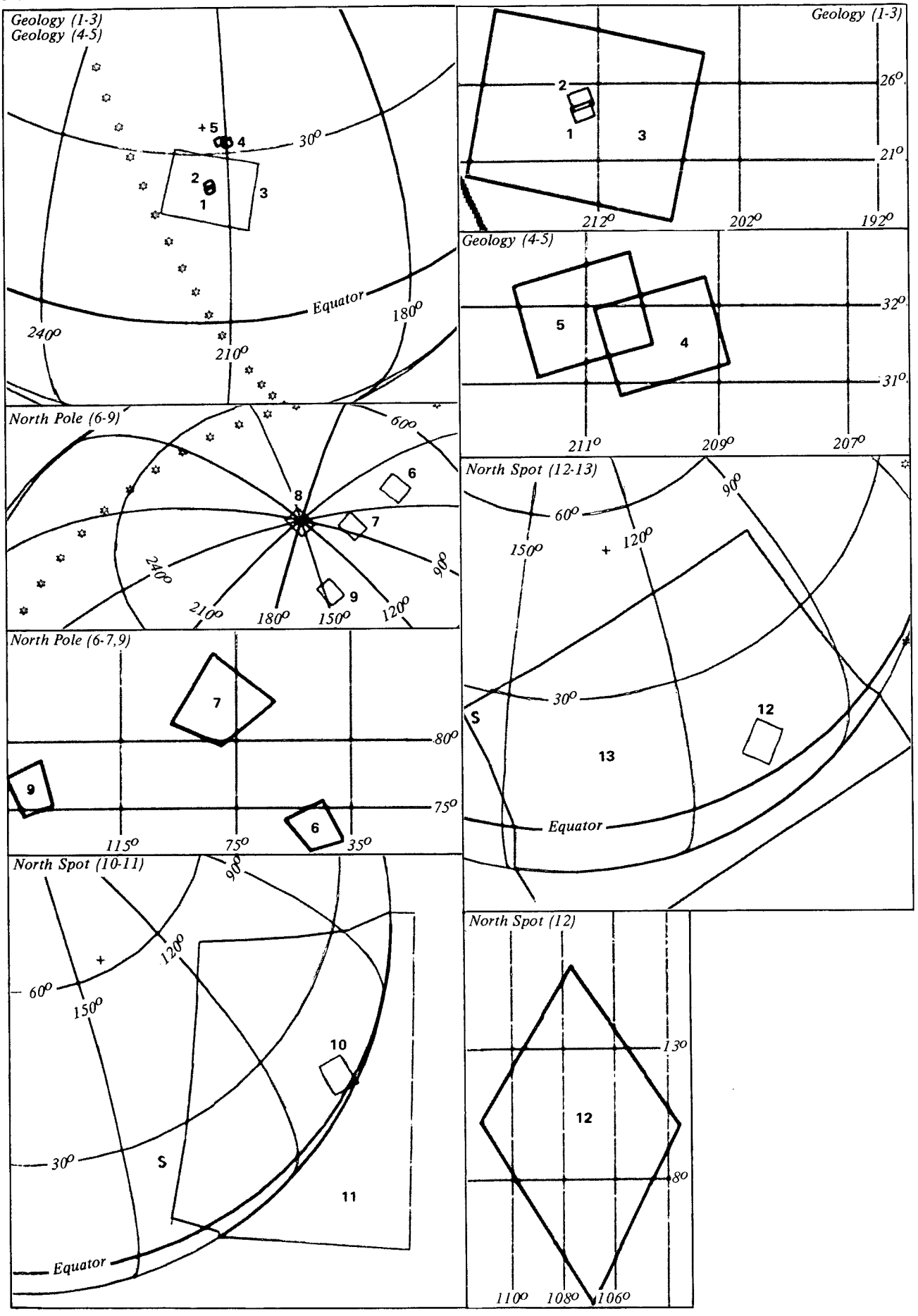
30°
60°
30°
Equator
1
2
3
4
Geology (1-2)
25°
15°
35°
30°
Variable Features (3)
42°
37°
41°
31°
21°
11°
Geology (4)
48°
47°
46°
27°
26°
North Polar Targets (5-8)
North Polar Targets (5-7)
North Polar Target (8)
84°
79°
272°
262°
252°
83°
81°
79°
346°
336°
5
6
7
8
60°
300
300
360°
60°
330°
300



Global (10)
Variable Features (11)



INST TYPE	TIME (GMT) D H M S	PERI TIME H M S	SPACECRAFT LAT	SPACECRAFT LONG-W	SPACECRAFT HGT	PLATFORM CONE	PLATFORM CLOCK	INTERCEPTING LAT	INTERCEPTING LONG-W	INTERCEPTING RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
GEOLOGY														
1 A	290 7 37 56	0 30 49	31.58	40.26	3059	98.08	199.47	15.79	31.82	3376	35.18	78.89	81.99	13,460,068
2 B	290 7 38 38	0 31 31	32.49	39.78	3112	98.08	199.47	17.80	30.95	3398	33.36	77.20	81.91	13,460,103
VARIABLE FEATURES														
3 A	290 7 44 56	0 37 49	39.93	35.31	3605	104.19	210.05	40.05	29.78	3623	8.19	67.92	75.87	13,460,418
GEOLOGY														
4 B	290 7 48 26	0 41 19	43.50	32.70	3888	107.23	209.56	46.51	26.61	3914	9.79	63.75	72.76	13,460,593
NORTH POLAR TARGETS														
5 B	290 8 37 26	1 30 19	63.94	346.38	7803	141.05	187.91	77.06	267.92	8296	36.94	58.27	38.93	13,463,043
6 B	290 8 38 50	1 31 43	63.98	345.11	7906	142.32	185.87	79.05	269.41	8362	35.48	59.11	37.67	13,463,113
7 B	290 8 40 14	1 33 7	64.00	343.87	8008	143.69	184.12	81.06	265.58	8468	35.57	60.77	36.30	13,463,183
8 B	290 8 41 38	1 34 31	64.00	342.65	8109	143.90	175.12	79.62	343.34	8284	21.94	55.81	36.08	13,463,253
PHOBOS														
9 B	290 10 49 2	3 41 55	45.57	314.12	14648	136.85	157.60	******	******	*****	109.52	71.66	36.08	13,469,623
GLOBAL														
10 A	290 11 20 32	4 13 25	40.87	316.92	15551	139.48	113.18	6.86	311.10	16257	41.16	51.03	40.59	13,471,198
VARIABLE FEATURES														
11 B	290 11 25 26	4 18 19	40.16	317.46	15669	137.73	100.32	40.22	328.26	15712	10.02	32.52	42.26	13,471,443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Geology (4-5)
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4
30°
2
1
3
Equator
240°
210°
180°
Geology (1-3)
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1
3
26°
21°
212°
202°
192°
Geology (4-5)
5
4
32°
31°
211°
209°
207°
North Pole (6-9)
600
6
8
7
240°
210°
180°
150°
120°
90°
9
North Spot (12-13)
90°
60°
150°
+
120°
30°
S
12
13
Equator
North Pole (6-7,9)
7
80°
9
75°
115°
75°
6
35°
North Spot (10-11)
90°
+
120°
60°
150°
10
30°
S
11
Equator
North Spot (12)
13°
12
8°
110°
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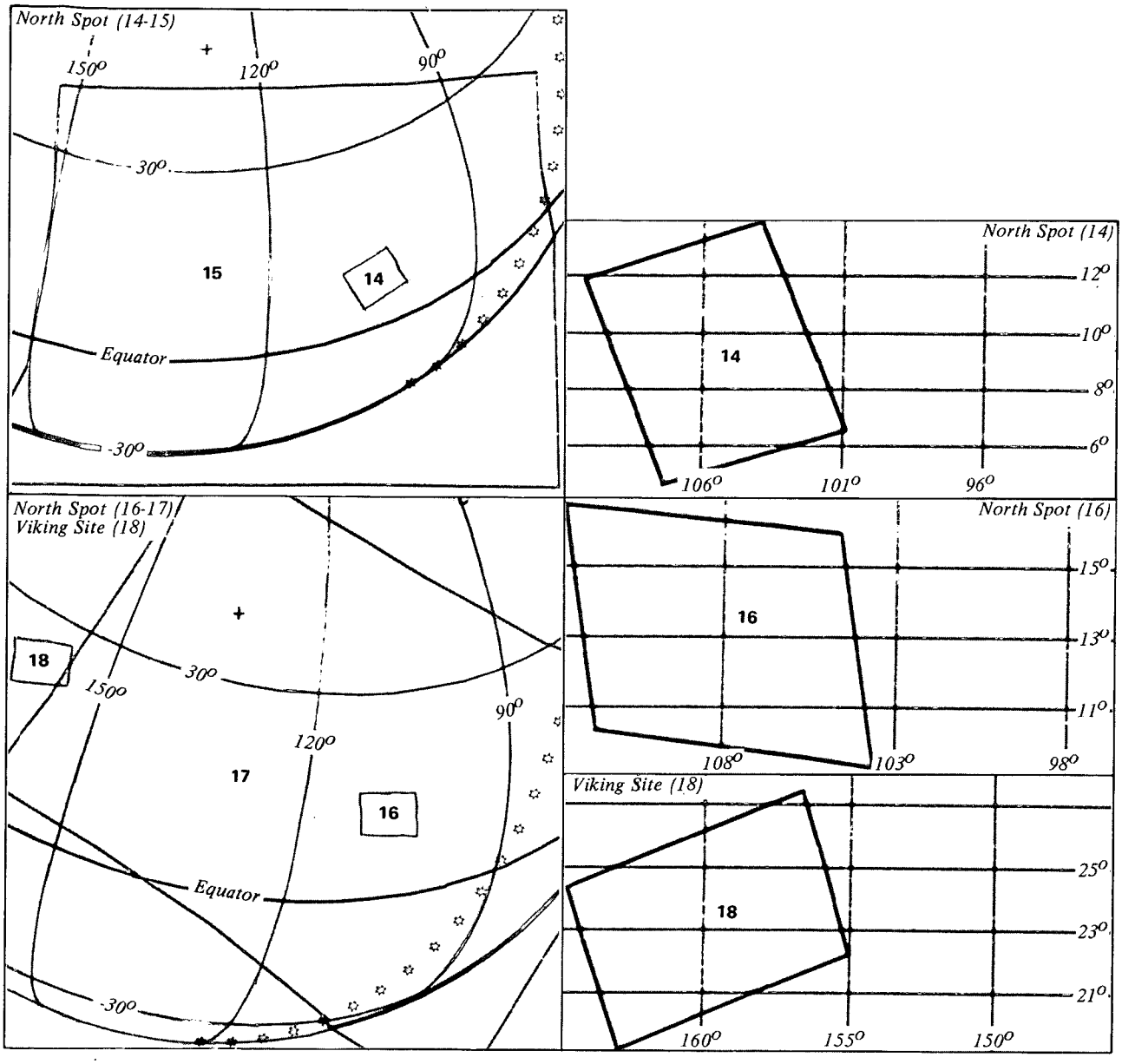
106°



INST TYPE	TIME (GMT) D	H	M	S	PERI TIME H	M	S	SPACECRAFT LAT	LONG-W	HGT	PLATFORM CONE	CLOCK	INTERCEPTING LAT	LONG-W	RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
GEOLOGY																			
1 B	290	19	36	50	0	30	42	31.41	215.64	3050	100.20	208.50	24.18	213.06	3112	15.83	81.12	79.79	13,496,013
2 B	290	19	38	14	0	32	6	33.23	214.68	3156	103.11	206.80	24.97	213.19	3230	17.11	80.63	76.88	13,496,083
3 A	290	19	38	56	0	32	48	34.11	214.19	3210	104.63	205.55	24.53	213.02	3307	19.50	80.52	75.44	13,496,118
4 B	290	19	42	26	0	36	18	38.25	211.72	3484	106.59	205.09	31.61	209.84	3531	13.36	74.63	73.40	13,496,293
5 B	290	19	43	50	0	37	42	39.79	210.70	3595	109.91	203.37	31.89	211.04	3657	15.23	75.22	70.08	13,496,363
NORTH POLE																			
6 B	290	20	37	2	1	30	54	63.96	161.17	7845	142.36	191.81	73.12	47.82	8721	49.15	66.23	37.63	13,499,023
7 B	290	20	38	26	1	32	18	63.99	159.91	7948	143.47	184.87	81.90	81.41	8407	35.57	61.07	36.52	13,499,093
8 B	290	20	39	50	1	33	42	64.00	158.67	8049	146.45	179.74	89.57	182.16	8509	35.50	65.15	33.53	13,499,163
9 B	290	20	41	14	1	35	6	64.00	157.47	8150	142.39	175.65	76.50	145.66	8273	18.37	52.11	37.60	13,499,233
NORTH SPOT																			
10 B	290	21	6	26	2	0	18	61.91	140.80	9851	131.57	167.69	9.79	108.30	11755	71.24	36.80	48.42	13,500,493
11 A	290	21	7	8	2	1	0	61.81	140.47	9895	132.98	165.35	22.90	116.17	11016	54.24	25.44	47.09	13,500,528
12 B	290	21	55	26	2	49	18	54.04	128.99	12550	140.53	145.85	10.38	107.45	13846	57.20	47.88	39.46	13,502,943
13 A	290	21	56	8	2	50	0	53.93	128.93	12583	139.76	140.99	21.57	121.44	13753	40.82	31.73	40.31	13,502,978
14 B	290	22	45	50	3	39	42	45.92	129.26	14574	143.79	125.29	9.56	105.73	15590	49.84	60.86	36.20	13,505,463
15 A	290	22	46	32	3	40	24	45.81	129.31	14597	141.95	123.24	15.08	117.64	15228	39.07	48.17	38.11	13,505,498
16 B	290	23	34	50	4	28	42	38.68	133.95	15899	143.07	106.65	13.29	108.25	16590	40.64	68.09	36.92	13,507,913
17 A	290	23	35	32	4	29	24	38.58	134.03	15914	141.36	104.31	23.15	118.87	16163	24.26	55.50	38.72	13,507,948
VIKING SITE																			
18 B	290	23	39	2	4	32	54	38.09	134.46	15985	133.67	100.30	23.44	159.73	16397	31.25	19.36	46.32	13,508,123
PHOBOS																			
19 B	291	0	53	14	5	47	6	27.88	145.02	16824	106.78	96.64	******	******	*****	107.86	27.06	46.32	13,511,833

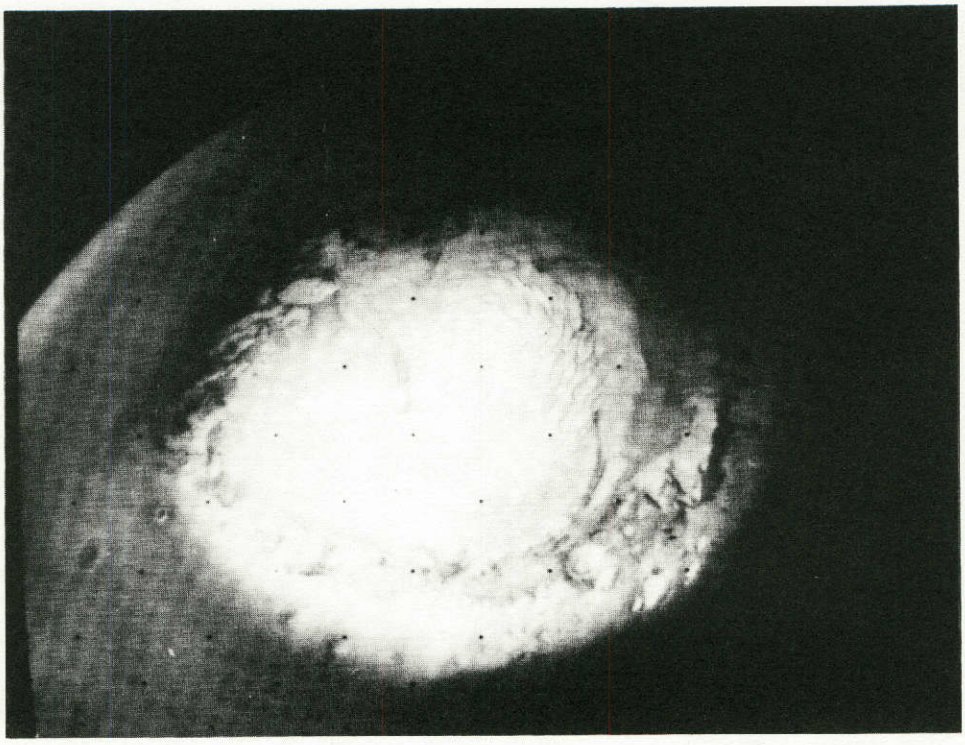


Figure 5-1. Rev 529, Picture No. 9A, North Pole

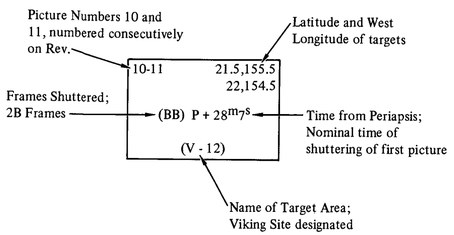
FOLDOUT FRAME 1

FOLDOUT FRAME 2

FOLDOUT FRAME 3

FOLDOUT FRAME

KEY TO SEQUENCE SUMMARY TABLES



NOTATION USED IN THE SUMMARY TABLES

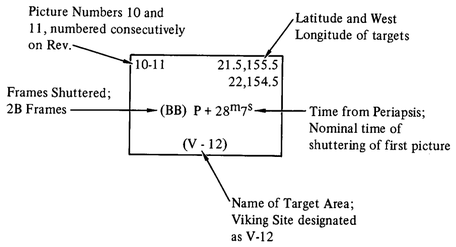
MC	–	Geology
V	–	Viking Site
N. Cap	–	North Polar Cap Mapping
N. Collar	–	North Collar Mapping
VF	–	Variable Features
Nix O.	–	Nix Olympica
N. Pole	–	North Pole
N. Spot	–	North Spot

Table 5-1. Sequence Summary, Revolution Numbers 416 - 451 – Extended Mission

416 Arcturus	417 Arcturus	422 Arcturus	423 Arcturus	430 Arcturus	431 Arcturus	436 Arcturus	437 Arcturus	444 Arcturus	445 Arcturus	450 Arcturus	451 Arcturus
1-2 (AB) P - 8m 46s S. Pole	1-4 5.5, 164.3 (BBBA) P + 8m 54s (V-13)	1-2 -28.1, 332 -30.1, 335 (AB) P - 3m 35s (VF-F)	1-4 -20.5, 142.5 (BBBA) P - 1m 50s (V-9)	1 -46,306 (A) P - 8m 48s Atmospheric (A-4)	1-3 -10,105 (BBA) P + 4m 6s (VF-26)	1 (A) P - 8m 26s S. Pole	1 (B) P - 5h 8m 36s Deimos	1-4 -14,230 (BBBA) P + 1m 41s (V-22)	1-3 -21.4, 44.5 (BBA) P - 1m 46s (V-5)	1-4 -2,193 (BBBA) P + 8m 49s (V-17)	1 (A) P - 13m 39s S. Pole (Dark)
3-6 -17.4, 350.2 (BBBA) P + 0m 20s (V-35)	5-8 23, 153 (BBBA) P + 25m 42s (V-12)	3-6 -16, 331.8 (BBBA) P - 0m 5s (V-34)	5-8 19.7, 134.6 (BBBA) P + 14m 58s (MC-8)	2-3 -35,303 (AB) P - 4m 36s (MC-27)	4 -1, 102.5 (B) P + 9m 42s (MC-17)	2-3 -27,263 (AB) P - 2m 50s IRR	2-4 -18.2, 76.3 (BBA) P + 0m 49s (V-7)	5-8 8,215 (BBBA) P + 12m 53s (V-20)	4-5 18.6, 34 (BB) P + 15m 2s (V-4)	5-8 7,192 (BBBA) P + 17m 13s (VF-9)	2 -15, 5.9 (B) P + 2m 27s (V-1)
7-8 40,330 41,329.1 (AB) P + 34m 38s (VF-13)	9-12 (ABAB) P + 46m 0s N. Collar	7-8 -10,330 (AB) P + 7m 37s IRIS	9-12 (ABAB) P + 45m 4s N. Collar	4-7 -17.5, 288.3 (BBBA) P + 0m 18s (V-32)	5-8 (ABAB) P + 46m 48s N. Collar	4-7 1.9, 253.2 (BBBA) P + 9m 4s (V-28)	23.7, 61 (B) P + 23m 13s (MC-10)	9-12 (ABAB) P + 47m 11s N. Collar	6-7 (BA) P + 19m 14s (V-4 cont'd)	9-12 (ABAB) P + 47m 19s N. Collar	3-5 (BBA) P + 5m 15s (V-1 cont'd)
9-12 (ABAB) P + 45m 50s N. Collar	13 (A) P + 53m 0s N. Cap	9-12 (ABAB) P + 45m 25s N. Collar	13 (A) P + 52m 4s N. Cap	8-11 13,283 (BBBA) P + 14m 18s (VF-8)	9-10 (AB) P + 55m 12s N. Collar	8-11 21,251 (BBBA) P + 17m 28s (V-27)	6-9 (ABAB) P + 47m 43s N. Collar	13-14 (AB) P + 55m 35s N. Collar	8-11 (ABAB) P + 46m 32s N. Collar	13-14 (AB) P + 55m 43s N. Collar	6-7 2.7, 18.3 3.2, 17.5 (BB) P + 12m 15s (MC-11)
13 (A) P + 52m 50s N. Cap	14-15 (AB) P + 55m 48s N. Collar	13 (A) P + 52m 25s N. Cap	14-15 (AB) P + 54m 52s N. Collar	12-15 (ABAB) P + 47m 12s N. Collar	11 (A) P + 58m 0s N. Cap	12-15 (ABAB) P + 47m 34s N. Collar	10-11 (AB) P + 56m 7s N. Collar	15 (A) P + 59m 47s N. Cap	12-14 (ABA) P + 54m 56s N. Collar & Cap		8-9 26,348 (BA) P + 26m 15s N. Limb
14-15 (AB) P + 55m 38s N. Collar		14-15 (AB) P + 55m 13s N. Collar		16-17 (AB) P + 55m 36s N. Collar		16-17 (AB) P + 55m 58s N. Collar	12 (A) P + 58m 55s N. Cap	16 (B) P + 3h 2m 17s Phobos			10-13 (ABAB) P + 46m 33s N. Collar
				18 (A) P + 58m 24s N. Cap		18 (A) P + 58m 46s N. Cap					14-16 (ABA) P + 54m 57s N. Collar & Cap
				19 (B) P + 1h 22m 54s Phobos							

FOLDOUT FRAME 1

KEY TO SEQUENCE SUMMARY TABLES



NOTATION USED IN THE SUMMARY TABLES

MC	–	Geology
V	–	Viking Site
N. Cap	–	North Polar Cap Mapping
N. Collar	–	North Collar Mapping
VF	–	Variable Features
Nix O.	–	Nix Olympica
N. Pole	–	North Pole
N. Spot	–	North Spot

FOLDOUT FRAME 2

Table 5-2. Sequence Summary, Revolution Numbers 458 - 676 – Extended Mission

458 Arcturus	459 Arcturus	473 Canopus	478 Canopus	479 Canopus	528 Canopus	529 Canopus	533 Canopus	667 Vega	668 Vega	675 Vega	676 Vega
1-2 -44.9,160.8 (BB) P-5m 29s USSR Landing Site	1-5 (ABAAA) P-7m 43s S. Pole Swath	1 -14,275 (A) P + 3m 42s (VF-1)	1 -11.5, 69 (B) P + 5m 9s (MC-18)	1 -45,290 (B) P-12m 35s IRIS Data (Dark)	1-4 -2,203 (BBBA) P + 5m 36s (V-18)	1 -8.5, 15 (B) P + 4m 12s (MC-19)	1-4 -5.8, 0 -5.8, 0 -5, 0 (ABBA) P + 6m 40s Geodesy . . . to est. zero meridian landmark	1 (B) P + 19m 48s IRIS; 10° darkside of term.	1 29.2, 257.5 (B) P + 30m 49s Geology	1,2 17.9, 31 (AB) P + 30m 51s Geology	1-3 24.5, 213.2 (BBA) P + 30m 44s Geology
3-5 -8.5, 151.5 -7.5, 151.5 -7.0, 151 (BBB) P + 4m 19s (MC-16)	6-8 -23,344 (BBA) P + 1m 23s (VF-7)	2-4 6.2, 268.8 (BBA) P + 10m 0s (V-30)	2-5 22, 65 (A) 22.4, 64.8 (B) 24.0, 61.1 (BB) (ABBB) P + 14m 15s (VF-11; AB) (MC-10; BB)	2-4 -22, 254 (B) -23.2, 244.4 (B) -23, 242 (A) (BBA) P - 1m 23s (MC-22; B) (VF-20; BA)	5-6 15,198 (AB) P + 14m 42s (VF-C)	2 12, 15 (A) P + 7m 42s (VF-23)		2 (B) P + 24m 0s IRIS; Term.	2 23,250 (A) P + 35m 43s Viking Site	3 40, 30 (A) P + 37m 51s (VF)	4,5 31.6, 209.5 31.8, 211 (BB) P + 36m 20s Geology
6-8 4,152 (BBB) P + 11m 19s (V-11)	9 40.4, 317.5 (B) P + 34m 59s (MC-5)	5-8 22,264 (BBBA) P + 15m 36s (V-29)	6-8 76, 74 79, 0 73.5, 15 (BBB) P + 1h 44m 33s N. Pole Targets	5-7 21.5, 232.5 (BBA) P + 15m 25s (V-23)	7-10 77.5, 0 85, 15 78, 105 84, 69.1 (BBBB) P + 2h 1m 48s N. Pole Targets	3-6 18, 5 (BBBA) P + 11m 12s (V-36)		3-5 22, 73 (BB) 22, 65 (A) (BBA) P + 29m 36s Geology: BB (VF: A)	3 18,134 (B) P + 1h 14m 13s Nix O. on Limb	4 46.6, 26.6 (B) P + 41m 21s Geology	6-9 72.5, 50 81.5, 80 90, 0 76, 144 (BBBB) P + 1h 30m 56s N. Pole Targets
9 19.8, 134.6 (B) P + 21m 7s (MC-8)	10 49.5, 328 (B) P + 41m 59s (MC-5)		9-10 (AA) P + 3h 3m 39s Global	8-11 85,175 79,205 72,195 76,170 (BBBB) P + 1h 46m 25s N. Pole Targets	11 50, 70 (B) P + 2h 38m 12s Tempe	7 24.9, 3 (B) P + 28m 0s		6 49, 70 (B) P + 43m 36s Geology	4 40,185 (B) P + 1h 25m 25s (VF)	5-8 77,272 79,272 81,272 79,345 (BBBB) P + 1h 30m 21s N. Pole Targets	10,11 11,108 24,115 (BA) P + 2h 0m 20s Atmospheric; N. Spot
10-11 21.5, 155.5 22, 154.5 (BB) P + 28m 7s (V-12)	11 (A) P + 56m 41s N. Pole			12-13 (AA) P + 2h 54m 19s Global	12-14 (AAA) P + 3h 2m 42s Global	8 77.5, 280 (B) P + 2h 4m 36s N. Polar		7-11 76.5, 167 85, 16 73.5, 14 76, 35 77, 80 (BBBBB) P + 1h 31m 12s N. Pole Targets	5-9 79, 345 84.5, 170 cover 78.4, 200 72.5, 195 (BBBBB) P + 1h 31m 1s N. Pole Targets	9 (B) P + 3h 41m 57s Phobos	12,13 11, 108 19.8, 119.8 (BA) P + 2h 49m 20s N. Spot
12 (A) P + 56m 49s N. Pole	12-16 84,274 82,274 80,274 78,274 (BBBBB) P + 60m 11s N. Pole Targets				15-16 18, 134 10.7, 104 (BB) P + 3h 20m 12s	9 (A) P + 2h 20m 42s N. Polar		12 90, 0 (A) P + 1h 45m 54s N. Pole	10 90, 0 (A) P + 1h 41m 31s N. Pole	10 7,312 (A) P + 4h 13m 27s Global	14,15 11, 108 16.3, 119.2 (BA) P + 3h 39m 44s N. Spot
13-15 83.5, 80 81.5, 80 79.5, 80 (BBB) P + 61m 43s N. Pole Targets					17 -10,105 (B) P + 3h 39m 48s (VF-26)	10 11,284 (B) P + 3h 39m 48s (VF-8)		13 -5, 5 (A) P + 5h 29m 54s Global	11,12 25, 213 33.8, 211.2 (BA) P + 1h 46m 25s Atmospheric	11 40,330 (B) P + 4h 18m 21s (VF)	16,17 11,108 22,120 (BA) P + 4h 28m 44s N. Spot
									13,14 17.8, 133.5 (B) 34, 133 (A) (BA) P + 2h 0m 25s Nix O. & Hougeria		18 25,160 (B) P + 4h 32m 56s Viking Site
									15 17.8, 133.5 (B) P + 3h 0m 32s Nix O.		19 (B) P + 5h 47m 8s Phobos
									16,17 17.8, 133.5 (B) 36, 145 (A) (BA) P + 4h 0m 49s Nix O. & Hougeria		

FOLDOUT FRAME 3

SECTION VI

TABLES AND FIGURES

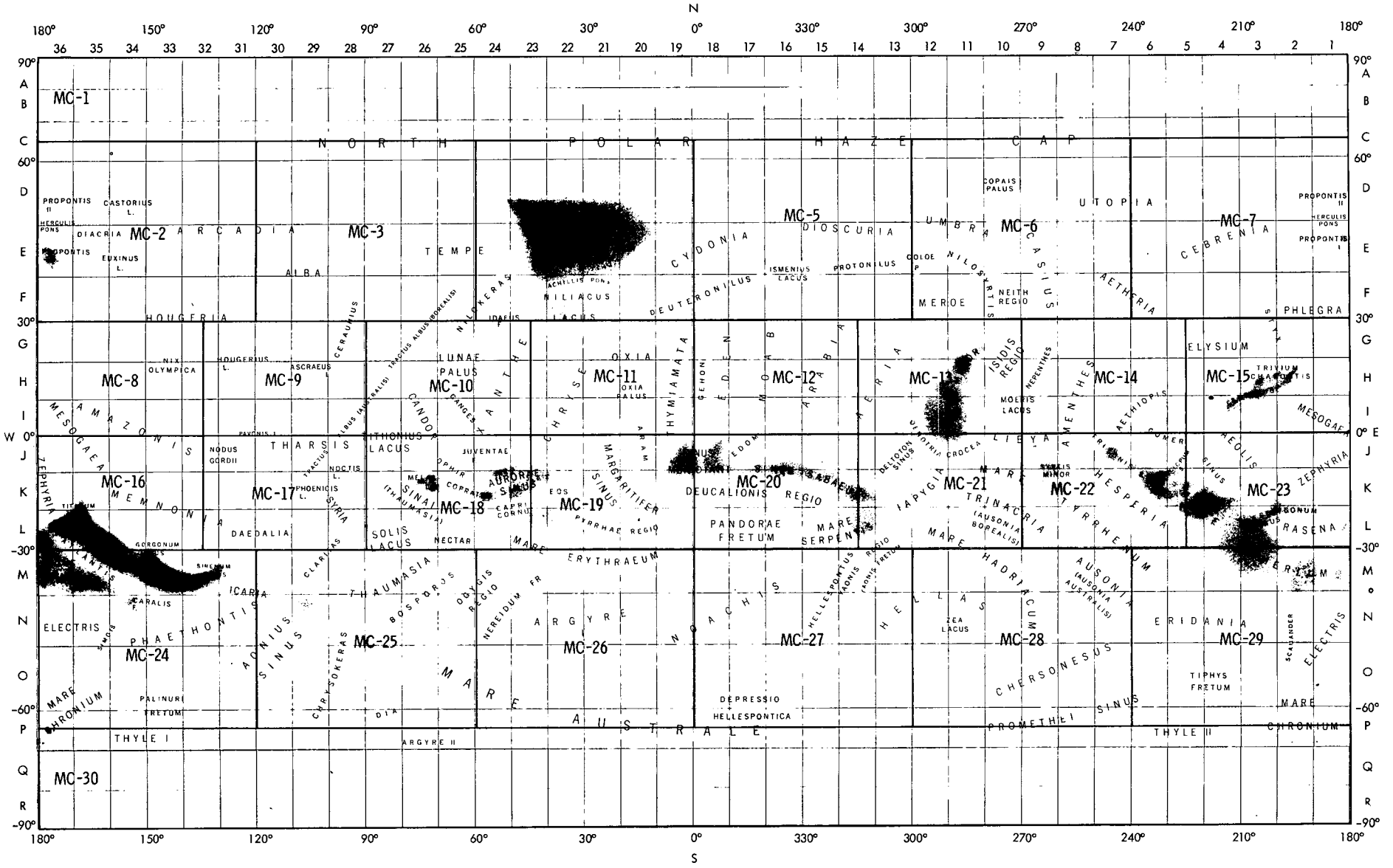


Figure 6-1. Index Map

Table 6-1. Surface Feature Locations

AREA	LAT	LONG
ACHILLIS PONS	39	30
ACIDALIUM, MARE	48	30
ACIDALIUS FONS	50	73
AEOLIS	- 5	210
AERIA	15	309
AETHERIA	35	240
AETHIOPIS	5	238
ALBA	41	107
AMAZONIS	3	154
AMENTHES	9	256
AONIUS SINUS	-51	115
ARABIA	22	324
ARAM	- 3	14
ARAXES	-27	125
ARCADIA	49	125
ARETHUSA LACUS	59	338
ARGYRE I	-45	30
ARGYRE II	-68	72
ARNON	50	335
ASCRAEUS LACUS	19	105
ATLANTIS	-33	166
AURORAE SINUS	-12	49
AUSONIA	-37	247
AUSTRALE, MARE	-63	26
BATHYS PORTUS	-41	110
BIBLIS FONS	17	133
BOREOSYRTIS	55	300
BOREUM, MARE	57	90
BOSPORUS	-41	75
CANDOR	5	74
CAPRI CORNU	-20	50
CARALIS FONS	-42	155
CASIUS	40	264
CASTORIUS LACUS	54	155
CEBRENIA	47	215
CECROPIA	65	310
CERAUNIUS	25	95
CERBERUS	10	200
CHALCE	-48	0
CHAOS	39	215
CHERSONESUS	-54	261
CHRONIUM, MARE	-60	180
CHRYSE	9	35
CHRYSOKERAS	-55	99
CIMMERIUM, MARE	-32	207
CLARITAS	-32	102
COLOE PALUS	43	297
COPAIS PALUS	56	275
COPRATES	-15	61
CROCEA	- 5	285
CYCLOPIA	- 2	225
CYCLOPUM SINUS	-10	227
CYDONIA	46	356
DAEDALIA	-25	120
DELTOTON SINUS	- 7	305
DEUCALIONIS REGIO	-16	344
DEUTHERONILUS	35	359
DIA	-61	84
DIACRIA	47	164
DIOSCURIA	49	319
EDEN	18	351
EDOM	- 3	345
ELECTRIS	-45	180
ELYSIUM	23	216
EOS	-15	36
ERIDANIA	-46	220
ERYTHRAEUM, MARE	-33	25
EUNOSTOS	12	225
EUPHRATES	15	334
EUXINUS LACUS	44	157
GANGES	8	63
GEHON	15	358
GOMER SINUS	- 5	225
GORGONUM SINUS	-30	149
GYNDES	55	215
HADRIACUM, MARE	-35	275
HAMMONIS CORNU	- 5	320
HEBES LACUS	- 1	83
HECATES LACUS	38	205
HELLAS	-47	295
HELLESPONTICA, DEPRESSIO	-60	344
HELLESPONTUS	-40	322
HEPHAESTUS	21	240
HERCULIS PONS	50	180
HESPERIA	-19	240
HIDDEKEL	15	346
HOUGERIA	31	139
HOUGERIUS LACUS	20	125
HYBLAEUS	26	233
HYPERBOREUS LACUS	75	60
HYPERNOTIUS MONS	-66	28
IAPYGIA	-16	298
ICARIA	-40	122
IDAEUS FON	30	52
ISIDIS REGIO	20	275
ISMENIUS LACUS	40	334
JAMUNA	15	35
JUVENTAE FONS	- 5	62
LAESTRYGON	- 5	198
LAESTRYGONUM SINUS	-32	200
LEMURIA	65	210
LIBYA	- 1	270
LUNAE PALUS	20	65
MAEOTIS PALUS	51	124
MAGNA, DEPRESSIO	-79	270
MAREOTIS LACUS	32	92
MARGARITIFER SINUS	-13	22
MELAS LACUS	-13	74
MEMNONIA	-20	145
MERIPIANI SINUS	- 8	0
MEROE	34	291
MESOGAEA	0	180
MOAB	18	340
MOERIS LACUS	9	271
MONS ARGENTINA	-70	30
MORPHEOS LACUS	35	230
NECTAR	-28	65
NEITH REGIO	35	272
NEPENTHES	17	265
NEREIDUM FRETUM	-43	51
NILIACUS LACUS	34	33
NILOKERAS	35	58
NILOSYRTIS	39	280
NIX OLYMPICA	20	138
NOACHIS	-43	350
NOCTIS LACUS	-10	95
NODUS ALCYONIUS	32	256
NODUS GORDII	- 5	129
NODUS LAOCOONTIS	20	248
NORTH POLAR CAP CENTER	89	290
NOTI SINUS	-63	204
NOTUS	-71	212
NOVISSIMA THYLE	-72	314
NOVUS MONS	-70	320
NUBIS LACUS	20	260
OENOTRIA	- 2	298
OGYGIS REGIO	-40	60
OLYMPIA	80	210
OPHIR	- 9	66
ORTYGIA	61	350
OXIA	21	16
OXIA PALUS	11	18
OXUS	10	21
PALINURI FRETUM	-59	146
PAMBOTIS LACUS	7	218
PANCHAIA	62	210
PANDORAE FRETUM	-25	345
PARVA, DEPRESSIO	-72	175
PAVONIS LACUS	1	120
PENEUS	-48	280
PHAETHONTIS	-47	139
PHISON	15	320
PHLEGRA	31	191
PHOENICIS LACUS	-15	108
PROMETHEI SINUS	-64	262
PROPONTIS I	45	180
PROPONTIS II	54	180
PROTEI REGIO	-23	50
PROTONILUS	42	313
PRUMETHEI SINUS	-63	259
PYRRHAE REGIO	-25	22
RASENA	-26	191
RIMA AUGUSTA	-73	50
RIMA AUSTRALIS	-73	335
RIMA BREVIS	-72	292
SABAEUS SINUS	-11	328
SCAMANDER	-49	196
SCANDIA	62	150
SERPENTIS, MARE	-25	321
SILOE FONS	35	5
SIMOIS	-48	161
SINAI (THAUMASIA)	-17	75
SIRENUM, MARE	-32	154
SIRENUM SINUS	-35	131
SITHONIUS LACUS	53	237
SOLIS LACUS	-27	85
SOUTH POLAR CAP CENTER	-84	30
STYX	28	202
SYRIA	-20	97
SYRTIS MAJOR	10	289
SYRTIS MINOR	-10	261
TANAIS	50	57
TEMPE	45	65
THARSIS	- 2	105
THAUMASIA	-36	84
THOANA PALUS	29	248
THOTH	33	255
THYLE I	-68	152
THYLE II	-66	225
THYLES COLLIS	-71	232
THYLES MONS	-73	154
THYMIAMATA	15	6
TIPHYS FRETUM	-56	219
TITANUM SINUS	-20	169
TITHONIUS LACUS	- 2	85
TRACTUS ALBUS (AUSTRALIS)	- 5	100
TRACTUS ALBUS (BOREALIS)	25	275
TRINACRIA (AUSONIA BOREALIS)	-20	275
TRITONIS SINUS	- 6	245
TRIVIUM CHARONTIS	15	200
TYRRHENUM, MARE	-22	252
UCHRONIA	70	260
ULTIMUM PROM.	-73	179
ULYXIS FRETUM	-73	195
UMBRA	49	287
UTOPIA	53	244
VULCANI PELAGUE	-35	15
XANTHE	14	52
XANTHUS	-45	230
YAONIS FRETUM	-34	310
YAONIS REGIO	-35	315
ZEA LACUS	-47	289
ZEPHYRIA	-10	180

Table 6-2. TV Picture Index

	SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
	A19	85	5	(186) 29A 30B (219) 17A
	A20	85	15	(528) 8B (667) 8B
	A26	85	75	(458) 13B 14B (528) 10B
	A27	85	85	(676) 7B
	A32	85	135	(180) 29A
	A34	85	155	(180) 30B (668) 10A
	A35	85	165	(259) 5B 7B (479) 8B
	A36	85	175	(259) 6A (528) 12A
	A1	85	185	(189) 29A (259) 8A (668) 6B (676) 8B
A	A3	85	205	(189) 30B (667) 12A
	A4	85	215	(183) 29A
	A6	85	235	(245) 9B 11B
	A7	85	245	(245) 10A
	A8	85	255	(183) 30B (245) 12A 13B
	A9	85	265	(675) 7B
	A10	85	275	(222) 18A (459) 12B 13B 14B
	A13	85	305	(239) 11A
	A14	85	315	(239) 12B
	A16	85	335	(239) 10B (529) 9A
	B19	75	5	(147) 32B (188) 25A 26B (192) 29A (194) 28B (478) 7B (528) 7B
	B20	75	15	(192) 30B (437) 12A (478) 8B (667) 9B
	B22	75	35	(431) 11A (667) 10B
	B23	75	45	(676) 6B
	B25	75	65	(184) 27A
	B26	75	75	(417) 13A (423) 13A (458) 15B (478) 6B
	B27	75	85	(667) 11B
	B28	75	95	(184) 29A
	B29	75	105	(184) 30B (528) 9B
	B32	75	135	(185) 30B
	B33	75	145	(179) 31A (185) 29A (676) 9B
	B35	75	165	(259) 3B (667) 7B
B	B36	75	175	(259) 4A (444) 15A (479) 11B
	B1	75	185	(668) 7B
	B2	75	195	(436) 18A (479) 10B (668) 8B 9B
	B3	75	205	(479) 9B
	B6	75	235	(245) 4A 5B 6A 7B 8A
	B7	75	245	(206) 24A 25B
	B8	75	255	(416) 13A (422) 13A (459) 16B
	B9	75	265	(675) 5B 6B
	B10	75	275	(459) 15B (529) 8B
	B12	75	295	(190) 29A 30B
	B13	75	305	(179) 29A (180) 31A
	B16	75	335	(451) 16A
	B17	75	345	(668) 5B (675) 8B
	B18	75	355	(194) 27A (219) 16B (445) 14A (478) 10A
	C21	65	25	(192) 27A
	C22	65	35	(192) 28B (248) 15B (437) 11B
	C25	65	65	(162) 33A
	C26	65	75	(184) 28B
	C28	65	95	(423) 14A 15B
	C30	65	115	(226) 18A
C	C32	65	135	(191) 25A 26B (222) 16A (458) 12A
	C34	65	155	(450) 14B
	C35	65	165	(144) 31A
	C36	65	175	(177) 31A 32B
	C1	65	185	(101) 32B (444) 14B
	C3	65	205	(191) 27A

Table 6-2. TV Picture Index (contd)

	SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
	C4	65	215	(191) 28B
	C6	65	235	(245) 1B 2A 3B (430) 18A
	C8	65	255	(161) 32A
	C9	65	265	(231) 13B
C	C10	65	275	(194) 26B (231) 11B 12A (422) 14A 15B
(contd)	C12	65	295	(225) 2A 4A 5B 6A 8A 9B 10A 11B
	C13	65	305	(225) 1B 3B 7B 12A 13B 14A
	C14	65	315	(179) 30B (192) 25A 26B (459) 11A
	C16	65	335	(178) 29A 30B (217) 19A
	C17	65	345	(145) 32A (178) 25A 26B 27A 28B (184) 25A 26B
	C18	65	355	(147) 31A (213) 20A (451) 9A
	D19	55	5	(211) 21B (445) 13B
	D20	55	15	(174) 31A (176) 31A 32B 33A (211) 20A (445) 12A
	D22	55	35	(205) 20B 22B (437) 9B 10A
	D23	55	45	(205) 19A 21A
	D24	55	55	(129) 31A (166) 31A 32B 33A (201) 19A 20B 22B (437) 6A 7B
	D25	55	65	(162) 31A 32B (164) 32B 33A (201) 21A (240) 10A (431) 9A 10B
	D26	55	75	(127) 31A (197) 20A 21B 22A 23B
	D27	55	85	(234) 13A
	D28	55	95	(32) 1B (193) 21A 22B 23A 24B
	D30	55	115	(189) 25A 26B 27A 28B (226) 17A (417) 14A 15B
	D32	55	135	(148) 33A (183) 27A 28B (185) 25A 26B 27A 28B (417) 10B (528) 13A
	D33	55	145	(181) 28B (220) 21A (222) 17A
	D34	55	155	(179) 28B (181) 27A 29A 30B (450) 13A
	D35	55	165	(144) 32B (179) 25A 26B 27A
	D36	55	175	(103) 32B (136) 32A (214) 22A 23B 25B (216) 20A 21B 22A (450) 10B
	D1	55	185	(101) 31A (212) 25B (214) 24A
D	D2	55	195	(210) 22A 23B 24A (444) 13A
	D3	55	205	(208) 20A 21B 22A 23B (444) 10B
	D4	55	215	(206) 20A 21B 22A 23B (436) 15B 16A 17B
	D5	55	225	(128) 29A 31A 33B
	D6	55	235	(202) 23A 24B 25A 26B (436) 12A 13B
	D7	55	245	(198) 24B (430) 15B 16A 17B
	D8	55	255	(198) 23A 25A 26B
	D9	55	265	(120) 32A 33B (194) 24B (430) 13B
	D10	55	275	(194) 23A 25A (237) 10A
	D11	55	285	(190) 25A 26B 28B
	D12	55	295	(190) 27A (416) 15B
	D13	55	305	(186) 25A 26B 28B (416) 14A
	D14	55	315	(186) 27A (235) 11A
	D15	55	325	(182) 25A 26B 27A 28B (217) 17B 18A (416) 10B
	D16	55	335	(451) 15B
	D17	55	345	(451) 14A
	D18	55	355	(52) 1B (451) 8B
	E19	45	5	(211) 18A 19B (445) 11B
	E20	45	15	(172) 31A 32B 33A (174) 32B (209) 21A (445) 10A
	E21	45	25	(168) 32B 33A (170) 32B 33A (207) 20A 21B 22B (445) 8A 9B (675) 3A 4B
	E22	45	35	(133) 32A (135) 31A 32B (168) 31A (205) 17A 18B (242) 10B (437) 8A
	E23	45	45	(131) 32A (203) 21A 22B
	E24	45	55	(201) 17A 18B
E	E25	45	65	(164) 31A (199) 21A 22B (431) 7A 8B
	E26	45	75	(195) 22B (197) 18A 19B (528) 11B (667) 6B
	E27	45	85	(193) 20B 25A 26B (195) 21A (234) 12B 14B (431) 5A 6B
	E28	45	95	(0) 83B (121) 32A (191) 24B (193) 19A (423) 11A 12B
	E29	45	105	(119) 31A 32B (154) 31A 32B 33A (187) 26B 28B (189) 23A 24B (191) 23A
	E30	45	115	(63) 9B (115) 31A 32B (152) 31A 32B 33A (187) 23A 24B 25A 27A (226) 16A (417) 12B (423) 9A 10B
	E31	45	125	(185) 23A 24B (417) 11A

Table 6-2. TV Picture Index (contd)

	SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
E (contd)	E32	45	135	(148) 31A 32B (183) 23A 24B 25A 26B
	E33	45	145	(181) 25A 26B (417) 9A
	E34	45	155	(179) 23A 24B (220) 19A 20A
	E35	45	165	(55) 1B 2B (140) 31A 32B (216) 18A 19B (259) 2A (450) 11A 12B
	E36	45	175	(0) 8B (53) 1B 2B (103) 31A (214) 20A 21B
	E1	45	185	(136) 30A 31A (138) 32A 33B (173) 31A 32B (175) 31A 32B (212) 20A 21B 22A 23B 24A (450) 9A (479) 13A (668) 4B
	E2	45	195	(210) 20A 21B (444) 11A 12B
	E3	45	205	(206) 19B (208) 18A 19B (444) 9A
	E4	45	215	(204) 24B (206) 18A
	E5	45	225	(128) 30B 32A (202) 21A 22B (204) 23A (436) 14A
	E6	45	235	(200) 23A 24B
	E7	45	245	(198) 21A 22B
	E8	45	255	(196) 23A 24B (430) 14A
	E9	45	265	(118) 31A 33B (120) 29A 30B 31A (157) 31A 32B (159) 32A (194) 21A 22B (430) 12A
	E10	45	275	(110) 33B (118) 29A 32A (192) 23A 24B (422) 11A 12B
	E11	45	285	(110) 32A (190) 23A 24B
	E12	45	295	(62) 2B (188) 23A 24B (422) 9A 10B
	E13	45	305	(62) 1B (186) 23A 24B (235) 10B (416) 11A 12B
	E14	45	315	(149) 32A (182) 29A 30B (184) 23A 24B (221) 19B 20B (223) 13B (459) 9B
	E15	45	325	(180) 24B 26B 27A 28B (182) 23A 24B (416) 8B 9A (459) 10B (675) 11B
	E16	45	335	(104) 13A (108) 29A 31A 32A 33B (178) 23A 24B (180) 23A (217) 15B 16A (221) 21A (451) 13B
	E17	45	345	(54) 2B (56) 1B 2B (215) 18A 19B (217) 14A (451) 12A
	E18	45	355	(52) 2B (139) 31A 32B (213) 18A 19B (451) 10A 11B
F	F19	35	5	(213) 15B 16A 17B
	F20	35	15	(211) 15B 16A 17B
	F21	35	25	(209) 18B 19A 20B
	F22	35	35	(170) 31A (205) 16B (207) 17B 18A 19B
	F23	35	45	(42) 1B 2B (203) 19A 20B (205) 14B 15A
	F24	35	55	(0) 66B (201) 15A 16B (203) 18B
	F25	35	65	(199) 19A 20B (201) 14B
	F26	35	75	(158) 32B 33A (197) 16A 17B (199) 18B
	F27	35	85	(158) 31A (195) 19A 20B (197) 15B
	F28	35	95	(156) 32B 33A (193) 16B 17A 18B (195) 18B
	F29	35	105	(191) 20B 21A 22B
	F30	35	115	(0) 7B (189) 20B 21A 22B
	F31	35	125	(24) 2B (59) 2B (63) 8B (187) 20B 21A 22B
	F32	35	135	(24) 1B (185) 20B 21A 22B (222) 15B (668) 14A
	F33	35	145	(183) 20B 21A 22B (222) 13B 14A (668) 17A
	F34	35	155	(49) 2B (51) 1B (142) 31A 32B (179) 22B (181) 22B 23A 24B (218) 16B 17A 18B (479) 12A
	F35	35	165	(57) 1B 2B (179) 20B 21A (216) 16A 17B (220) 18A (259) 1B
	F36	35	175	(214) 18A 19B (216) 15B
	F1	35	185	(136) 29B (138) 29B 30A 31B (212) 18A 19B (214) 17B
	F2	35	195	(210) 18A 19B (212) 17B
	F3	35	205	(208) 16A 17B (210) 17B (676) 4B
	F4	35	215	(206) 15B 16A 17B (208) 15B (668) 12A (676) 5B
	F5	35	225	(165) 31A 32B (167) 31A 32B (204) 20B 21A 22B
	F6	35	235	(202) 18B 19A 20B
	F7	35	245	(200) 20B 21A 22B
	F8	35	255	(198) 18B 19A 20B
	F9	35	265	(110) 30B (118) 30B (194) 20B (196) 20B 21A 22B
	F10	35	275	(153) 32B (192) 22B (194) 18B 19A
	F11	35	285	(112) 33B (153) 31A (190) 21A 22B (192) 20B 21A (233) 11A
	F12	35	295	(58) 2B (112) 32A (188) 21A 22B (190) 20B
	F13	35	305	(25) 3B 4B (58) 1B (186) 21A 22B (188) 20B
	F14	35	315	(184) 21A 22B (186) 20B (221) 18B
	F15	35	325	(108) 30B (182) 21A 22B (184) 20B (219) 13B
	F16	35	335	(104) 14B (143) 22A (180) 20B 21A 22B 25A (182) 20B (219) 14A 15B (416) 7A

Table 6-2. TV Picture Index (contd)

	SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
F (contd)	F17	35	345	(178) 20B 21A 22B (217) 12A 13B (260) 12B 13B 14B
	F18	35	355	(215) 15B 16A 17B
	G19	25	5	(176) 30A (213) 14A (529) 6A 7B
	G20	25	15	(174) 30A (211) 14A
	G21	25	25	(170) 30A (172) 30A (209) 17A
	G22	25	35	(207) 16A (248) 13B 14A (445) 7A
	G23	25	45	(0) 29B 62B (168) 30A (205) 13A
	G24	25	55	(0) 60B (164) 30A (166) 30A (203) 17A
	G25	25	65	(84) 32B (123) 31A 32B (125) 29A 30B 31A 32B (160) 31A 32B 33A (162) 30A (201) 13A (205) 11A 12B (238) 6B 7A 8B (242) 7B 8A 9B (437) 5B (478) 2A 3B 4B 5B (667) 5A
	G26	25	75	(0) 3B (160) 30A (199) 17A (203) 16B (667) 4B
	G27	25	85	(158) 30A (197) 14A (667) 2B
	G28	25	95	(156) 30A 31A (195) 17A (236) 12B 13B
	G29	25	105	(67) 1B (154) 30A (191) 19A (193) 15A (528) 14A
	G30	25	115	(80) 32B (152) 30A (189) 19A (676) 11A 17A
	G31	25	125	(24) 5B (55) 5B (57) 13B (150) 30A (187) 19A (220) 16A (261) 6A (676) 13A
	G32	25	135	(28) 4B (32) 20B (55) 4B (57) 12B (59) 4B (61) 1B 3B (63) 10B (146) 30A 31A 32B 33A (148) 30A (185) 19A (226) 13B 14A 15B (423) 8A (668) 3B
	G33	25	145	(144) 30A (183) 19A
	G34	25	155	(142) 30A (181) 21A (417) 5B 6B 7B 8A (458) 10B 11B (676) 18B
G	G35	25	165	(49) 1B (140) 30A (179) 19A
	G36	25	175	(177) 30A (216) 14A
	G1	25	185	(47) 5B (51) 5B (55) 13B (175) 30A (214) 16A
	G2	25	195	(47) 4B (51) 4B (101) 29A 30B (173) 30A (212) 16A
	G3	25	205	(45) 5B (169) 31A 32B (171) 30A (181) 20B (210) 16A
	G4	25	215	(45) 4B 6B (134) 30A 31B 32A 33B (169) 30A (208) 14A (668) 11B (676) 1B 2B 3A
	G5	25	225	(163) 31A 32B (167) 30A (206) 14A (243) 7B 8B
	G6	25	235	(165) 30A (202) 17A (204) 19A (479) 5B 6B 7A
	G7	25	245	(163) 30A (200) 19A (668) 2A
	G8	25	255	(161) 31A (198) 17A (436) 8B 9B 10B 11A (668) 1B
	G9	25	265	(7) 28A (159) 31A (196) 19A (473) 5B 6B 7B 8A
	G10	25	275	(155) 31A 32B (157) 30A (194) 17A
	G11	25	285	(114) 32A 33B (153) 30A (155) 30A (192) 19A (233) 10B
	G12	25	295	(112) 30B 31A (151) 30A 31A 32B (190) 19A
	G13	25	305	(149) 31A (188) 19A
	G14	25	315	(147) 30A (186) 19A
	G15	25	325	(145) 31A (184) 19A
	G16	25	335	(143) 21A (182) 19A
	G17	25	345	(48) 1B (141) 32A (178) 19A (180) 19A (217) 11B (478) 9A
	G18	25	355	(139) 30A (215) 14A (217) 10A
	H19	15	5	(44) 1B (176) 24A 25B 26A 28A 29B (215) 13B (529) 3B 4B 5B
	H20	15	15	(172) 29B (174) 24A 25B 26A 28A 29B
	H21	15	25	(0) 27B (170) 28A 29B (172) 24A 25B 26A 28A
	H22	15	35	(170) 24A 25B 26A (445) 4B 5B 6B (675) 1A 2B
	H23	15	45	(44) 7A 12A (166) 29B (168) 24A 25B 26A 28A 29B (209) 15B 16A (248) 11B 12A
	H24	15	55	(40) 12A (83) 17B (164) 26A 28A 29B (166) 23B 24A 25B 26A 28A
	H25	15	65	(0) 30B 61B (84) 31A (86) 31A 32B (162) 26A 28A 29B (164) 23B 24A 25B
	H26	15	75	(82) 32B (84) 30B (160) 25B 26A 28A 29B (162) 23B 24A 25B (203) 15A (667) 3B
	H27	15	85	(82) 31A (158) 23B 24A 25B 26A 28A 29B (160) 23B 24A
	H28	15	95	(117) 32A (156) 23B 24A 25B 26A 28A 29B (197) 12A 13B
H	H29	15	105	(0) 67B (26) 4B 5B 6B (30) 4B 5B (67) 2B 3B 16B (69) 16B 17B (78) 30B 31A 32B (113) 32B (154) 24A 25B 26A 28A 29B (199) 16B (232) 13B (676) 12B 16B
	H30	15	115	(30) 12A (80) 29A 30B 31A (152) 24A 25B 26A 28A 29B (676) 15A
	H31	15	125	(0) 36B (24) 3B 4B 6B (28) 7A 12A (150) 23B 24A 25B 26A 28A 29B (230) 9B 12B 15B
	H32	15	135	(26) 7A 12A (28) 3B 5B 6B (53) 13B 15B (55) 6B (57) 11B 14B (59) 5B 6B 7B (61) 2B 4B 5B 6B (63) 11B 12B 13B (107) 29A 30B 31A 32B (109) 31A 32B (146) 28A 29B (148) 24A 25B 26A 28A 29B (187) 17A 18B (220) 15B (222) 10B 11B 12B (230) 10A 11B 13B 14B (261) 5B (423) 5B 6B 7B (458) 9B (524) 15B (668) 13B 15B 16B
	H33	15	145	(55) 3B (144) 28A 29B (146) 24A 25B 26A
	H34	15	155	(142) 28A 29B (144) 24A 25B 26A
	H35	15	165	(0) 10B (140) 25B 26A 28A 29B (142) 24A 25B 26A
	H36	15	175	(0) 40B (45) 2B (55) 14B 15B (140) 23B 24A (177) 25B 26A 28A 29B (218) 14B 15B
	H1	15	185	(16) 3A (45) 1B (47) 6B (55) 12B (175) 24A 25B 26A 28A 29B (177) 23B 24A (218) 13B

Table 6-2. TV Picture Index (contd)

	SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
H (contd)	H2	15	195	(39) 1B (47) 3B (51) 3B 6B (173) 24A 25B 26A 28A 29B (175) 23B (528) 5A 6B
	H3	15	205	(93) 30A 31B (130) 29B 30A 31B 32A 33B (132) 29B 30A 31B 32A 33B (171) 23B 24A 25B 26A 28A 29B (173) 23B (181) 19A
	H4	15	215	(45) 3B (134) 29B (169) 23B 24A 25B 26A 28A 29B
	H5	15	225	(0) 45B (167) 23B 24A 25B 26A 28A 29B
	H6	15	235	(126) 31A 32A 33B (165) 24A 25B 26A 28A 29B (241) 6B 7B 8B
	H7	15	245	(124) 29A 30B 31A 32A 33B (126) 29A 30B (163) 23B 24A 25B 26A 28A 29B
	H8	15	255	(122) 29A 30B 31A 32A 33B (159) 30B (161) 24B 25A 26B 27A 29A 30B
	H9	15	265	(7) 27B (159) 24B 25A 26B 27A 29A
	H10	15	275	(35) 7B (116) 31A 33B (155) 29B (157) 24A 25B 26A 28A 29B (239) 7B 8B 9B
	H11	15	285	(35) 6B (114) 29A 30B 31A (116) 32A (153) 29B (155) 23B 24A 25B 26A 28A (233) 7B 8A 9B (237) 7B 8B 9B (430) 8B 9B 10B 11A (529) 10B
	H12	15	295	(29) 7A (31) 7A (112) 29A (151) 26A 28A 29B (153) 23B 24A 25B 26A 28A
	H13	15	305	(27) 9A (149) 25A 26B 27A 29A 30B (151) 24A 29B
	H14	15	315	(147) 24A 25B 26A 28A 29B (149) 24B
	H15	15	325	(106) 29A 30B 31A 32A 33B (145) 25A 26B 27A 29A 30B
	H16	15	335	(141) 31B (143) 16B 17A 19A 20B
	H17	15	345	(139) 29B (141) 25B 26A 27B 28A 30A (219) 10B 11B 12B
	H18	15	355	(44) 2B (91) 16B (139) 24A 25B 26A 28A
	I19	5	5	(52) 7A (85) 9A (137) 29A (176) 19B 20A 21B 22A 23B 27A
	I20	5	15	(22) 30A 31B 32A (48) 7A (50) 7A (81) 9A (83) 9A (87) 7A (135) 29A 30B (174) 19B 20A 21B 22A 23B 27A (213) 13B (451) 6B 7B (529) 2A
	I21	5	25	(0) 57B (46) 7A (85) 8A (170) 27A (172) 19B 20A 21B 22A 23B 27A
	I22	5	35	(83) 8A (170) 19B 20A 21B 22A 23B (209) 14B (211) 13B
	I23	5	45	(42) 7A 12A (75) 9A (77) 9A (90) 8B 9A 10B (168) 19B 20A 21B 22A 23B 27A (248) 7B 8A 9B 10A
	I24	5	55	(40) 7A (131) 30A 31B (164) 27A (166) 19B 20A 21B 22A 27A
	I25	5	65	(75) 8A (77) 8A (86) 29A 30B (162) 27A (164) 18A 19B 20A 21B 22A
	I26	5	75	(38) 7A (84) 27A 28B 29A (160) 27A (162) 19B 20A 21B 22A
	I27	5	85	(34) 7A (36) 7A (82) 29A 30B (158) 27A (160) 19B 20A 21B 22A (667) 1B
	I28	5	95	(0) 81B (156) 27A (158) 18A 19B 20A 21B 22A
	I29	5	105	(26) 3B (30) 3B 6B (32) 7A (67) 4B 17B (113) 31A (154) 22A 23B 27A (156) 19B 20A 21B 22A (199) 15A (528) 16B (676) 10B 14B
	I30	5	115	(2) 33B (26) 17B 18B 19B 20B (30) 7A 18B (61) 13B 14B (63) 14A 20B 21B (65) 1B (74) 31A 32B (76) 30B 31A 32B (78) 26B 27A 28B 29A (80) 26B 27A 28B (111) 31B (117) 31B (152) 21B 22A 23B 27A (154) 19B 20A 21B (195) 15A 16B (232) 7B 8A 9B 10B 11B 12B
	I31	5	125	(0) 79B (69) 13B (150) 19B 20A 21B 22A 27A (152) 20A (193) 13A 14B
	I32	5	135	(24) 7A 12A (61) 7A (148) 19B 20A 21B 22A 23B 27A
	I33	5	145	(53) 12B (59) 8A (105) 29A 30B 31A 32B (144) 27A (146) 19B 20A 21B 22A 23B 27A
	I34	5	155	(103) 30B (142) 27A (144) 19B 20A 21B 22A 23B (185) 18B (220) 14B (458) 6B 7B 8B
	I35	5	165	(20) 3A (57) 7A (140) 27A (142) 19B 20A 21B 22A 23B (218) 12A (417) 1B 2B 3B 4A
	I36	5	175	(18) 3A (53) 3B 4B 5B 6B 7A (55) 7A (140) 19B 20A 21B 22A (177) 27A
	I1	5	185	(51) 7A (175) 27A (177) 18A 19B 20A 21B 22A
	I2	5	195	(23) 30A 31B (49) 7A (82) 10A (173) 27A (175) 18A 19B 20A 21B 22A (214) 15B (450) 5B 6B 7B 8A
	I3	5	205	(47) 7A (80) 10A (93) 28A 29B (171) 27A (173) 18A 19B 20A 21B 22A
	I4	5	215	(0) 47B (45) 7A (78) 10A (82) 9A (169) 27A (171) 18A 19B 20A 21B 22A (444) 5B 6B 7B 8A
	I5	5	225	(0) 44B (43) 11A (80) 9A (167) 22A 27A (169) 18A 19B 20A 21B 22A
	I6	5	235	(41) 8A (74) 10A (165) 21B 22A 23B 27A (167) 18A 19B 20A 21B (206) 13B
	I7	5	245	(0) 48B (27) 3B (43) 7B 8B 9B 10B (163) 21B 22A 27A (165) 19B 20A (202) 16B
	I8	5	255	(39) 7A (161) 20B 21A 22B 23A 28A (163) 18A 19B 20A (436) 4B 5B 6B 7A
	I9	5	265	(7) 26A (35) 15B 16B 17B (37) 7A (159) 20B 21A 22B 23A 28A (198) 16B (200) 18B (473) 2B 3B 4A
	I10	5	275	(7) 24A 25B (33) 7A 13B (35) 8B 9A 14B (74) 1B 2B (157) 19B 20A 21B 22A 23B 27A (159) 19A (196) 18B
	I11	5	285	(35) 5B (116) 29A 30B (155) 18A 19B 20A 21B 22A 27A
	I12	5	295	(151) 27A (153) 19B 20A 21B 22A 27A (194) 16B (231) 8B 9B 10B (233) 4B 5B 6B
	I13	5	305	(62) 7A (149) 28A (151) 19B 20A 21B 22A 23B
	I14	5	315	(25) 9A (147) 23B 27A (149) 19A 20B 21A 22B 23A (675) 10A
	I15	5	325	(58) 7A (60) 7A (145) 23A 24B 28A (147) 19B 20A 21B 22A
	I16	5	335	(56) 7A (143) 14B 15A 18A (145) 20B 21A 22B
	I17	5	345	(19) 1A (141) 22A 23B 24A 29A (143) 12B 13A

Table 6-2. TV Picture Index (contd)

	SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
I (contd)	I18	5	355	(17) 1A (54) 7A (87) 8A (91) 17B (137) 30A (139) 19B 20A 21B 22A 23B 27A (141) 20A 21B (178) 18B
	J19	-5	5	(52) 12A (87) 12B 13B (137) 31A 32A (139) 14B 15A 16A 17A 18A (178) 17A (533) 1A 2B 3A (667) 13A
	J20	-5	15	(50) 12A (174) 16A (176) 14B 15A 16A 17B 18A (215) 12A (217) 9B (529) 1B
	J21	-5	25	(22) 24A 25B 26A 27B 28A 29B (46) 12A (48) 12A (172) 16A 18A (174) 14B 15A 17B 18A (213) 12A
	J22	-5	35	(79) 9A (170) 15A 16A 18A (172) 14B 15A 17B (211) 12A
	J23	-5	45	(42) 3B 4B 5B 6B (79) 1B 2B 3B (81) 1B 2B 8A (90) 5A 6A 7A (133) 30A 31B (168) 15A 16A 17B 18A (170) 14B 17B (207) 15B (209) 13A (248) 2A 3B 4A 5B 6A
	J24	-5	55	(79) 8A (102) 6A 8A 9A (166) 14B 15A 16A 17B 18A (168) 14B (207) 14A
	J25	-5	65	(36) 4B 5B 6B (38) 3B 4B 5B 6B (50) 3B (73) 12A (77) 1A (86) 28B (127) 29A 30B (164) 13A 14B 15A 16A 17B (205) 10A
	J26	-5	75	(0) 28A (36) 3B (71) 1B 2B 9A (73) 4B 5B (75) 1B 2B (84) 25A 26B (86) 25A 26B 27A (106) 5A (162) 13A 14B 15A 16B 17B 18A (203) 14A
	J27	-5	85	(36) 12A (38) 12A (89) 9A (73) 11A (82) 25A 26B 27A 28B (119) 29A 30B (160) 13A 14B 15A 16B 17B 18A (201) 10A (238) 3B 4B 5B (240) 1A 2B 3A 4B 5A 6B 7B 8A 9B (242) 4B 5B 6B
	J28	-5	95	(34) 12A (38) 17B 18B 19B 20B (40) 17B 18B 19B (65) 16B (67) 9A (69) 1B 2B 3B 4B (71) 8A (115) 30B (158) 13A 14B 15A 16B 17B (197) 11A (199) 14A (236) 10B 11A
	J29	-5	105	(6) 31B 32A 33B (32) 12A (65) 9A (69) 8A (156) 14B 15A 16B 17B 18A (195) 14A (234) 11B (236) 9B (431) 3A 4B
	J30	-5	115	(2) 30A 31B 32A (24) 17B 18B 19B 20B (30) 17B 19B 20B (32) 5B (61) 12B 15B (63) 19B 22B (65) 2B 3B 4B (67) 8A (74) 26B 27A 28B 29A 30B (76) 27A 28B 29A (78) 25A (80) 25A (111) 30A 32A (117) 30A (154) 14B 15A 16B 17B 18A (191) 18B (193) 12A
	J31	-5	125	(0) 80A (28) 17B 18B 19B 20B (32) 3B 4B (59) 13B 14B (65) 8A 17B 14B (69) 14B (76) 26B (109) 30B (141) 1B (152) 15A 16B 17B 18A 19B (189) 18B (191) 16A 17A (226) 11B 12B (228) 9B 10A 11B
	J32	-5	135	(148) 16B 18A (150) 13A 14B 15A 16B 17B 18A (189) 16A
	J33	-5	145	(146) 15A 16B 17B 18A (148) 14B 15A 17B (187) 15A 16A (222) 4B 9B
J	J34	-5	155	(22) 3A (144) 14B 15A 16B 17B 18A (146) 14B (185) 16A 17A (222) 5B 6B 7B 8A (224) 7B 8A 9B 10B 11B (261) 3B 4B (458) 3B 4B 5B
	J35	-5	165	(103) 29A (142) 14B 15A 16B 17B 18A (183) 16A 17A 18B (218) 11B (220) 12B 13B
	J36	-5	175	(86) 10A (140) 13A 14B 15A 16B 17B 18A (179) 17A 18B (181) 18A
	J1	-5	185	(84) 10A (177) 13A 14B 15A 16B 17B (179) 16A (216) 13B
	J2	-5	195	(23) 24A 25B 26A 27B 28A 29B (86) 9A (175) 13A 14B 15A 16B 17B (216) 12A (450) 1B 2B 3B 4A
	J3	-5	205	(21) 30A 31B (84) 9A (93) 27B (173) 13A 14B 15A 16B 17B (212) 15B (214) 14A (528) 1B 2B 3B 4A
	J4	-5	215	(93) 24A 25B 26A (171) 13A 14B 15A 16B 17B (210) 15B (212) 14A
	J5	-5	225	(41) 4B 5B 6B 7B (169) 13A 14B 15A 16B 17B (208) 12A (210) 14A
	J6	-5	235	(78) 9A (167) 13A 14B 15A 16B 17B (206) 12A (208) 13B
	J7	-5	245	(43) 16B 17B 18B 19B (165) 14B 15A 16B 17B 18A (204) 17A 18B
	J8	-5	255	(70) 10A (74) 9A (107) 5A (163) 13A 14B 15A 16B 17B (202) 15A
	J9	-5	265	(33) 14B 15B (39) 14B 15B (68) 10A (74) 3B 4B (159) 17B (161) 14A 15B 16A 17B 18B 19A (200) 17A
	J10	-5	275	(7) 23B (33) 12B (37) 12B 13B 14B 15B (39) 12B 13B (66) 10A (70) 9A (157) 16B 18A (159) 14A 15B 16A 18B (198) 15A
	J11	-5	285	(3) 33B (64) 10A (68) 9A (155) 14B 15A 16B 17B (157) 14B 15A 17B (196) 17A
	J12	-5	295	(66) 9A (153) 14B 15A 16B 17B 18A (155) 13A (194) 15A (237) 4B 5A 6B
	J13	-5	305	(151) 14B 15A 16B 17B 18A (190) 18B (192) 17A 18B (229) 7B 9B
	J14	-5	315	(62) 12A (149) 14A 15B 16A 17B 18B (188) 17A (190) 17A
	J15	-5	325	(60) 12A (62) 17B (68) 1B (147) 14B 15A 16B 17B 18A (186) 17A (188) 18B (227) 10B 11B 13B (422) 8B
	J16	-5	335	(23) 1A (58) 12A (145) 15B 16A 17B 18B 19A (184) 17A 18B (186) 18B (219) 7B 8A 9B (227) 8B 9A 12B
	J17	-5	345	(21) 1A (56) 12A (143) 7B 8A 9B 10B 11A (182) 17A 18B (229) 10B 11A 12B (260) 10B 11B
	J18	-5	355	(54) 12A (141) 15A 16B 17A 18B 19B (180) 17A 18B (221) 15B 16A 17B (533) 4A
	K19	-15	5	(42) 25B (46) 17B 18B (87) 14B (139) 9A 10B 11A 12B 13A (178) 16A (180) 15A (451) 2B 3B 4B 5A
	K20	-15	15	(24) 31B 32A (42) 11A (44) 11A 16A (61) 32B (176) 9A 10B 11A 12B 13A (178) 15A (215) 11A
K	K21	-15	25	(17) 11A (22) 20A 21B 22A 23B (40) 11A (42) 16A (61) 31A (85) 7A (174) 9A 10B 11A 12B 13A (213) 11A (215) 10A
	K22	-15	35	(20) 27B 28A 29B 30A 31B 32A (40) 16A (172) 9A 10B 11A 12B 13A (211) 10A 11A (213) 10A
	K23	-15	45	(0) 63B (18) 32A (34) 19B 20B (38) 11A (42) 17B 18B 19B 20B (79) 4B 13B 14B (81) 3B 4B 13B 14B (170) 10B 11A 12B 13A (190) 2B (209) 11A 12A (445) 3A

Table 6-2. TV Picture Index (contd)

SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
K24	-15	55	(0) 25B (28) 1B (30) 1B (34) 11A 18B (36) 11A (44) 8A 13A (50) 5B 6B (71) 15B (90) 3A 4B (102) 7B (168) 10B 11A 12B 13A (190) 1B (207) 12A 13A (248) 1B
K25	-15	65	(32) 11A (40) 5B 6B (50) 4B (51) 31A 32B (71) 13B 14B (75) 3B 4B 13B 14B (77) 2B 3B 4B 13B 14B (108) 5A (121) 31B (166) 9A 10B 11A 12B 13A (205) 7A 8B 9A (478) 1B
K26	-15	75	(0) 68B (26) 1B (40) 3B 4B (49) 31A 32B (71) 3B 4B (73) 6B 7B 16B 17B (121) 30A (123) 29A 30B (162) 12B (164) 9A 10B 11A 12B (203) 11A 12B 13A (437) 2B 3B 4A
K27	-15	85	(30) 11A (160) 12B (162) 9A 10B 11A (201) 7A 8B 9A
K28	-15	95	(0) 5B 82A (28) 11A 16A (30) 16A (36) 19B 20B (40) 20B (45) 31A (65) 17B (115) 29A (158) 10B 11A 12B (160) 9A 10B 11A (199) 11A 12B 13A
K29	-15	105	(6) 27B 28A 29B 30A (24) 11A (26) 11A 16A (36) 17B 18B (43) 31A 32B (63) 18A (67) 14B 15B (113) 30B (156) 10B 11A 12B 13A (158) 9A (197) 8A 9B 10A (234) 6B 7B 8B 10A (236) 7B 8A (431) 1B 2B (528) 17B
K30	-15	115	(2) 29B (24) 16A (32) 6B 19B (41) 29B 30A 31B 32A (59) 16B (61) 11A 17A (63) 23B 25B (65) 15B (67) 13B (69) 15B (113) 29A (154) 10B 11A 12B 13A (156) 9A (193) 11A (195) 11A 12B 13A (234) 9B
K31	-15	125	(2) 26A 27B 28A (30) 8A 13A (32) 17B 18B (39) 32B (59) 12A 15B (74) 25A (76) 25A (100) 5A (102) 1A (109) 29A (141) 2A (152) 10B 11A 12B 13A 14B (154) 6B (189) 17A (191) 14B 15A (193) 9A 10B (226) 10B (230) 6B 7B 8B
K32	-15	135	(0) 34B 37B 77B (28) 8A 13A (37) 30B 31A 32B (57) 10A (150) 9A 10B 11A 12B (189) 13A 14B 15A (191) 13A
K33	-15	145	(26) 8A 13A (55) 11A (148) 10B 11A 12B 13A (187) 13A 14B (423) 2B 4A
K34	-15	155	(51) 11A (53) 11A (146) 9A 10B 11A 12B 13A (185) 13A 14B 15A (187) 12A
K35	-15	165	(47) 11A (51) 12B 13B 14B 15B (142) 13A (144) 9A 10B 11A 12B 13A (183) 13A 14B 15A
K36	-15	175	(16) 5A (140) 12B (142) 10B 11A 12B (181) 15A 16B 17A (189) 8B
K1	-15	185	(16) 2A (18) 2A (45) 11A (47) 14B 15B (49) 11A (55) 8A (140) 9A 10B 11A (177) 12B (179) 13A 14B 15A
K (contd) K2	-15	195	(23) 22A 23B (25) 31A 32B (41) 12A (43) 15A (47) 12B 13B (175) 11A 12B (177) 9A 10B 11A (216) 10A 11A
K3	-15	205	(8) 1B 2A 3B 4A 5B (10) 1B 2A 3B (21) 28A 29B (23) 21A (173) 10B 11A 12B (175) 9A 10B (214) 12A 13A
K4	-15	215	(21) 24A 25B 26A 27B (93) 21B 22A 23B (171) 10B 11A 12B (173) 9A (212) 12A 13A
K5	-15	225	(0) 42B (19) 30A 31B (31) 1B (39) 11A (95) 33B (169) 10B 11A 12B (171) 9A (210) 12A 13A (444) 2B 4A
K6	-15	235	(0) 20B (43) 12A (45) 8A (54) 32A (167) 9A 10B 11A 12B (169) 9A (208) 10A 11A (444) 1B 3B
K7	-15	245	(33) 11A (103) 9B 10A (105) 10A (109) 5A (165) 10B 11A 12B 13A (204) 16A (206) 10A 11A (243) 6B
K8	-15	255	(62) 23B.24A 25B 26A 27B (163) 9A 10B 11A 12B (202) 14A (204) 15A
K9	-15	265	(0) 49B (31) 11A (105) 5A (161) 10A 11B 12A 13B (200) 16A (202) 13A
K10	-15	275	(7) 21B 22A (27) 13A (29) 11A (46) 32A (103) 5A (159) 10A 11B 12A 13B (198) 13A 14A (200) 15A (473) 1A
K11	-15	285	(3) 31B 32A (7) 20A (25) 13A (157) 10B 11A 12B 13A (196) 15A 16A (430) 4B 5B 6B 7A
K12	-15	295	(3) 29B 30A (42) 32A (60) 11A (62) 11A (103) 6B (105) 6B (155) 9A 10B 11A 12B (194) 13A 14A
K13	-15	305	(31) 8A (40) 32A (58) 11A (64) 9A (66) 1B 2B 3B 4B (151) 12B 13A (153) 9A 10B 11A 12B 13A (192) 15A 16A (229) 8A (231) 4B 5B 6B 7A (235) 7B 8B 9B
K14	-15	315	(29) 8A (36) 32A (56) 11A (62) 18B 19B 20B (68) 3B 4B (149) 12A 13B (151) 10B 11A (190) 15A 16A
K15	-15	325	(25) 7B 8B (27) 10A (54) 11A (68) 2B (147) 10B 11A 12B 13A (149) 10A 11B (188) 15A 16A
K16	-15	335	(25) 5B 6B (32) 32A (52) 11A (145) 11B 12A 13B 14A (184) 16A (186) 15A 16A (223) 9B (422) 3B 4B 5B 6A 7A
K17	-15	345	(30) 32A (48) 11A (50) 11A (91) 8A 9A (143) 3B 4A 5B 6A (145) 10A (182) 16A (184) 15A (219) 4B 5B 6B (223) 7B 8B (416) 6A
K18	-15	355	(0) 23B (28) 32A (42) 23B 24A (46) 11A 19B 20B (141) 11A 12B 13A 14B (180) 16A (182) 15A (260) 7B 8B 9B (416) 3B 4B 5B
L19	-25	5	(19) 2A 8A (26) 31B 32A (28) 28A 29B 30A (42) 26A (85) 10A (91) 20B 22B (102) 26A 27B (122) 5A (139) 8B (180) 11A 12A 13B 14A (184) 10B
L20	-25	15	(17) 2A 8A (19) 11A (24) 29B 30A (26) 29B 30A (52) 8A (54) 8A 13A (83) 10A (87) 6A (89) 5A (91) 14B (100) 27B 28A (120) 5A (137) 28A (139) 7A (176) 6B 7A 8B (178) 7B 8B 9B 10B 11A 12A 13B 14A (182) 7B 8B 9B 10B (184) 7B 8B 9B
L21	-25	25	(22) 18A 19B (24) 27B 28A (50) 8A 13A (52) 13A (61) 27A 28B 29A 30B (81) 10A (118) 5A (135) 27B 28A (137) 26A 27B (174) 6B 7A 8B (215) 7A 8A 9A (217) 7B 8B
L22	-25	35	(20) 25B 26A (22) 16A 17B (48) 8A 13A (59) 30A 31B 32A (79) 10A (83) 7A (85) 1B 2B (116) 5A (133) 28B 29A (135) 26A (172) 7A 8B (213) 7A 8A 9A (215) 6B
L23	-25	45	(0) 24B (7) 2A 3A 4A 5A 6A (18) 31B (20) 21B 22A 23B 24A (44) 5B (46) 8A (55) 32B (57) 26A 27B (75) 10A 16B 17B (77) 10A (79) 15B (81) 7A 15B (83) 1B (114) 5A (122) 7B (131) 27A 28B 29A (133) 27A (170) 7A 8B 9A (211) 7A 8A 9A (213) 5B 6B (445) 1B 2B
L24	-25	55	(7) 1A (18) 27B 28A 29B 30A (34) 17B (38) 16A (44) 4B (55) 28B 29A 30B 31A (79) 7A (110) 5A (112) 5A (114) 10A (120) 9B (129) 26A 27B 28A 29A 30B (168) 7A 8B 9A (209) 8A 9A 10A
L25	-25	65	(14) 32A 33B (16) 31B 32A (36) 16A (42) 8A 13A (51) 30B (53) 30B 31A 32B (75) 15B (77) 7A 15B (114) 8A (127) 26A 27B 28A (166) 7A 8B (205) 6A (207) 9A 10A 11A

Table 6-2. TV Picture Index (contd)

SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
L26	-25	75	(14) 31B (32) 16A (40) 8A 13A (49) 29A 30B (51) 27A 28B 29A (73) 18B (75) 7A (106) 4A (125) 25B 26A 27B 28A (164) 7A 8B (203) 10A (205) 3A 4A 5B
L27	-25	85	(12) 33B (47) 32B (49) 27A 28B (73) 10A (123) 26A 27B 28A (162) 7A 8B (201) 5B 6A (203) 7A 8A 9B (205) 1B 2B
L28	-25	95	(36) 8A (38) 8A 13A (45) 29A 30B (47) 29A 30B 31A (71) 7A (73) 21B (121) 27A 28B 29A (160) 7A 8B (199) 8A 9B 10A (201) 3A 4A
L29	-25	105	(0) 75B (6) 25B 26A (34) 8A (36) 13A (43) 29A 30B (45) 27A 28B (69) 7A (119) 25B 26A 27B 28A (158) 7A 8B (197) 5A 6B 7A (199) 7A (201) 1B 2B
L30	-25	115	(6) 23B 24A (32) 8A (41) 26A 27B 28A (43) 27A 28B (61) 19A 21A (63) 24A 26A 27B 28A (67) 7A (117) 27A 28B 29A (156) 7A 8B (195) 8A 9B 10A (197) 4A
L31	-25	125	(0) 69B (2) 22A 23B 24A 25B (39) 29A 30B 31A (41) 25B (61) 20B (65) 7A (102) 5A (115) 28A (137) 5A (152) 9A (154) 7A 8B 9A (193) 5A 6A 7B 8A (195) 7A (209) 6B
L32	-25	135	(2) 21B (37) 27A 28B 29A (39) 28B (63) 15A (92) 1B 2A 3B (111) 29A (113) 27B 28A (135) 5A (150) 7A 8B (152) 7A 8B (191) 9A 10A 11B 12A (193) 3B 4B (228) 6B
L33	-25	145	(35) 29A 30B 31A 32B (37) 26B (109) 28A (111) 28B (133) 6A (148) 7A 8B 9A (189) 9A 10A 11B 12A (191) 7B 8B (228) 7B 8B (423) 1B 3B
L34	-25	155	(20) 5A (24) 8A 13A (33) 29A 30B 31A 32B (35) 28B (61) 8A (107) 28A (129) 5A (131) 6A (146) 7A 8B (187) 9A 10A 11B
L35	-25	165	(18) 5A (22) 1A 2A (31) 32B (57) 8A (59) 9A (105) 26A 27B 28A (127) 5A (144) 7A 8B (183) 12A (185) 10A 11B 12A
L36	-25	175	(20) 2A (29) 29A 30B 31A 32B (31) 29A 30B 31A (103) 26A 27B 28A (142) 7A 8B 9A (181) 13B 14A (183) 10A 11B
L1	-25	185	(0) 11B (27) 30B 31A 32B (84) 11A (86) 11A (101) 27B 28A (123) 5A (140) 7A 8B (179) 11B 12A (181) 11A 12A (183) 7B 8B (218) 8B 9A 10B (220) 11B (224) 4B 5B 6B
L2	-25	195	(8) 15B (10) 10A 11B 12A 13B 14A 15B (25) 27A 28B 29A 30B (53) 8A (62) 31A 32B (82) 11A (119) 5A (121) 6A (138) 25B 26A 27B 28A (177) 7A 8B (179) 9A 10A (216) 9A (218) 5B 6B 7B (220) 9B 10A
L3	-25	205	(8) 6A 7B 8A 9B 10A 11B 12A 13B 14A (10) 4A 5B 6A 7B 8A 9B (23) 19A 20A (49) 8A (51) 8A (60) 30A 31B 32A (80) 11A 12A (86) 8A (136) 25B 26A 27B 28A (175) 7A 8B (214) 11A (216) 7A 8A
L4	-25	215	(21) 21A 22A 23B (47) 8A (58) 29B 30A 31B 32A (60) 29B (78) 11A (84) 8A (93) 19B 20A (117) 6A (134) 26A 27B 28A (173) 7B 8B (212) 10A 11A (214) 9A 10A (216) 5B 6B
L5	-25	225	(19) 24A 25B 26A 27B 28A 29B (45) 13B (56) 29B 30A 31B 32A (76) 6A 8A 9A 10A 11A 17B 18B (78) 3B (80) 1B 2B 3B 8A (82) 8A (93) 17B 18A (95) 30A 31B 32A (113) 5A (115) 5A (132) 26A 27B 28A (171) 7A 8B (210) 10A 11A (212) 9A
L6	-25	235	(17) 28A 29B 30A 31B (37) 11A (54) 28A 29B 30A 31B (56) 28A (74) 11A (76) 1B 2B 3B 4B 5B 7A 13A 15B 16B (78) 1B 2B (111) 6A (130) 26A 27B 28A (169) 7A 8B (208) 8A 9A (210) 9A
L7	-25	245	(15) 32A 33B (35) 13A (41) 9A (52) 29B 30A 31B 32A (78) 8A (128) 25B 26A 27B 28A (165) 9A (167) 7A 8B (206) 8A 9A (208) 7A (243) 4B 5A (479) 3B 4A
L8	-25	255	(50) 32A (74) 8A (107) 4A (124) 28A (126) 26A 27B 28A (163) 8B (165) 7A 8B (204) 11A 12A 13B 14A (206) 7A (479) 2B
L9	-25	265	(48) 32A (115) 8A (122) 28A (124) 26A 27B (161) 9B (163) 7A (202) 9A 10A 11B 12A (436) 2A 3B
L10	-25	275	(5) 30A 31B 32A 33B (37) 8A (39) 8A (46) 28A 29B 30A 31B (120) 27B 28A (122) 26A 27B (159) 8A 9B (161) 8A (200) 11A 12A 13B 14A
L11	-25	285	(7) 17B 18A 19B (33) 4B 5B 6B (35) 10A (44) 29B 30A 31B 32A (62) 16A (70) 8A (118) 27B 28A (120) 25B 26A (157) 7A 8B 9A (198) 9A 10A 11B 12A
L12	-25	295	(0) 50B (3) 25B 26A 27B 28A (33) 3B 8A (42) 28A 29B 30A 31B (60) 16A (66) 8A (68) 8A (101) 5A (116) 26A 27B 28A (118) 26A (138) 5A (155) 7A 8B (194) 12A (196) 11A 12A 13B 14A (198) 5B 6B 7B 8B
L13	-25	305	(40) 28A 29B 30A 31B (58) 16A (64) 8A (114) 27B 28A (136) 5A (153) 7A 8B (192) 13B 14A (194) 9A 10A 11B (231) 3B
L14	-25	315	(0) 51B (38) 30A 31B 32A (56) 16A (112) 28A (134) 5A (151) 7A 8B 9A (190) 12A 13B 14A (192) 11A 12A
L15	-25	325	(25) 10A (36) 28A 29B 30A 31B (62) 3B 4B 5B 6B 8A 13A (110) 27B 28A (132) 5A (149) 8A 9B (188) 12A 13B 14A (190) 11A
L16	-25	335	(32) 31B (34) 29B 30A 31B 32A (54) 16A (58) 3B 4B 5B 6B (60) 8A (108) 28A (130) 5A (147) 7A 8B 9A (186) 12A 13B 14A (188) 11A
L17	-25	345	(0) 22B (17) 9A (30) 31B (32) 28A 29B 30A (50) 16A (52) 16A (54) 3B 4B 5B 6B (58) 8A 13A (60) 13A (106) 28A (118) 8A 9B 10A (128) 5A (143) 2A (145) 8A 9B (184) 12A 13B 14A (186) 7B 8B 9B 10B 11A (223) 5B 6A (260) 5B 6A (459) 6B 7B 8A
L18	-25	355	(21) 11A (28) 31B (30) 28A 29B 30A (46) 16A (48) 16A (56) 8A 13A (87) 9A (102) 28A (104) 10A 11B 12A (126) 5A (141) 9A 10B (143) 1B (182) 11A 12A 13B 14A
M19	-35	5	(19) 5A (28) 27B (91) 19A 21A (102) 22A 23B 24A 25B (124) 1A 2A 3A
M20	-35	15	(17) 5A (19) 7A (26) 27B 28A (48) 5B (100) 23B 24A 25B 26A
M21	-35	25	(17) 7A (44) 10A 15A (48) 4B (61) 25A 26B (63) 31B 32A (87) 5A (118) 4A (137) 22A 23B 24A 25B
M22	-35	35	(0) 58B (22) 14A 15A (42) 15A (59) 28A 29B (61) 23A 24B (83) 2B 3B 4B (85) 3B 4B 6A (116) 4A (122) 8A (135) 22A 23B 24A 25B (190) 4B (215) 5B
M23	-35	45	(7) 7A 8A 9A 10A (20) 17B 18A 19B 20A (40) 15A (44) 6B (46) 13A (57) 23B 24A 25B (59) 26A 27B (81) 6A (83) 6A (96) 30A 31B 32A 33B (114) 4A (120) 8A 10A (122) 9B (133) 23A 24B 25A 26B (190) 3A
M24	-35	55	(18) 21B 22A 23B 24A 25B 26A (44) 3B (55) 26B 27A (57) 21B 22A (67) 23A (110) 4A (112) 4A (131) 23A 24B 25A 26B
M25	-35	65	(16) 25B 26A 27B 28A 29B 30A (18) 20A (34) 16A (53) 27A 28B 29A (55) 24B 25A (67) 22B (73) 13A (77) 6A (79) 6A (108) 4A (127) 25B (129) 22A 23B 24A 25B
M26	-35	75	(14) 26A 27B 28A 29B 30A (51) 24B 25A 26B (53) 26B (71) 10A (75) 6A (125) 24A (127) 21B 22A 23B 24A

L (contd)

M

Table 6-2. TV Picture Index (contd)

	SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
	M27	-35	85	(12) 29B 30A 31B 32A (49) 23A 24B 25A 26B (51) 23A (67) 10A (69) 10A (73) 23B (123) 24A 25B (125) 21B 22A 23B (164) 6B
	M28	-35	95	(30) 10A (38) 9A (47) 26B 27A 28B (65) 10A (73) 9A 22A (121) 25A 26B (123) 21B 22A 23B (160) 6B
	M29	-35	105	(0) 32B (6) 1B 4A (28) 10A 15A (30) 15A (45) 23A 24B 25A 26B (47) 25A (92) 12A (119) 23B 24A (121) 22B 23A 24B (158) 6B (199) 5B 6B
	M30	-35	115	(6) 19B 20A 21B 22A (24) 10A (26) 10A 15A (32) 13A (34) 13A (43) 26B (45) 22B (92) 10A 11B (102) 2A (117) 24B 25A 26B (119) 21B 22A (156) 6B (197) 2B 3B
	M31	-35	125	(24) 15A (41) 23B 24A (92) 6A 7B 8A 9B (100) 4A (115) 23B 24A 25B 26A 27B (117) 23A (137) 4A (209) 7B
	M32	-35	135	(0) 38B 78A (2) 17B 18A 19B 20A (39) 23A 24B 25A 26B 27A (92) 4A 5B (113) 22A 23B 24A 25B 26A (135) 4A (152) 6B (195) 5B 6B
	M33	-35	145	(2) 15B 16A (22) 5A (37) 22B 23A 24B 25A (51) 21A (111) 24B 25A 26B 27A (123) 7A 8A 10A (125) 10A (133) 5A (150) 6B (166) 1B 3B
	M34	-35	155	(0) 39B (18) 6A (35) 24B 25A 26B 27A (51) 16B 17A 18B 19A 20B (90) 2A (107) 27B (109) 23B 24A 25B 26A 27B (123) 9B (125) 7A 8A 9B (131) 5A (166) 4B (226) 7B 8A 9B
	M35	-35	165	(16) 6A (33) 25A 26B 27A 28B (105) 25B (107) 23B 24A 25B 26A (127) 4A (129) 4A (185) 9A
	M36	-35	175	(29) 28B (31) 26B 27A 28B (103) 25B (105) 21B 22A 23B 24A (125) 3A (183) 9A (185) 7B 8B
	M1	-35	185	(8) 24A 25B 26A 27B (10) 24A 25B (27) 28B 29A (29) 25A 26B 27A (31) 25A (101) 25B 26A (103) 22A 23B 24A (123) 6B (125) 1A 2A (142) 6B (181) 9B 10B
M (contd)	M2	-35	195	(8) 16A 17B 18A 19B 20A 21B 22A 23B (10) 16A 17B 18A 19B 20A 21B 22A 23B (25) 25A 26B (27) 25A 26B 27A (49) 14B 15B (101) 22A 23B 24A (119) 4A (121) 5A (138) 24A
	M3	-35	205	(25) 24B (49) 12B 13B (62) 28B 29A 30B (86) 7A (136) 23B 24A (138) 21B 22A 23B (179) 7B 8B
	M4	-35	215	(0) 13B (21) 20A (41) 11A (60) 27B 28A (84) 7A (117) 5A (134) 23B 24A 25B (136) 21B 22A (214) 7B 8B
	M5	-35	225	(19) 22A 23B (21) 19A (45) 12B 14B 15B (58) 27B 28A (78) 4B (80) 4B (82) 7A (93) 12A 13B 14A 15B 16A (95) 29B (113) 4A (115) 4A (132) 23B 24A 25B (134) 21B 22A
	M6	-35	235	(11) 31B (17) 27B (19) 20A 21A (29) 1B (56) 27B (76) 12A 14B (80) 7A (95) 24A 25B 26A 27B 28A (111) 5A (130) 22A 23B 24A 25B (132) 21B 22A
	M7	-35	245	(15) 30A 31B (17) 22A 23B 24A 25B 26A (54) 27B (78) 7A (109) 4A (128) 22A 23B 24A (130) 21B (210) 7B 8B
	M8	-35	255	(13) 33B (15) 28A 29B (52) 27B 28A (70) 11A (74) 7A (115) 7A 10A (126) 22A 23B 24A 25B (128) 21B
	M9	-35	265	(13) 30A 31B 32A (50) 28A 29B 30A 31B (68) 11A (105) 4A (124) 21B 22A 23B 24A 25B (134) 7B 8A 9B 10A (136) 7B 9B (204) 8B 9B
	M10	-35	275	(1) 33B (5) 29B (31) 10A (46) 27B (48) 28A 29B 30A 31B (66) 11A (103) 4A (122) 21B 22A 23B 24A 25B (134) 6B (136) 6B (138) 6B 7B (177) 2A (202) 5B 6B 7B 8B
	M11	-35	285	(1) 31B 32A (5) 26A 27B 28A (29) 10A (44) 28A (64) 11A (70) 7A (107) 7A 10A (120) 21B 22A 23B 24A (200) 7B 8B 9B 10B
	M12	-35	295	(3) 23B 24A (25) 12A (27) 12A (42) 27B (44) 27B (101) 4A (107) 8A (116) 25B (118) 22A 23B 24A 25B
	M13	-35	305	(3) 20A 21B 22A (40) 27B (114) 26A (116) 21B 22A 23B 24A (138) 4A (430) 2A 3B
	M14	-35	315	(23) 9A (29) 3B 4B 5B 6B (38) 28A 29B (112) 26A 27B (114) 23B 24A 25B (134) 4A (136) 4A (194) 8B
	M15	-35	325	(21) 9A (36) 27B (38) 27B (60) 3B (110) 24A 25B 26A (112) 23B 24A 25B (132) 4A (190) 9B 10B
	M16	-35	335	(19) 9A (34) 27B 28A (48) 26A (50) 21B 22A 23B 24A 25B 26A (108) 24A 25B 26A 27B (110) 22A 23B (130) 4A (188) 7B 8B 9B 10B (192) 7B 8B 9B 10B (432) 1A 2B
	M17	-35	345	(23) 2A 5A 8A 11A (32) 27B (48) 21B 22A 23B 24A 25B (91) 7A 10A (106) 24A 25B 26A 27B (108) 23B (118) 6A 7B (161) 3A (184) 11A
	M18	-35	355	(21) 2A 5A 8A (30) 27B (91) 23A (104) 6A 7B 8A 9B (106) 23B (126) 4A (161) 4B 5B
	N19	-45	5	(17) 4A (19) 4A (21) 7A (46) 5B 6B 10A (48) 15A (52) 5B (93) 11A (85) 11A (104) 2A 3B 4A 5B (106) 18A (122) 4A (180) 7B 8B 9B 10B
	N20	-45	15	(46) 3B 4B 15A (48) 6B (52) 3B 4B 6B (81) 11A (100) 22A (102) 18A 19B 20A 21B (120) 4A
	N21	-45	25	(13) 1B (17) 6A (19) 6A (48) 3B (54) 9A (63) 29B 30A (79) 11A (98) 31B 32A 33B (100) 18A 19B 20A 21B (118) 3A (137) 21B
	N22	-45	35	(40) 10A (42) 10A (52) 9A (61) 22B (77) 11A (87) 4A (116) 3A (122) 10A (135) 21B (137) 18A 19B 20A
N	N23	-45	45	(44) 17B 18B 19B 20B (59) 24A 25B (75) 11A (96) 29B (112) 6A 7B 9B (114) 3A (133) 22B (135) 18A 19B 20A (194) 1A
	N24	-45	55	(20) 14A 15A 16A (59) 23B (67) 18B 19A 20B 21A (96) 24A 25B 26A 27B 28A (110) 3A (112) 3A (131) 21A 22B (133) 19A 20B 21A
	N25	-45	65	(0) 64B (18) 16A 17B 18A 19B (34) 10A (36) 10A (38) 10A 15A (44) 9A 14A (55) 22B 23A (96) 23B (108) 3A (129) 20A 21B (131) 19A 20B
	N26	-45	75	(14) 25B (16) 19B 20A 21B 22A 23B 24A (36) 15A (40) 9A 14A (42) 9A 14A (53) 24B 25A (73) 26A (106) 3A (127) 20A (129) 18A 19B
	N27	-45	85	(12) 28A (14) 21B 22A 23B 24A (32) 10A 15A (51) 22B (73) 24A 25B (125) 19B 20A (127) 18A 19B (207) 7B 8B
	N28	-45	95	(0) 26B (12) 24A 25B 26A 27B (49) 22B (123) 19B 20A (125) 18A (203) 5B 6B (242) 1B 2B 3B

Table 6-2. TV Picture Index (contd)

SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
	N29	-45	105 (0) 76A (47) 24B (71) 6A (121) 19A 20B 21A (123) 18A (217) 1B 2A
	N30	-45	115 (6) 3B 5B 6A 8A 18A (34) 9A (36) 9A (63) 17A (67) 6A (69) 6A (102) 4A (119) 18A 19B 20A
	N31	-45	125 (6) 7B 9B 10A 11B 12A 13B 14A 15B 16A 17B (61) 10A (65) 6A (96) 2A 3B 4A (100) 3A (117) 19A 20B 21A 22B (137) 3A
	N32	-45	135 (22) 6A (30) 9A 14A (57) 9A (59) 11A (96) 1B (115) 19B 20A 21B 22A (135) 3A
	N33	-45	145 (2) 13B 14A (20) 6A (28) 9A 14A (39) 22B (57) 16A (111) 23A (113) 18A 19B 20A 21B (115) 18A (133) 4A (166) 2A
	N34	-45	155 (2) 10A 11B 12A (24) 14A (26) 9A 14A (55) 10A (57) 15B 17B 19B (109) 22A (111) 19A 20B 21A 22B (131) 4A (148) 6B
	N35	-45	165 (2) 8A 9B (24) 9A (33) 24B (47) 18B 19A 20B 21A 23A (51) 10A (53) 10A (61) 9A (107) 21B 22A (109) 18A 19B 20A 21B (145A) 1B 2B
	N36	-45	175 (2) 5B 6A 7B (8) 32A 33B (10) 32A 33B (47) 22B (59) 10A (68) 17B 32B (86) 12A (105) 19B 20A (107) 18A 19B 20A (125) 4A 5A
	N1	-45	185 (2) 3B 4A (8) 28A 29B 30A 31B (10) 26A 27B 28A 29B 30A 31B (16) 1A (18) 1A (29) 23A 24B (31) 24B (47) 10A (68) 31A (84) 12A (103) 19B 20A 21B (105) 18A (123) 4A
	N2	-45	195 (2) 1B 2A (27) 24B (29) 22B (49) 5B 6B 10A (82) 12A (97) 30A 31B 32A 33B (99) 30A 31B 32A 33B (101) 19B 20A 21B (103) 18A (119) 3A (140) 6B (158) 1B 3B 4B
N (contd)	N3	-45	205 (23) 17B 18B (43) 14A (45) 10A (49) 3B 4B (53) 9A (55) 9A (64) 32B (101) 18A (136) 18A 19B 20A
	N4	-45	215 (78) 12A (117) 4A (136) 18A 19B 20A
	N5	-45	225 (21) 18B (74) 12A (113) 3A (115) 3A (134) 18A 19B 20A
	N6	-45	235 (11) 30A (19) 19A (93) 7B 8A 9B 10A 11B (111) 4A (132) 18A 19B 20A
	N7	-45	245 (11) 28A 29B (17) 21A (23) 13A (37) 10A (39) 10A (43) 13A (45) 9A (95) 20A 21B 22A 23B (109) 3A (130) 18A 19B 20A
	N8	-45	255 (15) 24A 25B 26A 27B (17) 19A 20A (23) 12A (35) 12A (39) 5B (41) 10A (70) 12A (95) 16A 17B 18A 19B (107) 3A (128) 18A 19B 20A (208) 5B 6B
	N9	-45	265 (13) 27B 28A 29B (15) 23B (33) 10A (39) 3B 4B (50) 27B (70) 2B (95) 15B (101) 6B 7A 8A 9B 10A (105) 3A (126) 19A 19B 20A 21B (136) 8A 10A (138) 8A 9B 10A (177) 3B 4B (204) 7B 10B
	N10	-45	275 (13) 25B 26A (21) 12A (48) 27B (70) 1B 3B 4B (103) 3A (124) 18A 19B 20A
	N11	-45	285 (1) 27B 28A 29B 30A (5) 22A 23B 24A 25B (39) 9A (95) 7B (120) 20A (122) 18A 19B 20A
	N12	-45	295 (19) 12A (35) 11A (37) 9A (62) 10A 15A (68) 7A (95) 3B 4A 5B 6A (101) 3A (118) 21B (120) 18A 19B (214) 2A (479) 1B
	N13	-45	305 (3) 18A 19B (17) 12A 13A (31) 14B 15B (33) 9A (60) 10A 15A (64) 7A (66) 7A (95) 1B 2A (116) 19B 20A (118) 18A 19B 20A (138) 3A (140) 9B (212) 1B 2A (214) 1B (237) 2B 3A (430) 1A
	N14	-45	315 (3) 16A 17B (21) 10A (27) 5B 6B 7B 8B 17B (31) 4B 9A 12B 13B (56) 10A (58) 10A 15A (114) 20A 21B 22A (116) 18A (136) 3A (140) 3A (153) 6B (155) 6B (194) 7B (196) 7B 8B 9B 10B (210) 1B 2A (459) 5A
	N15	-45	325 (19) 10A (27) 14B 15B 16B (29) 9A (56) 15A (60) 4B 5B 6B (112) 20A 21B 22A (114) 18A 19B (132) 3A (134) 3A (194) 6B (229) 4B 5B
	N16	-45	335 (17) 10A (25) 11A (27) 11A (54) 10A 17B 18B 19B 20B (110) 19B 20A 21B (112) 18A 19B (130) 3A (190) 7B 8B (194) 5B (229) 6B
	N17	-45	345 (23) 4A (50) 19B 20B (52) 10A (54) 15A (71) 32A (91) 15B (108) 19B 20A 21B 22A (110) 18A (128) 4A
	N18	-45	355 (21) 4A (23) 7A (48) 10A (50) 10A 15A 17B 18B (52) 15A (58) 9A (60) 9A (71) 17B (87) 10A (91) 13B 14B (106) 19B 20A 21B 22A (108) 18A (124) 4A 5A (145) 7B (147) 6B
	O19	-55	5 (13) 4A 5B (15) 1B (23) 6A (52) 18B 19B 20B (56) 9A 14A (58) 14A (67) 32A (69) 29B 30A 31B (71) 26A 27B (91) 3B (106) 16B 17A (108) 13A 14B 15A (110) 12B (122) 3A (163) 1B
	O20	-55	15 (13) 2A 3B (21) 6A (22) 13A (52) 17B (65) 32A (67) 28A 29B 30A 31B (69) 27B 28A (85) 15B (91) 1B 2B (104) 1A (106) 13A 14B 15A (120) 3A (145) 6B (163) 2A 3B 4B
	O21	-55	25 (54) 14A (65) 28A 29B 30A 31B (67) 26A 27B (83) 15B (85) 13B 14B (98) 30A (102) 14B 15A 16B 17A (118) 2A
	O22	-55	35 (22) 12A (50) 9A (52) 14A (65) 27B (83) 13B 14B (98) 26A 27B 28A 29B (100) 15A 16B 17A (102) 12B 13A (112) 8A 10A (116) 2A (139) 6B (186) 3A 4B (194) 2B (221) 13B 14A
	O23	-55	45 (3) 1B (48) 9A (50) 14A (85) 5A (98) 25B (100) 13A 14B (102) 11A (114) 2A (137) 15A 16B 17A (139) 5B (147) 2A 3B 4B (155) 1B 2A 3B 4B (172) 6B (186) 1B 2B (221) 11B 12A
	O24	-55	55 (46) 9A 14A (48) 14A (81) 5A (83) 5A (110) 2A (112) 2A (135) 15A 16B 17A (137) 13A 14B (176) 5B
	O25	-55	65 (71) 11A (73) 14A (79) 5A (96) 21B 22A (108) 2A (133) 16A 17B 18A (135) 13A 14B (176) 6B (174) 5B (178) 5B 6B
	O26	-55	75 (18) 14A 15A (34) 15A (69) 11A (77) 5A (96) 18A 19B 20A (106) 2A (131) 16A 17B 18A (133) 14A 15B (211) 6B
	O27	-55	85 (9) 1B 2A 3B (16) 16A 17B 18A (65) 11A (67) 11A (75) 5A (96) 15B 16A 17B (127) 17A (129) 15A 16B 17A (131) 14A 15B (166) 6B (168) 6B (170) 5B (211) 5B
	O28	-55	95 (1) 3B (12) 23B (14) 17B 18A 19B 20A (16) 15A (96) 12A 13B 14A (125) 16B 17A (127) 14B 15A 16B (129) 13A 14B (178) 1B 2B 4B
	O29	-55	105 (12) 20A 21B 22A (14) 15B 16A (16) 14A (73) 8A (96) 9B 10A 11B (123) 16B 17A (125) 13A 14B 15A (127) 13A (164) 5B (178) 3A
	O30	-55	115 (0) 70B (12) 17B 18A 19B (36) 14A (38) 14A (71) 5A (96) 6A 7B 8A (102) 3A (106) 6A (121) 17B 18A (123) 13A 14B 15A (125) 12B (162) 5B 6B
	O31	-55	125 (32) 9A (34) 14A (67) 5A (69) 5A (87) 16B (96) 5B (100) 2A (119) 15A 16B 17A (121) 14A 15B 16A (123) 12B

Table 6-2. TV Picture Index (contd)

	SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
	O32	-55	135	(0) 7BR (20) 7A (32) 14A (65) 5A (117) 17B 18A (119) 13A 14B (121) 13B (158) 5B (160) 5B (170) 1B 2A 3B 4B
	O33	-55	145	(18) 7A (57) 18A (63) 16A (98) 3B 4A (115) 16B 17A (117) 14A 15B 16A (119) 12B
	O34	-55	155	(57) 20A (98) 1B 2A (113) 15A 16B 17A (115) 13A 14B 15A (117) 13B (156) 5B
	O35	-55	165	(16) 7A (72) 31A 32B (84) 23B 24A (111) 16A 17B 18A (113) 12B 13A 14B (127) 3A (129) 3A (148) 5B (152) 5B (162) 2A 3B 4B
	O36	-55	175	(14) 1B 2A (20) 1A (70) 32B (72) 29A 30B (80) 24A (82) 23B 24A (107) 17A (109) 15A 16B 17A (111) 13B 14A 15B (117) 11A (150) 5B (154) 2A (156) 2A (162) 1B (193) 2B (195) 2B (228) 5A (230) 4B 5B
	O1	-55	185	(12) 4A (20) 4A (68) 14B 22A 23B 24A 29A 30B (70) 29A 30B 31A (72) 27A 28B (80) 21B 23B (82) 21B (105) 16B 17A (107) 14B 15A 16B (109) 13A 14B (117) 7B 8A 9A 10B (123) 3A (154) 1B 3B 4B (156) 1B 3B 4B (158) 2A (193) 1B (195) 1A (228) 4B (230) 3B
	O2	-55	195	(12) 1B 2A 3B (16) 4A (18) 4A (66) 31A 32B (68) 13A 16B 19B 20A 21B 26B 27A 28B (70) 28B (90) 1B (97) 27B 28A 29B (103) 16B 17A (105) 13A 14B 15A (107) 13A (119) 2A (121) 4A (144) 5B (146) 5B 6B
	O3	-55	205	(64) 29A 30B 31A (66) 28B 29A 30B (68) 25A (86) 1B 2B 3B 21B 23B (97) 26A (99) 26A 27B 28A 29B (101) 16B 17A (103) 13A 14B 15A (105) 11A 12B (142) 5B (144) 6B
	O4	-55	215	(23) 16B (51) 9A (64) 26B 27A 28B (66) 27A (84) 1B 2B 3B (86) 5B 6A 19B (99) 24A 25B (101) 13A 14B 15A (103) 11A 12B (111) 11A (115) 2A (117) 9A (138) 16B 17A (140) 5B
0 (contd)	O5	-55	225	(21) 17B (23) 15B (47) 9A (49) 9A (82) 1B 2B 3B (84) 5B 6A (101) 12B (111) 7B 8A 9A 10B (113) 2A (136) 16B 17A (138) 13A 14B 15A (177) 6B
	O6	-55	235	(21) 16B (23) 14A (82) 5B 6A (111) 9A (134) 16B 17A (136) 13A 14B 15A (138) 12B (173) 6B (175) 6B (177) 5B
	O7	-55	245	(11) 25B 26A 27B (19) 17B 18B (80) 5B 6A (93) 4A 5B 6A (107) 2A (109) 2A (132) 16B 17A (134) 13A 14B 15A (136) 12B (173) 5B (175) 5B
	O8	-55	255	(11) 24A (21) 14A (39) 6B (68) 12A (72) 22A 24A (78) 5B 6A (93) 2A 3B (105) 2A (130) 16B 17A (132) 13A 14B 15A (134) 12B (169) 6B
	O9	-55	265	(15) 20A 21B 22A (21) 13A (37) 4B 5B 6B (66) 12A (72) 19B 20A 21B 23B (74) 5B 6A (91) 30A 31B (95) 13B 14A (103) 2A (128) 15A 16B 17A (130) 13A 14B 15A (132) 12B (167) 6B (171) 5B 6B (186) 6B (436) 1A
	O10	-55	275	(13) 23B 24A (15) 17B 18A 19B (37) 3B (64) 12A (91) 29B (95) 10A 11B 12A (126) 16B 17A (128) 13A 14B (130) 12B (165) 6B (169) 5B
	O11	-55	285	(1) 26A (5) 21B (13) 20A 21B 22A (15) 16A (19) 13A 14A (87) 28B 29A (95) 8A 9B (122) 17A (124) 14B 15A 16B 17A (126) 13A 14B 15A (128) 12B (163) 6B (165) 5B (167) 5B (177) 1B
	O12	-55	295	(1) 22A 23B 24A 25B (5) 18A 19B 20A (13) 19B (58) 19B 20B (70) 6A (85) 30A 31B (101) 2A (120) 17A (122) 14B 15A 16B (124) 12B 13A (161) 7B (163) 5B
	O13	-55	305	(17) 14A (23) 10A (31) 5B 6B (58) 18B (68) 5B 6A (70) 5B (79) 16B (81) 28A 29B 30A 31B (83) 29B 30A 31B (120) 14B 15A 16B (122) 12B 13A (140) 2A (161) 6B
	O14	-55	315	(3) 14A 15B (31) 3B (64) 5B (66) 5B 6A (79) 31B (81) 26A 27B (116) 17A (118) 14B 15A 16B 17A (120) 12B 13A (159) 6B 7B
	O15	-55	325	(3) 12A 13B (79) 28A 29B 30A (99) 1B 2A (114) 17A (116) 13A 14B 15A 16B (118) 13A (157) 5B 6B (459) 4A
	O16	-55	335	(3) 10A 11B (29) 14B (62) 9A (75) 30A 31B (79) 26A 27B (91) 11A (112) 17A (114) 14B 15A 16B (116) 12B (155) 5B (167) 1B (202) 3B 4B
	O17	-55	345	(29) 13B (62) 14A (71) 31B (75) 21A 23A 27B 28A 29B (77) 21A 23A (91) 6A (110) 8A 10A 16B 17A (112) 14B 15A 16B (114) 12B 13A (128) 3A (149) 5B (151) 5B 6B (153) 5B (227) 7A (416) 1A 2B
	O18	-55	355	(13) 6A (15) 2A 3B (60) 14A (69) 32A (71) 16B 28A 29B 30A (73) 30B 31A (75) 22B (77) 22B (108) 16B 17A (110) 13A 14B 15A (112) 12B 13A (126) 3A (147) 5B (149) 6B 7B
	P19	-65	5	(3) 5B 6A (73) 28B 29A (75) 12A 24A (91) 4B (97) 1B 2A (110) 11A (120) 2A (122) 2A (132) 6B
	P20	-65	15	(3) 4A (19) 3A (21) 3A (69) 26A (71) 24A 25B (73) 27A (108) 11A 12B (118) 1A (235) 3B
	P21	-65	25	(3) 3B (17) 3A (65) 12A (67) 12A (69) 25B (106) 11A 12B
	P22	-65	35	(3) 2A (20) 13A (65) 26A (67) 24A 25B (69) 24A (114) 1A (116) 1A (141) 7B 8B
	P23	-65	45	(18) 13A (20) 12A (22) 11A (65) 24A 25B (98) 23B 24A (100) 12B (110) 1A (112) 1A
	P24	-65	55	(98) 20A 21B 22A (100) 11A (137) 12B
P	P25	-65	65	(98) 18A 19B (106) 1A (135) 12B (137) 11A
	P26	-65	75	(1) 5B (98) 17B (133) 13B (135) 11A (172) 5B
	P27	-65	85	(1) 4A (9) 4A 5B 6A 7B 8A 9B 10A 11B (98) 16A (131) 13B (133) 12A (147) 1B
	P28	-65	95	(129) 12B (131) 12A
	P29	-65	105	(98) 12A 13B (106) 7B 8A 9B 10A (127) 12B (129) 11A (166) 5B (168) 5B
	P30	-65	115	(14) 12A 13B 14A (22) 7A (98) 10A 11B (125) 11A (127) 11A (135) 10A
	P31	-65	125	(12) 15B 16A (14) 10A 11B (98) 8A 9B (123) 11A (135) 6B 8A 9B
	P32	-65	135	(12) 13B 14A (14) 9B (86) 13A 14B (98) 6A 7B (121) 12A (127) 10A (135) 7B (137) 2A
	P33	-65	145	(12) 11B 12A (14) 7B 8A (84) 13A 14B (98) 5B (119) 11A (127) 6B 7A 8A 9B (133) 3A (135) 2A
	P34	-65	155	(12) 9B 10A (14) 5B 6A (82) 13A 14B (100) 6A (117) 12A (131) 3A
	P35	-65	165	(0) 15B (12) 7B 8A (14) 3B 4A (84) 19B 20A 21B 22A (115) 11A 12B (127) 2A (129) 2A (154) 5B

Table 6-2. TV Picture Index (contd)

	CENTER LAT	SECTOR LONG	(REV NUMBER) PICTURE CAMERA ID
	P36	-65 175	(12) 6A (22) 4A (45) 16R 17A 18B 19A 20B 21A (74) 13A 14B (78) 13A 14B (80) 19B 20A 22A (82) 20A 22A (113) 11A (123) 2A (167) 2A
	P1	-65 185	(12) 5B (72) 26B (82) 19B (109) 12R (111) 12A (121) 3A (167) 4R (199) 2B
	P2	-65 195	(70) 27A (72) 25A (107) 12B (109) 11A (119) 1A (199) 1A
	P3	-65 205	(0) 18B (66) 13A 14B (68) 15R (70) 25A 26R (84) 4B (86) 4B 20A 22A 24A (97) 22A 23B 24A 25B (107) 11A (117) 2A (121) 7R 8A 9A 10R 11A
	P4	-65 215	(66) 26B (82) 4B (97) 21B (99) 22A 23B (113) 1A (115) 1A
	P5	-65 225	(64) 25A (66) 25A (99) 20A 21B (101) 11A (111) 2A (148) 1R 2A 3R 4R
	P6	-65 235	(21) 15B (99) 18A 19B (138) 11A (179) 5R 6B
	P7	-65 245	(99) 17B (107) 1A (136) 11A
P	P8	-65 255	(11) 20A 21R 22A 23B (19) 16R (93) 1R (103) 1A (105) 1A (126) 8A 10A (134) 11A (146) 1B 2A 3R 4R (179) 2B (181) 4R (220) 4R 5R
(contd)	P9	-65 265	(17) 17B 18B (19) 15B (132) 11A
	P10	-65 275	(17) 16B (91) 28A (130) 11A
	P11	-65 285	(15) 15B (17) 15R (91) 26A 27R (128) 11A (459) 3A
	P12	-65 295	(1) 21R (5) 15R 16A 17B (13) 18A (15) 13R 14A (58) 17R (87) 26R 27A (91) 25B (99) 8A 9R (124) 11A (126) 11A 12R
	P13	-65 305	(1) 18A 19R 20A (5) 13R 14A (13) 16A 17R (15) 11R 12A (85) 28A 29R (87) 24B 25A (91) 24A (99) 6A 7B (119) 7A (122) 11A (130) 10A (138) 2A
	P14	-65 315	(13) 14A 15R (15) 9R 10A (64) 6A (83) 27R 28A (85) 26A 27B (87) 23A (99) 4A 5R (120) 11A (128) 10A (130) 8A 9R (136) 2A (171) 4R (198) 3R
	P15	-65 325	(13) 12A 13B (15) 8A (81) 24A 25R (83) 26A (85) 25R (87) 11A (99) 3R (118) 12R (128) 7B 8A 9R (130) 7B (131) 8R (134) 2A (165) 1R 2A 3B 4R (169) 1R 2A 3B 4B (171) 1B 3R (198) 4R (200) 5R 6R (204) 1R 2R 3A 4B (241) 1B 2A 3B
	P16	-65 335	(13) 10A 11R (15) 6A 7B (25) 16R 17R (29) 15R (49) 16R (75) 18R 19A (77) 19A (81) 12A (83) 12A 25R (85) 12A 24A (116) 11A (118) 11A (128) 6A (130) 2A 6R (132) 2A (171) 2A (262) 16A
	P17	-65 345	(3) 8A 9R (13) 8A 9R (15) 4A 5R (25) 14R 15R (49) 17A (75) 20R (77) 18B 20R (79) 25R (83) 23A 24A (85) 22R (110) 6A 7R 9R (114) 11A (128) 2A (149) 2R 3A 4R (153) 2A 3R 4R (190) 5R 6R (194) 3R 4R (227) 6R (260) 3R 4R (262) 13R 14A 15R
	P18	-65 355	(3) 7R (13) 7R (29) 12R (75) 25R 26A (77) 12A (79) 12A 24A (83) 22R (97) 3R (112) 11A (126) 2A (153) 1R (188) 5R 6R
	Q19	-75 5	(1) 11R (7) 12A 13A 14A (34) 26A (49) 21A (83) 18B 19A 20B (85) 18R (126) 1A (157) 1R 2A 3R 4B (184) 5R 6R (200) 2R 3A (235) 4R 6R
	Q20	-75 15	(7) 15A (24) 24A 26A (29) 16R (235) 1R 2R 5A
	Q21	-75 25	(1) 10A (23) 3A (24) 25R (69) 12A (71) 12A (120) 1A (122) 1A (192) 1R 2R 4R
	Q22	-75 35	(1) 9R (73) 15A (192) 3A
	Q23	-75 45	(1) 8A (108) 10A
	Q24	-75 55	(22) 10A (81) 18B (108) 1A 9R (182) 4R
	Q25	-75 65	(1) 6A 7B (11) 1R 2A 3B 4A (16) 13A (18) 12A (108) 7R 8A (141) 3B (182) 1R 3A (221) 5R 6R 7R 9R 10R (223) 2R 3R 4R
	Q26	-75 75	(5) 2A (20) 11A (182) 2R (217) 4R 6R (221) 8B
	Q27	-75 85	(9) 12A 13B 14A 15R 16A 17B (98) 15R (108) 6A (131) 7B (172) 2A 4R (174) 9R (217) 3B 5A
	Q28	-75 95	(5) 1R (9) 18A (98) 14A (139) 1R (172) 1R 3R (174) 3R (244) 1R
	Q29	-75 105	(18) 11A (20) 10A (43) 20R 21A (174) 2A
	Q30	-75 115	(43) 23A (174) 1R
Q	Q31	-75 125	(35) 18B 19A (37) 17A (39) 17A (43) 22R 24R 25A (100) 1A
	Q32	-75 135	(35) 20B 21A (37) 16B (47) 1R (100) 9R (164) 2A (203) 4R (209) 3R 5R
	Q33	-75 145	(0) 74A (35) 23A (37) 19A 21A (39) 19A (78) 20A (100) 7R 8A (137) 1A 7B (164) 3B (195) 4R (199) 3R 4R (203) 3R (209) 2R
	Q34	-75 155	(16) 11A (18) 10A (35) 22B (37) 18B 20R (39) 18R 20R 21A (76) 20A 22A 24A (78) 19R 22A 24A (113) 6R 10A (133) 2A (135) 1A (150) 2A (152) 2A 4R (164) 1R 4R (191) 1R (195) 3R (230) 2A (232) 4R 5R 6R (238) 1R 2R (262) 1R
	Q35	-75 165	(53) 23A (76) 19B 21R 23R (78) 21R 23R (113) 7A 8A 9R (131) 2A (150) 1R 3R 4R (152) 1R 3R (191) 2R 3A 4R (230) 1R (234) 4R 5R
	Q36	-75 175	(53) 21A 22R (127) 1A (129) 1A (234) 3R
	Q1	-75 185	(53) 18B 19A 20R (86) 16R
	Q2	-75 195	(16) 10A
	Q3	-75 205	(0) 17R (70) 14R (84) 16R (86) 15R (121) 2A (123) 1A (185) 5R 6R (187) 6R (189) 6R (191) 5R 6R
	Q4	-75 215	(70) 13A (82) 15B 16R (84) 15R (97) 19R 20A (144) 2A (160) 2A 3R (183) 5R 6R (187) 5R (189) 4R 5R (232) 1R 2R 3R (261) 1R 2A
	Q5	-75 225	(0) 19R (9) 30A (73) 19R (97) 17R 18A (109) 1A (125) 6R (144) 1R 3R 4R (160) 1R 4R (181) 7R 8R (189) 1R 2R 3A
	Q6	-75 235	(9) 31B 32A 33B (77) 16B (91) 12A (97) 16A (228) 1R 2R 3R
	Q7	-75 245	(60) 20B (77) 17B (97) 15R (99) 16A (187) 1R (220) 3R 8A
	Q8	-75 255	(99) 14A 15R (126) 6A 7B 9R (179) 1R 3A 4R (181) 3R 5A 6R (183) 4R (220) 1R 2R 6R

Table 6-2. TV Picture Index (contd)

SECTOR	CENTER LAT	CENTER LONG	(REV NUMBER) PICTURE CAMERA ID
Q (contd)	Q9	-75	265 (11) 15R 16A 17B 18A 19B (60) 22A 24A 26A (99) 13R (183) 2B 3A (220) 7R
	Q10	-75	275 (60) 19B 23B 25B (64) 24A (78) 15B 16B 17B (99) 12A (175) 2A
	Q11	-75	285 (56) 6B (60) 21B (64) 23B (70) 17B (74) 15B 16B 17B (99) 10A 11B (173) 3B (175) 3B 4B
	Q12	-75	295 (60) 18B (64) 17B 22A (66) 16B 17B (70) 15B 16B (142) 2A 4B (173) 4B
	Q13	-75	305 (5) 12A (56) 5B (60) 17B (64) 16B 20A 21B (66) 15B (87) 20A 21B 22A (101) 1A (119) 6B 8A 9B 10A (142) 1B 3B (173) 2A (243) 3B
	Q14	-75	315 (1) 16A 17B (5) 10A 11B (54) 26A (56) 4B (64) 15B 19B (87) 18A 19B (138) 1A (202) 2B
	Q15	-75	325 (1) 15B (5) 9B (54) 24A 25B (87) 17B (134) 1A (136) 1A (175) 1B (202) 1A
	Q16	-75	335 (1) 14A (40) 1B (44) 26A (54) 22A 23B (97) 8A (130) 1A (132) 1A 10A
	Q17	-75	345 (1) 13B (40) 22A 24A 26A (44) 22A 24A 25B (49) 18B (54) 21B (85) 21A 23A (97) 6A 7B (132) 9B (198) 2A (262) 11B 12A
	Q18	-75	355 (1) 12A (40) 21B 23B 25B (44) 21B 23B (49) 19A (83) 21A (85) 19A 20B (97) 4A 5B (128) 1A (132) 7B 8A (198) 1B (200) 1B 4B (262) 9B 10A
R	R19	-85	5 (5) 6A (7) 11A (24) 21B 22A (28) 23B 26A (29) 18B 19A 21A (30) 22A (32) 24A 26A (34) 21B (36) 24A (41) 17B (55) 18B (65) 20B (71) 22B (79) 20B (81) 22B (116) 9B (182) 5B 6B (262) 6A 7B 8A
	R20	-85	15 (7) 16A (24) 23B (26) 24A (27) 18B 20B (28) 25B (29) 17A (30) 24A (34) 23B 25B (36) 23B 25B (38) 26A (41) 18A 19B (46) 22A 23B (55) 19A (56) 18B (59) 19B 20A (81) 21A (116) 6A (168) 3B (196) 1B (206) 1B (229) 2B
	R21	-85	25 (11) 8A (26) 23B 26A (27) 19A 22B (30) 21B 25B 26A (32) 23B 25B (36) 21B (38) 24A (64) 2B (116) 7B (124) 6A (168) 4B (188) 1B (196) 2B (223) 1A
	R22	-85	35 (5) 5B (26) 25B (27) 21A (30) 23B (32) 21B (38) 25B (41) 20A (59) 22A (71) 21A (81) 20B (159) 3A 4B 5B (227) 2B (260) 2A
	R23	-85	45 (5) 4A (11) 6A 7B (33) 18B (38) 22A 23B (41) 21B (46) 21B (81) 19A (109) 6B 7A 8A 9B (145) 2B 5B (159) 2B (218) 4A (260) 1B (451) 1A
	R24	-85	55 (11) 5B (55) 21A (59) 21B (168) 2A (184) 4B (196) 4B (227) 4B 5B
	R25	-85	65 (38) 21B (58) 21B (109) 10A (133) 11A (141) 4A (168) 1B (180) 1B 5B (184) 1B (196) 3A (227) 3B (262) 5B
	R26	-85	75 (5) 3B (33) 19A (41) 22A (52) 21B (55) 20B (88) 2A (180) 2B 4B 6B (184) 3A (213) 4B (219) 2B 3B (227) 1B
	R27	-85	85 (9) 19B (33) 20B (64) 3B (145) 4B (151) 2A 3B (176) 3B 4B (180) 3A (184) 2B (211) 4B (213) 2B (215) 4B (219) 1B
	R28	-85	95 (9) 20A 21B (16) 12A (27) 23A (58) 22A (71) 20B (88) 1B (213) 1B 3A (215) 3A (226) 1B
	R29	-85	105 (88) 4A (133) 10B (145) 3A (151) 1B 4B (207) 6B (211) 2B 3A
	R30	-85	115 (9) 22A 23B (25) 18B (33) 21A (56) 17B 21B (71) 19A (88) 3B (133) 7B (141) 6B (211) 1B (215) 2B
	R31	-85	125 (52) 22A (71) 18B (100) 10A (207) 4B
	R32	-85	135 (39) 16B (133) 9A (137) 8A 10A (141) 5A (207) 3B 5A (262) 4A
	R33	-85	145 (33) 22B 23A (137) 9B (188) 3A (209) 4A (236) 6B (262) 3B
	R34	-85	155 (25) 19A (65) 18B (69) 18B (86) 18B (137) 6B (215) 1B (236) 4B (262) 2A
	R35	-85	165 (25) 20B (79) 18B (84) 18B (133) 8B (187) 4B
	R36	-85	175 (9) 24A 25B (25) 21A (56) 22A (82) 18B (86) 17B (197) 3A (236) 5B
	R1	-85	185 (25) 22B 23A (84) 17B (236) 3B
	R2	-85	195 (82) 17B (226) 2B (236) 1B 2B (241) 5A
	R3	-85	205 (9) 26A
	R4	-85	215 (9) 27B (79) 19A
	R5	-85	225 (9) 28A 29B (226) 3B (237) 1B
	R6	-85	235 (56) 24A (187) 2B (226) 5B
	R7	-85	245 (56) 26A (140) 1B (185) 4B (222) 3B (224) 2B (226) 4B
	R8	-85	255 (97) 14A (185) 2B 3A (212) 8B (218) 2B 3B (222) 1B 2B (224) 1B (226) 6B
	R9	-85	265 (56) 25B (58) 26A (97) 13B (183) 1B (185) 1B (212) 7B (216) 1B (218) 1B
	R10	-85	275 (11) 13B 14A (56) 23B (58) 24A (66) 18B (70) 18B (78) 18B (91) 5A (97) 12A (212) 6B (214) 3B 4B 6B (216) 2B 4B
	R11	-85	285 (11) 12A (52) 26A (64) 18B (74) 18B (176) 1B (210) 4B 6B (216) 3A
	R12	-85	295 (31) 23A (52) 24A (97) 11B (206) 4B (208) 2B 4B (210) 3B 5A (212) 3B 4B 5A (214) 5A (239) 6B
	R13	-85	305 (11) 11B (26) 21B (55) 16B (58) 25B (208) 1B 3A (243) 2B
	R14	-85	315 (31) 21A 22B (52) 25B (59) 17B (69) 19A (97) 10A (124) 8A (176) 2A (206) 5B 6B (224) 3B (239) 4B 5A
	R15	-85	325 (11) 10A (28) 21B (31) 19A 20B (56) 20B (59) 18A (69) 21A 22B 23A (79) 21A (97) 9B (124) 10A (206) 3A (231) 2A (234) 1B (239) 1B 2B 3B (243) 1B
	R16	-85	335 (5) 8A (28) 22A (31) 18B (46) 26A (55) 17A (69) 20B (79) 23A (116) 8A 10A (192) 6B (204) 6B (206) 2B (229) 1B
	R17	-85	345 (5) 7B (26) 22A (34) 22A (46) 24A (56) 19B (65) 21A 22B 23A (71) 23A (81) 23A (173) 1B (188) 4B (192) 5B (196) 5B (233) 1B 2B
	R18	-85	355 (11) 9B (28) 24A (29) 20B (32) 22A (34) 24A (36) 22A 26A (46) 25B (49) 20B (52) 23B (58) 23B (64) 1B (65) 19A (79) 22B (124) 7B 9B (188) 2B (196) 6B (204) 5B (229) 3B (231) 1B (233) 3B (234) 2A

Table 6-2. TV Picture Index (contd)

	(REV NUMBER) PICTURE CAMERA ID
CENTER OF PICTURE OFF PLANET	(0) 1A 2A 4A 6A 9A 12A 14A 16A 21A 31A 33A 35A 41A 43A 46A 52A 53A 54A 55A 56A 59A 65A 71A 72A (1) 1A 2A (6) 2A (7) 29A 30A 31A 32A (11) 32A 33A (14) 8A 9A (18) 8A 9A (20) 8A 9A (22) 8A 9A (25) 1A 2A (26) 2A (27) 1A 2A 4A (28) 2A (29) 2A (30) 2A (31) 2A 16A 17A (32) 2A (33) 1A 2A 16A 17A (34) 1A 2A 3A 4A 5A 6A (35) 1A 2A 3A 4A (36) 1A 2A (37) 1A 2A (38) 1A 2A (39) 2A (40) 2A (41) 1A 2A 3A 13A 14A 15A 16A (42) 21A 22A (43) 1A 2A 3A 4A 5A 6A (46) 1A 2A (47) 2A 16A 17A (48) 2A 17A 18A 19A 20A (50) 1A 2A (51) 2A (53) 14A 16A 17A (54) 1A (56) 3A (57) 3A 4A 5A 6A (59) 1A 3A (60) 1A 2A (61) 16A 18A (62) 21A 22A (63) 1A 2A 3A 4A 5A 6A 7A (64) 4A 13A 14A (66) 19A 20A 21A 22A 23A 24A (68) 18A (70) 19A 20A 21A 22A 23A 24A (72) 1A 2A 3A 4A 5A 6A 7A 8A 9A 10A 11A 12A 13A 14A 15A 16A 17A 18A (73) 1A 2A 3A 20A (74) 19A 20A 21A 22A 23A 24A (77) 24A 25A 26A 27A 28A 29A 30A 31A (79) 17A (80) 13A 14A 15A 16A 17A 18A (81) 16A 17A (83) 16A (85) 16A 17A (87) 1A 2A 3A 15A (89) 1A 2A 3A 4A (93) 32A 33A (100) 29A 30A 31A 32A 33A (102) 10A 29A 30A 31A 32A 33A (103) 7A 8A (105) 7A 8A 9A (107) 6A 9A (110) 29A 31A (111) 1A (114) 6A 7A 9A (115) 6A 9A (117) 1A (120) 6A 7A (121) 1A (122) 6A (127) 32A (129) 6A 7A 8A 9A 10A 32A (131) 1A 9A 10A 11A (133) 1A (136) 33A (139) 2A 3A 4A (145) 1A (149) 1A (150) 31A 32A 33A (159) 1A (161) 1A 2A (167) 3A (171) 31A 32A (181) 1A 2A (186) 5A (187) 7A 8A 29A 30A (188) 27A 28A 29A 30A (189) 7A (191) 29A 30A (195) 23A 24A 25A (196) 25A 26A (197) 1A (199) 23A (200) 25A (201) 11A 12A (203) 1A 2A (204) 25A 26A (207) 1A 2A (209) 1A (218) 19A 20A (220) 17A (221) 1A 2A 3A 4A (241) 4A (258) 1A 2A 3A 4A (260) 15A 16A (430) 19A (437) 1A (444) 16A (459) 1A 2A (475) 9A (676) 19A

Table 6-3. Calendar Date Versus Day Number

NOVEMBER 1971

S	M	T	W	T	F	S
	305 1	*306* 2	*307* 3	*308* 4	*309* 5	*310* 6
311 7	*312* 8	*313* 9	*314* 10	*315* 11	*316* 12	*317* 13
318 14	*319* 15	*320* 16	*321* 17	*322* 18	*323* 19	*324* 20
325 21	*326* 22	*327* 23	*328* 24	*329* 25	*330* 26	*331* 27
332 28	*333* 29	*334* 30				

DECEMBER 1971

S	M	T	W	T	F	S
			335 1	*336* 2	*337* 3	*338* 4
339 5	*340* 6	*341* 7	*342* 8	*343* 9	*344* 10	*345* 11
346 12	*347* 13	*348* 14	*349* 15	*350* 16	*351* 17	*352* 18
353 19	*354* 20	*355* 21	*356* 22	*357* 23	*358* 24	*359* 25
360 26	*361* 27	*362* 28	*363* 29	*364* 30	*365* 31	

JANUARY 1972

S	M	T	W	T	F	S
						1 1
2 2	*3* 3	*4* 4	*5* 5	*6* 6	*7* 7	*8* 8
9 9	*10* 10	*11* 11	*12* 12	*13* 13	*14* 14	*15* 15
16 16	*17* 17	*18* 18	*19* 19	*20* 20	*21* 21	*22* 22
23 23	*24* 24	*25* 25	*26* 26	*27* 27	*28* 28	*29* 29
30 30	*31* 31					

FEBRUARY 1972

S	M	T	W	T	F	S
		32 1	*33* 2	*34* 3	*35* 4	*36* 5
37 6	*38* 7	*39* 8	*40* 9	*41* 10	*42* 11	*43* 12
44 13	*45* 14	*46* 15	*47* 16	*48* 17	*49* 18	*50* 19
51 20	*52* 21	*53* 22	*54* 23	*55* 24	*56* 25	*57* 26
58 27	*59* 28	*60* 29				

MARCH 1972

S	M	T	W	T	F	S
			61 1	*62* 2	*63* 3	*64* 4
65 5	*66* 6	*67* 7	*68* 8	*69* 9	*70* 10	*71* 11
72 12	*73* 13	*74* 14	*75* 15	*76* 16	*77* 17	*78* 18
79 19	*80* 20	*81* 21	*82* 22	*83* 23	*84* 24	*85* 25
86 26	*87* 27	*88* 28	*89* 29	*90* 30	*91* 31	

APRIL 1972

S	M	T	W	T	F	S
						92 1
93 2	*94* 3	*95* 4	*96* 5	*97* 6	*98* 7	*99* 8
100 9	*101* 10	*102* 11	*103* 12	*104* 13	*105* 14	*106* 15
107 16	*108* 17	*109* 18	*110* 19	*111* 20	*112* 21	*113* 22
114 23	*115* 24	*116* 25	*117* 26	*118* 27	*119* 28	*120* 29
121 30						

Table 6-3. Calendar Date Versus Day Number (contd)

MAY 1972

S	M	T	W	T	F	S
	122 1	*123* 2	*124* 3	*125* 4	*126* 5	*127* 6
128 7	*129* 8	*130* 9	*131* 10	*132* 11	*133* 12	*134* 13
135 14	*136* 15	*137* 16	*138* 17	*139* 18	*140* 19	*141* 20
142 21	*143* 22	*144* 23	*145* 24	*146* 25	*147* 26	*148* 27
149 28	*150* 29	*151* 30	*152* 31			

JUNE 1972

S	M	T	W	T	F	S
				153 1	*154* 2	*155* 3
156 4	*157* 5	*158* 6	*159* 7	*160* 8	*161* 9	*162* 10
163 11	*164* 12	*165* 13	*166* 14	*167* 15	*168* 16	*169* 17
170 18	*171* 19	*172* 20	*173* 21	*174* 22	*175* 23	*176* 24
177 25	*178* 26	*179* 27	*180* 28	*181* 29	*182* 30	

JULY 1972

S	M	T	W	T	F	S
						183 1
184 2	*185* 3	*186* 4	*187* 5	*188* 6	*189* 7	*190* 8
191 9	*192* 10	*193* 11	*194* 12	*195* 13	*196* 14	*197* 15
198 16	*199* 17	*200* 18	*201* 19	*202* 20	*203* 21	*204* 22
205 23	*206* 24	*207* 25	*208* 26	*209* 27	*210* 28	*211* 29
212 30	*213* 31					

AUGUST 1972

S	M	T	W	T	F	S
		214 1	*215* 2	*216* 3	*217* 4	*218* 5
219 6	*220* 7	*221* 8	*222* 9	*223* 10	*224* 11	*225* 12
226 13	*227* 14	*228* 15	*229* 16	*230* 17	*231* 18	*232* 19
233 20	*234* 21	*235* 22	*236* 23	*237* 24	*238* 25	*239* 26
240 27	*241* 28	*242* 29	*243* 30	*244* 31		

SEPTEMBER 1972

S	M	T	W	T	F	S
					245 1	*246* 2
247 3	*248* 4	*249* 5	*250* 6	*251* 7	*252* 8	*253* 9
254 10	*255* 11	*256* 12	*257* 13	*258* 14	*259* 15	*260* 16
261 17	*262* 18	*263* 19	*264* 20	*265* 21	*266* 22	*267* 23
268 24	*269* 25	*270* 26	*271* 27	*272* 28	*273* 29	*274* 30

OCTOBER 1972

S	M	T	W	T	F	S
275 1	*276* 2	*277* 3	*278* 4	*279* 5	*280* 6	*281* 7
282 8	*283* 9	*284* 10	*285* 11	*286* 12	*287* 13	*288* 14
289 15	*290* 16	*291* 17	*292* 18	*293* 19	*294* 20	*295* 21
296 22	*297* 23	*298* 24	*299* 25	*300* 26	*301* 27	*302* 28
303 29	*304* 30	*305* 31				

Table 6-4. Pictures in Final SEDR Files Deleted and/or Added Since Publication of Volume II

Rev.	DAS Number	
POS 1	1,460,392	These pictures exist but are not included in SEDR files or Vol. II or this Addendum because the associated telemetry data is not available.
POS 1	1,463,472	
POS 1	1,466,552	
POS 1	1,469,632	
POS 1	1,472,712	
POS 1	1,475,792	
POS 1	1,478,872	
POS 1	1,481,952	
POS 1	1,483,492	
POS 1	1,485,032	
POS 1	1,488,112	
POS 3	1,657,897	deleted
1	1,672,706	added
1	1,672,741	added
8	1,885,380	added; previously deleted
30	2,678,025	added
32	2,749,845	added
34	2,821,665	added
44	3,181,050	added
46	3,252,940	added
48	3,324,620	added
54	3,540,150	added
57	3,642,700	deleted
60	3,755,400	added
62	3,827,115	added
75	4,293,385	added; previously deleted
83	4,580,875	added; previously deleted
85	4,652,695	added; previously deleted
87	4,720,735	deleted
88	4,756,575	deleted
88	4,756,645	deleted
88	4,756,715	deleted
88	4,756,785	deleted
88	4,756,995	deleted
88	4,757,030	deleted
88	4,757,100	deleted
88	4,757,170	deleted
88	4,757,240	deleted
88	4,757,310	deleted
88	4,757,380	deleted
88	4,757,450	deleted
88	4,757,520	deleted
88	4,757,555	deleted
88	4,757,765	deleted
88	4,757,835	deleted
88	4,757,905	deleted
88	4,757,975	deleted
88	4,759,375	deleted
88	4,759,410	deleted
88	4,761,020	deleted
88	4,761,055	deleted

Rev.	DAS Number	
88	4,761,090	deleted
88	4,761,125	deleted
88	4,761,160	deleted
88	4,761,195	deleted
88	4,761,230	deleted
88	4,761,265	deleted
89	4,792,555	deleted
89	4,792,625	deleted
89	4,792,940	deleted
89	4,793,010	deleted
89	4,793,150	deleted
89	4,793,220	deleted
89	4,793,290	deleted
89	4,793,360	deleted
89	4,793,430	deleted
89	4,793,675	deleted
89	4,793,745	deleted
89	4,793,815	deleted
89	4,794,095	deleted
89	4,794,165	deleted
89	4,795,285	deleted
89	4,795,320	deleted
89	4,795,355	deleted
89	4,795,390	deleted
89	4,795,425	deleted
89	4,795,460	deleted
89	4,796,090	deleted
89	4,796,125	deleted
89	4,796,160	deleted
90	4,831,195	deleted
90	4,831,230	deleted
90	4,831,265	deleted
90	4,831,300	deleted
90	4,831,335	deleted
91	4,868,085	added; previously deleted
98	5,095,088	added
99	5,131,068	added
102	5,240,618	added; previously deleted
103	5,276,598	added; previously deleted
104	5,308,623	deleted
104	5,308,693	deleted
104	5,308,763	deleted
104	5,308,833	deleted
104	5,308,903	deleted
104	5,309,953	deleted
104	5,309,988	deleted
104	5,310,023	deleted
104	5,310,058	deleted
104	5,310,093	deleted
104	5,310,653	deleted
104	5,310,688	deleted
104	5,310,723	deleted

Table 6-4. Pictures in Final SEDR Files Deleted and/or Added Since Publication of Volume II (contd)

Rev.	DAS Number	
104	5,310,758	deleted
104	5,310,793	deleted
104	5,310,828	deleted
104	5,312,438	added; previously deleted
108	5,456,428	added; previously deleted
110	5,528,458	added; previously deleted
112	5,600,418	added; previously deleted
114	5,672,448	added; previously deleted
116	5,744,478	added; previously deleted
118	5,816,438	added; previously deleted
120	5,888,468	added; previously deleted
122	5,960,428	added; previously deleted
124	6,032,388	added; previously deleted
126	6,104,278	added; previously deleted
128	6,176,238	added; previously deleted
130	6,248,058	added; previously deleted
132	6,319,948	added; previously deleted
134	6,391,838	added; previously deleted
136	6,463,728	added; previously deleted
138	6,535,618	added; previously deleted
143	6,712,578	deleted
143	6,712,823	deleted
143	6,712,858	deleted
143	6,712,928	deleted
143	6,713,488	deleted
143	6,713,768	deleted
143	6,714,573	deleted
143	6,715,448	added; previously deleted
143	6,716,008	deleted
146	6,823,983	added; previously deleted
148	6,895,943	added; previously deleted
150	6,968,743	added; previously deleted
152	7,039,933	added; previously deleted
154	7,111,963	added; previously deleted
160	7,327,913	added; previously deleted
162	7,399,943	added; previously deleted
164	7,471,903	added; previously deleted
166	7,543,793	added; previously deleted
170	7,687,573	added; previously deleted
172	7,759,463	added; previously deleted
173	7,793,973	deleted
176	7,903,243	added; previously deleted
179	8,011,883	added
180	8,047,863	added
191	8,443,684	added; previously deleted
195	8,587,464	added; previously deleted
197	8,659,424	added; previously deleted
199	8,727,744	deleted
199	8,727,814	deleted
202	8,839,394	added; previously deleted
204	8,911,214	added; previously deleted
207	9,019,154	added; previously deleted
208	9,055,134	added; previously deleted
209	9,087,054	deleted

Rev.	DAS Number	
211	9,162,864	added; previously deleted
216	9,342,659	added; previously deleted
217	9,378,569	added; previously deleted
217	9,378,779	added; previously deleted
221	9,522,174	added; previously deleted
224	9,628,994	added; previously deleted
226	9,702,529	added; previously deleted
227	9,734,484	deleted
230	9,845,574	added; previously deleted
231	9,882,254	added; previously deleted
232	9,917,639	deleted
234	9,990,159	deleted
234	9,990,369	deleted
236	10,061,594	deleted
237	10,094,704	deleted
237	10,094,774	deleted
238	10,131,174	deleted
239	10,171,144	added; previously deleted
241	10,241,354	added; previously deleted
244	10,346,634	added
245	10,386,534	added
245	10,386,569	added
245	10,386,674	added
245	10,386,709	added
245	10,386,744	added
245	10,386,779	added
245	10,386,814	added
245	10,386,849	added
245	10,386,884	added
245	10,386,919	added
245	10,386,954	added
245	10,386,989	added
245	10,387,024	added
248	10,492,514	added
248	10,492,549	added
248	10,492,584	added
248	10,492,619	added
248	10,492,654	added
248	10,492,689	added
248	10,492,724	added
248	10,492,759	added
248	10,492,794	added
248	10,492,829	added
248	10,492,864	added
248	10,492,899	added
248	10,493,074	added
248	10,493,109	added
248	10,494,474	added
258	10,563,119	added
258	10,563,154	added
258	10,563,329	added
258	10,563,364	added

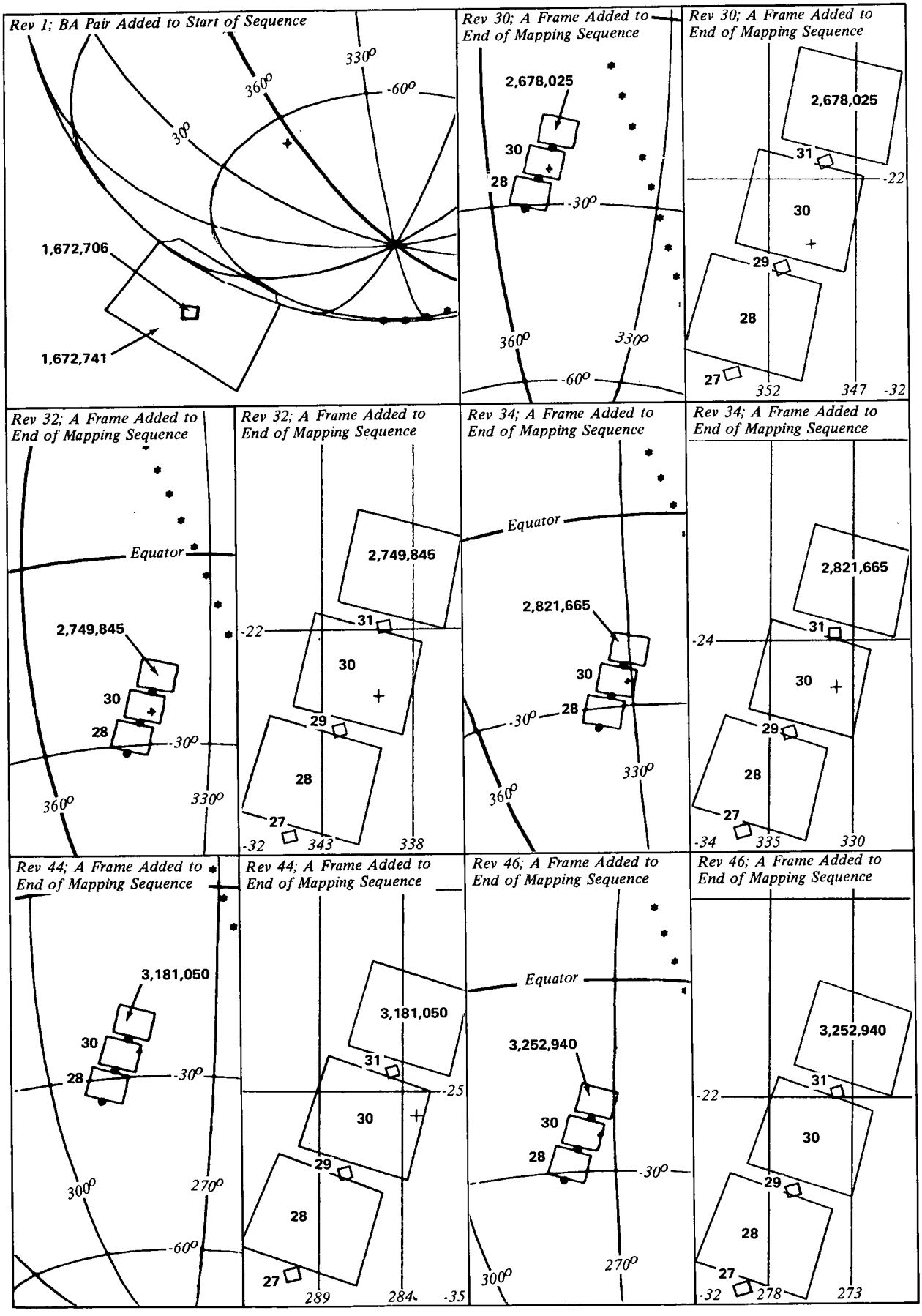
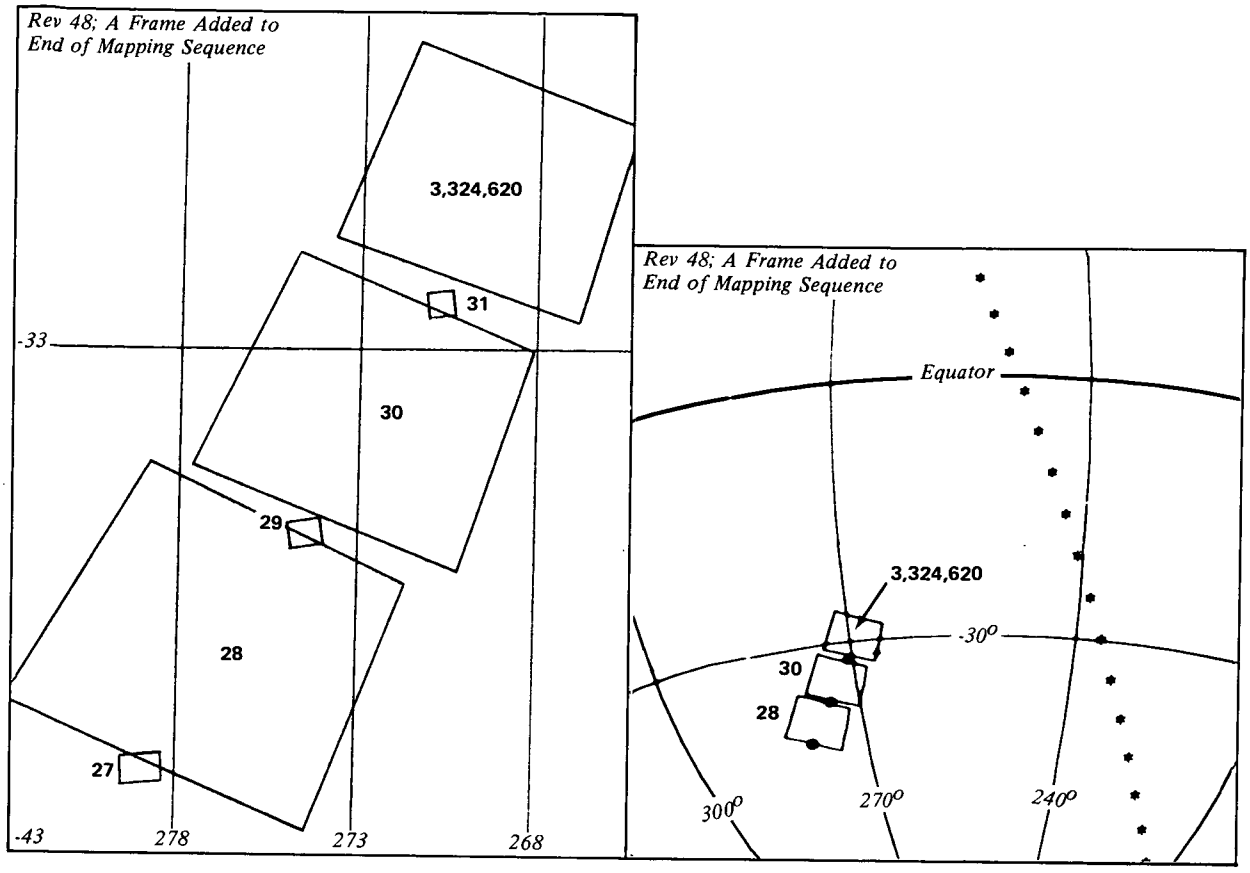


Figure 6-2. TV Pictures Added to SEDR Files



INST TYPE	TIME (GMT) D	H	M	S	PERI TIME H	M	S	SPACECRAFT LAT	LONG-W	HGT	PLATFORM CONE	CLOCK	INTERCEPTING LAT	LONG-W	RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
												REV 1							
B	318	12	45	53	-0	30	0	-64.18	4.01	2918	132.02	241.79	******	******	*****	94.25	69.86	.00	1,672,706
A	318	12	46	35	-0	29	18	-64.28	1.61	2861	132.02	241.73	******	******	*****	92.58	70.56	.00	1,672,741
												REV 30							
A	333	2	7	16	0	1	13	-19.49	347.20	1400	99.63	249.72	-18.69	347.81	1402	3.35	79.42	80.44	2,678,025
												REV 32							
A	334	2	3	40	0	1	4	-19.84	337.59	1398	99.55	249.48	-19.20	338.61	1401	3.95	78.04	80.51	2,749,845
												REV 34							
A	335	2	0	4	0	0	31	-21.17	328.58	1395	100.04	249.55	-21.14	330.00	1399	4.54	75.71	80.03	2,821,665
												REV 44							
A	340	1	47	44	0	0	32	-21.05	280.81	1392	100.04	249.75	-21.51	283.53	1404	8.81	71.24	80.03	3,181,050
												REV 46							
A	341	1	45	32	0	1	16	-19.27	270.33	1395	99.95	249.82	-19.14	272.91	1406	8.30	72.24	80.12	3,252,940
												REV 48							
A	342	1	39	8	-0	1	44	-26.62	264.07	1398	99.96	249.42	-29.34	269.23	1447	17.78	63.38	80.11	3,324,620

Figure 6-2. TV Pictures Added to SEDR Files (contd)

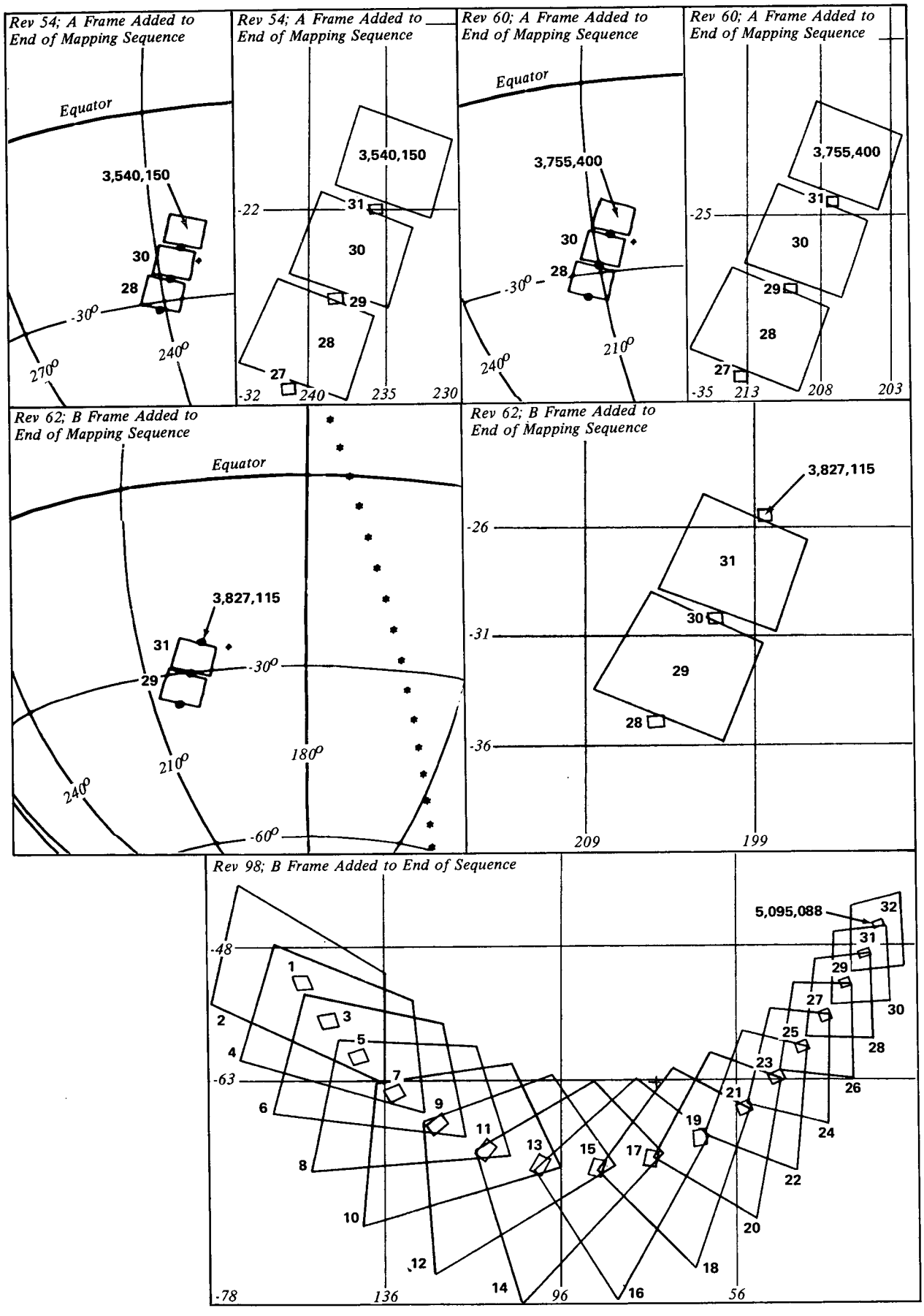
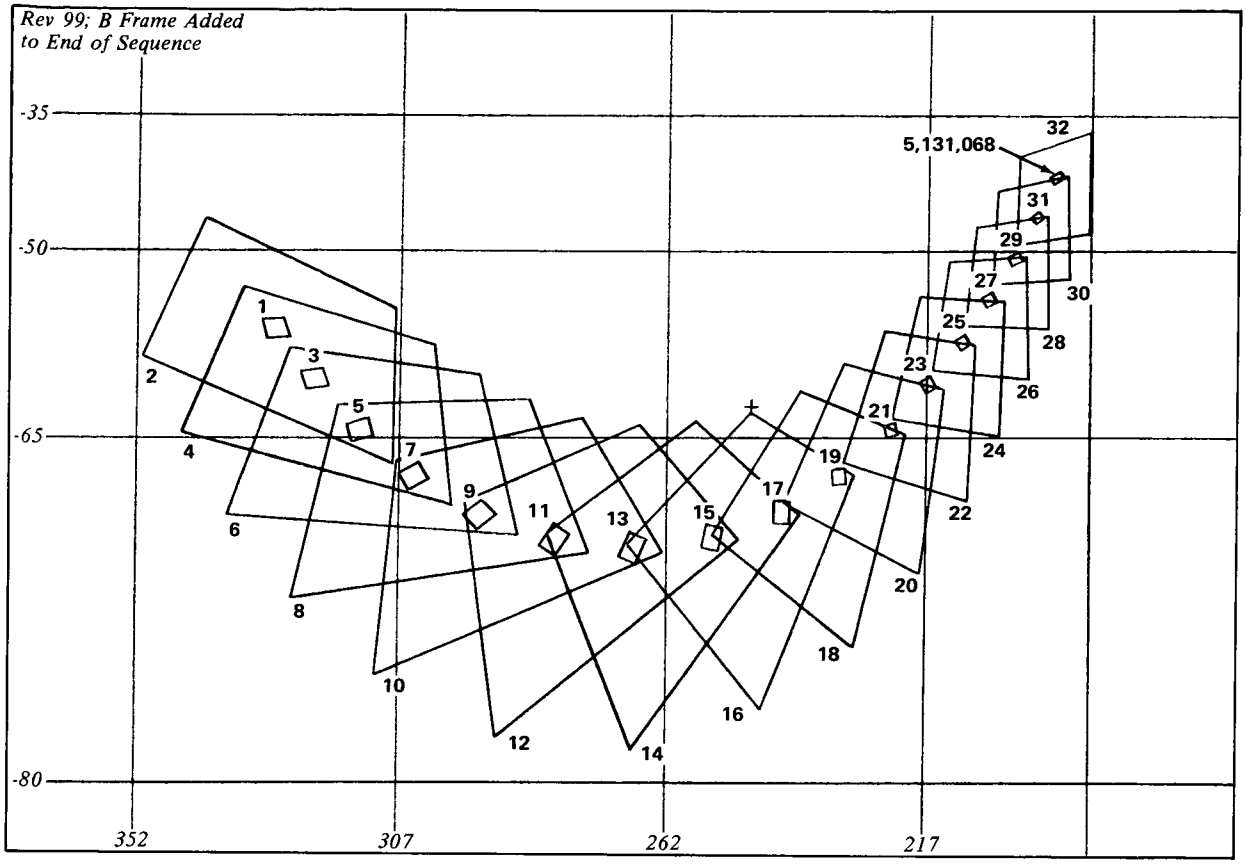


Figure 6-2. TV Pictures Added to SEDR Files (contd)

C.2



INST TYPE	TIME (GMT) D	H	M	S	PERI TIME H	M	S	SPACECRAFT LAT	LONG-W	HGT	PLATFORM CONE	CLOCK	INTERCEPTING LAT	LONG-W	RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
												REV 54							
A	345	1	29	43	0	1	19	-19.30	230.65	1398	99.60	249.78	-19.55	234.47	1421	12.23	68.42	80.47	3,540,150
												REV 60							
A	348	1	14	42	0	0	45	-20.78	201.04	1397	99.98	249.44	-21.67	206.02	1436	15.93	64.16	80.09	3,755,400
												REV 62							
B	349	1	9	0	-0	0	16	-23.32	192.17	1396	99.75	249.38	-25.46	198.34	1459	20.09	60.51	80.24	3,827,115
												REV 98							
B	1	23	58	25	-0	16	27	-51.90	40.77	2017	139.44	168.00	-44.88	23.28	2255	34.08	50.75	40.54	5,095,088
												REV 99							
B	2	11	58	1	-0	13	51	-50.95	214.71	1989	140.15	164.93	-42.58	195.08	2308	39.25	52.39	39.84	5,131,068

Figure 6-2. TV Pictures Added to SEDR Files (contd)

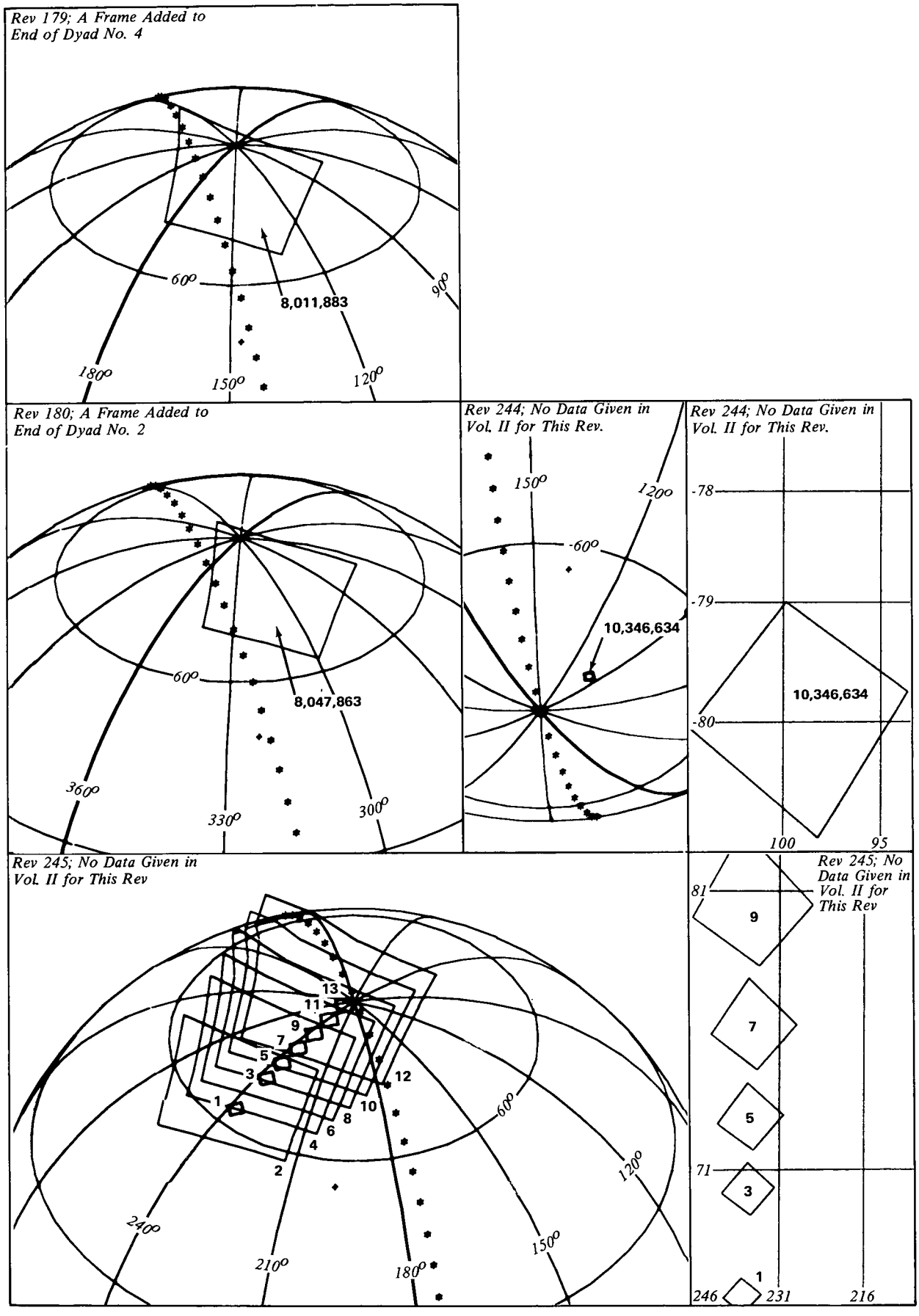
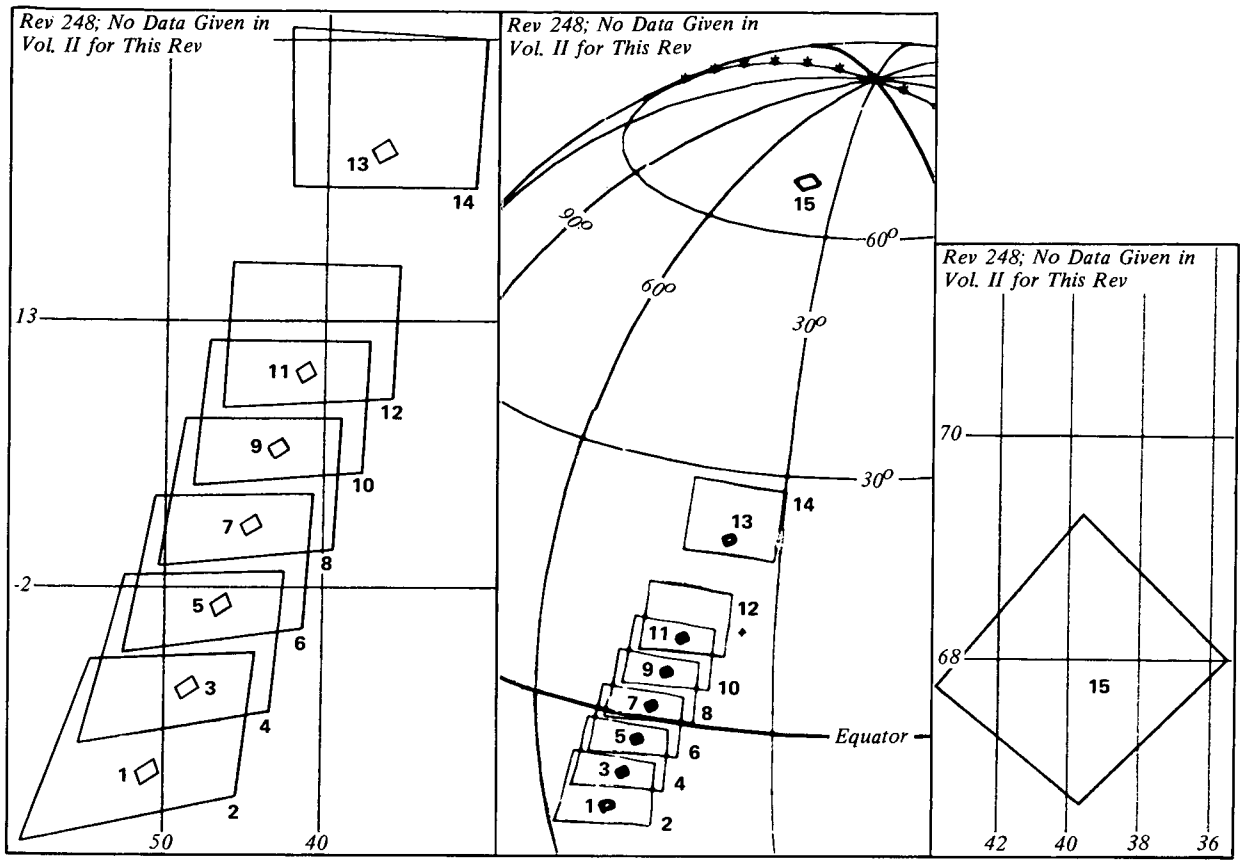


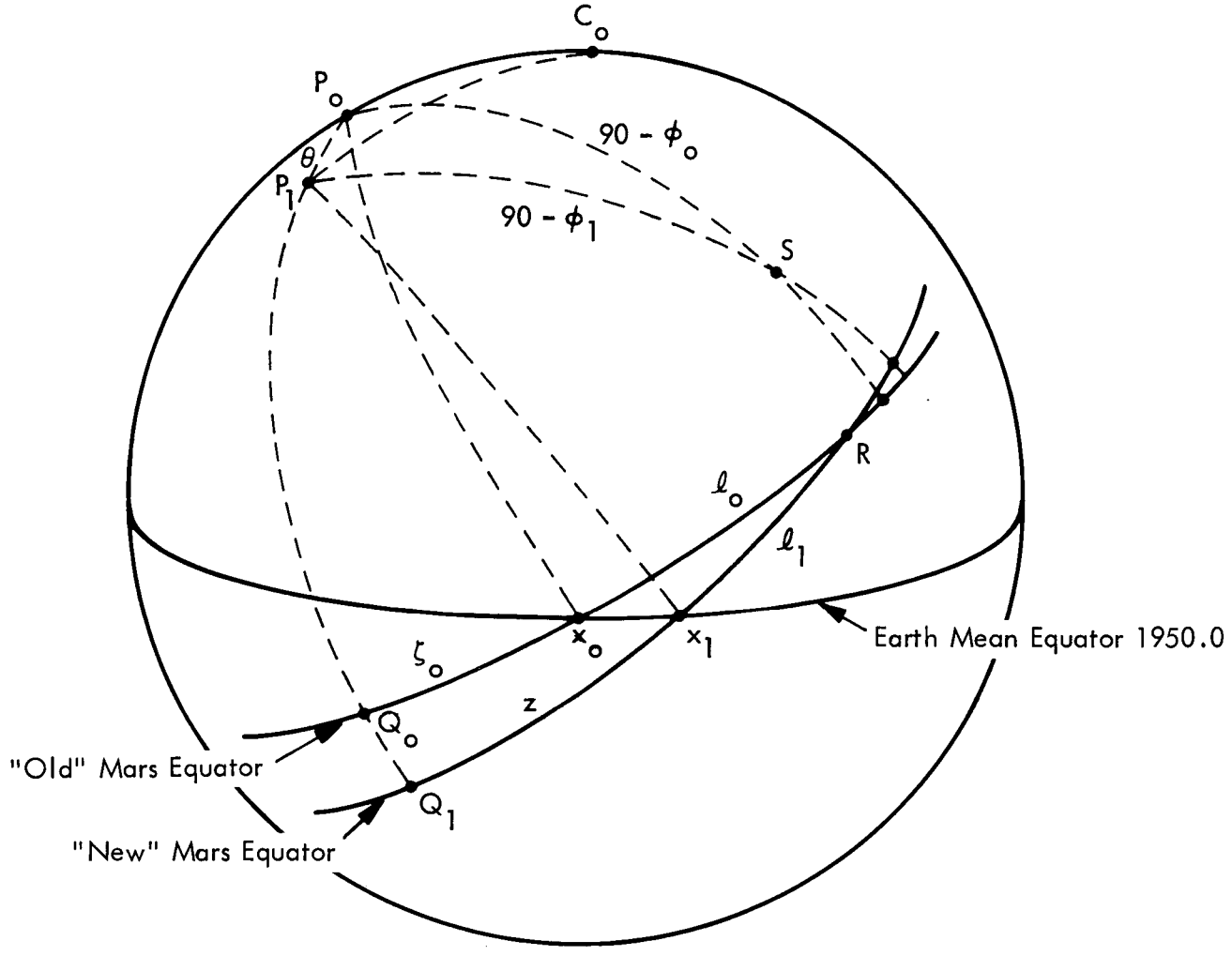
Figure 6-2. TV Pictures Added to SEDR Files (contd)



INST TYPE	TIME (GMT) D	H	M	S	PERI TIME H	M	S	SPACECRAFT LAT	LONG-W	HGT	PLATFORM CONE	CLOCK	INTERCEPTING LAT	LONG-W	RANGE	VIEW ANGLE	LIGHT ANGLE	PHASE ANGLE	DAS REFERENCE TIME
											REV 179								
A	42	12	14	8	0	46	49	50.35	147.87	4339	96.21	286.80	77.80	145.96	4972	45.76	94.78	83.86	8,011,883
											REV 180								
A	43	0	13	43	0	47	15	50.68	322.80	4375	98.41	288.92	75.11	305.78	4922	42.57	98.08	81.66	8,047,863
											REV 244								
1 B	74	22	29	0	-0	29	35	-64.00	138.05	2963	98.82	114.57	-79.94	99.15	3341	38.59	81.21	81.17	10,346,634
											REV 245								
1 B	75	11	46	59	0	49	19	52.12	203.25	4546	102.01	290.87	63.14	237.32	4921	35.17	66.09	77.98	10,386,534
2 A	75	11	47	41	0	50	1	52.61	202.59	4605	102.03	290.87	65.20	238.71	5015	36.69	67.65	78.04	10,386,569
3 B	75	11	49	47	0	52	7	54.01	200.58	4779	102.07	290.89	69.96	236.18	5201	36.93	72.38	77.91	10,386,674
4 A	75	11	50	29	0	52	49	54.45	199.90	4837	102.09	290.89	72.11	238.45	5310	38.94	73.94	77.98	10,386,709
5 B	75	11	51	11	0	53	31	54.88	199.21	4895	102.10	290.89	73.46	235.80	5357	38.43	75.53	77.89	10,386,744
6 A	75	11	51	53	0	54	13	55.30	198.51	4954	102.13	290.89	75.70	238.80	5474	40.66	77.13	77.94	10,386,779
7 B	75	11	52	35	0	54	55	55.70	197.81	5012	102.14	290.91	77.03	235.29	5522	40.21	78.71	77.85	10,386,814
8 A	75	11	53	17	0	55	37	56.09	197.10	5070	102.17	290.91	79.34	239.75	5649	42.68	80.33	77.90	10,386,849
9 B	75	11	53	59	0	56	19	56.48	196.39	5128	102.15	290.91	80.69	235.46	5702	42.43	81.88	77.83	10,386,884
10 A	75	11	54	41	0	57	1	56.85	195.67	5186	102.14	290.92	83.00	243.30	5839	45.09	83.46	77.93	10,386,919
11 B	75	11	55	23	0	57	43	57.21	194.95	5243	102.10	290.92	84.36	237.30	5895	44.94	84.98	77.89	10,386,954
12 A	75	11	56	5	0	58	25	57.55	194.22	5301	102.08	290.93	86.61	257.35	6044	47.83	86.57	77.99	10,386,989
13 B	75	11	56	47	0	59	7	57.89	193.49	5359	102.07	290.91	88.18	252.36	6106	47.89	88.16	77.92	10,387,024
											REV 248								
1 B	76	23	6	35	0	12	2	2.03	37.76	1907	133.62	280.10	-12.45	50.87	2385	47.72	15.53	46.37	10,492,514
2 A	76	23	7	17	0	12	44	3.45	37.23	1936	133.62	280.11	-9.72	49.82	2356	44.85	14.22	46.45	10,492,549
3 B	76	23	7	59	0	13	26	4.87	36.72	1967	133.61	280.10	-7.57	48.53	2341	42.38	13.97	46.38	10,492,584
4 A	76	23	8	41	0	14	8	6.26	36.20	1999	133.60	280.08	-4.97	47.66	2327	39.74	13.63	46.47	10,492,619
5 B	76	23	9	23	0	14	50	7.64	35.69	2032	133.60	280.06	-2.92	46.49	2323	37.40	14.27	46.39	10,492,654
6 A	76	23	10	5	0	15	32	8.99	35.18	2066	133.62	280.07	-.43	45.72	2320	34.95	14.85	46.45	10,492,689
7 B	76	23	10	47	0	16	14	10.33	34.68	2102	133.64	280.06	1.54	44.63	2325	32.68	16.14	46.35	10,492,724
8 A	76	23	11	29	0	16	56	11.65	34.18	2139	133.66	280.07	3.96	43.94	2333	30.43	17.31	46.41	10,492,759
9 B	76	23	12	11	0	17	38	12.95	33.69	2177	133.71	280.07	5.89	42.88	2344	28.22	18.96	46.28	10,492,794
10 A	76	23	12	53	0	18	20	14.24	33.19	2216	133.75	280.08	8.25	42.24	2360	26.14	20.50	46.32	10,492,829
11 B	76	23	13	35	0	19	2	15.50	32.70	2256	133.80	280.07	10.14	41.21	2378	24.01	22.33	46.19	10,492,864
12 A	76	23	14	17	0	19	44	16.74	32.21	2297	133.86	280.09	12.46	40.59	2402	22.15	24.06	46.21	10,492,899
13 B	76	23	17	47	0	23	14	22.64	29.76	2517	133.60	280.49	22.11	36.61	2565	14.74	33.23	46.39	10,493,074
14 A	76	23	18	29	0	23	56	23.76	29.28	2563	133.65	280.47	24.41	36.03	2609	14.25	35.19	46.42	10,493,109
15 B	76	23	45	47	0	51	14	53.39	7.36	4706	103.55	291.14	67.93	39.61	5079	34.86	70.56	76.44	10,494,474
											REV 258								
1 B	81	17	48	58	-4	54	54	15.18	104.20	16378	96.12	125.12	******	******	*****	184.28	153.13	.00	10,563,119
2 A	81	17	49	40	-4	54	12	15.08	104.32	16367	96.14	125.13	******	******	*****	183.98	153.43	.00	10,563,154
3 B	81	17	53	10	-4	50	42	14.56	104.90	16314	96.17	125.00	******	******	*****	183.57	154.05	.00	10,563,329
4 A	81	17	53	52	-4	50	0	14.46	105.02	16302	96.18	124.94	******	******	*****	183.23	154.38	.00	10,563,364

NO PLOTS FOR REV 258; ALL PICTURES OFF PLANET

Figure 6-2. TV Pictures Added to SEDR Files (contd)



C_o Pole of Earth mean equator of 1950.0

P_o "Old" Mars pole

P_1 "New" Mars pole

S General point of interest

R Intersection of "old" and "new" equators

Figure 6-3. Geometry of Mars Pole Corrections

Table 6-5. Mars Prime Meridian Angle from Earth Node

NOVEMBER 1971

JULIAN DATE	GMT YR	MO	DAY	HR	$\Delta_{50}^{(o)} + 180^{o} + V_{o}$
2441256.5	71	11	1	0	104.674085
2441257.0	71	11	1	12	280.120065
2441257.5	71	11	2	0	95.566045
2441258.0	71	11	2	12	271.012025
2441258.5	71	11	3	0	86.458004
2441259.0	71	11	3	12	261.903984
2441259.5	71	11	4	0	77.349964
2441260.0	71	11	4	12	252.795944
2441260.5	71	11	5	0	68.241923
2441261.0	71	11	5	12	243.687903
2441261.5	71	11	6	0	59.133883
2441262.0	71	11	6	12	234.579863
2441262.5	71	11	7	0	50.025842
2441263.0	71	11	7	12	225.471822
2441263.5	71	11	8	0	40.917802
2441264.0	71	11	8	12	216.363781
2441264.5	71	11	9	0	31.809761
2441265.0	71	11	9	12	207.255741
2441265.5	71	11	10	0	22.701721
2441266.0	71	11	10	12	198.147700
2441266.5	71	11	11	0	13.593680
2441267.0	71	11	11	12	189.039660
2441267.5	71	11	12	0	4.485640
2441268.0	71	11	12	12	179.931619
2441268.5	71	11	13	0	355.377599
2441269.0	71	11	13	12	170.823579
2441269.5	71	11	14	0	346.269559
2441270.0	71	11	14	12	161.715538
2441270.5	71	11	15	0	337.161518
2441271.0	71	11	15	12	152.607498
2441271.5	71	11	16	0	328.053478
2441272.0	71	11	16	12	143.499457
2441272.5	71	11	17	0	318.945437
2441273.0	71	11	17	12	134.391417
2441273.5	71	11	18	0	309.837397
2441274.0	71	11	18	12	125.283376
2441274.5	71	11	19	0	300.729356
2441275.0	71	11	19	12	116.175336
2441275.5	71	11	20	0	291.621316
2441276.0	71	11	20	12	107.067295
2441276.5	71	11	21	0	282.513275
2441277.0	71	11	21	12	97.959255
2441277.5	71	11	22	0	273.405235
2441278.0	71	11	22	12	88.851214
2441278.5	71	11	23	0	264.297194
2441279.0	71	11	23	12	79.743174
2441279.5	71	11	24	0	255.189154
2441280.0	71	11	24	12	70.635133
2441280.5	71	11	25	0	246.081113
2441281.0	71	11	25	12	61.527093
2441281.5	71	11	26	0	236.973072
2441282.0	71	11	26	12	52.419052
2441282.5	71	11	27	0	227.865032
2441283.0	71	11	27	12	43.311012
2441283.5	71	11	28	0	218.756991
2441284.0	71	11	28	12	34.202971
2441284.5	71	11	29	0	209.648951
2441285.0	71	11	29	12	25.094931
2441285.5	71	11	30	0	200.540910
2441286.0	71	11	30	12	15.986890

DECEMBER 1971

JULIAN DATE	GMT YR	MO	DAY	HR	$\Delta_{50}^{(o)} + 180^{o} + V_{o}$
2441286.5	71	12	1	0	191.432870
2441287.0	71	12	1	12	6.878850
2441287.5	71	12	2	0	182.324829
2441288.0	71	12	2	12	357.770809
2441288.5	71	12	3	0	173.216789
2441289.0	71	12	3	12	348.662769
2441289.5	71	12	4	0	164.108748
2441290.0	71	12	4	12	339.554728
2441290.5	71	12	5	0	155.000708
2441291.0	71	12	5	12	330.446688
2441291.5	71	12	6	0	145.892667
2441292.0	71	12	6	12	321.338647
2441292.5	71	12	7	0	136.784627
2441293.0	71	12	7	12	312.230607
2441293.5	71	12	8	0	127.676586
2441294.0	71	12	8	12	303.122566
2441294.5	71	12	9	0	118.568546
2441295.0	71	12	9	12	294.014526
2441295.5	71	12	10	0	109.460505
2441296.0	71	12	10	12	284.906485
2441296.5	71	12	11	0	100.352465
2441297.0	71	12	11	12	275.798445
2441297.5	71	12	12	0	91.244424
2441298.0	71	12	12	12	266.690404
2441298.5	71	12	13	0	82.136384
2441299.0	71	12	13	12	257.582363
2441299.5	71	12	14	0	73.028343
2441300.0	71	12	14	12	248.474323
2441300.5	71	12	15	0	63.920303
2441301.0	71	12	15	12	239.366282
2441301.5	71	12	16	0	54.812262
2441302.0	71	12	16	12	230.258242
2441302.5	71	12	17	0	45.704222
2441303.0	71	12	17	12	221.150201
2441303.5	71	12	18	0	36.596181
2441304.0	71	12	18	12	212.042161
2441304.5	71	12	19	0	27.488141
2441305.0	71	12	19	12	202.934120
2441305.5	71	12	20	0	18.380100
2441306.0	71	12	20	12	193.826080
2441306.5	71	12	21	0	9.272060
2441307.0	71	12	21	12	184.718039
2441307.5	71	12	22	0	.164019
2441308.0	71	12	22	12	175.609999
2441308.5	71	12	23	0	351.055979
2441309.0	71	12	23	12	166.501958
2441309.5	71	12	24	0	341.947938
2441310.0	71	12	24	12	157.393918
2441310.5	71	12	25	0	332.839898
2441311.0	71	12	25	12	148.285877
2441311.5	71	12	26	0	323.731857
2441312.0	71	12	26	12	139.177837
2441312.5	71	12	27	0	314.623817
2441313.0	71	12	27	12	130.069796
2441313.5	71	12	28	0	305.515776
2441314.0	71	12	28	12	120.961756
2441314.5	71	12	29	0	296.407735
2441315.0	71	12	29	12	111.853715
2441315.5	71	12	30	0	287.299695
2441316.0	71	12	30	12	102.745675
2441316.5	71	12	31	0	278.191654
2441317.0	71	12	31	12	93.637634

Table 6-5. Mars Prime Meridian Angle from Earth Node (contd)

JANUARY 1972

JULIAN DATE	GMT YR	MO	DAY	HR	$\Delta_{50}^{(o)} + 180^o + V_o$
2441317.5	72	1	1	0	269.083614
2441318.0	72	1	1	12	84.529594
2441318.5	72	1	2	0	259.975573
2441319.0	72	1	2	12	75.421553
2441319.5	72	1	3	0	250.867533
2441320.0	72	1	3	12	66.313513
2441320.5	72	1	4	0	241.759492
2441321.0	72	1	4	12	57.205472
2441321.5	72	1	5	0	232.651452
2441322.0	72	1	5	12	48.097432
2441322.5	72	1	6	0	223.543411
2441323.0	72	1	6	12	38.989391
2441323.5	72	1	7	0	214.435371
2441324.0	72	1	7	12	29.881351
2441324.5	72	1	8	0	205.327330
2441325.0	72	1	8	12	20.773310
2441325.5	72	1	9	0	196.219290
2441326.0	72	1	9	12	11.665270
2441326.5	72	1	10	0	187.111249
2441327.0	72	1	10	12	2.557229
2441327.5	72	1	11	0	178.003209
2441328.0	72	1	11	12	353.449189
2441328.5	72	1	12	0	168.895168
2441329.0	72	1	12	12	344.341148
2441329.5	72	1	13	0	159.787128
2441330.0	72	1	13	12	335.233108
2441330.5	72	1	14	0	150.679087
2441331.0	72	1	14	12	326.125067
2441331.5	72	1	15	0	141.571047
2441332.0	72	1	15	12	317.017026
2441332.5	72	1	16	0	132.463006
2441333.0	72	1	16	12	307.908986
2441333.5	72	1	17	0	123.354966
2441334.0	72	1	17	12	298.800945
2441334.5	72	1	18	0	114.246925
2441335.0	72	1	18	12	289.692905
2441335.5	72	1	19	0	105.138885
2441336.0	72	1	19	12	280.584864
2441336.5	72	1	20	0	96.030844
2441337.0	72	1	20	12	271.476824
2441337.5	72	1	21	0	86.922804
2441338.0	72	1	21	12	262.368783
2441338.5	72	1	22	0	77.814763
2441339.0	72	1	22	12	253.260743
2441339.5	72	1	23	0	68.706723
2441340.0	72	1	23	12	244.152702
2441340.5	72	1	24	0	59.598682
2441341.0	72	1	24	12	235.044662
2441341.5	72	1	25	0	50.490642
2441342.0	72	1	25	12	225.936621
2441342.5	72	1	26	0	41.382601
2441343.0	72	1	26	12	216.828581
2441343.5	72	1	27	0	32.274561
2441344.0	72	1	27	12	207.720540
2441344.5	72	1	28	0	23.166520
2441345.0	72	1	28	12	198.612500
2441345.5	72	1	29	0	14.058480
2441346.0	72	1	29	12	189.504459
2441346.5	72	1	30	0	4.950439
2441347.0	72	1	30	12	180.396419
2441347.5	72	1	31	0	355.842399
2441348.0	72	1	31	12	171.288378

FEBRUARY 1972

JULIAN DATE	GMT YR	MO	DAY	HR	$\Delta_{50}^{(o)} + 180^o + V_o$
2441348.5	72	2	1	0	346.734358
2441349.0	72	2	1	12	162.180338
2441349.5	72	2	2	0	337.626317
2441350.0	72	2	2	12	153.072297
2441350.5	72	2	3	0	328.518277
2441351.0	72	2	3	12	143.964257
2441351.5	72	2	4	0	319.410236
2441352.0	72	2	4	12	134.856216
2441352.5	72	2	5	0	310.302196
2441353.0	72	2	5	12	125.748176
2441353.5	72	2	6	0	301.194155
2441354.0	72	2	6	12	116.640135
2441354.5	72	2	7	0	292.086115
2441355.0	72	2	7	12	107.532095
2441355.5	72	2	8	0	282.978074
2441356.0	72	2	8	12	98.424054
2441356.5	72	2	9	0	273.870034
2441357.0	72	2	9	12	89.316014
2441357.5	72	2	10	0	264.761993
2441358.0	72	2	10	12	80.207973
2441358.5	72	2	11	0	255.653953
2441359.0	72	2	11	12	71.099933
2441359.5	72	2	12	0	246.545912
2441360.0	72	2	12	12	61.991892
2441360.5	72	2	13	0	237.437872
2441361.0	72	2	13	12	52.883852
2441361.5	72	2	14	0	228.329831
2441362.0	72	2	14	12	43.775811
2441362.5	72	2	15	0	219.221791
2441363.0	72	2	15	12	34.667771
2441363.5	72	2	16	0	210.113750
2441364.0	72	2	16	12	25.559730
2441364.5	72	2	17	0	201.005710
2441365.0	72	2	17	12	16.451689
2441365.5	72	2	18	0	191.897669
2441366.0	72	2	18	12	7.343649
2441366.5	72	2	19	0	182.789629
2441367.0	72	2	19	12	358.235608
2441367.5	72	2	20	0	173.681588
2441368.0	72	2	20	12	349.127568
2441368.5	72	2	21	0	164.573548
2441369.0	72	2	21	12	340.019527
2441369.5	72	2	22	0	155.465507
2441370.0	72	2	22	12	330.911487
2441370.5	72	2	23	0	146.357467
2441371.0	72	2	23	12	321.803446
2441371.5	72	2	24	0	137.249426
2441372.0	72	2	24	12	312.695406
2441372.5	72	2	25	0	128.141386
2441373.0	72	2	25	12	303.587365
2441373.5	72	2	26	0	119.033345
2441374.0	72	2	26	12	294.479325
2441374.5	72	2	27	0	109.925305
2441375.0	72	2	27	12	285.371284
2441375.5	72	2	28	0	100.817264
2441376.0	72	2	28	12	276.263244
2441376.5	72	2	29	0	91.709224
2441377.0	72	2	29	12	267.155203

Table 6-5. Mars Prime Meridian Angle from Earth Node (contd)

MARCH 1972

JULIAN DATE	GMT YR	MO	DAY	HR	$\Delta_{50}^{(o)} + 180^o + V_o$
2441377.5	72	3	1	0	82.601183
2441378.0	72	3	1	12	258.047163
2441378.5	72	3	2	0	73.493143
2441379.0	72	3	2	12	248.939122
2441379.5	72	3	3	0	64.385102
2441380.0	72	3	3	12	239.831082
2441380.5	72	3	4	0	55.277062
2441381.0	72	3	4	12	230.723041
2441381.5	72	3	5	0	46.169021
2441382.0	72	3	5	12	221.615001
2441382.5	72	3	6	0	37.060980
2441383.0	72	3	6	12	212.506960
2441383.5	72	3	7	0	27.952940
2441384.0	72	3	7	12	203.398920
2441384.5	72	3	8	0	18.844899
2441385.0	72	3	8	12	194.290879
2441385.5	72	3	9	0	9.736859
2441386.0	72	3	9	12	185.182839
2441386.5	72	3	10	0	.628818
2441387.0	72	3	10	12	176.074798
2441387.5	72	3	11	0	351.520778
2441388.0	72	3	11	12	166.966758
2441388.5	72	3	12	0	342.412737
2441389.0	72	3	12	12	157.858717
2441389.5	72	3	13	0	333.304697
2441390.0	72	3	13	12	148.750677
2441390.5	72	3	14	0	324.196656
2441391.0	72	3	14	12	139.642636
2441391.5	72	3	15	0	315.088616
2441392.0	72	3	15	12	130.534596
2441392.5	72	3	16	0	305.980575
2441393.0	72	3	16	12	121.426555
2441393.5	72	3	17	0	296.872535
2441394.0	72	3	17	12	112.318515
2441394.5	72	3	18	0	287.764494
2441395.0	72	3	18	12	103.210474
2441395.5	72	3	19	0	278.656454
2441396.0	72	3	19	12	94.102434
2441396.5	72	3	20	0	269.548413
2441397.0	72	3	20	12	84.994393
2441397.5	72	3	21	0	260.440373
2441398.0	72	3	21	12	75.886353
2441398.5	72	3	22	0	251.332332
2441399.0	72	3	22	12	66.778312
2441399.5	72	3	23	0	242.224292
2441400.0	72	3	23	12	57.670271
2441400.5	72	3	24	0	233.116251
2441401.0	72	3	24	12	48.562231
2441401.5	72	3	25	0	224.008211
2441402.0	72	3	25	12	39.454190
2441402.5	72	3	26	0	214.900170
2441403.0	72	3	26	12	30.346150
2441403.5	72	3	27	0	205.792130
2441404.0	72	3	27	12	21.238109
2441404.5	72	3	28	0	196.684089
2441405.0	72	3	28	12	12.130069
2441405.5	72	3	29	0	187.576049
2441406.0	72	3	29	12	3.022028
2441406.5	72	3	30	0	178.468008
2441407.0	72	3	30	12	353.913988
2441407.5	72	3	31	0	169.359968
2441408.0	72	3	31	12	344.805947

APRIL 1972

JULIAN DATE	GMT YR	MO	DAY	HR	$\Delta_{50}^{(o)} + 180^o + V_o$
2441408.5	72	4	1	0	160.251927
2441409.0	72	4	1	12	335.697907
2441409.5	72	4	2	0	151.143887
2441410.0	72	4	2	12	326.589866
2441410.5	72	4	3	0	142.035846
2441411.0	72	4	3	12	317.481826
2441411.5	72	4	4	0	132.927806
2441412.0	72	4	4	12	308.373785
2441412.5	72	4	5	0	123.819765
2441413.0	72	4	5	12	299.265745
2441413.5	72	4	6	0	114.711725
2441414.0	72	4	6	12	290.157704
2441414.5	72	4	7	0	105.603684
2441415.0	72	4	7	12	281.049664
2441415.5	72	4	8	0	96.495643
2441416.0	72	4	8	12	271.941623
2441416.5	72	4	9	0	87.387603
2441417.0	72	4	9	12	262.833583
2441417.5	72	4	10	0	78.279562
2441418.0	72	4	10	12	253.725542
2441418.5	72	4	11	0	69.171522
2441419.0	72	4	11	12	244.617502
2441419.5	72	4	12	0	60.063481
2441420.0	72	4	12	12	235.509461
2441420.5	72	4	13	0	50.955441
2441421.0	72	4	13	12	226.401421
2441421.5	72	4	14	0	41.847400
2441422.0	72	4	14	12	217.293380
2441422.5	72	4	15	0	32.739360
2441423.0	72	4	15	12	208.185340
2441423.5	72	4	16	0	23.631319
2441424.0	72	4	16	12	199.077299
2441424.5	72	4	17	0	14.523279
2441425.0	72	4	17	12	189.969259
2441425.5	72	4	18	0	5.415238
2441426.0	72	4	18	12	180.861218
2441426.5	72	4	19	0	356.307198
2441427.0	72	4	19	12	171.753178
2441427.5	72	4	20	0	347.199157
2441428.0	72	4	20	12	162.645137
2441428.5	72	4	21	0	338.091117
2441429.0	72	4	21	12	153.537097
2441429.5	72	4	22	0	328.983076
2441430.0	72	4	22	12	144.429056
2441430.5	72	4	23	0	319.875036
2441431.0	72	4	23	12	135.321016
2441431.5	72	4	24	0	310.766995
2441432.0	72	4	24	12	126.212975
2441432.5	72	4	25	0	301.658955
2441433.0	72	4	25	12	117.104934
2441433.5	72	4	26	0	292.550914
2441434.0	72	4	26	12	107.996894
2441434.5	72	4	27	0	283.442874
2441435.0	72	4	27	12	98.888853
2441435.5	72	4	28	0	274.334833
2441436.0	72	4	28	12	89.780813
2441436.5	72	4	29	0	265.226793
2441437.0	72	4	29	12	80.672772
2441437.5	72	4	30	0	256.118752
2441438.0	72	4	30	12	71.564732

Table 6-5. Mars Prime Meridian Angle from Earth Node (contd)

MAY 1972

JULIAN DATE	GMT YR	MO	DAY	HR	$\Delta_{50}^{(o)} + 180^o + V_o$
2441438.5	72	5	1	0	247.010712
2441439.0	72	5	1	12	62.456691
2441439.5	72	5	2	0	237.902671
2441440.0	72	5	2	12	53.348651
2441440.5	72	5	3	0	228.794631
2441441.0	72	5	3	12	44.240610
2441441.5	72	5	4	0	219.686590
2441442.0	72	5	4	12	35.132570
2441442.5	72	5	5	0	210.578550
2441443.0	72	5	5	12	26.024529
2441443.5	72	5	6	0	201.470509
2441444.0	72	5	6	12	16.916489
2441444.5	72	5	7	0	192.362469
2441445.0	72	5	7	12	7.808448
2441445.5	72	5	8	0	183.254428
2441446.0	72	5	8	12	358.700408
2441446.5	72	5	9	0	174.146388
2441447.0	72	5	9	12	349.592367
2441447.5	72	5	10	0	165.038347
2441448.0	72	5	10	12	340.484327
2441448.5	72	5	11	0	155.930307
2441449.0	72	5	11	12	331.376286
2441449.5	72	5	12	0	146.822266
2441450.0	72	5	12	12	322.268246
2441450.5	72	5	13	0	137.714225
2441451.0	72	5	13	12	313.160205
2441451.5	72	5	14	0	128.606185
2441452.0	72	5	14	12	304.052165
2441452.5	72	5	15	0	119.498144
2441453.0	72	5	15	12	294.944124
2441453.5	72	5	16	0	110.390104
2441454.0	72	5	16	12	285.836084
2441454.5	72	5	17	0	101.282063
2441455.0	72	5	17	12	276.728043
2441455.5	72	5	18	0	92.174023
2441456.0	72	5	18	12	267.620003
2441456.5	72	5	19	0	83.065982
2441457.0	72	5	19	12	258.511962
2441457.5	72	5	20	0	73.957942
2441458.0	72	5	20	12	249.403922
2441458.5	72	5	21	0	64.849901
2441459.0	72	5	21	12	240.295881
2441459.5	72	5	22	0	55.741861
2441460.0	72	5	22	12	231.187841
2441460.5	72	5	23	0	46.633820
2441461.0	72	5	23	12	222.079800
2441461.5	72	5	24	0	37.525780
2441462.0	72	5	24	12	212.971760
2441462.5	72	5	25	0	28.417739
2441463.0	72	5	25	12	203.863719
2441463.5	72	5	26	0	19.309699
2441464.0	72	5	26	12	194.755679
2441464.5	72	5	27	0	10.201658
2441465.0	72	5	27	12	185.647638
2441465.5	72	5	28	0	1.093618
2441466.0	72	5	28	12	176.539597
2441466.5	72	5	29	0	351.985577
2441467.0	72	5	29	12	167.431557
2441467.5	72	5	30	0	342.877537
2441468.0	72	5	30	12	158.323516
2441468.5	72	5	31	0	333.769496
2441469.0	72	5	31	12	149.215476

JUNE 1972

JULIAN DATE	GMT YR	MO	DAY	HR	$\Delta_{50}^{(o)} + 180^o + V_o$
2441469.5	72	6	1	0	324.661456
2441470.0	72	6	1	12	140.107435
2441470.5	72	6	2	0	315.553415
2441471.0	72	6	2	12	130.999395
2441471.5	72	6	3	0	306.445375
2441472.0	72	6	3	12	121.891354
2441472.5	72	6	4	0	297.337334
2441473.0	72	6	4	12	112.783314
2441473.5	72	6	5	0	288.229294
2441474.0	72	6	5	12	103.675273
2441474.5	72	6	6	0	279.121253
2441475.0	72	6	6	12	94.567233
2441475.5	72	6	7	0	270.013213
2441476.0	72	6	7	12	85.459192
2441476.5	72	6	8	0	260.905172
2441477.0	72	6	8	12	76.351152
2441477.5	72	6	9	0	251.797132
2441478.0	72	6	9	12	67.243111
2441478.5	72	6	10	0	242.689091
2441479.0	72	6	10	12	58.135071
2441479.5	72	6	11	0	233.581051
2441480.0	72	6	11	12	49.027030
2441480.5	72	6	12	0	224.473010
2441481.0	72	6	12	12	39.918990
2441481.5	72	6	13	0	215.364970
2441482.0	72	6	13	12	30.810949
2441482.5	72	6	14	0	206.256929
2441483.0	72	6	14	12	21.702909
2441483.5	72	6	15	0	197.148888
2441484.0	72	6	15	12	12.594868
2441484.5	72	6	16	0	188.040848
2441485.0	72	6	16	12	3.486828
2441485.5	72	6	17	0	178.932807
2441486.0	72	6	17	12	354.378787
2441486.5	72	6	18	0	169.824767
2441487.0	72	6	18	12	345.270747
2441487.5	72	6	19	0	160.716726
2441488.0	72	6	19	12	336.162706
2441488.5	72	6	20	0	151.608686
2441489.0	72	6	20	12	327.054666
2441489.5	72	6	21	0	142.500645
2441490.0	72	6	21	12	317.946625
2441490.5	72	6	22	0	133.392605
2441491.0	72	6	22	12	308.838585
2441491.5	72	6	23	0	124.284564
2441492.0	72	6	23	12	299.730544
2441492.5	72	6	24	0	115.176524
2441493.0	72	6	24	12	290.622504
2441493.5	72	6	25	0	106.068483
2441494.0	72	6	25	12	281.514463
2441494.5	72	6	26	0	96.960443
2441495.0	72	6	26	12	272.406423
2441495.5	72	6	27	0	87.852402
2441496.0	72	6	27	12	263.298382
2441496.5	72	6	28	0	78.744362
2441497.0	72	6	28	12	254.190342
2441497.5	72	6	29	0	69.636321
2441498.0	72	6	29	12	245.082301
2441498.5	72	6	30	0	60.528281
2441499.0	72	6	30	12	235.974261

Table 6-5. Mars Prime Meridian Angle from Earth Node (contd)

JULY 1972

JULIAN DATE	YR	GMT MO	DAY	HR	$\Delta_{50}^{(o)} + 180^o + V_o$
2441499.5	72	7	1	0	51.420240
2441500.0	72	7	1	12	226.866220
2441500.5	72	7	2	0	42.312200
2441501.0	72	7	2	12	217.758179
2441501.5	72	7	3	0	33.204159
2441502.0	72	7	3	12	208.650139
2441502.5	72	7	4	0	24.096119
2441503.0	72	7	4	12	199.542098
2441503.5	72	7	5	0	14.988078
2441504.0	72	7	5	12	190.434058
2441504.5	72	7	6	0	5.880038
2441505.0	72	7	6	12	181.326017
2441505.5	72	7	7	0	356.771997
2441506.0	72	7	7	12	172.217977
2441506.5	72	7	8	0	347.663957
2441507.0	72	7	8	12	163.109936
2441507.5	72	7	9	0	338.555916
2441508.0	72	7	9	12	154.001896
2441508.5	72	7	10	0	329.447876
2441509.0	72	7	10	12	144.893855
2441509.5	72	7	11	0	320.339835
2441510.0	72	7	11	12	135.785815
2441510.5	72	7	12	0	311.231795
2441511.0	72	7	12	12	126.677774
2441511.5	72	7	13	0	302.123754
2441512.0	72	7	13	12	117.569734
2441512.5	72	7	14	0	293.015714
2441513.0	72	7	14	12	108.461693
2441513.5	72	7	15	0	283.907673
2441514.0	72	7	15	12	99.353653
2441514.5	72	7	16	0	274.799633
2441515.0	72	7	16	12	90.245612
2441515.5	72	7	17	0	265.691592
2441516.0	72	7	17	12	81.137572
2441516.5	72	7	18	0	256.583551
2441517.0	72	7	18	12	72.029531
2441517.5	72	7	19	0	247.475511
2441518.0	72	7	19	12	62.921491
2441518.5	72	7	20	0	238.367470
2441519.0	72	7	20	12	53.813450
2441519.5	72	7	21	0	229.259430
2441520.0	72	7	21	12	44.705410
2441520.5	72	7	22	0	220.151389
2441521.0	72	7	22	12	35.597369
2441521.5	72	7	23	0	211.043349
2441522.0	72	7	23	12	26.489329
2441522.5	72	7	24	0	201.935308
2441523.0	72	7	24	12	17.381288
2441523.5	72	7	25	0	192.827268
2441524.0	72	7	25	12	8.273248
2441524.5	72	7	26	0	183.719227
2441525.0	72	7	26	12	359.165207
2441525.5	72	7	27	0	174.611187
2441526.0	72	7	27	12	350.057167
2441526.5	72	7	28	0	165.503146
2441527.0	72	7	28	12	340.949126
2441527.5	72	7	29	0	156.395106
2441528.0	72	7	29	12	331.841086
2441528.5	72	7	30	0	147.287065
2441529.0	72	7	30	12	322.733045
2441529.5	72	7	31	0	138.179025
2441530.0	72	7	31	12	313.625005

AUGUST 1972

JULIAN DATE	YR	GMT MO	DAY	HR	$\Delta_{50}^{(o)} + 180^o + V_o$
2441530.5	72	8	1	0	129.070984
2441531.0	72	8	1	12	304.516964
2441531.5	72	8	2	0	119.962944
2441532.0	72	8	2	12	295.408924
2441532.5	72	8	3	0	110.854903
2441533.0	72	8	3	12	286.300883
2441533.5	72	8	4	0	101.746863
2441534.0	72	8	4	12	277.192842
2441534.5	72	8	5	0	92.638822
2441535.0	72	8	5	12	268.084802
2441535.5	72	8	6	0	83.530782
2441536.0	72	8	6	12	258.976761
2441536.5	72	8	7	0	74.422741
2441537.0	72	8	7	12	249.868721
2441537.5	72	8	8	0	65.314701
2441538.0	72	8	8	12	240.760680
2441538.5	72	8	9	0	56.206660
2441539.0	72	8	9	12	231.652640
2441539.5	72	8	10	0	47.098620
2441540.0	72	8	10	12	222.544599
2441540.5	72	8	11	0	37.990579
2441541.0	72	8	11	12	213.436559
2441541.5	72	8	12	0	28.882539
2441542.0	72	8	12	12	204.328518
2441542.5	72	8	13	0	19.774498
2441543.0	72	8	13	12	195.220478
2441543.5	72	8	14	0	10.666458
2441544.0	72	8	14	12	186.112437
2441544.5	72	8	15	0	1.558417
2441545.0	72	8	15	12	177.004397
2441545.5	72	8	16	0	352.450377
2441546.0	72	8	16	12	167.896356
2441546.5	72	8	17	0	343.342336
2441547.0	72	8	17	12	158.788316
2441547.5	72	8	18	0	334.234296
2441548.0	72	8	18	12	149.680275
2441548.5	72	8	19	0	325.126255
2441549.0	72	8	19	12	140.572235
2441549.5	72	8	20	0	316.018215
2441550.0	72	8	20	12	131.464194
2441550.5	72	8	21	0	306.910174
2441551.0	72	8	21	12	122.356154
2441551.5	72	8	22	0	297.802133
2441552.0	72	8	22	12	113.248113
2441552.5	72	8	23	0	288.694093
2441553.0	72	8	23	12	104.140073
2441553.5	72	8	24	0	279.586052
2441554.0	72	8	24	12	95.032032
2441554.5	72	8	25	0	270.478012
2441555.0	72	8	25	12	85.923992
2441555.5	72	8	26	0	261.369971
2441556.0	72	8	26	12	76.815951
2441556.5	72	8	27	0	252.261931
2441557.0	72	8	27	12	67.707911
2441557.5	72	8	28	0	243.153890
2441558.0	72	8	28	12	58.599870
2441558.5	72	8	29	0	234.045850
2441559.0	72	8	29	12	49.491830
2441559.5	72	8	30	0	224.937809
2441560.0	72	8	30	12	40.383789
2441560.5	72	8	31	0	215.829769
2441561.0	72	8	31	12	31.275749

Table 6-5. Mars Prime Meridian Angle from Earth Node (contd)

SEPTEMBER 1972

JULIAN DATE	GMT YR	MO	DAY	HR	$\Delta_{50}^{(o)} + 180^o + V_o$
2441561.5	72	9	1	0	206.721728
2441562.0	72	9	1	12	22.167708
2441562.5	72	9	2	0	197.613688
2441563.0	72	9	2	12	13.059668
2441563.5	72	9	3	0	188.505647
2441564.0	72	9	3	12	3.951627
2441564.5	72	9	4	0	179.397607
2441565.0	72	9	4	12	354.843587
2441565.5	72	9	5	0	170.289566
2441566.0	72	9	5	12	345.735546
2441566.5	72	9	6	0	161.181526
2441567.0	72	9	6	12	336.627505
2441567.5	72	9	7	0	152.073485
2441568.0	72	9	7	12	327.519465
2441568.5	72	9	8	0	142.965445
2441569.0	72	9	8	12	318.411424
2441569.5	72	9	9	0	133.857404
2441570.0	72	9	9	12	309.303384
2441570.5	72	9	10	0	124.749364
2441571.0	72	9	10	12	300.195343
2441571.5	72	9	11	0	115.641323
2441572.0	72	9	11	12	291.087303
2441572.5	72	9	12	0	106.533283
2441573.0	72	9	12	12	281.979262
2441573.5	72	9	13	0	97.425242
2441574.0	72	9	13	12	272.871222
2441574.5	72	9	14	0	88.317202
2441575.0	72	9	14	12	263.763181
2441575.5	72	9	15	0	79.209161
2441576.0	72	9	15	12	254.655141
2441576.5	72	9	16	0	70.101121
2441577.0	72	9	16	12	245.547100
2441577.5	72	9	17	0	60.993080
2441578.0	72	9	17	12	236.439060
2441578.5	72	9	18	0	51.885040
2441579.0	72	9	18	12	227.331019
2441579.5	72	9	19	0	42.776999
2441580.0	72	9	19	12	218.222979
2441580.5	72	9	20	0	33.668959
2441581.0	72	9	20	12	209.114938
2441581.5	72	9	21	0	24.560918
2441582.0	72	9	21	12	200.006898
2441582.5	72	9	22	0	15.452878
2441583.0	72	9	22	12	190.898857
2441583.5	72	9	23	0	6.344837
2441584.0	72	9	23	12	181.790817
2441584.5	72	9	24	0	357.236796
2441585.0	72	9	24	12	172.682776
2441585.5	72	9	25	0	348.128756
2441586.0	72	9	25	12	163.574736
2441586.5	72	9	26	0	339.020715
2441587.0	72	9	26	12	154.466695
2441587.5	72	9	27	0	329.912675
2441588.0	72	9	27	12	145.358655
2441588.5	72	9	28	0	320.804634
2441589.0	72	9	28	12	136.250614
2441589.5	72	9	29	0	311.696594
2441590.0	72	9	29	12	127.142574
2441590.5	72	9	30	0	302.588553
2441591.0	72	9	30	12	118.034533

OCTOBER 1972

JULIAN DATE	GMT YR	MO	DAY	HR	$\Delta_{50}^{(o)} + 180^o + V_o$
2441591.5	72	10	1	0	293.480513
2441592.0	72	10	1	12	108.926493
2441592.5	72	10	2	0	284.372472
2441593.0	72	10	2	12	99.818452
2441593.5	72	10	3	0	275.264432
2441594.0	72	10	3	12	90.710412
2441594.5	72	10	4	0	266.156391
2441595.0	72	10	4	12	81.602371
2441595.5	72	10	5	0	257.048351
2441596.0	72	10	5	12	72.494331
2441596.5	72	10	6	0	247.940310
2441597.0	72	10	6	12	63.386290
2441597.5	72	10	7	0	238.832270
2441598.0	72	10	7	12	54.278250
2441598.5	72	10	8	0	229.724229
2441599.0	72	10	8	12	45.170209
2441599.5	72	10	9	0	220.616189
2441600.0	72	10	9	12	36.062169
2441600.5	72	10	10	0	211.508148
2441601.0	72	10	10	12	26.954128
2441601.5	72	10	11	0	202.400108
2441602.0	72	10	11	12	17.846087
2441602.5	72	10	12	0	193.292067
2441603.0	72	10	12	12	8.738047
2441603.5	72	10	13	0	184.184027
2441604.0	72	10	13	12	359.630006
2441604.5	72	10	14	0	175.075986
2441605.0	72	10	14	12	350.521966
2441605.5	72	10	15	0	165.967946
2441606.0	72	10	15	12	341.413925
2441606.5	72	10	16	0	156.859905
2441607.0	72	10	16	12	332.305885
2441607.5	72	10	17	0	147.751865
2441608.0	72	10	17	12	323.197844
2441608.5	72	10	18	0	138.643824
2441609.0	72	10	18	12	314.089804
2441609.5	72	10	19	0	129.535784
2441610.0	72	10	19	12	304.981763
2441610.5	72	10	20	0	120.427743
2441611.0	72	10	20	12	295.873723
2441611.5	72	10	21	0	111.319703
2441612.0	72	10	21	12	286.765682
2441612.5	72	10	22	0	102.211662
2441613.0	72	10	22	12	277.657642
2441613.5	72	10	23	0	93.103622
2441614.0	72	10	23	12	268.549601
2441614.5	72	10	24	0	83.995581
2441615.0	72	10	24	12	259.441561
2441615.5	72	10	25	0	74.887541
2441616.0	72	10	25	12	250.333520
2441616.5	72	10	26	0	65.779500
2441617.0	72	10	26	12	241.225480
2441617.5	72	10	27	0	56.671459
2441618.0	72	10	27	12	232.117439
2441618.5	72	10	28	0	47.563419
2441619.0	72	10	28	12	223.009399
2441619.5	72	10	29	0	38.455378
2441620.0	72	10	29	12	213.901358
2441620.5	72	10	30	0	29.347338
2441621.0	72	10	30	12	204.793318
2441621.5	72	10	31	0	20.239297
2441622.0	72	10	31	12	195.685277

Table 6-6. Corrections to Latitude and Longitude $\left(\frac{\Delta\phi}{\Delta\lambda}\right)$ for New Pole ($-80° \leq Lat \leq 80°$)

ℓ_o ↓	LATITUDE																
	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80
0	.288	.285	.284	.284	.283	.283	.283	.283	.283	.282	.282	.282	.282	.281	.281	.280	.277
	1.852	.938	.615	.441	.328	.243	.174	.113	.055	-.002	-.063	-.133	-.219	-.335	-.514	-.852	-1.845
10	.228	.225	.224	.223	.223	.222	.222	.222	.222	.221	.221	.221	.221	.220	.220	.218	.215
	2.107	1.061	.692	.494	.365	.269	.190	.121	.056	-.010	-.079	-.159	-.256	-.387	-.589	-.972	-2.088
20	.162	.158	.157	.156	.155	.155	.155	.154	.154	.154	.154	.153	.153	.152	.152	.150	.146
	2.304	1.154	.750	.534	.393	.288	.202	.127	.056	-.015	-.091	-.177	-.283	-.426	-.645	-1.059	-2.263
30	.091	.086	.084	.084	.083	.083	.082	.082	.082	.082	.081	.081	.080	.080	.079	.077	.073
	2.436	1.214	.787	.560	.411	.300	.210	.131	.056	-.019	-.098	-.189	-.300	-.449	-.679	-1.112	-2.363
40	.016	.011	.010	.009	.008	.008	.008	.007	.007	.007	.006	.006	.006	.005	.004	.003	-.002
	2.498	1.240	.803	.570	.418	.305	.213	.132	.056	-.020	-.101	-.193	-.306	-.458	-.691	-1.129	-2.389
50	-.059	-.064	-.065	-.066	-.067	-.067	-.067	-.068	-.068	-.068	-.069	-.069	-.069	-.070	-.071	-.072	-.077
	2.486	1.230	.796	.565	.414	.303	.212	.132	.056	-.019	-.098	-.189	-.300	-.450	-.680	-1.109	-2.361
60	-.133	-.137	-.138	-.139	-.140	-.140	-.140	-.141	-.141	-.141	-.141	-.142	-.142	-.143	-.143	-.145	-.149
	2.399	1.184	.766	.544	.399	.292	.205	.129	.057	-.015	-.091	-.178	-.285	-.428	-.646	-1.055	-2.222
70	-.202	-.206	-.207	-.208	-.208	-.209	-.209	-.209	-.209	-.210	-.210	-.210	-.211	-.211	-.212	-.213	-.216
	2.239	1.103	.714	.508	.374	.275	.194	.123	.057	-.009	-.080	-.160	-.258	-.390	-.592	-.968	-2.036
80	-.266	-.269	-.270	-.271	-.271	-.271	-.271	-.272	-.272	-.272	-.272	-.272	-.273	-.273	-.273	-.274	-.277
	2.008	.989	.642	.458	.339	.251	.179	.116	.057	-.002	-.065	-.136	-.223	-.340	-.518	-.851	-1.791
90	-.322	-.324	-.325	-.325	-.325	-.325	-.326	-.326	-.326	-.326	-.326	-.326	-.326	-.327	-.327	-.328	-.330
	1.712	.846	.551	.396	.295	.221	.160	.107	.057	.007	-.046	-.106	-.179	-.277	-.428	-.707	-1.495
100	-.367	-.369	-.369	-.369	-.370	-.370	-.370	-.370	-.370	-.370	-.370	-.370	-.370	-.370	-.371	-.371	-.372
	1.362	.677	.445	.323	.244	.185	.138	.096	.057	.018	-.024	-.071	-.128	-.205	-.323	-.541	-1.156
110	-.402	-.402	-.402	-.403	-.403	-.403	-.403	-.403	-.403	-.403	-.403	-.403	-.403	-.403	-.403	-.403	-.404
	.967	.488	.327	.242	.187	.146	.113	.084	.057	.030	.001	-.032	-.072	-.125	-.207	-.358	-.783
120	-.423	-.423	-.423	-.423	-.423	-.423	-.423	-.423	-.423	-.423	-.423	-.423	-.423	-.423	-.424	-.424	-.424
	.541	.286	.200	.155	.126	.104	.086	.071	.057	.042	.027	.010	-.012	-.040	-.083	-.164	-.389
130	-.431	-.431	-.431	-.431	-.431	-.431	-.431	-.431	-.431	-.431	-.431	-.431	-.431	-.431	-.431	-.431	-.431
	.098	.076	.069	.065	.062	.060	.059	.057	.056	.055	.054	.052	.050	.048	.044	.037	.018
140	-.426	-.426	-.426	-.426	-.426	-.426	-.426	-.426	-.426	-.426	-.426	-.426	-.426	-.426	-.426	-.426	-.426
	-.346	-.135	-.063	-.026	-.001	.017	.031	.044	.056	.068	.081	.095	.113	.136	.172	.239	.426
150	-.407	-.407	-.407	-.407	-.407	-.407	-.407	-.408	-.408	-.408	-.408	-.408	-.408	-.408	-.408	-.408	-.409
	-.777	-.339	-.191	-.114	-.063	-.026	.004	.031	.056	.081	.107	.137	.173	.222	.297	.435	.824
160	-.375	-.376	-.376	-.376	-.377	-.377	-.377	-.377	-.377	-.377	-.377	-.377	-.377	-.377	-.378	-.378	-.379
	-1.178	-.531	-.312	-.196	-.121	-.066	-.021	.019	.056	.092	.132	.176	.230	.303	.414	.621	1.201
170	-.331	-.333	-.334	-.334	-.334	-.334	-.335	-.335	-.335	-.335	-.335	-.335	-.335	-.336	-.336	-.337	-.338
	-1.538	-.703	-.420	-.271	-.174	-.102	-.044	.007	.055	.103	.154	.212	.282	.377	.521	.790	1.547
180	-.277	-.280	-.281	-.281	-.282	-.282	-.282	-.282	-.283	-.283	-.283	-.283	-.283	-.284	-.284	-.285	-.288
	-1.845	-.852	-.514	-.335	-.219	-.133	-.063	-.002	.055	.113	.174	.243	.328	.441	.615	.938	1.852
190	-.215	-.218	-.220	-.220	-.221	-.221	-.221	-.221	-.222	-.222	-.222	-.222	-.223	-.223	-.224	-.225	-.228
	-2.088	-.972	-.589	-.387	-.256	-.159	-.079	-.010	.056	.121	.190	.269	.365	.494	.692	1.061	2.107
200	-.146	-.150	-.152	-.152	-.153	-.153	-.154	-.154	-.154	-.154	-.155	-.155	-.155	-.156	-.157	-.158	-.162
	-2.263	-1.059	-.645	-.426	-.283	-.177	-.091	-.015	.056	.127	.202	.288	.393	.534	.750	1.154	2.304
210	-.073	-.077	-.079	-.080	-.080	-.081	-.081	-.082	-.082	-.082	-.082	-.083	-.083	-.084	-.084	-.086	-.091
	-2.363	-1.112	-.679	-.449	-.300	-.189	-.098	-.019	.056	.131	.210	.300	.411	.560	.787	1.214	2.436
220	.002	-.003	-.004	-.005	-.006	-.006	-.006	-.007	-.007	-.007	-.008	-.008	-.008	-.009	-.010	-.011	-.016
	-2.389	-1.129	-.691	-.458	-.306	-.193	-.101	-.020	.056	.132	.213	.305	.418	.570	.803	1.240	2.498
230	.077	.072	.071	.070	.069	.069	.069	.068	.068	.068	.067	.067	.067	.066	.065	.064	.059
	-2.341	-1.109	-.680	-.450	-.300	-.189	-.098	-.019	.056	.132	.212	.303	.414	.565	.796	1.230	2.486
240	.149	.145	.143	.143	.142	.142	.141	.141	.141	.141	.140	.140	.140	.139	.138	.137	.133
	-2.222	-1.055	-.646	-.428	-.285	-.178	-.091	-.015	.057	.129	.205	.292	.399	.544	.766	1.184	2.399
250	.216	.213	.212	.211	.211	.210	.210	.210	.209	.209	.209	.209	.208	.208	.207	.206	.202
	-2.036	-.968	-.592	-.390	-.258	-.160	-.080	-.009	.057	.123	.194	.275	.374	.508	.714	1.103	2.239
260	.277	.274	.273	.273	.273	.272	.272	.272	.272	.272	.271	.271	.271	.271	.270	.269	.266
	-1.791	-.851	-.518	-.340	-.223	-.136	-.065	-.002	.057	.116	.179	.251	.339	.458	.642	.989	2.008
270	.330	.328	.327	.327	.326	.326	.326	.326	.326	.326	.326	.325	.325	.325	.325	.324	.322
	-1.495	-.707	-.428	-.277	-.179	-.106	-.046	.007	.057	.107	.160	.221	.295	.396	.551	.846	1.712
280	.372	.371	.371	.370	.370	.370	.370	.370	.370	.370	.370	.370	.370	.369	.369	.369	.367
	-1.156	-.541	-.323	-.205	-.128	-.071	-.024	.018	.057	.096	.138	.185	.244	.323	.445	.677	1.362
290	.404	.403	.403	.403	.403	.403	.403	.403	.403	.403	.403	.403	.403	.403	.402	.402	.402
	-.783	-.358	-.207	-.125	-.072	-.032	.001	.030	.057	.084	.113	.146	.187	.242	.327	.488	.967
300	.424	.424	.423	.423	.423	.423	.423	.423	.423	.423	.423	.423	.423	.423	.423	.423	.423
	-.389	-.164	-.083	-.040	-.012	.010	.027	.042	.057	.071	.086	.104	.126	.155	.200	.286	.541
310	.431	.431	.431	.431	.431	.431	.431	.431	.431	.431	.431	.431	.431	.431	.431	.431	.431
	.018	.037	.044	.048	.050	.052	.054	.055	.056	.057	.059	.060	.062	.065	.069	.076	.098
320	.426	.426	.426	.426	.426	.426	.426	.426	.426	.426	.426	.426	.426	.426	.426	.426	.426
	.426	.239	.172	.136	.113	.095	.081	.068	.056	.044	.031	.017	-.001	-.026	-.063	-.135	-.346
330	.409	.408	.408	.408	.408	.408	.408	.408	.408	.408	.407	.407	.407	.407	.407	.407	.407
	.824	.435	.297	.222	.173	.137	.107	.081	.056	.031	.004	-.026	-.063	-.114	-.191	-.339	-.777
340	.379	.378	.378	.377	.377	.377	.377	.377	.377	.377	.377	.377	.377	.376	.376	.376	.375
	1.201	.621	.414	.303	.230	.176	.132	.092	.056	.019	-.021	-.066	-.121	-.196	-.312	-.531	-1.178
350	.338	.337	.336	.336	.335	.335	.335	.335	.335	.335	.335	.334	.334	.334	.334	.333	.331
	1.547	.790	.521	.377	.282	.212	.154	.103	.055	.007	-.044	-.102	-.174	-.271	-.420	-.703	-1.538
360	.288	.285	.284	.284	.283	.283	.283	.283	.283	.282	.282	.282	.282	.281	.281	.280	.277
	1.852	.938	.615	.441	.328	.243	.174	.113	.055	-.002	-.063	-.133	-.219	-.335	-.514	-.852	-1.845

Note: For new longitude convention, reduce $\Delta\lambda$ by 0.178 (see Subsection IV D)

Table 6-7. Corrections to Latitude and Longitude $\left(\frac{\Delta\phi}{\Delta\lambda}\right)$ *for New Pole (80° ≤ Lat ≤ 89°)*

ℓ_o ↓	LATITUDE 80	81	82	83	84	85	86	87	88	89
0	.277 -1.845	.276 -2.067	.276 -2.345	.275 -2.707	.273 -3.193	.271 -3.884	.268 -4.944	.263 -6.774	.252 -10.680	.212 -24.362
10	.215 -2.088	.214 -2.337	.213 -2.649	.212 -3.052	.210 -3.593	.207 -4.359	.204 -5.526	.197 -7.520	.184 -11.689	.138 -25.360
20	.146 -2.263	.145 -2.529	.144 -2.863	.142 -3.294	.140 -3.871	.137 -4.683	.133 -5.913	.126 -7.992	.111 -12.247	.063 -25.401
30	.073 -2.363	.072 -2.640	.071 -2.985	.069 -3.429	.067 -4.021	.064 -4.852	.059 -6.101	.051 -8.191	.036 -12.386	-.011 -24.696
40	-.002 -2.389	-.003 -2.666	-.005 -3.011	-.006 -3.454	-.008 -4.044	-.012 -4.867	-.016 -6.097	-.024 -8.134	-.039 -12.146	-.083 -23.412
50	-.077 -2.341	-.078 -2.610	-.079 -2.945	-.081 -3.374	-.083 -3.943	-.086 -4.734	-.090 -5.910	-.097 -7.839	-.111 -11.575	-.150 -21.680
60	-.149 -2.222	-.150 -2.475	-.151 -2.791	-.152 -3.194	-.154 -3.727	-.157 -4.465	-.161 -5.556	-.167 -7.330	-.179 -10.718	-.211 -19.600
70	-.216 -2.036	-.217 -2.268	-.218 -2.555	-.219 -2.921	-.221 -3.404	-.223 -4.071	-.226 -5.052	-.232 -6.635	-.241 -9.620	-.267 -17.250
80	-.277 -1.791	-.278 -1.995	-.278 -2.246	-.279 -2.566	-.281 -2.988	-.282 -3.568	-.285 -4.418	-.289 -5.781	-.296 -8.324	-.315 -14.691
90	-.330 -1.495	-.330 -1.664	-.331 -1.874	-.331 -2.141	-.332 -2.491	-.333 -2.972	-.335 -3.674	-.338 -4.795	-.343 -6.867	-.356 -11.972
100	-.372 -1.156	-.372 -1.288	-.373 -1.451	-.373 -1.658	-.374 -1.929	-.374 -2.301	-.375 -2.843	-.377 -3.703	-.380 -5.285	-.388 -9.134
110	-.404 -.783	-.404 -.875	-.404 -.987	-.404 -1.130	-.405 -1.317	-.405 -1.573	-.405 -1.944	-.406 -2.534	-.408 -3.611	-.411 -6.211
120	-.424 -.389	-.424 -.437	-.424 -.496	-.424 -.572	-.424 -.670	-.424 -.805	-.424 -1.001	-.424 -1.311	-.425 -1.876	-.426 -3.232
130	-.431 .018	-.431 .014	-.431 .009	-.431 .002	-.431 -.006	-.431 -.018	-.431 -.034	-.431 -.061	-.431 -.109	-.431 -.225
140	-.426 .426	-.426 .466	-.426 .515	-.426 .578	-.426 .660	-.426 .772	-.426 .934	-.426 1.191	-.427 1.660	-.427 2.785
150	-.409 .824	-.409 .907	-.409 1.010	-.409 1.140	-.409 1.311	-.409 1.544	-.410 1.884	-.410 2.421	-.412 3.403	-.415 5.771
160	-.379 1.201	-.379 1.325	-.380 1.479	-.380 1.675	-.380 1.931	-.381 2.282	-.382 2.792	-.383 3.603	-.386 5.091	-.393 8.706
170	-.338 1.547	-.339 1.710	-.339 1.911	-.340 2.167	-.341 2.503	-.342 2.965	-.343 3.638	-.346 4.711	-.351 6.692	-.362 11.563
180	-.288 1.852	-.288 2.049	-.289 2.294	-.290 2.605	-.291 3.013	-.293 3.576	-.295 4.399	-.299 5.719	-.306 8.175	-.323 14.307
190	-.228 2.107	-.229 2.334	-.230 2.615	-.231 2.973	-.233 3.446	-.235 4.098	-.238 5.055	-.243 6.600	-.252 9.505	-.276 16.899
200	-.162 2.304	-.163 2.555	-.164 2.865	-.165 3.262	-.167 3.787	-.170 4.513	-.174 5.585	-.180 7.326	-.191 10.642	-.222 19.293
210	-.091 2.436	-.092 2.703	-.093 3.035	-.094 3.460	-.096 4.024	-.099 4.807	-.104 5.968	-.111 7.872	-.124 11.547	-.162 21.428
220	-.016 2.498	-.017 2.774	-.019 3.118	-.020 3.560	-.022 4.147	-.026 4.965	-.030 6.188	-.038 8.208	-.053 12.176	-.095 23.232
230	.059 2.486	.058 2.763	.057 3.109	.055 3.554	.053 4.147	.050 4.978	.045 6.227	.037 8.312	.022 12.481	-.025 24.608
240	.133 2.399	.132 2.669	.130 3.006	.129 3.440	.127 4.021	.124 4.839	.119 6.075	.112 8.162	.097 12.416	.049 25.433
250	.202 2.239	.201 2.491	.200 2.808	.199 3.218	.197 3.767	.195 4.544	.191 5.726	.184 7.742	.170 11.939	.124 25.545
260	.266 2.008	.265 2.235	.265 2.521	.263 2.891	.262 3.389	.260 4.097	.257 5.180	.251 7.046	.240 11.016	.198 24.744
270	.322 1.712	.321 1.907	.321 2.151	.320 2.468	.319 2.897	.317 3.507	.315 4.446	.311 6.082	.302 9.631	.269 22.790
280	.367 1.362	.367 1.516	.367 1.710	.366 1.962	.366 2.303	.365 2.790	.363 3.545	.361 4.869	.355 7.797	.332 19.435
290	.402 .967	.401 1.075	.401 1.211	.401 1.388	.401 1.627	.400 1.971	.399 2.505	.398 3.448	.395 5.564	.383 14.520
300	.423 .541	.423 .598	.423 .671	.423 .765	.423 .893	.423 1.078	.422 1.364	.422 1.873	.421 3.025	.418 8.128
310	.431 .098	.431 .103	.431 .109	.431 .117	.431 .128	.431 .144	.431 .169	.431 .213	.431 .313	.431 .763
320	.426 -.346	.426 -.394	.426 -.455	.425 -.533	.425 -.640	.425 -.793	.425 -1.031	.425 -1.455	.424 -2.415	.422 -6.693
330	.407 -.777	.406 -.875	.406 -1.000	.406 -1.162	.406 -1.382	.405 -1.696	.405 -2.186	.404 -3.051	.401 -4.997	.391 -13.318
340	.375 -1.178	.374 -1.324	.374 -1.508	.374 -1.747	.373 -2.070	.372 -2.532	.371 -3.248	.369 -4.506	.363 -7.296	.343 -18.526
350	.331 -1.538	.331 -1.726	.330 -1.961	.329 -2.267	.328 -2.680	.327 -3.269	.325 -4.178	.321 -5.761	.313 -9.209	.281 -22.164
360	.277 -1.845	.276 -2.067	.276 -2.345	.275 -2.707	.273 -3.193	.271 -3.884	.268 -4.944	.263 -6.774	.252 -10.680	.212 -24.362

Note: For new longitude convention, reduce $\Delta\lambda$ by 0.178 (see Subsection IV D)

Table 6-8. Corrections to Latitude and Longitude $\begin{pmatrix}\Delta\phi\\ \Delta\lambda\end{pmatrix}$ for New Pole ($-89° \leq Lat \leq -80°$)

ℓ_o ↓	LATITUDE −89	−88	−87	−86	−85	−84	−83	−82	−81	−80
0	.323 14.307	.306 8.175	.299 5.719	.295 4.399	.293 3.576	.291 3.013	.290 2.605	.289 2.294	.288 2.049	.288 1.852
10	.276 16.899	.252 9.505	.243 6.600	.238 5.055	.235 4.098	.233 3.446	.231 2.973	.230 2.615	.229 2.334	.228 2.107
20	.222 19.293	.191 10.642	.180 7.326	.174 5.585	.170 4.513	.167 3.787	.165 3.262	.164 2.865	.163 2.555	.162 2.304
30	.162 21.428	.124 11.547	.111 7.872	.104 5.968	.099 4.807	.096 4.024	.094 3.460	.093 3.035	.092 2.703	.091 2.436
40	.095 23.232	.053 12.176	.038 8.208	.030 6.188	.026 4.965	.022 4.147	.020 3.560	.019 3.118	.017 2.774	.016 2.498
50	.025 24.608	−.022 12.481	−.037 8.312	−.045 6.227	−.050 4.978	−.053 4.147	−.055 3.554	−.057 3.109	−.058 2.763	−.059 2.486
60	−.049 25.433	−.097 12.416	−.112 8.162	−.119 6.075	−.124 4.839	−.127 4.021	−.129 3.440	−.130 3.006	−.132 2.669	−.133 2.399
70	−.124 25.545	−.170 11.939	−.184 7.742	−.191 5.726	−.195 4.544	−.197 3.767	−.199 3.218	−.200 2.808	−.201 2.491	−.202 2.239
80	−.198 24.744	−.240 11.016	−.251 7.046	−.257 5.180	−.260 4.097	−.262 3.389	−.263 2.891	−.265 2.521	−.265 2.235	−.266 2.008
90	−.269 22.790	−.302 9.631	−.311 6.082	−.315 4.446	−.317 3.507	−.319 2.897	−.320 2.468	−.321 2.151	−.321 1.907	−.322 1.712
100	−.332 19.435	−.355 7.797	−.361 4.869	−.363 3.545	−.365 2.790	−.366 2.303	−.366 1.962	−.367 1.710	−.367 1.516	−.367 1.362
110	−.383 14.520	−.395 5.564	−.398 3.448	−.399 2.505	−.400 1.971	−.401 1.627	−.401 1.388	−.401 1.211	−.401 1.075	−.402 .967
120	−.418 8.128	−.421 3.025	−.422 1.873	−.422 1.364	−.423 1.078	−.423 .893	−.423 .765	−.423 .671	−.423 .598	−.423 .541
130	−.431 .763	−.431 .313	−.431 .213	−.431 .169	−.431 .144	−.431 .128	−.431 .117	−.431 .109	−.431 .103	−.431 .098
140	−.422 −6.693	−.424 −2.415	−.425 −1.455	−.425 −1.031	−.425 −.793	−.425 −.640	−.425 −.533	−.426 −.455	−.426 −.394	−.426 −.346
150	−.391 −13.318	−.401 −4.997	−.404 −3.051	−.405 −2.186	−.405 −1.696	−.406 −1.382	−.406 −1.162	−.406 −1.000	−.406 −.875	−.407 −.777
160	−.343 −18.526	−.363 −7.296	−.369 −4.506	−.371 −3.248	−.372 −2.532	−.373 −2.070	−.374 −1.747	−.374 −1.508	−.374 −1.324	−.375 −1.178
170	−.281 −22.164	−.313 −9.209	−.321 −5.761	−.325 −4.178	−.327 −3.269	−.328 −2.680	−.329 −2.267	−.330 −1.961	−.331 −1.726	−.331 −1.538
180	−.212 −24.362	−.252 −10.680	−.263 −6.774	−.268 −4.944	−.271 −3.884	−.273 −3.193	−.275 −2.707	−.276 −2.345	−.276 −2.067	−.277 −1.845
190	−.138 −25.360	−.184 −11.689	−.197 −7.520	−.204 −5.526	−.207 −4.359	−.210 −3.593	−.212 −3.052	−.213 −2.649	−.214 −2.337	−.215 −2.088
200	−.063 −25.401	−.111 −12.247	−.126 −7.992	−.133 −5.913	−.137 −4.683	−.140 −3.871	−.142 −3.294	−.144 −2.863	−.145 −2.529	−.146 −2.263
210	.011 −24.696	−.036 −12.386	−.051 −8.191	−.059 −6.101	−.064 −4.852	−.067 −4.021	−.069 −3.429	−.071 −2.985	−.072 −2.640	−.073 −2.363
220	.083 −23.412	.039 −12.146	.024 −8.134	.016 −6.097	.012 −4.867	.008 −4.044	.006 −3.454	.005 −3.011	.003 −2.666	.002 −2.389
230	.150 −21.680	.111 −11.575	.097 −7.839	.090 −5.910	.086 −4.734	.083 −3.943	.081 −3.374	.079 −2.945	.078 −2.610	.077 −2.341
240	.211 −19.600	.179 −10.718	.167 −7.330	.161 −5.556	.157 −4.465	.154 −3.727	.152 −3.194	.151 −2.791	.150 −2.475	.149 −2.222
250	.267 −17.250	.241 −9.620	.232 −6.635	.226 −5.052	.223 −4.071	.221 −3.404	.219 −2.921	.218 −2.555	.217 −2.268	.216 −2.036
260	.315 −14.691	.296 −8.324	.289 −5.781	.285 −4.418	.282 −3.568	.281 −2.988	.279 −2.566	.278 −2.246	.278 −1.995	.277 −1.791
270	.356 −11.972	.343 −6.867	.338 −4.795	.335 −3.674	.333 −2.972	.332 −2.491	.331 −2.141	.331 −1.874	.330 −1.664	.330 −1.495
280	.388 −9.134	.380 −5.285	.377 −3.703	.375 −2.843	.374 −2.301	.374 −1.929	.373 −1.658	.373 −1.451	.372 −1.288	.372 −1.156
290	.411 −6.211	.408 −3.611	.406 −2.534	.405 −1.944	.405 −1.573	.405 −1.317	.404 −1.130	.404 −.987	.404 −.875	.404 −.783
300	.426 −3.232	.425 −1.876	.424 −1.311	.424 −1.001	.424 −.805	.424 −.670	.424 −.572	.424 −.496	.424 −.437	.424 −.389
310	.431 −.225	.431 −.109	.431 −.061	.431 −.034	.431 −.018	.431 −.006	.431 .002	.431 .009	.431 .014	.431 .018
320	.427 2.785	.427 1.660	.426 1.191	.426 .934	.426 .772	.426 .660	.426 .578	.426 .515	.426 .466	.426 .426
330	.415 5.771	.412 3.403	.410 2.421	.410 1.884	.409 1.544	.409 1.311	.409 1.140	.409 1.010	.409 .907	.409 .824
340	.393 8.706	.386 5.091	.383 3.603	.382 2.792	.381 2.282	.380 1.931	.380 1.675	.380 1.479	.379 1.325	.379 1.201
350	.362 11.563	.351 6.692	.346 4.711	.343 3.638	.342 2.965	.341 2.503	.340 2.167	.339 1.911	.339 1.710	.338 1.547
360	.323 14.307	.306 8.175	.299 5.719	.295 4.399	.293 3.576	.291 3.013	.290 2.605	.289 2.294	.288 2.049	.288 1.852

Note: For new longitude convention, reduce $\Delta\lambda$ by 0.178 (see Subsection IV D)

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate

rev	DAS REF. TIME	DAY	GMT HR	MN	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
0	1.491.192	315	8	33	19	*******	*******	*******	*******	*****	******
	1.494.272	315	9	34	55	*******	*******	*******	*******	*****	******
	1.497.352	315	10	36	31	20.30	78.61	19.97	78.38	-.33	-.23
	1.500.432	315	11	38	7	*******	*******	*******	*******	*****	******
	1.503.512	315	12	39	43	-19.15	96.82	-19.52	96.77	-.37	-.05
	1.504.492	315	12	59	19	*******	*******	*******	*******	*****	******
	1.506.592	315	13	41	19	37.77	117.62	37.42	117.31	-.35	-.31
	1.509.672	315	14	42	55	45.17	171.29	45.05	170.75	-.12	-.54
	1.510.512	315	14	59	43	*******	*******	*******	*******	*****	******
	1.512.752	315	15	44	31	13.70	168.24	13.46	168.03	-.24	-.21
	1.515.832	315	16	46	7	-22.54	186.87	-22.76	186.90	-.22	.03
	1.516.532	315	17	0	7	*******	*******	*******	*******	*****	******
	1.518.912	315	17	47	43	-35.19	211.28	-35.34	211.42	-.16	.16
	1.520.242	315	18	14	19	*******	*******	*******	*******	*****	******
	1.521.992	315	18	48	19	-61.55	168.20	-61.97	168.22	-.42	.02
	1.523.532	315	19	20	7	*******	*******	*******	*******	*****	******
	1.525.072	315	19	50	55	-77.10	200.53	-77.48	201.31	-.38	.78
	1.528.152	315	20	52	31	-66.24	207.21	-66.65	207.42	-.41	.21
	1.531.232	315	21	54	7	-73.81	222.79	-74.21	223.18	-.40	.39
	1.534.312	315	22	55	43	-16.06	231.39	-16.48	231.29	-.42	-.10
	1.534.347	315	22	56	25	*******	*******	*******	*******	*****	******
	1.546.632	316	3	2	7	-29.79	348.26	-29.93	348.37	-.14	.11
	1.549.712	316	4	3	43	-13.08	353.48	-13.29	353.44	-.21	-.04
	1.552.792	316	5	5	19	-29.76	43.50	-29.72	43.62	.04	.12
	1.555.872	316	6	6	55	-13.35	57.12	-13.32	57.10	.03	-.02
	1.558.952	316	7	8	31	-49.88	99.48	-49.65	99.79	.23	.31
	1.562.032	316	8	10	7	15.50	22.71	15.13	22.53	-.37	-.18
	1.565.112	316	9	11	43	-2.00	71.07	-2.20	70.96	-.20	-.11
	1.568.192	316	10	13	19	25.38	47.19	24.99	46.98	-.39	-.21
	1.571.272	316	11	14	55	13.10	68.31	12.73	68.14	-.37	-.17
	1.573.512	316	11	59	43	*******	*******	*******	*******	*****	******
	1.574.352	316	12	16	31	-32.32	102.61	-32.60	102.69	-.28	.08
	1.576.522	316	12	59	55	*******	*******	*******	*******	*****	******
	1.577.432	316	13	18	7	-17.39	136.29	-17.55	136.29	-.16	.00
	1.579.532	316	14	0	7	*******	*******	*******	*******	*****	******
	1.580.512	316	14	19	43	13.19	120.90	12.85	120.71	-.34	-.19
	1.583.592	316	15	21	19	-11.52	133.91	-11.87	133.84	-.35	-.07
	1.586.672	316	16	22	55	-30.60	132.17	-31.01	132.13	-.41	-.04
	1.589.752	316	17	24	31	-34.44	152.12	-34.83	152.12	-.39	-.00
	1.592.832	316	18	26	7	15.23	177.44	14.87	177.25	-.36	-.19
	1.594.512	316	18	59	43	*******	*******	*******	*******	*****	******
	1.595.912	316	19	27	43	-15.52	222.75	-15.70	222.73	-.18	-.02
	1.598.012	316	20	9	43	*******	*******	*******	*******	*****	******
	1.598.992	316	20	29	19	8.78	224.31	8.51	224.13	-.27	-.18
	1.602.072	316	21	30	55	15.57	226.80	15.23	226.60	-.34	-.20
	1.603.542	316	22	0	19	*******	*******	*******	*******	*****	******
	1.605.152	316	22	32	31	2.77	218.82	2.35	218.74	-.42	-.13
	1.608.232	316	23	34	7	6.84	245.13	6.46	244.98	-.38	-.15
	1.611.312	317	0	35	43	-19.91	269.40	-20.26	269.37	-.35	-.03
	1.614.392	317	1	37	19	-20.76	298.76	-21.03	298.76	-.27	.00
	1.617.472	317	2	38	55	-27.84	312.03	-28.12	312.08	-.28	.05
	1.618.242	317	2	54	19	*******	*******	*******	*******	*****	******
	1.632.032	317	7	30	7	*******	*******	*******	*******	*****	******
	1.632.522	317	7	39	55	*******	*******	*******	*******	*****	******
	1.632.872	317	7	46	55	*******	*******	*******	*******	*****	******
	1.632.992	317	7	48	19	*******	*******	*******	*******	*****	******
	1.639.032	317	9	50	7	4.54	26.06	4.13	25.92	-.41	-.14
	1.639.102	317	9	51	31	-36.51	37.87	-36.89	37.90	-.38	.03
	1.640.292	317	10	15	19	*******	*******	*******	*******	*****	******
	1.643.792	317	11	25	19	20.93	57.04	20.54	56.84	-.39	-.20
	1.644.282	317	11	35	6	12.10	66.49	11.74	66.32	-.36	-.17
	1.645.192	317	11	53	18	23.86	45.33	23.43	45.18	-.43	-.15
	1.645.262	317	11	54	42	-14.69	47.93	-15.12	47.82	-.43	-.11
	1.645.332	317	11	55	6	-48.97	64.18	-49.36	64.27	-.39	.09
	1.645.542	317	12	0	18	*******	*******	*******	*******	*****	******
	1.651.352	317	13	56	30	35.60	57.39	35.18	57.32	-.42	-.07
	1.651.422	317	13	57	54	16.54	101.04	16.18	100.85	-.36	-.19
	1.651.492	317	13	59	18	-14.37	71.64	-14.80	71.52	-.43	-.12
	1.651.562	317	14	0	42	-21.96	121.86	-22.22	121.87	-.26	.01
	1.651.632	317	14	2	6	-52.53	116.30	-52.82	116.59	-.29	.29
	1.652.052	317	14	10	30	*******	*******	*******	*******	*****	******
	1.656.042	317	15	30	18	*******	*******	*******	*******	*****	******
	1.657.512	317	15	59	42	-51.04	134.59	-51.39	134.78	-.35	.19
	1.657.547	317	16	0	24	-72.81	140.38	-73.13	141.20	-.32	.82
	1.657.582	317	16	1	6	-27.23	106.45	-27.66	106.36	-.43	-.09
	1.657.617	317	16	1	48	-40.08	101.40	-40.51	101.29	-.43	-.11
	1.657.652	317	16	2	30	-18.16	135.63	-18.51	135.59	-.35	-.04
	1.657.687	317	16	3	12	-30.85	135.83	-31.20	135.86	-.35	.03
	1.657.722	317	16	3	54	6.36	126.46	5.98	126.31	-.38	-.15
	1.657.757	317	16	4	36	-7.11	126.24	-7.50	126.14	-.39	-.10
	1.657.792	317	16	5	18	4.66	90.67	4.23	90.55	-.43	-.12
	1.657.827	317	16	6	0	-10.18	96.31	-10.61	90.17	-.43	-.14
	1.657.862	317	16	6	42	45.24	95.06	44.81	94.97	-.43	-.09
1	1.672.706	318	12	45	53	*******	*******	*******	*******	*****	******
	1.672.741	318	12	46	35	*******	*******	*******	*******	*****	******
	1.672.846	318	12	48	41	-57.13	92.15	-57.41	92.54	-.28	.39
	1.672.881	318	12	49	23	-63.73	82.67	-64.06	83.11	-.33	.44
	1.672.916	318	12	50	5	-67.47	78.08	-67.82	78.56	-.35	.48
	1.672.951	318	12	50	47	-71.13	68.20	-71.52	68.62	-.39	.42
	1.672.986	318	12	51	29	-73.84	61.61	-74.25	61.96	-.41	.35
	1.673.021	318	12	52	11	-76.01	48.58	-76.44	48.61	-.43	.03
	1.673.056	318	12	52	53	-77.79	38.63	-78.22	38.32	-.43	-.31
	1.673.091	318	12	53	35	-78.52	22.01	-78.92	21.07	-.40	-.94
	1.673.126	318	12	54	17	-79.03	8.93	-79.38	7.48	-.35	-1.45
	1.673.161	318	12	54	59	-78.15	353.69	-78.42	351.94	-.27	-1.75
	1.673.196	318	12	55	41	-77.44	341.96	-77.83	340.09	-.19	-1.87
	1.673.231	318	12	56	23	-75.57	331.89	-75.69	330.15	-.12	-1.74
	1.673.266	318	12	57	5	-74.22	323.96	-74.28	322.32	-.06	-1.64
	1.673.301	318	12	57	47	-71.94	317.86	-71.96	316.41	-.02	-1.45
	1.673.336	318	12	58	29	-70.27	312.18	-70.24	310.84	.03	-1.32
	1.673.371	318	12	59	11	-67.88	307.99	-67.82	306.82	.06	-1.17
	1.673.406	318	12	59	53	-66.02	303.89	-65.93	302.82	.09	-1.07
	1.673.441	318	13	0	35	-63.53	301.02	-63.42	300.06	.11	-.96
	1.673.476	318	13	1	17	-61.57	298.03	-61.44	297.15	.13	-.88
	1.673.511	318	13	1	59	-59.11	296.05	-58.96	295.25	.15	-.80
	1.673.546	318	13	2	41	-57.12	293.66	-56.95	292.92	.17	-.74
	1.673.581	318	13	3	23	-54.65	292.06	-54.47	291.38	.18	-.68
	1.673.616	318	13	4	5	-52.57	290.05	-52.38	289.42	.19	-.63
	1.673.651	318	13	4	47	-50.11	288.72	-49.91	288.14	.20	-.58
	1.673.686	318	13	5	29	-48.03	287.06	-47.82	286.52	.21	-.54
	1.673.721	318	13	6	11	-45.53	285.94	-45.31	285.44	.22	-.50
	1.673.756	318	13	6	53	-43.40	284.42	-43.17	283.95	.23	-.47
	1.673.791	318	13	7	35	-40.90	283.34	-40.66	282.91	.24	-.43
	1.673.826	318	13	8	17	-38.70	281.86	-38.45	281.46	.25	-.40
	1.673.861	318	13	8	59	-36.13	280.68	-35.87	280.30	.26	-.38
	1.673.896	318	13	9	41	-33.86	279.13	-33.59	278.78	.27	-.35
2	1.710.786	319	1	27	29	-40.25	194.63	-40.61	194.30	-.36	-.33
	1.710.821	319	1	28	11	-41.74	190.07	-42.08	189.71	-.34	-.36
	1.710.856	319	1	28	53	-43.37	186.28	-43.69	185.88	-.32	-.40
	1.710.891	319	1	29	35	-44.02	181.85	-44.32	181.42	-.30	-.43
	1.710.926	319	1	30	17	-45.01	178.03	-45.29	177.57	-.28	-.46
	1.710.961	319	1	30	59	-45.06	173.79	-45.31	173.31	-.25	-.48
	1.710.996	319	1	31	41	-45.52	170.07	-45.74	169.57	-.22	-.50
	1.711.031	319	1	32	23	-44.90	165.74	-45.09	165.23	-.19	-.51
	1.711.066	319	1	33	5	-45.12	162.50	-45.29	161.98	-.17	-.52
	1.711.101	319	1	33	47	-44.29	158.82	-44.43	158.30	-.14	-.52
	1.711.136	319	1	34	29	-43.91	155.46	-44.03	154.94	-.12	-.52
	1.711.171	319	1	35	11	-42.75	152.16	-42.84	151.65	-.09	-.51
	1.711.206	319	1	35	53	-42.07	149.07	-42.14	148.56	-.07	-.51
	1.711.241	319	1	36	35	-40.54	146.39	-40.59	145.90	-.05	-.49
	1.711.276	319	1	37	17	-39.51	143.85	-39.54	143.37	-.03	-.48
	1.711.311	319	1	37	59	-37.75	141.46	-37.76	141.00	-.01	-.46
	1.711.346	319	1	38	41	-36.61	138.86	-36.60	138.41	.01	-.45
	1.711.381	319	1	39	23	-34.72	136.50	-34.69	136.08	.03	-.42
	1.711.416	319	1	40	5	-33.33	134.15	-33.28	133.74	.05	-.41
	1.711.451	319	1	40	47	-31.25	132.20	-31.18	131.82	.07	-.38
	1.711.486	319	1	41	29	-29.65	130.29	-29.57	129.92	.08	-.37
	1.711.521	319	1	42	11	-27.36	128.65	-27.27	128.31	.09	-.34
	1.711.556	319	1	42	53	-25.61	126.94	-25.50	126.62	.11	-.32
	1.711.591	319	1	43	35	-23.12	125.52	-23.00	125.22	.12	-.30
	1.711.626	319	1	44	17	-21.18	123.93	-21.05	123.65	.13	-.28
	1.711.661	319	1	44	59	-18.46	122.64	-18.32	122.38	.14	-.26
	1.711.696	319	1	45	41	-16.30	121.19	-16.15	120.95	.15	-.24
	1.711.731	319	1	46	23	-13.32	120.06	-13.16	119.84	.16	-.22
	1.711.766	319	1	47	5	-10.92	119.74	-10.75	119.54	.17	-.20
	1.711.801	319	1	47	47	-7.52	117.78	-7.34	117.60	.18	-.18
	1.711.836	319	1	48	29	-4.81	116.58	-4.62	116.42	.19	-.16
	1.711.871	319	1	49	11	-.77	115.80	-.57	115.67	.20	-.13
	1.711.906	319	1	49	53	2.63	114.74	2.83	114.63	.20	-.11

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 3

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
1•748•586	319	14	3	29	-57.36	47.84	-57.79	47.67	-.43	-.17
1•748•621	319	14	4	11	-60.54	36.88	-60.96	36.55	-.42	-.33
1•748•656	319	14	4	53	-62.68	28.40	-63.07	27.93	-.39	-.47
1•748•691	319	14	5	35	-63.57	18.15	-63.93	17.53	-.36	-.62
1•748•726	319	14	6	17	-64.27	9.87	-64.59	9.13	-.32	-.74
1•748•761	319	14	6	59	-63.84	.83	-64.10	.01	-.26	-.82
1•748•796	319	14	7	41	-63.54	353.43	-63.78	352.55	-.22	-.88
1•748•831	319	14	8	23	-62.31	346.18	-62.48	345.30	-.17	-.88
1•748•866	319	14	9	5	-61.39	340.30	-61.51	339.42	-.12	-.88
1•748•901	319	14	9	47	-59.67	334.90	-59.75	334.05	-.08	-.85
1•748•936	319	14	10	29	-58.32	330.20	-58.37	329.38	-.05	-.82
1•748•971	319	14	11	11	-56.31	326.02	-56.33	325.25	-.02	-.77
1•749•006	319	14	11	53	-54.69	322.24	-54.68	321.51	.01	-.73
1•749•041	319	14	12	35	-52.52	318.97	-52.48	318.29	.04	-.68
1•749•076	319	14	13	17	-50.75	315.91	-50.69	315.26	.06	-.65
1•749•111	319	14	13	59	-48.51	313.31	-48.43	312.71	.08	-.60
1•749•146	319	14	14	41	-46.63	310.77	-46.53	310.20	.10	-.57
1•749•181	319	14	15	23	-44.32	308.62	-44.20	308.09	.12	-.53
1•749•216	319	14	16	5	-42.33	306.38	-42.19	305.88	.14	-.50
1•749•251	319	14	16	47	-39.95	304.52	-39.80	304.06	.15	-.46
1•749•286	319	14	17	29	-37.88	302.60	-37.69	302.17	.17	-.43
1•749•321	319	14	18	11	-35.41	301.00	-35.23	300.50	.18	-.40
1•749•356	319	14	18	53	-33.30	299.34	-33.11	298.96	.19	-.38
1•749•391	319	14	19	35	-30.86	298.00	-30.66	297.65	.20	-.35
1•749•426	319	14	20	17	-28.70	296.52	-28.49	296.19	.21	-.33
1•749•461	319	14	20	59	-26.18	295.32	-25.96	295.01	.22	-.31
1•749•496	319	14	21	41	-23.95	293.95	-23.72	293.66	.23	-.29
1•749•531	319	14	22	23	-21.36	292.84	-21.12	292.58	.24	-.26
1•749•566	319	14	23	5	-19.05	291.56	-18.80	291.31	.25	-.25
1•749•601	319	14	23	47	-16.37	290.51	-16.12	290.28	.25	-.23
1•749•636	319	14	24	29	-14.00	289.26	-13.74	289.05	.26	-.21
1•749•671	319	14	25	11	-11.25	288.22	-10.98	288.03	.27	-.19
1•749•706	319	14	25	53	-8.79	286.98	-8.51	286.80	.28	-.18

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1•779•190	320	14	30	38	-75.14	91.10	-75.46	92.08	-.32	.98
1•779•225	320	14	31	20	-78.43	78.89	-78.80	79.84	-.37	.95
1•779•260	320	14	32	2	-80.89	70.90	-81.29	71.80	-.40	.90
1•779•295	320	14	32	44	-82.62	49.07	-83.05	48.90	-.43	-.17
1•779•330	320	14	33	26	-83.78	30.16	-84.18	28.60	-.40	-1.56
1•779•365	320	14	34	8	-83.07	2.67	-83.35	359.82	-.28	-2.85
1•779•400	320	14	34	50	-82.37	344.30	-82.54	341.17	-.17	-3.13
1•779•435	320	14	35	32	-80.13	331.10	-80.20	328.52	-.07	-2.58
1•779•470	320	14	36	14	-78.58	321.48	-78.58	319.22	.00	-2.26
1•779•505	320	14	36	56	-76.03	315.77	-75.99	313.92	.04	-1.85
1•779•540	320	14	37	38	-74.18	310.24	-74.09	308.63	.09	-1.61
1•779•575	320	14	38	20	-71.59	307.17	-71.48	305.80	.11	-1.37
1•779•610	320	14	39	2	-69.64	303.41	-69.50	302.19	.14	-1.22
1•779•645	320	14	39	44	-67.11	301.36	-66.96	300.28	.15	-1.08
1•779•680	320	14	40	26	-65.11	298.57	-64.94	297.60	.17	-.97
1•779•715	320	14	41	8	-62.54	297.36	-62.36	296.49	.18	-.87
1•779•750	320	14	41	50	-60.46	295.40	-60.26	294.60	.20	-.80
1•779•785	320	14	42	32	-57.91	294.41	-57.71	293.68	.20	-.73
1•779•820	320	14	43	14	-55.85	292.68	-55.63	292.01	.22	-.67
1•779•855	320	14	43	56	-53.38	291.48	-53.16	290.86	.22	-.62
1•779•890	320	14	44	38	-51.29	289.59	-51.05	289.02	.24	-.57
1•779•925	320	14	45	20	-48.78	288.42	-48.53	287.89	.25	-.53
1•779•960	320	14	46	2	-46.57	286.78	-46.31	286.29	.26	-.49
1•779•995	320	14	46	44	-43.93	285.98	-43.67	285.53	.26	-.45
1•780•030	320	14	47	26	-41.64	284.60	-41.37	284.18	.27	-.42
1•780•065	320	14	48	8	-38.95	283.73	-38.67	283.34	.28	-.39
1•780•100	320	14	48	50	-36.69	282.28	-36.40	281.92	.29	-.36
1•780•135	320	14	49	32	-34.02	281.28	-33.73	280.94	.29	-.34
1•780•170	320	14	50	14	-31.66	279.72	-31.36	279.41	.30	-.31
1•780•205	320	14	50	56	-28.88	278.58	-28.57	278.29	.31	-.29
1•780•240	320	14	51	38	-26.37	276.89	-26.05	276.62	.32	-.27
1•780•275	320	14	52	20	-23.34	275.54	-23.01	275.29	.33	-.25
1•780•310	320	14	53	2	-20.50	273.59	-20.16	273.36	.34	-.23

rev 6

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
1•814•820	321	2	23	14	-37.72	109.88	-37.55	109.45	.17	-.43
1•814•855	321	2	23	56	*******	*******	*******	*******	*****	******
1•814•960	321	2	26	2	-42.22	115.28	-42.08	114.78	.14	-.50
1•814•995	321	2	26	44	-30.01	105.78	-29.81	105.44	.20	-.34
1•815•100	321	2	28	50	-45.13	118.92	-45.01	118.38	.12	-.54
1•815•135	321	2	29	32	-41.39	115.24	-41.25	114.76	.14	-.48
1•815•240	321	2	31	38	-47.25	121.74	-47.15	121.16	.10	-.58
1•815•275	321	2	32	20	-44.33	118.59	-44.21	118.06	.12	-.53
1•815•380	321	2	34	26	-48.03	123.02	-47.93	122.43	.10	-.59
1•815•415	321	2	35	8	-45.41	120.40	-45.29	119.85	.12	-.55
1•815•520	321	2	37	14	-48.71	124.68	-48.62	124.08	.09	-.60
1•815•555	321	2	37	56	-46.63	122.70	-46.53	122.13	.10	-.57
1•815•730	321	2	41	26	-49.55	126.69	-49.47	126.07	.08	-.62
1•815•765	321	2	42	8	-47.53	124.65	-47.43	124.07	.10	-.58
1•815•940	321	2	45	38	-49.54	128.02	-49.46	127.40	.08	-.62
1•815•975	321	2	46	20	-47.28	125.64	-47.18	125.06	.10	-.58
1•816•080	321	2	48	26	-42.95	121.72	-42.82	121.21	.13	-.51
1•816•115	321	2	49	8	-40.54	119.91	-40.40	119.44	.14	-.47
1•816•150	321	2	49	50	-38.45	118.05	-38.29	117.61	.16	-.44
1•816•185	321	2	50	32	-35.97	116.49	-35.80	116.08	.17	-.41
1•816•220	321	2	51	14	-33.81	114.76	-33.63	114.37	.18	-.39
1•816•255	321	2	51	56	-31.30	113.35	-31.11	112.99	.19	-.36
1•816•290	321	2	52	38	-29.11	111.82	-28.91	111.48	.20	-.34
1•816•325	321	2	53	20	-26.61	110.58	-26.40	110.27	.21	-.31
1•816•360	321	2	54	2	-24.35	109.18	-24.13	108.89	.22	-.29
1•816•395	321	2	54	44	-21.80	108.05	-21.57	107.78	.23	-.27
1•816•430	321	2	55	26	-19.53	106.76	-19.29	106.51	.24	-.25
1•816•465	321	2	56	8	-16.92	105.70	-16.67	105.47	.25	-.23
1•816•500	321	2	56	50	-14.60	104.47	-14.34	104.26	.26	-.21
1•816•535	321	2	57	32	-11.94	103.44	-11.68	103.24	.26	-.20
1•816•570	321	2	58	14	-9.59	102.26	-9.32	102.08	.27	-.18
1•816•605	321	2	58	56	-6.87	101.27	-6.59	101.11	.28	-.16
1•816•640	321	2	59	38	-4.47	100.05	-4.18	99.90	.29	-.15

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1•845•585	321	12	38	32	-21.89	50.76	-22.23	50.74	-.34	-.02
1•845•655	321	12	39	56	-23.75	49.97	-24.10	49.96	-.35	-.01
1•845•725	321	12	41	20	-25.21	49.01	-25.56	49.00	-.35	-.01
1•845•795	321	12	42	44	-26.72	48.29	-27.08	48.29	-.36	-.00
1•845•865	321	12	44	8	-28.23	47.53	-28.59	47.53	-.36	.00
1•845•935	321	12	45	32	-29.73	46.78	-30.09	46.79	-.36	.01
1•846•005	321	12	46	56	-31.22	45.99	-31.59	46.00	-.37	.01
1•846•075	321	12	48	20	-32.75	45.12	-33.12	45.13	-.37	.01
1•846•145	321	12	49	44	-34.34	44.26	-34.72	44.28	-.38	.02
1•846•215	321	12	51	8	-35.86	43.32	-36.24	43.34	-.38	.02
1•850•625	321	14	19	20	-80.08	4.30	-80.44	2.78	-.36	-1.52
1•850•695	321	14	20	44	-79.84	4.01	-80.20	2.50	-.36	-1.51
1•850•835	321	14	23	32	-79.66	7.28	-80.03	5.89	-.37	-1.39
1•850•905	321	14	24	56	-79.50	9.44	-79.87	8.13	-.37	-1.31
1•850•975	321	14	26	20	-79.80	10.16	-80.18	8.83	-.38	-1.33
1•851•045	321	14	27	44	-80.04	12.02	-80.42	10.72	-.38	-1.30
1•852•130	321	14	49	26	-25.27	283.90	-25.05	283.60	.22	-.30
1•852•165	321	14	50	8	-22.60	282.70	-22.37	282.42	.23	-.28
1•852•200	321	14	50	50	-20.26	281.35	-20.02	281.09	.24	-.26
1•852•235	321	14	51	32	-17.44	280.19	-17.19	279.96	.25	-.23
1•852•270	321	14	52	14	-14.96	278.86	-14.70	278.64	.26	-.22
1•852•305	321	14	52	56	-11.91	277.68	-11.64	277.48	.27	-.20
1•852•410	321	14	55	2	-2.88	273.57	-2.59	273.43	.29	-.14
1•852•445	321	14	55	44	.99	272.12	1.29	272.00	.30	-.12
1•852•480	321	14	56	26	4.54	270.38	4.85	270.28	.31	-.10
1•852•515	321	14	57	8	9.51	268.45	9.83	268.37	.32	-.08
1•852•550	321	14	57	50	14.45	265.93	14.78	265.88	.33	-.05
1•852•585	321	14	58	32	24.60	261.07	24.96	261.06	.36	-.01
1•852•620	321	14	59	14	*******	*******	*******	*******	*****	******
1•852•655	321	14	59	56	*******	*******	*******	*******	*****	******
1•852•690	321	15	0	38	*******	*******	*******	*******	*****	******
1•852•725	321	15	1	20	*******	*******	*******	*******	*****	******

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 8

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
1.884.260	322	1	32	1	-13.53	208.70	-13.96	208.59	-.43	-.11
1.884.295	322	1	32	43	-15.76	207.77	-16.19	207.66	-.43	-.11
1.884.330	322	1	33	25	-16.08	207.82	-16.51	207.71	-.43	-.11
1.884.365	322	1	34	7	-18.31	207.00	-18.74	206.89	-.43	-.11
1.884.400	322	1	34	49	-18.65	206.85	-19.08	206.74	-.43	-.11
1.884.435	322	1	35	31	-20.72	205.95	-21.15	205.84	-.43	-.11
1.884.470	322	1	36	13	-20.99	205.83	-21.42	205.72	-.43	-.11
1.884.505	322	1	36	55	-22.97	204.81	-23.40	204.69	-.43	-.12
1.884.540	322	1	37	37	-23.10	204.56	-23.53	204.44	-.43	-.12
1.884.575	322	1	38	19	-25.01	203.33	-25.44	203.21	-.43	-.12
1.884.610	322	1	39	1	-25.02	202.81	-25.45	202.68	-.43	-.13
1.884.645	322	1	39	43	-27.83	201.45	-28.26	201.32	-.43	-.13
1.884.680	322	1	40	25	-27.23	201.46	-27.66	201.33	-.43	-.13
1.884.715	322	1	41	7	-28.84	200.10	-29.27	199.96	-.43	-.14
1.884.750	322	1	41	49	-29.06	199.77	-29.49	199.63	-.43	-.14
1.884.785	322	1	42	31	-30.67	198.32	-31.10	198.17	-.43	-.15
1.884.820	322	1	43	13	-30.85	197.99	-31.28	197.84	-.43	-.15
1.884.855	322	1	43	55	-32.43	196.39	-32.86	196.23	-.43	-.16
1.884.890	322	1	44	37	-32.64	196.03	-33.07	195.86	-.43	-.17
1.884.925	322	1	45	19	-34.14	194.29	-34.56	194.11	-.42	-.18
1.884.960	322	1	46	1	-34.39	193.87	-34.81	193.69	-.42	-.18
1.884.995	322	1	46	43	-35.80	191.98	-36.22	191.78	-.42	-.20
1.885.030	322	1	47	25	-36.08	191.46	-36.50	191.26	-.42	-.20
1.885.065	322	1	48	7	-37.50	189.37	-37.91	189.15	-.41	-.22
1.885.100	322	1	48	49	-37.71	188.93	-38.12	188.71	-.41	-.22
1.885.135	322	1	49	31	-38.89	186.73	-39.30	186.49	-.41	-.24
1.885.170	322	1	50	13	-39.07	186.32	-39.48	186.08	-.41	-.24
1.885.205	322	1	50	55	-40.17	184.05	-40.57	183.79	-.40	-.26
1.885.240	322	1	51	37	-40.36	183.56	-40.76	183.29	-.40	-.27
1.885.275	322	1	52	19	-41.41	181.01	-41.80	180.72	-.39	-.29
1.885.310	322	1	53	1	-41.51	180.63	-41.90	180.34	-.39	-.29
1.885.345	322	1	53	43	-42.38	177.88	-42.76	177.58	-.38	-.32
1.885.380	322	1	54	25	-42.47	177.59	-42.85	177.27	-.38	-.32

rev 9

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
1.920.660	322	13	40	1	-56.21	85.16	-56.38	85.63	-.17	.47
1.920.695	322	13	40	43	-58.51	85.98	-58.68	86.51	-.17	.53
1.920.730	322	13	41	25	-59.07	84.49	-59.25	85.02	-.18	.53
1.920.765	322	13	42	7	-61.24	86.02	-61.41	86.62	-.17	.60
1.920.800	322	13	42	49	-61.60	84.49	-61.78	85.09	-.18	.60
1.920.835	322	13	43	31	-63.73	86.43	-63.90	87.11	-.17	.68
1.920.870	322	13	44	13	-64.10	84.78	-64.28	85.47	-.18	.69
1.920.905	322	13	44	55	-66.21	86.99	-66.37	87.77	-.16	.78
1.920.940	322	13	45	37	-66.60	85.10	-66.78	85.89	-.18	.79
1.920.975	322	13	46	19	-68.77	87.88	-68.93	88.79	-.16	.91
1.921.010	322	13	47	1	-69.20	85.91	-69.38	86.83	-.18	.92
1.921.045	322	13	47	43	-71.10	87.90	-71.26	88.95	-.16	1.05
1.921.080	322	13	48	25	-71.28	84.93	-71.46	85.96	-.18	1.03
1.921.115	322	13	49	7	-73.21	87.83	-73.37	89.03	-.16	1.20
1.921.150	322	13	49	49	-73.82	84.78	-74.01	86.00	-.19	1.22
1.921.185	322	13	50	31	-76.21	89.09	-76.37	90.61	-.16	1.52
1.921.220	322	13	51	13	-76.87	85.71	-77.05	87.27	-.18	1.56
1.921.255	322	13	51	55	-79.33	92.19	-79.47	94.25	-.14	2.06
1.921.290	322	13	52	37	-80.04	86.09	-80.21	90.25	-.17	2.16
1.921.325	322	13	53	19	-82.44	99.08	-82.52	102.16	-.08	3.08
1.921.360	322	13	54	1	-83.24	94.00	-83.36	97.40	-.12	3.40
1.921.395	322	13	54	43	-85.32	118.33	-85.26	123.38	.06	5.05
1.921.430	322	13	55	25	-86.26	114.58	-86.22	120.99	.04	6.41
1.921.465	322	13	56	7	-86.43	170.61	-86.06	173.81	.37	3.20
1.921.500	322	13	56	49	-87.31	176.07	-86.92	179.55	.39	3.48
1.921.535	322	13	57	31	-84.70	207.92	-84.27	207.43	.43	-.49
1.921.570	322	13	58	13	-85.14	216.94	-84.72	215.70	.42	-1.24
1.921.605	322	13	58	55	-81.20	222.82	-80.79	221.81	.41	-1.01
1.921.640	322	13	59	37	-81.56	228.96	-81.19	227.64	.39	-1.32
1.921.675	322	14	0	19	-77.04	228.78	-76.65	227.88	.39	-.90
1.921.710	322	14	1	1	-77.43	233.25	-77.05	232.20	.38	-1.05
1.921.745	322	14	1	43	-70.64	230.29	-70.25	229.63	.39	-.66
1.921.780	322	14	2	25	-70.67	233.39	-70.29	232.68	.38	-.71

rev 10

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
1.955.660	323	1	20	1	-16.70	204.00	-17.12	203.91	-.42	-.09
1.955.695	323	1	20	43	-18.75	203.32	-19.17	203.23	-.42	-.09
1.955.730	323	1	21	25	-18.64	203.22	-19.06	203.13	-.42	-.09
1.955.765	323	1	22	7	-20.67	202.53	-21.09	202.44	-.42	-.09
1.955.800	323	1	22	49	-20.58	202.42	-21.00	202.33	-.42	-.09
1.955.835	323	1	23	31	-22.51	201.68	-22.93	201.59	-.42	-.09
1.955.870	323	1	24	13	-22.50	201.56	-22.92	201.47	-.42	-.09
1.955.905	323	1	24	55	-24.33	200.77	-24.75	200.68	-.42	-.09
1.955.940	323	1	25	37	-24.33	200.64	-24.75	200.55	-.42	-.09
1.955.975	323	1	26	19	-26.23	199.78	-26.66	199.69	-.43	-.09
1.956.010	323	1	27	1	-26.19	199.64	-26.62	199.55	-.43	-.09
1.956.045	323	1	27	43	-28.00	198.72	-28.43	198.63	-.43	-.09
1.956.080	323	1	28	25	-27.97	198.57	-28.40	198.47	-.43	-.10
1.956.115	323	1	29	7	-29.80	197.60	-30.23	197.50	-.43	-.10
1.956.150	323	1	29	49	-29.79	197.44	-30.22	197.34	-.43	-.10
1.956.185	323	1	30	31	-31.61	196.28	-32.04	196.18	-.43	-.10
1.956.220	323	1	31	13	-31.64	196.01	-32.07	195.90	-.43	-.11
1.956.255	323	1	31	55	-33.37	194.83	-33.80	194.72	-.43	-.11
1.956.290	323	1	32	37	-33.61	194.48	-34.04	194.37	-.43	-.11
1.956.325	323	1	33	19	-35.39	193.15	-35.82	193.03	-.43	-.12
1.956.360	323	1	34	1	-35.63	192.76	-36.06	192.64	-.43	-.12
1.956.395	323	1	34	43	-37.41	191.27	-37.84	191.14	-.43	-.13
1.956.430	323	1	35	25	-37.58	190.90	-38.01	190.76	-.43	-.14
1.956.465	323	1	36	7	-39.30	189.26	-39.73	189.11	-.43	-.15
1.956.500	323	1	36	49	-39.50	188.86	-39.93	188.71	-.43	-.15
1.956.535	323	1	37	31	-41.16	187.03	-41.59	186.86	-.43	-.17
1.956.570	323	1	38	13	-41.21	186.68	-41.64	186.51	-.43	-.17
1.956.605	323	1	38	55	-42.67	184.76	-43.10	184.57	-.43	-.19
1.956.640	323	1	39	37	-42.76	184.34	-43.18	184.15	-.42	-.19
1.956.675	323	1	40	19	-44.21	182.19	-44.63	181.98	-.42	-.21
1.956.710	323	1	41	1	-44.24	181.77	-44.66	181.55	-.42	-.22
1.956.745	323	1	41	43	-45.61	179.41	-46.03	179.17	-.42	-.24
1.956.780	323	1	42	25	-45.63	178.99	-46.04	178.74	-.41	-.25

rev 11

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
1.994.090	323	14	8	37	-73.35	69.95	-73.60	71.00	-.25	1.05
1.994.125	323	14	9	19	-75.64	66.95	-75.91	68.14	-.27	1.19
1.994.160	323	14	10	1	-77.02	65.94	-77.30	67.26	-.28	1.32
1.994.195	323	14	10	43	-79.38	61.43	-79.68	62.96	-.30	1.53
1.994.230	323	14	11	25	-80.77	56.15	-81.09	59.83	-.32	1.68
1.994.265	323	14	12	7	-82.95	49.20	-83.31	51.01	-.36	1.81
1.994.300	323	14	12	49	-84.20	41.92	-84.59	43.67	-.39	1.75
1.994.335	323	14	13	31	-85.81	20.09	-86.24	20.23	-.43	.14
1.994.370	323	14	14	13	-86.43	359.59	-86.84	357.01	-.41	-2.58
1.994.405	323	14	14	55	-86.21	321.18	-86.43	315.26	-.22	-5.92
1.994.440	323	14	15	37	-85.59	302.37	-85.67	296.71	-.08	-5.66
1.994.475	323	14	16	19	-83.81	284.28	-83.76	280.22	.05	-4.06
1.994.510	323	14	17	1	-82.65	277.84	-82.56	274.47	.09	-3.37
1.994.545	323	14	17	43	-80.57	271.37	-80.43	268.80	.14	-2.57
1.994.580	323	14	18	25	-79.29	268.25	-79.13	266.02	.16	-2.23
1.994.615	323	14	19	7	-77.00	265.05	-76.82	263.24	.18	-1.81
1.994.650	323	14	19	49	-75.56	263.55	-75.37	261.94	.19	-1.61
1.994.685	323	14	20	31	-73.19	261.33	-72.98	259.96	.21	-1.37
1.994.720	323	14	21	13	-71.70	260.15	-71.48	258.90	.22	-1.25
1.994.755	323	14	21	55	-69.08	257.70	-68.85	256.63	.23	-1.07
1.994.790	323	14	22	37	-67.38	256.32	-67.14	255.34	.24	-.98
1.994.825	323	14	23	19	-64.61	254.18	-64.35	253.33	.26	-.85
1.994.860	323	14	24	1	-62.76	252.89	-62.50	252.11	.26	-.78
1.994.895	323	14	24	43	-59.78	250.82	-59.50	250.13	.28	-.69
1.994.930	323	14	25	25	-57.95	249.89	-57.67	249.25	.28	-.64
1.994.965	323	14	26	7	-54.83	248.01	-54.54	247.44	.29	-.57
1.995.000	323	14	26	49	-52.81	246.94	-52.51	246.41	.30	-.53
1.995.035	323	14	27	31	-49.12	244.62	-48.81	244.16	.31	-.46
1.995.070	323	14	28	13	-46.65	243.17	-46.33	242.74	.32	-.43
1.995.105	323	14	28	55	-41.45	239.50	-41.11	239.14	.34	-.36
1.995.140	323	14	29	37	-37.18	238.41	-36.83	238.10	.35	-.31
1.995.175	323	14	30	19	*******	*******	*******	*******	*****	******
1.995.210	323	14	31	1	*******	*******	*******	*******	*****	******

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 12

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•030•490	324	2	16	37	-53.83	199.18	-54.26	199.11	-.43	-.07
2•030•525	324	2	17	19	-56.07	193.96	-56.50	193.83	-.43	-.13
2•030•560	324	2	18	1	-57.99	190.39	-58.42	190.22	-.43	-.17
2•030•595	324	2	18	43	-59.62	184.70	-60.04	184.45	-.42	-.25
2•030•630	324	2	19	25	-61.13	180.52	-61.55	180.20	-.42	-.32
2•030•665	324	2	20	7	-62.13	174.49	-62.53	174.08	-.40	-.41
2•030•700	324	2	20	49	-63.12	169.89	-63.51	169.40	-.39	-.49
2•030•735	324	2	21	31	-63.51	163.70	-63.88	163.12	-.37	-.58
2•030•770	324	2	22	13	-64.09	158.74	-64.43	158.08	-.34	-.66
2•030•805	324	2	22	55	-64.03	152.49	-64.34	151.75	-.31	-.74
2•030•840	324	2	23	37	-64.22	147.26	-64.50	146.46	-.28	-.80
2•030•875	324	2	24	19	-63.73	141.11	-63.98	140.26	-.25	-.85
2•030•910	324	2	25	1	-63.51	136.04	-63.72	135.16	-.21	-.88
2•030•945	324	2	25	43	-62.58	130.53	-62.76	129.64	-.18	-.89
2•030•980	324	2	26	25	-61.97	125.92	-62.11	125.03	-.14	-.89
2•031•015	324	2	27	7	-60.69	121.31	-60.80	120.44	-.11	-.87
2•031•050	324	2	27	49	-59.75	117.37	-59.83	116.52	-.08	-.85
2•031•085	324	2	28	31	-58.15	113.51	-58.20	112.69	-.05	-.82
2•031•120	324	2	29	13	-56.95	110.09	-56.97	109.30	-.02	-.79
2•031•155	324	2	29	55	-55.13	106.90	-55.13	106.16	.00	-.74
2•031•190	324	2	30	37	-53.70	103.99	-53.67	103.28	.03	-.71
2•031•225	324	2	31	19	-51.70	101.30	-51.65	100.63	.05	-.67
2•031•260	324	2	32	1	-50.13	99.81	-50.06	98.18	.07	-.63
2•031•295	324	2	32	43	-48.01	96.53	-47.92	95.94	.09	-.59
2•031•330	324	2	33	25	-46.31	94.33	-46.21	93.77	.10	-.56
2•031•365	324	2	34	7	-44.12	92.32	-44.00	91.79	.12	-.53
2•031•400	324	2	34	49	-42.34	90.34	-42.20	89.84	.14	-.50
2•031•435	324	2	35	31	-40.06	88.66	-39.91	88.20	.15	-.46
2•031•470	324	2	36	13	-38.17	86.96	-38.01	86.52	.16	-.44
2•031•505	324	2	36	55	-35.78	85.46	-35.61	85.05	.17	-.41
2•031•540	324	2	37	37	-33.78	83.91	-33.60	83.53	.18	-.38
2•031•575	324	2	38	19	-31.23	82.56	-31.04	82.20	.19	-.36
2•031•610	324	2	39	1	-29.05	81.10	-28.84	80.77	.21	-.33

rev 13

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•066•330	324	14	13	25	-47.92	22.89	-48.34	22.88	-.42	-.01
2•066•365	324	14	14	7	-51.13	18.01	-51.56	17.97	-.43	-.04
2•066•400	324	14	14	49	-53.62	14.90	-54.05	14.84	-.43	-.06
2•066•435	324	14	15	31	-55.97	9.49	-56.40	9.37	-.43	-.12
2•066•470	324	14	16	13	-57.94	5.66	-58.37	5.49	-.43	-.17
2•066•505	324	14	16	55	-59.59	359.75	-60.01	359.50	-.42	-.25
2•066•540	324	14	17	37	-61.09	355.29	-61.51	354.97	-.42	-.32
2•066•575	324	14	18	19	-62.17	349.01	-62.57	348.59	-.40	-.42
2•066•610	324	14	19	1	-63.28	344.16	-63.67	343.66	-.39	-.50
2•066•645	324	14	19	43	-63.80	337.72	-64.16	337.12	-.36	-.60
2•066•680	324	14	20	25	-64.39	332.62	-64.73	331.94	-.34	-.68
2•066•715	324	14	21	7	-64.27	326.32	-64.58	325.56	-.31	-.76
2•066•750	324	14	21	49	-64.39	321.18	-64.67	320.36	-.28	-.82
2•066•785	324	14	22	31	-63.80	315.28	-64.04	314.43	-.24	-.85
2•066•820	324	14	23	13	-63.51	310.34	-63.72	309.45	-.21	-.89
2•066•855	324	14	23	55	-62.45	305.01	-62.62	304.12	-.17	-.89
2•066•890	324	14	24	37	-61.74	300.57	-61.88	299.68	-.14	-.89
2•066•925	324	14	25	19	-60.37	296.06	-60.48	295.20	-.11	-.86
2•066•960	324	14	26	1	-59.37	292.15	-59.45	291.31	-.08	-.84
2•066•995	324	14	26	43	-57.76	288.39	-57.81	287.58	-.05	-.81
2•067•030	324	14	27	25	-56.55	285.02	-56.57	284.24	-.02	-.78
2•067•065	324	14	28	7	-54.74	281.86	-54.73	281.13	.01	-.73
2•067•100	324	14	28	49	-53.35	278.86	-53.32	278.16	.03	-.70
2•067•135	324	14	29	31	-51.44	275.97	-51.39	275.31	.05	-.66
2•067•170	324	14	30	13	-49.91	273.28	-49.84	272.65	.07	-.63
2•067•205	324	14	30	55	-47.84	271.05	-47.75	270.46	.09	-.59
2•067•240	324	14	31	37	-46.15	269.01	-46.04	268.45	.11	-.56
2•067•275	324	14	32	19	-43.95	267.17	-43.83	266.65	.12	-.52
2•067•310	324	14	33	1	-42.16	265.36	-42.02	264.87	.14	-.49
2•067•345	324	14	33	43	-39.84	263.69	-39.69	263.23	.15	-.46
2•067•380	324	14	34	25	-37.89	261.94	-37.73	261.51	.16	-.43
2•067•415	324	14	35	7	-35.46	260.35	-35.29	259.95	.17	-.40
2•067•450	324	14	35	49	-33.44	258.71	-33.25	258.33	.19	-.38

rev 14

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•102•380	325	2	14	25	-58.36	179.76	-58.79	179.58	-.43	-.18
2•102•415	325	2	15	7	-59.96	174.01	-60.38	173.75	-.42	-.26
2•102•450	325	2	15	49	-61.42	169.72	-61.84	169.39	-.42	-.33
2•102•485	325	2	16	31	-62.43	163.50	-62.83	163.07	-.40	-.43
2•102•520	325	2	17	13	-63.48	158.65	-63.87	158.14	-.39	-.51
2•102•555	325	2	17	55	-63.92	152.15	-64.28	151.54	-.36	-.61
2•102•590	325	2	18	37	-64.50	146.96	-64.84	146.27	-.34	-.69
2•102•625	325	2	19	19	-64.38	140.45	-64.68	139.68	-.30	-.77
2•102•660	325	2	20	1	-64.50	135.18	-64.77	134.35	-.27	-.83
2•102•695	325	2	20	43	-63.85	129.15	-64.12	128.28	-.23	-.87
2•102•730	325	2	21	25	-63.54	124.31	-63.74	123.42	-.20	-.89
2•102•765	325	2	22	7	-62.50	119.11	-62.67	118.22	-.17	-.89
2•102•800	325	2	22	49	-61.79	114.77	-61.92	113.88	-.13	-.89
2•102•835	325	2	23	31	-60.35	110.30	-60.45	109.44	-.10	-.86
2•102•870	325	2	24	13	-59.28	106.48	-59.35	105.64	-.07	-.84
2•102•905	325	2	24	55	-57.61	102.75	-57.65	101.95	-.04	-.80
2•102•940	325	2	25	37	-56.34	99.43	-56.36	98.66	-.02	-.77
2•102•975	325	2	26	19	-54.48	96.18	-54.47	95.45	.01	-.73
2•103•010	325	2	27	1	-53.06	93.15	-53.03	92.45	.03	-.70
2•103•045	325	2	27	43	-51.09	90.42	-51.03	89.77	.06	-.65
2•103•080	325	2	28	25	-49.54	87.86	-49.46	87.24	.08	-.62
2•103•115	325	2	29	7	-47.43	85.63	-47.34	85.05	.09	-.58
2•103•150	325	2	29	49	-45.75	83.47	-45.64	82.92	.11	-.55
2•103•185	325	2	30	31	-43.54	81.61	-43.42	81.09	.12	-.52
2•103•220	325	2	31	13	-41.72	79.83	-41.58	79.34	.14	-.49
2•103•255	325	2	31	55	-39.38	78.21	-39.23	77.75	.15	-.46
2•103•290	325	2	32	37	-37.44	76.61	-37.28	76.18	.16	-.43
2•103•325	325	2	33	19	-34.97	75.10	-34.79	74.70	.18	-.40
2•103•360	325	2	34	1	-32.89	73.52	-32.70	73.15	.19	-.37
2•103•395	325	2	34	43	-30.28	72.10	-30.08	71.75	.20	-.35
2•103•430	325	2	35	25	-28.05	70.60	-27.84	70.28	.21	-.32
2•103•465	325	2	36	7	-25.30	69.24	-25.08	68.94	.22	-.30
2•103•500	325	2	36	49	-22.92	67.76	-22.69	67.48	.23	-.28

rev 15

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•138•220	325	14	11	12	-55.35	2.23	-55.78	2.14	-.43	-.09
2•138•255	325	14	11	54	-57.35	356.87	-57.78	356.72	-.43	-.15
2•138•290	325	14	12	36	-59.11	353.02	-59.54	352.81	-.43	-.21
2•138•325	325	14	13	18	-60.50	347.65	-60.92	347.37	-.42	-.28
2•138•360	325	14	14	0	-61.69	343.41	-62.10	343.06	-.41	-.35
2•138•395	325	14	14	42	-62.64	336.98	-63.04	336.53	-.40	-.45
2•138•430	325	14	15	24	-63.64	331.88	-64.02	331.34	-.38	-.54
2•138•465	325	14	16	6	-64.01	325.14	-64.36	324.50	-.35	-.64
2•138•500	325	14	16	48	-64.52	319.71	-64.85	318.99	-.33	-.72
2•138•535	325	14	17	30	-64.31	313.13	-64.60	312.34	-.29	-.79
2•138•570	325	14	18	12	-64.31	307.77	-64.57	306.92	-.26	-.85
2•138•605	325	14	18	54	-63.56	301.89	-63.78	301.02	-.22	-.87
2•138•640	325	14	19	36	-63.11	297.05	-63.30	296.16	-.19	-.89
2•138•675	325	14	20	18	-61.97	291.96	-62.12	291.07	-.15	-.89
2•138•710	325	14	21	0	-61.19	287.67	-61.31	286.79	-.12	-.88
2•138•745	325	14	21	42	-59.75	283.36	-59.84	282.51	-.09	-.85
2•138•780	325	14	22	24	-58.68	279.60	-58.74	278.77	-.06	-.83
2•138•815	325	14	23	6	-56.99	275.98	-57.02	275.19	-.03	-.79
2•138•850	325	14	23	48	-55.72	272.75	-55.72	271.99	-.00	-.76
2•138•885	325	14	24	30	-53.86	269.73	-53.84	269.02	.02	-.71
2•138•920	325	14	25	12	-52.41	266.96	-52.37	266.28	.04	-.68
2•138•955	325	14	25	54	-50.41	264.41	-50.35	263.77	.06	-.64
2•138•990	325	14	26	36	-48.82	261.99	-48.74	261.38	.08	-.61
2•139•025	325	14	27	18	-46.70	259.80	-46.60	259.23	.10	-.57
2•139•060	325	14	28	0	-44.97	257.68	-44.85	257.14	.12	-.54
2•139•095	325	14	28	42	-42.73	255.80	-42.60	255.30	.13	-.50
2•139•130	325	14	29	24	-40.90	253.98	-40.76	253.50	.14	-.48
2•139•165	325	14	30	6	-38.57	252.36	-38.41	251.92	.16	-.44
2•139•200	325	14	30	48	-36.62	250.73	-36.45	250.31	.17	-.42
2•139•235	325	14	31	30	-34.14	249.27	-33.96	248.88	.18	-.39
2•139•270	325	14	32	12	-32.08	247.78	-31.87	247.41	.19	-.37
2•139•305	325	14	32	54	-29.42	246.49	-29.22	246.15	.20	-.34
2•139•340	325	14	33	36	-27.20	245.04	-26.99	244.72	.21	-.32

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	DAY	GMT HR	MM	SEC	W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
rev 16					INTERCEPTING LAT AND LON					
2.169.545	326	0	37	42	-46.78	189.43	-47.12	189.59	-.34	.16
2.169.615	326	0	39	6	-17.93	189.69	-18.27	189.65	-.34	-.04
2.169.685	326	0	40	30	10.09	184.02	9.72	183.86	-.37	-.16
2.169.965	326	0	46	6	-52.89	139.51	-53.19	199.80	-.30	.29
2.171.015	326	1	7	6	-19.75	172.05	-20.17	171.96	-.42	-.09
2.171.085	326	1	8	30	-34.08	165.85	-34.51	165.76	-.43	-.09
2.171.225	326	1	11	18	-51.56	160.22	-51.99	160.10	-.43	-.12
2.173.570	326	1	58	12	*******	*******	*******	*******	*****	******
2.173.605	326	1	58	54	*******	*******	*******	*******	*****	******
2.174.025	326	2	7	18	-73.44	193.92	-73.84	194.31	-.40	.39
2.174.095	326	2	8	42	-79.93	159.83	-80.35	159.09	-.42	-.74
2.174.165	326	2	10	6	-81.09	98.96	-81.19	96.14	-.10	-2.82
2.174.235	326	2	11	30	-74.67	61.14	-74.49	59.59	.18	-1.55
2.174.725	326	2	21	18	-59.99	103.15	-60.11	102.31	-.12	-.84
2.174.795	326	2	22	42	-57.41	94.71	-57.46	93.92	-.05	-.79
2.174.865	326	2	24	6	-54.25	87.79	-54.25	87.07	.00	-.72
2.174.900	326	2	24	48	-52.74	84.59	-52.71	83.90	.03	-.69
2.174.935	326	2	25	30	-50.70	81.70	-50.65	81.05	.05	-.65
2.174.970	326	2	26	12	-49.00	79.01	-48.93	78.40	.07	-.61
2.175.005	326	2	26	54	-46.79	76.62	-46.70	76.05	.09	-.57
2.175.040	326	2	27	36	-44.97	74.32	-44.86	73.78	.11	-.54
2.175.075	326	2	28	18	-44.10	73.80	-43.99	73.27	.11	-.53
2.175.110	326	2	29	0	-42.23	71.82	-42.10	71.32	.13	-.50
2.175.145	326	2	29	42	-41.26	71.48	-41.13	71.00	.13	-.48
2.175.180	326	2	30	24	-39.30	65.63	-39.15	69.17	.15	-.46
2.175.215	326	2	31	6	-38.33	69.26	-38.18	68.82	.15	-.44
2.175.250	326	2	31	48	-36.30	67.49	-36.14	67.07	.16	-.42
2.175.285	326	2	32	30	-35.27	66.99	-35.10	66.59	.17	-.40
2.175.320	326	2	33	12	-33.16	65.32	-32.98	64.94	.18	-.38
2.175.355	326	2	33	54	-32.11	64.80	-31.93	64.43	.18	-.37
2.175.390	326	2	34	36	-29.95	63.24	-29.75	62.89	.20	-.35
2.175.425	326	2	35	18	-27.45	61.96	-27.24	61.64	.21	-.32
rev 17										
2.205.525	326	12	37	18	3.59	357.92	3.22	357.78	-.37	-.14
2.205.595	326	12	38	42	-26.13	12.61	-26.43	12.64	-.30	.03
2.205.665	326	12	40	6	-61.97	21.92	-62.22	22.46	-.25	.54
2.205.735	326	12	41	30	-40.57	8.49	-40.90	8.61	-.33	.12
2.206.015	326	12	47	6	-30.57	13.10	-30.88	13.15	-.31	.05
2.206.995	326	13	6	42	-46.38	28.30	-46.63	28.54	-.25	.24
2.207.065	326	13	8	6	-35.62	20.69	-35.92	20.79	-.30	.10
2.207.135	326	13	9	30	-24.92	14.47	-25.25	14.47	-.33	.00
2.207.205	326	13	10	54	-27.07	347.69	-27.49	347.61	-.42	-.08
2.207.275	326	13	12	18	-42.07	338.72	-42.50	338.62	-.43	-.10
2.207.695	326	13	20	42	-18.65	21.45	-18.96	21.43	-.31	-.02
2.209.725	326	14	1	16	-40.85	308.77	-41.19	308.41	-.34	-.36
2.209.795	326	14	2	42	-49.86	307.31	-50.19	306.85	-.33	-.46
2.209.865	326	14	4	6	-59.88	305.34	-60.19	304.70	-.31	-.64
2.210.040	326	14	7	36	-68.70	289.15	-68.91	288.06	-.21	-1.09
2.210.110	326	14	9	0	-67.36	279.64	-67.51	278.54	-.15	-1.10
2.210.180	326	14	10	24	-63.05	267.05	-63.10	266.08	-.05	-.97
2.210.250	326	14	11	48	-60.40	260.64	-60.40	259.76	-.00	-.88
2.210.845	326	14	23	42	-49.58	255.34	-49.52	254.71	.06	-.63
2.210.915	326	14	25	6	-45.66	250.56	-45.56	250.01	.10	-.55
2.210.985	326	14	26	30	-41.58	246.54	-41.45	246.05	.13	-.49
2.211.055	326	14	27	54	-38.62	244.30	-38.47	243.85	.15	-.45
2.211.090	326	14	28	36	-38.02	243.88	-37.87	243.44	.15	-.44
2.211.125	326	14	29	18	-35.65	242.41	-35.49	242.00	.16	-.41
2.211.160	326	14	30	0	-34.83	241.80	-34.66	241.40	.17	-.40
2.211.195	326	14	30	42	-32.38	240.31	-32.20	239.94	.18	-.37
2.211.230	326	14	31	24	-31.63	239.60	-31.45	239.24	.18	-.36
2.211.265	326	14	32	6	-29.15	238.29	-28.96	237.95	.19	-.34
2.211.300	326	14	32	48	-28.44	237.89	-28.24	237.56	.20	-.33
2.211.335	326	14	33	30	-25.98	236.80	-25.77	236.49	.21	-.31
2.211.370	326	14	34	12	-23.80	235.53	-23.58	235.24	.22	-.29

DAS REF. TIME	DAY	GMT HR	MM	SEC	W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
rev 18					INTERCEPTING LAT AND LON					
2.241.435	327	0	35	30	-48.61	181.82	-48.94	182.01	-.33	.19
2.241.505	327	0	36	54	-19.47	180.45	-19.81	180.42	-.34	-.03
2.241.575	327	0	38	18	5.56	174.42	5.19	174.27	-.37	-.15
2.241.855	327	0	43	54	-55.56	192.38	-55.85	192.73	-.29	.35
2.242.905	327	1	4	54	-23.18	162.57	-23.60	162.49	-.42	-.08
2.242.975	327	1	6	18	-37.41	155.63	-37.84	155.54	-.43	-.09
2.243.115	327	1	9	6	-54.16	148.20	-54.59	148.05	-.43	-.15
2.245.460	327	1	56	0	*******	*******	*******	*******	*****	******
2.245.495	327	1	56	42	*******	*******	*******	*******	*****	******
2.245.915	327	2	5	6	-78.10	157.37	-78.53	157.01	-.43	-.36
2.245.985	327	2	6	30	-79.37	108.49	-79.61	106.42	-.24	-2.07
2.246.055	327	2	7	54	-76.15	67.37	-76.09	65.52	.06	-1.85
2.246.125	327	2	9	18	-68.55	44.85	-68.33	43.78	.22	-1.07
2.246.615	327	2	19	6	-54.95	73.72	-54.97	72.98	-.02	-.74
2.246.685	327	2	20	30	-51.53	73.52	-51.50	72.85	.03	-.67
2.246.755	327	2	21	54	-47.86	68.30	-47.79	67.71	.07	-.59
2.246.790	327	2	22	36	-46.15	65.94	-46.06	65.38	.09	-.56
2.246.825	327	2	23	18	-43.93	63.87	-43.82	63.34	.11	-.53
2.246.860	327	2	24	0	-42.07	61.83	-41.95	61.33	.12	-.50
2.246.895	327	2	24	42	-39.78	60.06	-39.64	59.60	.14	-.46
2.246.930	327	2	25	24	-37.82	58.25	-37.67	57.81	.15	-.44
2.246.965	327	2	26	6	-36.85	57.77	-36.69	57.35	.16	-.42
2.247.000	327	2	26	48	-34.81	56.07	-34.64	55.67	.17	-.40
2.247.035	327	2	27	30	-33.75	55.82	-33.58	55.43	.17	-.39
2.247.070	327	2	28	12	-31.70	54.46	-31.52	54.10	.18	-.36
2.247.105	327	2	28	54	-30.68	54.15	-30.49	53.80	.19	-.35
2.247.140	327	2	29	36	-28.54	52.65	-28.34	52.32	.20	-.33
2.247.175	327	2	30	18	-27.43	52.24	-27.23	51.92	.20	-.32
2.247.210	327	2	31	0	-25.23	50.81	-25.02	50.51	.21	-.30
2.247.245	327	2	31	42	-24.14	50.39	-23.92	50.10	.22	-.29
2.247.280	327	2	32	24	-21.91	49.05	-21.68	48.78	.23	-.27
2.247.315	327	2	33	6	-19.36	47.98	-19.13	47.73	.23	-.25
rev 19										
2.277.415	327	12	35	6	.13	349.28	-.24	349.16	-.37	-.12
2.277.485	327	12	36	30	-28.58	4.33	-28.88	4.38	-.30	.05
2.277.555	327	12	37	54	-64.31	18.26	-64.52	18.92	-.21	.66
2.277.625	327	12	39	18	-43.03	1.58	-43.34	1.73	-.31	.15
2.277.905	327	12	44	54	-32.95	6.53	-33.24	6.61	-.29	.08
2.278.885	327	13	4	30	-49.02	20.32	-49.28	20.61	-.24	.29
2.278.955	327	13	5	54	-38.39	11.89	-38.68	12.02	-.29	.13
2.279.025	327	13	7	18	-28.31	5.21	-28.64	5.24	-.33	.03
2.279.095	327	13	8	42	-30.39	336.62	-30.81	336.54	-.42	-.08
2.279.165	327	13	10	6	-45.23	326.80	-45.66	326.68	-.43	-.12
2.279.585	327	13	18	30	-23.86	10.28	-24.18	10.29	-.32	.01
2.281.615	327	13	59	6	-42.85	290.90	-43.14	290.48	-.29	-.42
2.281.685	327	14	0	30	-50.98	287.41	-51.25	286.87	-.27	-.54
2.281.755	327	14	1	54	-59.83	282.58	-60.07	281.84	-.24	-.74
2.281.930	327	14	5	24	-66.06	263.34	-66.16	262.27	-.10	-1.07
2.282.000	327	14	6	48	-63.83	255.56	-63.87	254.56	-.04	-1.00
2.282.070	327	14	8	12	-58.40	245.96	-58.37	245.14	.03	-.82
2.282.140	327	14	9	36	-54.94	240.66	-54.86	239.93	.08	-.73
2.282.735	327	14	21	30	-42.51	237.82	-42.39	237.32	.12	-.50
2.282.805	327	14	22	54	-38.27	234.07	-38.12	233.63	.15	-.44
2.282.875	327	14	24	18	-33.84	230.79	-33.67	230.40	.17	-.39
2.282.945	327	14	25	42	-30.68	228.78	-30.49	228.43	.19	-.35
2.282.980	327	14	26	24	-30.01	228.38	-29.82	228.03	.19	-.35
2.283.015	327	14	27	6	-27.60	227.23	-27.40	226.91	.20	-.32
2.283.050	327	14	27	48	-26.78	226.88	-26.58	226.56	.20	-.32
2.283.085	327	14	28	30	-24.27	225.72	-24.06	225.43	.21	-.29
2.283.120	327	14	29	12	-23.42	225.13	-23.20	224.84	.22	-.29
2.283.155	327	14	29	54	-20.81	223.98	-20.59	223.72	.22	-.26
2.283.190	327	14	30	36	-20.00	223.58	-19.77	223.32	.23	-.26
2.283.225	327	14	31	18	-17.36	222.52	-17.12	222.28	.24	-.24
2.283.260	327	14	32	0	-15.10	221.32	-14.86	221.10	.24	-.22

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 20

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•313•325	328	0	33	18	-52.33	173.89	-52.65	174.14	-.32	.25
2•313•395	328	0	34	42	-22.35	171.36	-22.69	171.35	-.34	-.01
2•313•465	328	0	36	6	3.27	165.19	2.90	165.05	-.37	-.14
2•313•745	328	0	41	42	-59.00	185.05	-59.27	185.49	-.27	.44
2•314•795	328	1	2	42	-27.01	152.25	-27.43	152.17	-.42	-.08
2•314•865	328	1	4	6	-40.71	144.87	-41.14	144.78	-.43	-.09
2•315•005	328	1	6	54	-57.69	135.35	-58.12	135.16	-.43	-.19
2•317•350	328	1	53	48	*******	*******	*******	*******	*****	*****
2•317•385	328	1	54	30	*******	*******	*******	*******	*****	*****
2•317•805	328	2	2	54	-78.80	106.77	-79.09	105.00	-.29	-1.77
2•317•875	328	2	4	18	-75.41	70.05	-75.45	68.27	-.04	-1.78
2•317•945	328	2	5	42	-69.47	45.25	-69.32	44.05	.15	-1.20
2•318•015	328	2	7	6	-61.12	30.49	-60.87	29.73	.25	-.76
2•318•505	328	2	16	54	-48.65	59.14	-48.58	58.53	.07	-.61
2•318•575	328	2	18	18	-44.66	54.68	-44.56	54.14	.10	-.54
2•318•645	328	2	19	42	-40.54	50.89	-40.41	50.41	.13	-.48
2•318•680	328	2	20	24	-38.61	49.06	-38.47	48.61	.14	-.45
2•318•715	328	2	21	6	-36.23	47.44	-36.07	47.02	.16	-.42
2•318•750	328	2	21	48	-34.19	45.77	-34.02	45.38	.17	-.39
2•318•785	328	2	22	30	-31.72	44.33	-31.54	43.96	.18	-.37
2•318•820	328	2	23	12	-29.60	42.82	-29.41	42.48	.19	-.34
2•318•855	328	2	23	54	-28.55	42.42	-28.35	42.09	.20	-.33
2•318•890	328	2	24	36	-26.41	40.98	-26.20	40.65	.21	-.31
2•318•925	328	2	25	18	-25.32	40.80	-25.11	40.50	.21	-.30
2•318•960	328	2	26	0	-23.16	39.60	-22.94	39.32	.22	-.28
2•318•995	328	2	26	42	-22.14	39.41	-21.92	39.14	.22	-.27
2•319•030	328	2	27	24	-19.88	38.10	-19.65	37.84	.23	-.26
2•319•065	328	2	28	6	-18.67	37.78	-18.44	37.53	.23	-.25
2•319•100	328	2	28	48	-16.36	36.52	-16.12	36.29	.24	-.23
2•319•135	328	2	29	30	-15.21	36.18	-14.97	35.96	.24	-.22
2•319•170	328	2	30	12	-12.88	35.00	-12.63	34.80	.25	-.20
2•319•205	328	2	30	54	-10.20	34.03	-9.94	33.84	.26	-.19

rev 21

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•349•305	328	12	32	54	-3.88	340.73	-4.24	340.62	-.36	-.11
2•349•375	328	12	34	18	-31.33	355.75	-31.62	355.82	-.29	.07
2•349•445	328	12	35	42	-67.62	15.31	-67.79	16.16	-.17	.85
2•349•515	328	12	37	6	-45.92	353.81	-46.22	354.00	-.30	.19
2•349•795	328	12	42	42	-36.29	357.18	-36.58	357.29	-.29	.11
2•350•775	328	13	2	18	-52.40	12.18	-52.63	12.53	-.23	.35
2•350•845	328	13	3	42	-41.88	2.52	-42.17	2.68	-.29	.16
2•350•915	328	13	5	6	-32.74	355.33	-33.07	355.38	-.33	.05
2•350•985	328	13	6	30	-35.30	325.20	-35.73	325.13	-.43	-.07
2•351•055	328	13	7	54	-48.42	315.23	-48.85	315.10	-.43	-.13
2•351•475	328	13	16	18	-28.81	358.89	-29.14	358.92	-.33	.03
2•353•505	328	13	56	54	-43.37	271.53	-43.61	271.06	-.24	-.47
2•353•575	328	13	58	18	-50.33	266.44	-50.53	265.85	-.20	-.59
2•353•645	328	13	59	42	-57.98	259.18	-58.13	258.41	-.15	-.77
2•353•820	328	14	3	12	-61.65	239.91	-61.65	238.99	.00	-.92
2•353•890	328	14	4	36	-58.57	234.18	-58.52	233.35	.05	-.83
2•353•960	328	14	6	0	-52.40	227.28	-52.30	226.61	.10	-.67
2•354•030	328	14	7	24	-48.22	222.80	-48.09	222.22	.13	-.58
2•354•625	328	14	19	18	-34.56	221.38	-34.40	220.98	.16	-.40
2•354•695	328	14	20	42	-30.06	218.48	-29.87	218.13	.19	-.35
2•354•765	328	14	22	6	-25.37	215.77	-25.16	215.47	.21	-.30
2•354•835	328	14	23	30	-21.93	214.09	-21.71	213.82	.22	-.27
2•354•870	328	14	24	12	-21.19	213.65	-20.97	213.38	.22	-.27
2•354•905	328	14	24	54	-18.56	212.52	-18.33	212.27	.23	-.25
2•354•940	328	14	25	36	-17.72	212.19	-17.48	211.95	.24	-.24
2•354•975	328	14	26	18	-15.12	211.31	-14.88	211.09	.24	-.22
2•355•010	328	14	27	0	-14.36	210.99	-14.12	210.78	.24	-.21
2•355•045	328	14	27	42	-11.68	209.97	-11.43	209.77	.25	-.20
2•355•080	328	14	28	24	-10.97	209.59	-10.71	209.40	.26	-.19
2•355•115	328	14	29	6	-8.27	208.58	-8.01	208.41	.26	-.17
2•355•150	328	14	29	48	-5.87	207.37	-5.60	207.21	.27	-.16

rev 22

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•385•285	329	0	32	29	-25.66	162.00	-26.00	162.01	-.34	.01
2•385•355	329	0	33	53	-26.73	161.15	-27.07	161.16	-.34	.01
2•385•425	329	0	35	17	-9.32	156.97	-9.68	156.89	-.36	-.08
2•385•705	329	0	40	53	-64.37	176.54	-64.64	177.13	-.27	.59
2•386•755	329	1	1	53	-32.36	141.47	-32.78	141.40	-.42	-.07
2•386•825	329	1	3	17	-45.37	133.16	-45.80	133.06	-.43	-.10
2•386•965	329	1	6	5	-61.60	117.57	-62.02	117.25	-.42	-.32
2•389•310	329	1	52	59	*******	*******	*******	*******	*****	*****
2•389•345	329	1	53	41	*******	*******	*******	*******	*****	*****
2•389•765	329	2	2	5	-71.59	54.01	-71.58	52.59	.01	-1.42
2•389•835	329	2	3	29	-65.31	46.19	-65.24	45.14	.07	-1.05
2•389•905	329	2	4	53	-58.74	33.06	-58.57	32.28	.17	-.78
2•389•975	329	2	6	17	-50.63	19.93	-50.38	19.38	.25	-.55
2•390•465	329	2	16	5	-36.78	37.71	-36.63	37.28	.15	-.43
2•390•535	329	2	17	29	-32.35	34.67	-32.17	34.30	.18	-.37
2•390•605	329	2	18	53	-27.74	31.89	-27.54	31.56	.20	-.33
2•390•640	329	2	19	35	-25.57	30.51	-25.36	30.21	.21	-.30
2•390•675	329	2	20	17	-22.95	29.33	-22.73	29.05	.22	-.28
2•390•710	329	2	20	59	-20.68	28.02	-20.45	27.76	.23	-.26
2•390•745	329	2	21	41	-17.95	26.89	-17.72	26.65	.23	-.24
2•390•780	329	2	22	23	-15.55	25.62	-15.31	25.40	.24	-.22
2•390•815	329	2	23	5	-12.61	24.43	-12.36	24.23	.25	-.20
2•390•850	329	2	23	47	-12.00	24.17	-11.75	23.97	.25	-.20
2•390•885	329	2	24	29	-9.02	23.00	-8.78	22.82	.26	-.18
2•390•920	329	2	25	11	-8.45	22.79	-8.19	22.62	.26	-.17
2•390•955	329	2	25	53	-5.45	21.72	-5.18	21.56	.27	-.16
2•390•990	329	2	26	35	-4.95	21.57	-4.68	21.42	.27	-.15
2•391•025	329	2	27	17	-1.96	20.57	-1.68	20.44	.28	-.13
2•391•060	329	2	27	59	-1.41	20.44	-1.13	20.31	.28	-.13
2•391•095	329	2	28	41	1.66	19.36	1.95	19.25	.29	-.11
2•391•130	329	2	29	23	2.14	19.07	2.43	18.96	.29	-.11
2•391•165	329	2	30	5	5.21	18.06	5.51	17.96	.30	-.10

rev 23

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•421•195	329	12	30	41	-7.68	332.04	-8.04	331.95	-.36	-.09
2•421•265	329	12	32	5	-35.08	347.71	-35.36	347.82	-.28	.11
2•421•335	329	12	33	29	-72.23	20.26	-72.29	21.47	-.06	1.21
2•421•405	329	12	34	53	-48.07	344.14	-48.37	344.36	-.30	.22
2•421•685	329	12	40	29	-39.95	347.62	-40.24	347.76	-.29	.14
2•422•665	329	13	0	5	-55.53	3.97	-55.75	4.39	-.22	.42
2•422•735	329	13	1	29	-45.40	352.66	-45.69	352.86	-.29	.20
2•422•805	329	13	2	53	-36.52	344.84	-36.86	344.92	-.34	.08
2•422•875	329	13	4	17	-38.26	314.67	-38.69	314.60	-.43	-.07
2•422•945	329	13	5	41	-51.00	303.59	-51.43	303.44	-.43	-.15
2•423•365	329	13	14	5	-33.11	347.73	-33.44	347.78	-.33	.05
2•425•395	329	13	54	41	-42.41	252.60	-42.58	252.11	-.17	-.49
2•425•465	329	13	56	5	-48.22	246.39	-48.35	245.80	-.13	-.59
2•425•535	329	13	57	29	-54.63	237.55	-54.69	236.82	-.06	-.73
2•425•710	329	14	0	59	-55.99	220.44	-55.92	219.69	.07	-.75
2•425•780	329	14	2	23	-52.30	215.64	-52.19	214.98	.11	-.66
2•425•850	329	14	3	47	-45.16	209.36	-45.00	208.83	.16	-.53
2•425•920	329	14	5	11	-40.45	205.53	-40.26	205.08	.19	-.45
2•426•515	329	14	17	5	-26.20	206.04	-26.00	205.73	.20	-.31
2•426•585	329	14	18	29	-21.31	203.53	-21.09	203.26	.22	-.27
2•426•655	329	14	19	53	-16.21	201.12	-15.97	200.89	.24	-.23
2•426•725	329	14	21	17	-12.58	199.68	-12.33	199.48	.25	-.20
2•426•760	329	14	21	59	-11.94	199.45	-11.69	199.25	.25	-.20
2•426•795	329	14	22	41	-9.13	198.53	-8.87	198.35	.26	-.18
2•426•830	329	14	23	23	-8.35	198.35	-8.09	198.18	.26	-.17
2•426•865	329	14	24	5	-5.49	197.39	-5.22	197.23	.27	-.16
2•426•900	329	14	24	47	-4.80	197.00	-4.53	196.85	.27	-.15
2•426•935	329	14	25	29	-1.89	195.97	-1.61	195.84	.28	-.13
2•426•970	329	14	26	11	-1.32	195.75	-1.04	195.62	.28	-.13
2•427•005	329	14	26	53	1.61	194.74	1.90	194.63	.29	-.11
2•427•040	329	14	27	35	4.22	193.51	4.51	193.41	.29	-.10

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 24

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2.456.720	330	0	21	11	39.83	130.23	39.42	129.99	-.41	-.24
2.456.790	330	0	22	35	39.24	124.94	38.82	124.73	-.42	-.21
2.457.070	330	0	28	11	15.45	129.87	15.04	129.71	-.41	-.16
2.457.140	330	0	29	35	19.45	129.05	19.04	128.88	-.41	-.17
2.457.210	330	0	30	59	20.09	125.54	19.67	125.38	-.42	-.16
2.457.280	330	0	32	23	15.57	126.86	15.15	126.71	-.42	-.15
2.457.455	330	0	35	53	6.58	137.37	6.18	137.23	-.40	-.14
2.457.525	330	0	37	17	-20.58	151.95	-20.92	151.92	-.34	-.03
2.457.595	330	0	38	41	-46.74	160.09	-47.05	160.29	-.31	.20
2.457.665	330	0	40	5	-38.31	118.67	-38.74	118.56	-.43	-.11
2.457.735	330	0	41	29	-12.95	104.89	-13.37	104.75	-.42	-.14
2.458.015	330	0	47	5	7.70	138.97	7.30	138.82	-.40	-.15
2.458.085	330	0	48	29	-22.52	153.37	-22.87	153.35	-.35	-.02
2.458.155	330	0	49	53	-46.45	158.95	-46.78	159.12	-.33	.17
2.458.225	330	0	51	17	-36.62	123.30	-37.05	123.20	-.43	-.10
2.458.295	330	0	52	41	-15.16	114.14	-15.59	114.01	-.43	-.13
2.458.470	330	0	56	11	-4.64	118.14	-5.07	118.01	-.43	-.13
2.458.540	330	0	57	35	-3.61	118.31	-4.04	118.18	-.43	-.13
2.458.610	330	0	58	59	-1.64	115.21	-2.07	115.08	-.43	-.13
2.458.680	330	1	0	23	-4.29	114.68	-4.72	114.55	-.43	-.13
2.460.990	330	1	46	35	-83.35	.38	-83.06	357.61	.29	-2.77
2.461.025	330	1	47	17	-80.78	1.00	-80.49	358.94	.29	-2.06
2.461.060	330	1	47	59	-81.79	15.60	-81.59	12.87	.20	-2.73
2.461.095	330	1	48	41	-79.26	12.57	-79.04	10.52	.22	-2.05
2.461.130	330	1	49	23	-79.99	22.83	-79.84	20.44	.15	-2.39
2.461.165	330	1	50	5	-77.67	19.13	-77.49	17.23	.18	-1.90
2.462.530	330	2	17	23	-27.45	21.35	-27.25	21.03	.20	-.32
2.462.565	330	2	18	5	-24.92	20.12	-24.71	19.82	.21	-.30
2.462.600	330	2	18	47	-22.67	18.77	-22.45	18.49	.22	-.28
2.462.635	330	2	19	29	-20.10	17.65	-19.87	17.39	.23	-.26
2.462.670	330	2	20	11	-17.85	16.40	-17.61	16.16	.24	-.24
2.462.705	330	2	20	53	-15.27	15.40	-15.02	15.18	.25	-.22

rev 25

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2.490.320	330	11	33	11	*******	*******	*******	*******	*****	******
2.490.355	330	11	33	53	*******	*******	*******	*******	*****	******
2.492.630	330	12	19	23	33.20	305.58	32.79	305.36	-.41	-.22
2.492.700	330	12	20	47	32.01	302.73	31.60	302.53	-.41	-.20
2.492.980	330	12	26	23	-16.78	334.39	-17.08	334.36	-.30	-.03
2.493.050	330	12	27	47	-15.50	333.12	-15.81	333.08	-.31	-.04
2.493.120	330	12	29	11	-16.36	329.79	-16.68	329.75	-.32	-.04
2.493.190	330	12	30	35	-18.97	329.74	-19.30	329.71	-.33	-.03
2.493.365	330	12	34	5	5.18	312.61	4.78	312.47	-.40	-.14
2.493.435	330	12	35	29	-20.89	327.08	-21.23	327.06	-.34	-.02
2.493.505	330	12	36	53	-45.89	336.19	-46.19	336.39	-.30	.20
2.493.575	330	12	38	17	-39.94	295.16	-40.37	295.06	-.43	-.10
2.493.645	330	12	39	41	-14.83	281.07	-15.25	280.93	-.42	-.14
2.493.820	330	12	43	11	-61.32	340.50	-61.60	340.97	-.28	.47
2.493.890	330	12	44	35	-64.08	340.41	-64.37	340.95	-.29	.54
2.493.960	330	12	45	59	-64.69	333.53	-65.01	334.01	-.32	.48
2.494.030	330	12	47	23	-67.19	332.30	-67.52	332.83	-.33	.53
2.496.900	330	13	44	47	-87.77	111.70	-87.35	114.04	.42	2.34
2.496.935	330	13	45	29	-86.31	156.89	-85.93	153.76	.38	-3.13
2.496.970	330	13	46	11	-87.37	169.84	-87.04	164.08	.33	-5.76
2.497.005	330	13	46	53	-85.12	178.91	-84.84	175.05	.28	-3.86
2.497.040	330	13	47	35	-85.59	181.51	-85.32	177.13	.27	-4.38
2.497.075	330	13	48	17	-82.96	181.02	-82.69	178.20	.27	-2.82
2.498.300	330	14	12	47	-35.14	201.10	-34.97	200.70	.17	-.40
2.498.335	330	14	13	29	-32.62	199.62	-32.44	199.25	.18	-.37
2.498.370	330	14	14	11	-30.42	198.06	-30.23	197.71	.19	-.35
2.498.405	330	14	14	53	-27.88	196.78	-27.68	196.45	.20	-.33
2.498.440	330	14	15	35	-25.65	195.39	-25.44	195.09	.21	-.30
2.498.475	330	14	16	17	-23.10	194.23	-22.88	193.95	.22	-.28
2.498.510	330	14	16	59	-20.84	192.95	-20.61	192.69	.23	-.26
2.498.545	330	14	17	41	-18.29	191.91	-18.05	191.67	.24	-.24
2.498.580	330	14	18	23	-16.06	190.71	-15.82	190.48	.24	-.23

rev 26

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2.528.400	331	0	14	47	-13.12	71.47	-13.50	71.30	-.38	-.17
2.528.470	331	0	16	11	*******	*******	*******	*******	*****	******
2.528.750	331	0	21	47	7.61	109.10	7.18	108.97	-.43	-.13
2.528.820	331	0	23	11	13.01	106.79	12.58	106.66	-.43	-.13
2.528.890	331	0	24	35	16.55	100.94	16.12	100.82	-.43	-.12
2.528.960	331	0	25	59	11.99	102.90	11.56	102.78	-.43	-.12
2.529.135	331	0	29	29	10.11	131.00	9.73	130.84	-.38	-.16
2.529.205	331	0	30	53	-16.83	144.26	-17.16	144.22	-.33	-.04
2.529.275	331	0	32	17	-42.49	151.95	-42.78	152.12	-.29	.17
2.529.345	331	0	33	41	-36.60	114.58	-37.03	114.51	-.43	-.07
2.529.415	331	0	35	5	-12.57	100.45	-13.00	100.32	-.43	-.13
2.529.695	331	0	40	41	11.45	131.75	11.06	131.59	-.39	-.16
2.529.765	331	0	42	5	-18.94	146.68	-19.27	146.65	-.33	-.03
2.529.835	331	0	43	29	-42.23	152.83	-42.53	152.99	-.30	.16
2.529.905	331	0	44	53	-34.83	117.71	-35.25	117.64	-.42	-.07
2.529.975	331	0	46	17	-14.18	107.11	-14.61	106.98	-.43	-.13
2.530.150	331	0	49	47	2.35	118.87	1.93	118.74	-.42	-.13
2.530.220	331	0	51	11	4.99	118.10	4.56	117.97	-.43	-.13
2.530.290	331	0	52	35	5.56	115.25	5.13	115.12	-.43	-.13
2.530.360	331	0	53	59	1.81	115.33	1.38	115.20	-.43	-.13
2.532.670	331	1	40	11	-88.30	303.94	-87.87	303.29	.43	-.65
2.532.705	331	1	40	53	-86.44	340.32	-86.09	336.23	.35	-4.09
2.532.740	331	1	41	35	-87.46	27.00	-87.39	17.41	.07	-9.59
2.532.775	331	1	42	17	-85.22	16.07	-85.09	11.11	.13	-4.96
2.532.810	331	1	42	59	-85.35	37.47	-85.37	32.04	-.02	-5.43
2.532.845	331	1	43	41	-83.30	20.86	-83.20	17.19	.10	-3.67
2.534.210	331	2	10	59	-33.67	15.22	-33.50	14.83	.17	-.39
2.534.245	331	2	11	41	-31.17	13.82	-30.99	13.46	.18	-.36
2.534.280	331	2	12	23	-29.00	12.31	-28.80	11.97	.20	-.34
2.534.315	331	2	13	5	-26.50	11.09	-26.30	10.78	.20	-.31
2.534.350	331	2	13	47	-24.28	9.73	-24.07	9.44	.21	-.29
2.534.385	331	2	14	29	-21.73	8.64	-21.51	8.37	.22	-.27

rev 27

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2.562.560	331	11	37	59	*******	*******	*******	*******	*****	******
2.562.595	331	11	38	41	*******	*******	*******	*******	*****	******
2.564.310	331	12	12	59	1.68	248.20	1.30	248.08	-.38	-.12
2.564.380	331	12	14	23	*******	*******	*******	*******	*****	******
2.564.660	331	12	19	59	-45.87	317.43	-46.20	317.60	-.33	.17
2.564.730	331	12	21	23	-43.46	314.92	-43.80	315.05	-.34	.13
2.564.800	331	12	22	47	-43.90	310.25	-44.26	310.35	-.36	.10
2.564.870	331	12	24	11	-45.88	310.62	-46.24	310.74	-.36	.12
2.565.045	331	12	27	41	10.32	306.05	9.94	305.89	-.38	-.16
2.565.115	331	12	29	5	-17.61	320.42	-17.94	320.39	-.33	-.03
2.565.185	331	12	30	29	-43.60	330.17	-43.87	330.36	-.27	.19
2.565.255	331	12	31	53	-37.13	290.52	-37.55	290.46	-.42	-.06
2.565.325	331	12	33	17	-12.13	275.89	-12.56	275.76	-.43	-.13
2.565.500	331	12	36	47	-42.92	327.68	-43.22	327.85	-.30	.17
2.565.570	331	12	38	11	-40.77	324.21	-41.09	324.34	-.32	.13
2.565.640	331	12	39	35	-41.67	320.24	-42.01	320.36	-.34	.12
2.565.710	331	12	40	59	-43.84	319.38	-44.18	319.51	-.34	.13
2.568.580	331	13	38	23	-83.71	19.22	-83.75	23.00	-.04	3.78
2.568.615	331	13	39	5	-85.99	28.42	-85.95	34.40	.04	5.98
2.568.650	331	13	39	47	-85.38	14.68	-85.45	19.86	-.07	5.18
2.568.685	331	13	40	29	-87.60	32.28	-87.52	42.13	.08	9.85
2.568.720	331	13	41	11	-87.14	24.82	-87.12	33.31	.02	8.49
2.568.755	331	13	41	53	-88.83	93.89	-88.42	99.98	.41	6.09
2.569.980	331	14	6	23	-41.87	196.63	-41.75	196.14	.12	-.49
2.570.015	331	14	7	5	-39.31	194.70	-39.17	194.24	.14	-.46
2.570.050	331	14	7	47	-37.13	192.83	-36.98	192.40	.15	-.43
2.570.085	331	14	8	29	-34.62	191.29	-34.45	190.89	.17	-.40
2.570.120	331	14	9	11	-32.49	189.67	-32.31	189.30	.18	-.37
2.570.155	331	14	9	53	-30.00	188.33	-29.81	187.98	.19	-.35
2.570.190	331	14	10	35	-27.85	186.88	-27.65	186.55	.20	-.33
2.570.225	331	14	11	17	-25.35	185.68	-25.14	185.38	.21	-.30
2.570.260	331	14	11	59	-23.18	184.31	-22.96	184.03	.22	-.28

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 28

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•600•220	332	0	11	11	-10.32	51.99	-10.66	51.82	-.34	-.17
2•600•290	332	0	12	35	*******	*******	*******	*******	*****	******
2•600•570	332	0	18	11	18.91	135.97	18.60	135.74	-.31	-.23
2•600•640	332	0	19	35	21.85	135.08	21.53	134.84	-.32	-.24
2•600•710	332	0	20	59	19.71	131.97	19.37	131.75	-.34	-.22
2•600•780	332	0	22	23	14.89	132.25	14.55	132.05	-.34	-.20
2•600•955	332	0	25	53	10.26	122.34	9.88	122.18	-.38	-.16
2•601•025	332	0	27	17	-17.03	135.95	-17.35	135.91	-.32	-.04
2•601•095	332	0	28	41	-43.13	144.42	-43.41	144.61	-.28	.19
2•E01•165	332	0	30	5	-36.68	107.20	-37.10	107.14	-.42	-.06
2•601•235	332	0	31	29	-12.08	92.61	-12.51	92.48	-.43	-.13
2•E01•515	332	0	37	5	11.76	123.18	11.37	123.02	-.39	-.16
2•601•585	332	0	38	29	-18.28	137.11	-18.61	137.08	-.33	-.03
2•E01•655	332	0	39	53	-42.39	144.04	-42.69	144.20	-.30	.16
2•601•725	332	0	41	17	-35.50	109.94	-35.92	109.88	-.42	-.06
2•E01•795	332	0	42	41	-14.26	99.42	-14.69	99.30	-.43	-.12
2•601•970	332	0	46	11	-6.28	124.11	-6.67	124.01	-.39	-.10
2•E02•040	332	0	47	35	-9.41	122.68	-9.81	122.58	-.40	-.10
2•602•110	332	0	48	59	-7.51	122.31	-7.91	122.21	-.40	-.10
2•E02•180	332	0	50	23	-8.78	120.47	-9.18	120.37	-.40	-.10
2•604•490	332	1	36	35	-88.09	325.42	-87.72	319.22	.37	-6.20
2•E04•525	332	1	37	17	-85.68	338.63	-85.38	334.60	.30	-4.03
2•604•560	332	1	37	59	-86.62	9.31	-86.50	2.28	.12	-7.03
2•E04•595	332	1	38	41	-84.38	357.74	-84.19	353.74	.19	-4.00
2•604•630	332	1	39	23	-84.88	15.53	-84.81	10.68	.07	-4.85
2•E04•665	332	1	40	5	-82.74	5.21	-82.60	1.91	.14	-3.30
2•606•030	332	2	7	23	-31.54	4.05	-31.36	3.69	.18	-.36
2•606•065	332	2	8	5	-28.97	2.68	-28.78	2.34	.19	-.34
2•606•100	332	2	8	47	-26.74	1.23	-26.54	.91	.20	-.32
2•E06•135	332	2	9	29	-24.19	.06	-23.98	359.77	.21	-.29
2•606•170	332	2	10	11	-21.95	358.75	-21.73	358.48	.22	-.27
2•E06•205	332	2	10	53	-19.41	357.67	-19.18	357.42	.23	-.25

rev 29

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•636•060	332	12	7	58	-30.81	233.47	-31.18	233.21	-.37	-.26
2•E36•130	332	12	9	22	*******	*******	*******	*******	*****	******
2•636•410	332	12	14	58	-37.47	317.74	-37.74	317.87	-.27	.13
2•E36•480	332	12	16	22	-35.31	315.24	-35.60	315.34	-.29	.10
2•636•550	332	12	17	46	-36.15	310.45	-36.47	310.54	-.32	.09
2•E36•620	332	12	19	10	-38.37	310.47	-38.69	310.58	-.32	.11
2•636•795	332	12	22	40	13.17	299.03	12.80	298.86	-.37	-.17
2•E36•865	332	12	24	4	-15.10	313.46	-15.41	313.42	-.31	-.04
2•636•935	332	12	25	28	-40.87	322.58	-41.13	322.74	-.26	.18
2•E37•005	332	12	26	52	-35.96	284.52	-36.30	284.48	-.42	-.04
2•637•075	332	12	28	16	-11.90	271.10	-12.33	270.98	-.43	-.12
2•E37•250	332	12	31	46	-60.04	354.65	-60.08	355.27	-.04	.62
2•637•320	332	12	33	10	-57.76	341.94	-57.90	342.46	-.14	.52
2•637•390	332	12	34	34	-59.19	333.68	-59.39	334.20	-.20	.52
2•637•460	332	12	35	58	-61.55	334.42	-61.75	335.01	-.20	.59
2•E40•330	332	13	33	22	-79.43	10.38	-79.46	12.56	-.03	2.18
2•640•365	332	13	34	4	-82.18	13.27	-82.19	16.29	-.01	3.02
2•E40•400	332	13	34	46	-81.74	3.97	-81.82	6.78	-.08	2.81
2•640•435	332	13	35	28	-84.45	3.65	-84.53	7.92	-.08	4.27
2•E40•470	332	13	36	10	-84.13	358.81	-84.25	2.76	-.12	3.95
2•640•505	332	13	36	52	-86.99	3.14	-87.06	11.21	-.07	8.07
2•E41•730	332	14	1	22	-45.13	190.13	-45.03	189.58	.10	-.55
2•641•765	332	14	2	4	-42.60	187.89	-42.49	187.38	.11	-.51
2•E41•800	332	14	2	46	-40.44	185.71	-40.31	185.24	.13	-.47
2•641•835	332	14	3	28	-37.91	183.90	-37.77	183.46	.14	-.44
2•E41•870	332	14	4	10	-35.75	182.05	-35.59	181.64	.16	-.41
2•641•905	332	14	4	52	-33.22	180.51	-33.05	180.13	.17	-.38
2•641•940	332	14	5	34	-31.03	178.90	-30.85	178.54	.18	-.36
2•641•975	332	14	6	16	-28.49	177.67	-28.30	177.24	.19	-.33
2•E42•010	332	14	6	58	-26.29	176.14	-26.09	175.83	.20	-.31
2•642•045	332	14	7	40	-23.76	174.95	-23.55	174.66	.21	-.29
2•E42•080	332	14	8	22	-21.53	173.64	-21.31	173.37	.22	-.27

rev 30

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•672•040	333	0	7	34	-17.91	55.96	-18.30	55.78	-.39	-.18
2•672•110	333	0	8	58	*******	*******	*******	*******	*****	******
2•672•390	333	0	14	34	8.77	107.43	8.38	107.28	-.39	-.15
2•E72•460	333	0	15	58	11.92	106.94	11.53	106.78	-.39	-.16
2•672•530	333	0	17	22	12.61	102.97	12.20	102.81	-.41	-.16
2•E72•600	333	0	18	46	9.12	104.29	8.72	104.14	-.40	-.15
2•672•775	333	0	22	16	9.65	113.80	9.28	113.64	-.37	-.16
2•E72•845	333	0	23	40	-17.62	128.03	-17.93	128.00	-.31	-.03
2•672•915	333	0	25	4	-43.18	139.36	-43.44	138.56	-.26	.20
2•E72•985	333	0	26	28	-37.04	99.44	-37.46	99.40	-.42	-.04
2•673•055	333	0	27	52	-13.58	85.14	-14.01	85.02	-.43	-.12
2•E73•335	333	0	33	28	10.80	115.35	10.42	115.19	-.38	-.16
2•673•405	333	0	34	52	-18.44	129.10	-18.76	129.07	-.32	-.03
2•E73•475	333	0	36	16	-42.36	136.43	-42.64	136.60	-.28	.17
2•E73•545	333	0	37	40	-36.03	102.00	-36.45	101.95	-.42	-.05
2•673•615	333	0	39	4	-15.73	91.31	-16.16	91.19	-.43	-.12
2•673•790	333	0	42	34	-1.24	117.52	-1.62	117.40	-.38	-.12
2•E73•860	333	0	43	58	.40	116.75	.02	116.63	-.38	-.12
2•673•930	333	0	45	22	-1.29	114.31	-1.68	114.19	-.39	-.12
2•674•000	333	0	46	46	-4.66	114.23	-5.05	114.12	-.39	-.11
2•676•310	333	1	32	58	-86.30	28.71	-86.40	22.02	-.10	-6.69
2•676•345	333	1	33	40	-84.53	9.18	-84.50	4.58	.03	-4.60
2•676•380	333	1	34	22	-84.30	31.78	-84.43	27.50	-.13	-4.28
2•E76•415	333	1	35	4	-82.74	13.53	-82.74	10.07	.00	-3.51
2•676•450	333	1	35	46	-82.65	25.01	-82.73	21.59	-.08	-3.42
2•E76•485	333	1	36	28	-82.11	27.45	-82.21	24.28	-.10	-3.17
2•677•850	333	2	3	46	-30.70	354.03	-30.52	353.67	.18	-.36
2•E77•885	333	2	4	28	-28.19	352.72	-28.00	352.39	.19	-.33
2•677•920	333	2	5	10	-25.99	351.31	-25.79	351.00	.20	-.31
2•E77•955	333	2	5	52	-23.45	350.16	-23.24	349.87	.21	-.29
2•677•990	333	2	6	34	-21.24	348.86	-21.02	348.59	.22	-.27
2•E78•025	333	2	7	16	-18.69	347.81	-18.46	347.56	.23	-.25

rev 31

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•707•880	333	12	4	22	-18.27	225.11	-18.64	224.91	-.37	-.20
2•707•950	333	12	5	46	*******	*******	*******	*******	*****	******
2•708•230	333	12	11	22	-53.02	318.57	-53.22	318.95	-.20	.38
2•708•300	333	12	12	46	-49.99	312.47	-50.23	312.77	-.24	.30
2•708•370	333	12	14	10	-50.95	307.05	-51.23	307.33	-.28	.28
2•708•440	333	12	15	34	-53.54	308.68	-53.81	309.01	-.27	.33
2•708•615	333	12	19	4	13.85	291.28	13.49	291.10	-.36	-.18
2•708•685	333	12	20	28	-14.56	305.25	-14.86	305.21	-.30	-.04
2•708•755	333	12	21	52	-40.30	314.92	-40.54	315.10	-.24	.18
2•708•825	333	12	23	16	-35.32	277.45	-35.73	277.42	-.41	-.03
2•708•895	333	12	24	40	-11.85	263.54	-12.28	263.42	-.43	-.12
2•709•070	333	12	28	10	-45.98	314.85	-46.23	315.09	-.25	.24
2•709•140	333	12	29	34	-43.48	311.10	-43.76	311.29	-.28	.19
2•709•210	333	12	30	58	-44.73	306.43	-45.04	306.61	-.31	.18
2•709•280	333	12	32	22	-46.91	307.31	-47.21	307.52	-.30	.21
2•711•170	333	13	10	10	*******	*******	*******	*******	*****	******
2•711•205	333	13	10	52	*******	*******	*******	*******	*****	******
2•712•150	333	13	29	46	-80.81	333.61	-81.03	335.79	-.22	2.18
2•712•185	333	13	30	28	-83.38	329.22	-83.63	332.18	-.25	2.96
2•712•220	333	13	31	10	-82.40	324.89	-82.68	327.28	-.28	2.39
2•712•255	333	13	31	52	-84.84	315.09	-85.17	318.15	-.33	3.06
2•712•290	333	13	32	34	-84.13	314.50	-84.46	317.10	-.33	2.60
2•712•325	333	13	33	16	-86.24	294.35	-86.65	296.44	-.41	2.09
2•713•550	333	13	57	46	-40.01	183.52	-39.94	183.04	.07	-.48
2•713•585	333	13	58	28	-37.71	181.31	-37.62	180.86	.09	-.45
2•713•620	333	13	59	10	-35.76	179.15	-35.65	178.73	.11	-.42
2•713•655	333	13	59	52	-33.41	177.31	-33.29	176.91	.12	-.40
2•713•690	333	14	0	34	-31.38	175.45	-31.25	175.08	.13	-.37
2•713•725	333	14	1	16	-28.97	173.87	-28.82	173.52	.15	-.35
2•713•760	333	14	1	58	-26.88	172.25	-26.72	171.92	.16	-.33
2•713•795	333	14	2	40	-24.41	170.88	-24.24	170.58	.17	-.30
2•713•830	333	14	3	22	-22.23	169.44	-22.05	169.16	.18	-.28

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 32

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•743•860	334	0	3	58	50.69	90.20	50.28	89.90	-.41	-.30
2•743•930	334	0	5	22	*******	*******	*******	*******	*****	******
2•744•210	334	0	10	58	-9.11	123.27	-9.38	123.20	-.27	-.07
2•744•280	334	0	12	22	-7.39	122.34	-7.67	122.26	-.28	-.08
2•744•350	334	0	13	46	-8.54	119.43	-8.84	119.35	-.30	-.08
2•744•420	334	0	15	10	-11.14	119.75	-11.44	119.69	-.30	-.06
2•744•595	334	0	18	40	.92	100.75	.53	100.62	-.39	-.13
2•744•665	334	0	20	4	-24.06	114.74	-24.39	114.74	-.33	.00
2•744•735	334	0	21	28	-50.19	126.36	-50.46	126.64	-.27	.28
2•744•805	334	0	22	52	-44.52	82.36	-44.95	82.29	-.43	-.07
2•744•875	334	0	24	16	-19.52	69.98	-19.95	69.84	-.43	-.14
2•745•155	334	0	29	52	-6.40	103.28	-6.79	103.18	-.39	-.10
2•745•225	334	0	31	16	-31.05	118.21	-31.38	118.26	-.33	.05
2•745•295	334	0	32	40	-56.02	137.97	-56.26	133.38	-.24	.41
2•745•365	334	0	34	4	-49.22	86.52	-49.65	86.47	-.43	-.05
2•745•435	334	0	35	28	-29.08	76.83	-29.51	76.70	-.43	-.13
2•745•610	334	0	38	58	-11.91	122.70	-12.22	122.64	-.31	-.06
2•745•680	334	0	40	22	-11.42	121.24	-11.74	121.17	-.32	-.07
2•745•750	334	0	41	46	-13.37	118.42	-13.71	118.36	-.34	-.06
2•745•820	334	0	43	10	24.59	131.10	24.32	130.82	-.27	-.28
2•748•130	334	1	29	22	-87.68	30.46	-87.86	20.22	-.18	-10.24
2•748•165	334	1	30	4	-85.80	359.41	-85.76	353.46	.04	-5.95
2•748•200	334	1	30	46	-84.98	29.24	-85.16	24.59	-.18	-4.65
2•748•235	334	1	31	28	-83.45	9.77	-83.50	5.90	-.05	-3.87
2•748•270	334	1	32	10	-83.22	23.54	-83.37	19.96	-.15	-3.58
2•748•305	334	1	32	52	-81.80	8.66	-81.84	5.55	-.04	-3.11
2•749•670	334	2	0	10	-31.25	344.85	-31.07	344.49	.18	-.36
2•749•705	334	2	0	52	-28.72	343.54	-28.53	343.20	.19	-.34
2•749•740	334	2	1	34	-26.51	342.12	-26.31	341.81	.20	-.31
2•749•775	334	2	2	16	-23.98	340.95	-23.77	340.66	.21	-.29
2•749•810	334	2	2	58	-21.76	339.66	-21.54	339.39	.22	-.27
2•749•845	334	2	3	40	-19.20	338.61	-18.98	338.36	.22	-.25

rev 33

2•779•770	334	12	2	10	*******	*******	*******	*******	*****	******
2•779•840	334	12	3	34	*******	*******	*******	*******	*****	******
2•780•120	334	12	9	10	-26.66	291.15	-26.97	291.18	-.31	.03
2•780•190	334	12	10	34	-25.00	287.87	-25.33	287.88	-.33	.01
2•780•260	334	12	11	58	-25.10	286.75	-25.44	286.75	-.34	.00
2•780•330	334	12	13	22	-27.28	287.05	-27.62	287.07	-.34	.02
2•780•505	334	12	16	52	1.55	278.50	1.17	278.37	-.38	-.13
2•780•575	334	12	18	16	-22.88	292.44	-23.21	292.44	-.32	.00
2•780•645	334	12	19	40	-49.36	306.43	-49.60	306.73	-.24	.30
2•780•715	334	12	21	4	-44.45	260.70	-44.87	260.65	-.42	-.05
2•780•785	334	12	22	28	-19.44	247.90	-19.87	247.77	-.43	-.13
2•780•960	334	12	25	58	-2.01	271.95	-2.41	271.83	-.40	-.12
2•781•030	334	12	27	22	.25	270.83	-.16	270.71	-.41	-.12
2•781•100	334	12	28	46	-.13	268.05	-.54	267.93	-.41	-.12
2•781•170	334	12	30	10	-3.28	267.93	-3.70	267.81	-.42	-.12
2•782•920	334	13	5	10	*******	*******	*******	*******	*****	******
2•782•955	334	13	5	52	*******	*******	*******	*******	*****	******
2•784•040	334	13	27	34	-85.51	48.79	-85.16	51.78	.35	2.99
2•784•075	334	13	28	16	-84.93	77.18	-84.50	77.79	.43	.61
2•784•110	334	13	28	58	-87.85	80.83	-87.42	81.52	.43	.89
2•784•145	334	13	29	40	-86.21	116.22	-85.83	113.20	.38	-3.02
2•784•180	334	13	30	22	-87.44	148.01	-87.21	140.14	.23	-7.87
2•784•215	334	13	31	4	-84.87	146.26	-84.64	142.20	.23	-4.06
2•785•440	334	13	55	34	-41.51	167.99	-41.40	167.50	.11	-.49
2•785•475	334	13	56	16	-38.98	165.94	-38.85	165.48	.13	-.46
2•785•510	334	13	56	58	-36.80	163.96	-36.65	163.53	.15	-.43
2•785•545	334	13	57	40	-34.24	162.35	-34.08	161.95	.16	-.40
2•785•580	334	13	58	22	-32.04	160.70	-31.87	160.33	.17	-.37
2•785•615	334	13	59	4	-29.50	159.32	-29.32	158.98	.18	-.34
2•785•650	334	13	59	46	-27.30	157.87	-27.11	157.55	.19	-.32
2•785•685	334	14	0	28	-24.75	156.68	-24.55	156.38	.20	-.30
2•785•720	334	14	1	10	-22.53	155.36	-22.32	155.08	.21	-.28

rev 34

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
2•815•680	335	0	0	22	*******	*******	*******	*******	*****	******
2•815•750	335	0	1	46	*******	*******	*******	*******	*****	******
2•816•100	335	0	8	46	*******	*******	*******	*******	*****	******
2•816•170	335	0	10	10	*******	*******	*******	*******	*****	******
2•816•240	335	0	11	34	*******	*******	*******	*******	*****	******
2•816•310	335	0	12	58	*******	*******	*******	*******	*****	******
2•816•485	335	0	16	28	4.30	88.37	3.91	88.23	-.39	-.14
2•816•555	335	0	17	52	-22.97	101.98	-23.31	101.97	-.34	-.01
2•816•625	335	0	19	16	-49.97	111.51	-50.27	111.76	-.30	.25
2•816•695	335	0	20	40	-42.27	69.14	-42.70	69.04	-.43	-.10
2•816•765	335	0	22	4	-15.41	56.00	-15.83	55.86	-.42	-.14
2•817•045	335	0	27	40	-8.19	94.96	-8.57	94.87	-.38	-.09
2•817•115	335	0	29	4	-31.87	111.35	-32.18	111.41	-.31	.06
2•817•185	335	0	30	28	-55.86	126.31	-56.08	126.73	-.22	.42
2•817•255	335	0	31	52	-50.30	78.56	-50.72	78.53	-.42	-.03
2•817•325	335	0	33	16	-30.43	68.00	-30.86	67.87	-.43	-.13
2•817•500	335	0	36	46	-22.00	52.23	-22.41	52.05	-.41	-.18
2•817•570	335	0	38	10	-19.63	51.88	-20.04	51.71	-.41	-.17
2•817•640	335	0	39	34	-18.59	48.40	-18.99	48.22	-.40	-.18
2•817•710	335	0	40	58	-19.19	45.84	-19.58	45.65	-.39	-.19
2•819•950	335	1	25	46	-86.17	6.90	-86.26	.40	-.09	-6.50
2•819•985	335	1	26	28	-84.71	343.96	-84.64	339.28	.07	-4.68
2•820•020	335	1	27	10	-83.91	14.62	-84.06	10.67	-.15	-3.95
2•820•055	335	1	27	52	-82.27	358.79	-82.31	355.49	-.04	-3.30
2•820•090	335	1	28	34	-81.47	13.46	-81.62	10.61	-.15	-2.85
2•820•125	335	1	29	16	-79.97	.20	-80.02	357.65	-.05	-2.55
2•821•490	335	1	56	34	-33.13	336.87	-32.97	336.49	.16	-.38
2•821•525	335	1	57	16	-30.59	335.40	-30.42	335.04	.17	-.36
2•821•560	335	1	57	58	-28.41	333.85	-28.22	333.52	.19	-.33
2•821•595	335	1	58	40	-25.89	332.56	-25.69	332.25	.20	-.31
2•821•630	335	1	59	22	-23.68	331.16	-23.47	330.87	.21	-.29
2•821•665	335	2	0	4	-21.14	330.00	-20.93	329.73	.21	-.27

rev 35

2•849•770	335	11	22	10	*******	*******	*******	*******	*****	******
2•849•805	335	11	22	52	*******	*******	*******	*******	*****	******
2•851•660	335	11	59	58	*******	*******	*******	*******	*****	******
2•851•730	335	12	1	22	*******	*******	*******	*******	*****	******
2•852•010	335	12	6	58	9.61	282.14	9.30	281.97	-.31	-.17
2•852•080	335	12	8	22	11.72	280.73	11.40	280.55	-.32	-.18
2•852•150	335	12	9	46	11.83	276.84	11.49	276.66	-.34	-.18
2•852•220	335	12	11	10	8.96	276.89	8.62	276.72	-.34	-.17
2•852•395	335	12	14	40	.55	270.33	.18	270.20	-.37	-.13
2•852•465	335	12	16	4	-23.17	284.74	-23.48	284.75	-.31	.01
2•852•535	335	12	17	28	-49.01	299.51	-49.23	299.82	-.22	.31
2•852•605	335	12	18	52	-44.72	254.24	-45.14	254.22	-.42	-.02
2•852•675	335	12	20	16	-20.49	240.58	-20.92	240.46	-.43	-.12
2•852•850	335	12	23	46	5.25	271.03	4.87	270.89	-.38	-.14
2•852•920	335	12	25	10	8.82	269.62	8.44	269.47	-.38	-.15
2•852•990	335	12	26	34	8.64	266.90	8.25	266.75	-.39	-.15
2•853•060	335	12	27	58	4.42	267.21	4.03	267.07	-.39	-.14
2•855•930	335	13	25	22	-76.46	125.04	-76.17	123.61	.29	-1.43
2•855•965	335	13	26	4	-73.36	121.54	-73.05	120.42	.31	-1.12
2•856•000	335	13	26	46	-76.25	139.90	-76.05	138.23	.20	-1.67
2•856•035	335	13	27	28	-73.78	135.69	-73.55	134.32	.23	-1.37
2•856•070	335	13	28	10	-75.29	150.29	-75.16	148.61	.13	-1.68
2•856•105	335	13	28	52	-73.04	145.30	-72.87	143.88	.17	-1.42
2•857•330	335	13	53	22	-39.19	156.84	-39.06	156.38	.13	-.46
2•857•365	335	13	54	4	-36.69	155.06	-36.55	154.63	.14	-.43
2•857•400	335	13	54	46	-34.55	153.27	-34.40	152.87	.15	-.40
2•857•435	335	13	55	28	-32.05	151.76	-31.89	151.39	.16	-.37
2•857•470	335	13	56	10	-29.90	150.18	-29.72	149.83	.18	-.35
2•857•505	335	13	56	52	-27.39	148.85	-27.20	148.53	.19	-.32
2•857•540	335	13	57	34	-25.20	147.40	-25.00	147.10	.20	-.30
2•857•575	335	13	58	16	-22.68	146.19	-22.47	145.91	.21	-.28
2•857•610	335	13	58	58	-20.47	144.87	-20.25	144.61	.22	-.26

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 36										
2•887•570	335	23	58	9	*******	*******	*******	*******	*****	******
2•887•640	335	23	59	33	*******	*******	*******	*******	*****	******
2•887•920	336	0	5	9	-7.05	70.85	-7.46	70.74	-.41	-.11
2•887•990	336	0	6	33	-4.42	69.89	-4.83	69.78	-.41	-.11
2•888•060	336	0	7	57	-4.56	66.61	-4.98	66.49	-.42	-.12
2•888•130	336	0	9	21	-7.39	67.58	-7.81	67.47	-.42	-.11
2•888•305	336	0	12	51	1.65	85.51	1.28	85.38	-.37	-.13
2•888•375	336	0	14	15	-22.85	99.88	-23.15	99.89	-.30	.01
2•888•445	336	0	15	39	-48.86	114.59	-49.08	114.89	-.22	.30
2•888•515	336	0	17	3	-43.91	68.97	-44.33	68.94	-.42	-.03
2•888•585	336	0	18	27	-19.76	55.85	-20.19	55.73	-.43	-.12
2•888•865	336	0	24	3	-5.65	87.46	-6.02	87.36	-.37	-.10
2•888•935	336	0	25	27	-29.89	102.76	-30.19	102.81	-.30	.05
2•889•005	336	0	26	51	-53.54	119.57	-53.74	119.96	-.20	.39
2•889•075	336	0	28	15	-48.97	73.53	-49.39	73.54	-.42	.01
2•889•145	336	0	29	39	-29.58	61.66	-30.01	61.55	-.43	-.11
2•889•320	336	0	33	9	-11.40	103.69	-11.71	103.63	-.31	-.06
2•889•390	336	0	34	33	-11.38	102.28	-11.70	102.22	-.32	-.06
2•889•460	336	0	35	57	-11.64	99.40	-11.97	99.33	-.33	-.07
2•889•530	336	0	37	21	-13.33	99.69	-13.66	99.63	-.33	-.06
2•891•840	336	1	23	33	-86.41	21.49	-86.67	15.66	-.26	-5.83
2•891•875	336	1	24	15	-85.08	353.56	-85.15	348.45	-.07	-5.11
2•891•910	336	1	24	57	-83.72	17.77	-83.96	14.33	-.24	-3.44
2•891•945	336	1	25	39	-82.4C	.38	-82.52	357.13	-.12	-3.25
2•891•980	336	1	26	21	-81.72	12.17	-81.93	9.41	-.21	-2.76
2•892•015	336	1	27	3	-80.58	357.60	-80.68	354.94	-.10	-2.66
2•893•380	336	1	54	21	-31.68	326.70	-31.51	326.33	.17	-.37
2•893•415	336	1	55	3	-29.16	325.26	-28.98	324.92	.18	-.34
2•893•450	336	1	55	45	-26.95	323.75	-26.76	323.43	.19	-.32
2•893•485	336	1	56	27	-24.42	322.48	-24.22	322.18	.20	-.30
2•893•520	336	1	57	9	-22.20	321.10	-21.99	320.82	.21	-.28
2•893•555	336	1	57	51	-19.64	319.96	-19.42	319.70	.22	-.26
rev 37										
2•923•550	336	11	57	45	*******	*******	*******	*******	*****	******
2•923•620	336	11	59	9	*******	*******	*******	*******	*****	******
2•923•900	336	12	4	45	-51.48	270.57	-51.80	270.82	-.32	.25
2•923•970	336	12	6	9	-50.01	267.62	-50.34	267.82	-.33	.20
2•924•040	336	12	7	33	-51.13	264.94	-51.48	265.14	-.35	.20
2•924•110	336	12	8	57	-53.75	265.28	-54.10	265.51	-.35	.23
2•924•285	336	12	12	27	1.52	261.73	1.15	261.60	-.37	-.13
2•924•355	336	12	13	51	-23.32	276.98	-23.61	276.99	-.29	.01
2•924•425	336	12	15	15	-49.41	294.50	-49.60	294.83	-.19	.33
2•924•495	336	12	16	39	-44.27	247.12	-44.68	247.11	-.41	-.01
2•924•565	336	12	18	3	-20.31	233.30	-20.74	233.18	-.43	-.12
2•924•740	336	12	21	33	-7.18	279.50	-7.47	279.42	-.29	-.08
2•924•810	336	12	22	57	-5.76	277.88	-6.06	277.79	-.30	-.09
2•924•880	336	12	24	21	-6.78	274.83	-7.10	274.74	-.32	-.09
2•924•950	336	12	25	45	-8.19	275.35	-8.51	275.27	-.32	-.08
2•927•750	336	13	21	45	-77.22	134.40	-77.05	132.54	.17	-1.86
2•927•785	336	13	22	27	-74.66	129.89	-74.46	128.38	.20	-1.51
2•927•820	336	13	23	9	-75.89	150.06	-75.83	148.24	.06	-1.82
2•927•855	336	13	23	51	-73.74	142.66	-73.63	141.12	.11	-1.54
2•927•890	336	13	24	33	-74.29	156.88	-74.28	155.22	.01	-1.66
2•927•925	336	13	25	15	-72.42	149.96	-72.36	148.49	.06	-1.47
2•929•220	336	13	51	9	-38.37	146.75	-38.24	146.30	.13	-.45
2•929•255	336	13	51	51	-35.79	144.87	-35.65	144.45	.14	-.42
2•929•290	336	13	52	33	-33.58	143.07	-33.42	142.68	.16	-.39
2•929•325	336	13	53	15	-31.03	141.63	-30.86	141.27	.17	-.36
2•929•360	336	13	53	57	-28.81	140.13	-28.63	139.79	.18	-.34
2•929•395	336	13	54	39	-26.26	138.88	-26.07	138.57	.19	-.31
2•929•430	336	13	55	21	-24.04	137.53	-23.84	137.24	.20	-.29
2•929•465	336	13	56	3	-21.49	136.41	-21.28	136.14	.21	-.27
2•929•500	336	13	56	45	-19.29	135.11	-19.07	134.86	.22	-.25
2•929•535	336	13	57	27	-16.76	134.01	-16.53	133.78	.23	-.23
2•929•570	336	13	58	9	-14.52	132.78	-14.29	132.56	.23	-.22
rev 38										
2•959•390	336	23	54	33	*******	*******	*******	*******	*****	******
2•959•460	336	23	55	57	*******	*******	*******	*******	*****	******
2•959•740	337	0	1	33	-5.57	64.02	-5.97	63.91	-.40	-.11
2•959•810	337	0	2	57	-3.02	63.09	-3.42	62.97	-.40	-.12
2•959•880	337	0	4	21	-2.87	60.17	-3.28	60.05	-.41	-.12
2•959•950	337	0	5	45	-5.46	61.49	-5.87	61.38	-.41	-.11
2•960•125	337	0	9	15	3.45	78.21	3.09	78.07	-.36	-.14
2•960•195	337	0	10	39	-20.53	93.76	-20.81	93.76	-.28	-.00
2•960•265	337	0	12	3	-31.91	97.85	-32.17	97.94	-.26	.09
2•960•335	337	0	13	27	-42.19	64.18	-42.60	64.18	-.41	.00
2•960•405	337	0	14	51	-18.66	49.32	-19.09	49.20	-.43	-.12
2•960•685	337	0	20	27	-2.56	80.19	-2.92	80.08	-.36	-.11
2•960•755	337	0	21	51	-27.32	95.95	-27.61	95.99	-.29	.04
2•960•825	337	0	23	15	-51.43	113.40	-51.61	113.77	-.18	.37
2•960•895	337	0	24	39	-47.23	67.93	-47.64	67.96	-.41	.03
2•960•965	337	0	26	3	-28.14	55.92	-28.57	55.83	-.43	-.09
2•961•140	337	0	29	33	-5.23	96.98	-5.52	96.89	-.29	-.09
2•961•210	337	0	30	57	-5.27	95.11	-5.57	95.02	-.30	-.09
2•961•280	337	0	32	21	-5.67	92.41	-5.99	92.32	-.32	-.09
2•961•350	337	0	33	45	-7.41	92.73	-7.73	92.64	-.32	-.09
2•963•660	337	1	19	57	-85.24	66.47	-85.67	66.81	-.43	.34
2•963•695	337	1	20	39	-86.77	42.95	-87.17	39.98	-.40	-2.97
2•963•730	337	1	21	21	-84.24	48.97	-84.66	47.80	-.42	-1.17
2•963•765	337	1	22	3	-84.39	22.01	-84.71	18.87	-.32	-3.14
2•963•800	337	1	22	45	-82.77	30.76	-83.13	28.76	-.36	-2.00
2•963•835	337	1	23	27	-82.55	10.82	-82.81	8.01	-.26	-2.81
2•965•200	337	1	50	45	-35.72	320.13	-35.58	319.71	.14	-.42
2•965•235	337	1	51	27	-33.21	318.40	-33.05	318.01	.16	-.39
2•965•270	337	1	52	9	-31.07	316.71	-30.90	316.35	.17	-.36
2•965•305	337	1	52	51	-28.58	315.35	-28.40	315.01	.18	-.34
2•965•340	337	1	53	33	-26.41	313.91	-26.22	313.59	.19	-.32
2•965•375	337	1	54	15	-23.84	312.73	-23.64	312.44	.20	-.29
rev 39										
2•995•375	337	11	54	15	13.29	196.21	12.89	196.12	-.40	-.09
2•995•445	337	11	55	39	*******	*******	*******	*******	*****	******
2•995•725	337	12	1	15	-49.96	265.56	-50.25	265.82	-.29	.26
2•995•795	337	12	2	39	-47.95	262.20	-48.26	262.41	-.31	.21
2•995•865	337	12	4	3	-48.99	259.83	-49.31	260.04	-.32	.21
2•995•935	337	12	5	27	-50.13	259.72	-50.46	259.94	-.33	.22
2•996•110	337	12	8	57	3.54	254.68	3.19	254.54	-.35	-.14
2•996•180	337	12	10	21	-20.94	270.28	-21.22	270.28	-.28	.00
2•996•250	337	12	11	45	-45.97	287.36	-46.14	287.65	-.17	.29
2•996•320	337	12	13	9	-42.47	241.63	-42.87	241.65	-.40	.02
2•996•390	337	12	14	33	-19.06	227.22	-19.49	227.11	-.43	-.11
2•996•565	337	12	18	3	-3.55	272.88	-3.82	272.78	-.27	-.10
2•996•635	337	12	19	27	-2.14	271.43	-2.42	271.32	-.28	-.11
2•996•705	337	12	20	51	-3.70	267.88	-4.00	267.78	-.30	-.10
2•996•775	337	12	22	15	-5.27	268.56	-5.57	268.47	-.30	-.09
2•999•575	337	13	18	15	-81.03	132.72	-80.92	129.98	.11	-2.74
2•999•610	337	13	18	57	-78.72	125.97	-78.56	123.86	.16	-2.11
2•999•645	337	13	19	39	-79.17	150.90	-79.19	148.52	-.02	-2.38
2•999•680	337	13	20	21	-77.42	141.55	-77.37	139.51	.05	-2.04
2•999•715	337	13	21	3	-77.23	159.01	-77.31	157.01	-.08	-2.00
2•999•750	337	13	21	45	-75.74	150.62	-75.76	148.80	-.02	-1.82
3•001•045	337	13	47	39	-42.27	141.22	-42.17	140.71	.10	-.51
3•001•080	337	13	48	21	-39.70	139.10	-39.59	138.63	.11	-.47
3•001•115	337	13	49	3	-37.59	137.05	-37.46	136.61	.13	-.44
3•001•150	337	13	49	45	-35.08	135.41	-34.94	135.00	.14	-.41
3•001•185	337	13	50	27	-32.93	133.65	-32.77	133.27	.16	-.38
3•001•220	337	13	51	9	-30.40	132.11	-30.23	131.75	.17	-.36
3•001•255	337	13	51	51	-28.21	130.52	-28.03	130.19	.18	-.33
3•001•290	337	13	52	33	-25.67	129.17	-25.48	128.86	.19	-.31
3•001•325	337	13	53	15	-23.37	127.76	-23.17	127.47	.20	-.29
3•001•360	337	13	53	57	-20.78	126.53	-20.57	126.26	.21	-.27
3•001•395	337	13	54	39	-18.56	125.28	-18.34	125.03	.22	-.25

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 40										
3.031.355	337	23	53	51	-71.70	339.03	-71.96	337.85	-.26	-1.18
3.031.425	337	23	55	15	*******	*******	*******	*******	*****	******
3.031.705	338	0	0	51	-14.13	72.81	-14.46	72.76	-.33	-.05
3.031.775	338	0	2	15	-11.92	71.23	-12.26	71.16	-.34	-.07
3.031.845	338	0	3	39	-12.58	67.91	-12.94	67.84	-.36	-.07
3.031.915	338	0	5	3	-14.36	67.81	-14.72	67.75	-.36	-.06
3.032.090	338	0	8	33	7.36	55.00	6.95	54.86	-.41	-.14
3.032.160	338	0	9	57	-21.38	70.56	-21.73	70.53	-.35	-.03
3.032.230	338	0	11	21	-49.28	79.79	-49.59	80.02	-.31	.23
3.032.300	338	0	12	45	-40.35	36.82	-40.78	36.70	-.43	-.12
3.032.370	338	0	14	9	-10.83	20.02	-11.24	19.87	-.41	-.15
3.032.650	338	0	19	45	10.25	56.29	9.84	56.14	-.41	-.15
3.032.720	338	0	21	9	-21.48	72.43	-21.84	72.40	-.36	-.03
3.032.790	338	0	22	33	-46.22	78.92	-46.55	79.09	-.33	.17
3.032.860	338	0	23	57	-36.71	41.99	-37.14	41.88	-.43	-.11
3.032.930	338	0	25	21	-13.89	30.33	-14.32	30.19	-.43	-.14
3.033.105	338	0	28	51	-5.04	98.38	-5.27	98.29	-.23	-.09
3.033.175	338	0	30	15	-4.78	96.56	-5.02	96.47	-.24	-.09
3.033.245	338	0	31	39	-8.20	92.98	-8.46	92.89	-.26	-.07
3.033.315	338	0	33	3	-11.91	91.88	-12.18	91.83	-.27	-.05
3.035.625	338	1	19	15	-77.38	352.20	-77.59	350.37	-.21	-1.83
3.035.660	338	1	19	57	-76.25	343.01	-76.39	341.22	-.14	-1.79
3.035.695	338	1	20	39	-75.29	353.75	-75.51	352.20	-.22	-1.55
3.035.730	338	1	21	21	-74.42	345.54	-74.58	343.97	-.16	-1.57
3.035.765	338	1	22	3	-73.91	352.91	-74.12	351.47	-.21	-1.44
3.035.800	338	1	22	45	-73.00	345.39	-73.16	343.95	-.16	-1.44
3.037.165	338	1	50	3	-30.49	307.13	-30.32	306.77	.17	-.36
3.037.200	338	1	50	45	-27.95	305.81	-27.77	305.48	.18	-.33
3.037.235	338	1	51	27	-25.75	304.40	-25.56	304.09	.19	-.31
3.037.270	338	1	52	9	-23.20	303.24	-23.00	302.95	.20	-.29
3.037.305	338	1	52	51	-20.98	301.97	-20.77	301.70	.21	-.27
3.037.340	338	1	53	33	-18.42	300.88	-18.20	300.63	.22	-.25
rev 41										
3.066.215	338	11	31	3	*******	*******	*******	*******	*****	******
3.067.265	338	11	52	3	*******	*******	*******	*******	*****	******
3.067.335	338	11	53	27	*******	*******	*******	*******	*****	******
3.067.615	338	11	59	3	-5.32	223.29	-5.74	223.18	-.42	-.11
3.067.685	338	12	0	27	-2.74	224.03	-3.16	223.91	-.42	-.12
3.067.755	338	12	1	51	-2.84	221.20	-3.26	221.08	-.42	-.12
3.067.825	338	12	3	15	-5.70	221.76	-6.12	221.65	-.42	-.11
3.068.000	338	12	6	45	7.10	231.31	6.70	231.17	-.40	-.14
3.068.070	338	12	8	9	-20.36	246.66	-20.71	246.63	-.35	-.03
3.068.140	338	12	9	33	-46.99	255.72	-47.30	255.92	-.31	.20
3.068.210	338	12	10	57	-39.58	214.78	-40.01	214.68	-.43	-.10
3.068.280	338	12	12	21	-12.51	199.35	-12.93	199.21	-.42	-.14
3.069.015	338	12	27	3	*******	*******	*******	*******	*****	******
3.069.680	338	12	40	21	*******	*******	*******	*******	*****	******
3.069.750	338	12	41	45	*******	*******	*******	*******	*****	******
3.069.820	338	12	43	9	*******	*******	*******	*******	*****	******
3.071.535	338	13	17	27	-82.37	.14	-82.07	2.30	.30	2.16
3.071.570	338	13	18	9	-82.49	18.50	-82.11	19.89	.38	1.39
3.071.605	338	13	18	51	-85.60	10.18	-85.25	13.23	.35	3.05
3.071.640	338	13	19	33	-85.04	39.95	-84.61	40.47	.43	.52
3.071.675	338	13	20	15	-87.59	46.23	-87.16	46.40	.43	.17
3.071.710	338	13	20	57	-85.68	74.85	-85.29	72.39	.39	-2.46
3.073.075	338	13	48	15	-32.61	124.01	-32.45	123.63	.16	-.38
3.073.110	338	13	48	57	-30.07	122.54	-29.90	122.19	.17	-.35
3.073.145	338	13	49	39	-27.85	121.00	-27.67	120.67	.18	-.33
3.073.180	338	13	50	21	-25.30	119.72	-25.11	119.41	.19	-.31
3.073.215	338	13	51	3	-23.11	118.34	-22.91	118.05	.20	-.29
3.073.250	338	13	51	45	-20.57	117.18	-20.36	116.91	.21	-.27
3.073.285	338	13	52	27	-18.35	115.80	-18.13	115.65	.22	-.25
3.073.320	338	13	53	9	-15.79	114.84	-15.57	114.61	.22	-.23
3.073.355	338	13	53	51	-13.55	113.64	-13.32	113.43	.23	-.21
3.073.390	338	13	54	33	-10.96	112.66	-10.72	112.47	.24	-.19
rev 42										
3.103.245	338	23	51	39	39.30	42.71	38.90	42.46	-.40	-.25
3.103.315	338	23	53	3	31.19	41.23	30.78	41.02	-.41	-.21
3.103.595	338	23	58	39	-3.28	47.05	-3.68	46.94	-.40	-.11
3.103.665	339	0	0	3	-.29	46.33	-.69	46.21	-.40	-.12
3.103.735	339	0	1	27	-1.90	43.27	-2.31	43.15	-.41	-.12
3.103.805	339	0	2	51	-3.36	43.24	-3.77	43.12	-.41	-.12
3.103.980	339	0	6	21	4.48	47.90	4.08	47.76	-.40	-.14
3.104.050	339	0	7	45	-22.17	62.63	-22.52	62.61	-.35	-.02
3.104.120	339	0	9	9	-47.52	71.99	-47.82	72.21	-.30	.22
3.104.190	339	0	10	33	-40.48	30.59	-40.91	30.49	-.43	-.10
3.104.260	339	0	11	57	-12.81	15.62	-13.23	15.48	-.42	-.14
3.104.540	339	0	17	33	9.05	48.48	8.65	48.33	-.40	-.15
3.104.610	339	0	18	57	-21.83	64.40	-22.18	64.38	-.35	-.02
3.104.680	339	0	20	21	-45.70	70.99	-46.02	71.16	-.32	.17
3.104.750	339	0	21	45	-36.62	34.54	-37.05	34.45	-.43	-.09
3.104.820	339	0	23	9	-14.18	23.60	-14.61	23.46	-.43	-.14
3.104.895	339	0	26	39	-18.43	48.18	-18.85	48.10	-.42	-.08
3.105.065	339	0	28	3	-16.80	45.94	-17.22	45.85	-.42	-.09
3.105.135	339	0	29	27	-16.55	43.48	-16.97	43.38	-.42	-.10
3.105.205	339	0	30	51	-18.65	43.43	-19.07	43.34	-.42	-.09
3.107.515	339	1	17	3	*******	*******	*******	*******	*****	******
3.107.550	339	1	17	45	*******	*******	*******	*******	*****	******
3.107.585	339	1	18	27	-13.47	358.40	-13.78	358.20	-.31	-.20
3.107.620	339	1	19	9	-15.96	356.62	-16.26	356.41	-.30	-.21
3.107.655	339	1	19	51	-19.31	3.42	-19.64	3.20	-.33	-.22
3.107.690	339	1	20	33	-20.18	1.23	-20.50	1.00	-.32	-.23
3.109.055	339	1	47	51	-30.11	297.75	-29.94	297.40	.17	-.35
3.109.090	339	1	48	33	-27.53	296.33	-27.35	296.00	.18	-.33
3.109.125	339	1	49	15	-25.29	294.84	-25.10	294.53	.19	-.31
3.109.160	339	1	49	57	-22.71	293.60	-22.51	293.32	.20	-.28
3.109.195	339	1	50	38	-20.44	292.25	-20.23	291.99	.21	-.26
3.109.230	339	1	51	20	-17.85	291.13	-17.63	290.89	.22	-.24
rev 43										
3.136.565	339	10	58	2	*******	*******	*******	*******	*****	******
3.136.600	339	10	58	44	*******	*******	*******	*******	*****	******
3.137.335	339	11	13	26	*******	*******	*******	*******	*****	******
3.137.370	339	11	14	8	*******	*******	*******	*******	*****	******
3.139.155	339	11	49	50	*******	*******	*******	*******	*****	******
3.139.225	339	11	51	14	*******	*******	*******	*******	*****	******
3.139.505	339	11	56	50	7.67	246.12	7.38	245.95	-.29	-.17
3.139.575	339	11	58	14	9.18	244.40	8.88	244.23	-.30	-.17
3.139.645	339	11	59	38	7.97	241.18	7.65	241.02	-.32	-.16
3.139.715	339	12	1	2	6.03	241.20	5.71	241.05	-.32	-.15
3.139.890	339	12	4	32	8.65	224.96	8.26	224.81	-.39	-.15
3.139.960	339	12	5	56	-19.74	239.44	-20.08	239.41	-.34	-.03
3.140.030	339	12	7	20	-47.90	248.82	-48.19	249.05	-.29	.23
3.140.100	339	12	8	44	-40.24	208.13	-40.67	208.05	-.43	-.08
3.140.170	339	12	10	8	-12.71	193.71	-13.14	193.57	-.43	-.14
3.140.345	339	12	13	38	-4.43	246.41	-4.74	246.31	-.31	-.10
3.140.415	339	12	15	2	-2.80	245.53	-3.12	245.42	-.32	-.11
3.140.485	339	12	16	26	-3.41	242.46	-3.75	242.35	-.34	-.11
3.140.555	339	12	17	50	-6.08	242.39	-6.42	242.30	-.34	-.09
3.143.425	339	13	15	14	-75.10	108.07	-74.95	106.44	.15	-1.63
3.143.460	339	13	15	56	-72.66	102.67	-72.47	101.31	.19	-1.36
3.143.495	339	13	16	38	-74.20	121.62	-74.15	119.99	.05	-1.63
3.143.530	339	13	17	20	-72.19	115.57	-72.09	114.14	.10	-1.43
3.143.565	339	13	18	2	-72.73	129.45	-72.73	127.94	-.00	-1.51
3.143.600	339	13	18	44	-70.99	123.50	-70.95	122.13	.04	-1.37
3.144.965	339	13	46	2	-32.02	114.41	-31.86	114.04	.16	-.37
3.145.000	339	13	46	44	-29.51	112.89	-29.34	112.54	.17	-.35
3.145.035	339	13	47	26	-27.32	111.30	-27.14	110.97	.18	-.33
3.145.070	339	13	48	8	-24.76	109.98	-24.57	109.68	.19	-.30
3.145.105	339	13	48	50	-22.53	108.57	-22.33	108.29	.20	-.28
3.145.140	339	13	49	32	-19.98	107.40	-19.77	107.14	.21	-.26
3.145.175	339	13	50	14	-17.74	106.15	-17.52	105.91	.22	-.24

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 44

DAS REF. TIME	DAY	GMT HR	MM	SEC	W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
3•175•065	339	23	48	2	15.07	4.47	14.64	4.36	-.43	-.11
3•175•135	339	23	49	26	19.73	354.17	19.32	354.09	-.41	-.08
3•175•415	339	23	55	2	-30.11	53.19	-30.44	53.23	-.33	.04
3•175•485	339	23	56	26	-27.42	51.31	-27.76	51.32	-.34	.01
3•175•555	339	23	57	50	-28.02	47.62	-28.38	47.62	-.36	.00
3•175•625	339	23	59	14	-30.38	48.95	-30.74	48.97	-.36	.02
3•175•800	340	0	2	44	10.03	41.46	9.64	41.30	-.39	-.16
3•175•870	340	0	4	8	-18.95	55.60	-19.28	55.57	-.33	-.03
3•175•940	340	0	5	32	-47.11	64.93	-47.39	65.16	-.28	.23
3•176•010	340	0	6	56	-39.55	25.96	-39.98	25.89	-.43	-.07
3•176•080	340	0	8	20	-12.54	12.12	-12.97	11.99	-.43	-.13
3•176•360	340	0	13	56	12.43	40.92	12.03	40.76	-.40	-.16
3•176•430	340	0	15	20	-19.00	57.12	-19.34	57.09	-.34	-.03
3•176•500	340	0	16	44	-43.81	65.06	-44.11	65.24	-.30	.18
3•176•570	340	0	18	8	-35.23	28.89	-35.66	28.82	-.43	-.07
3•176•640	340	0	19	32	-13.85	16.78	-14.28	16.65	-.43	-.13
3•176•815	340	0	23	2	-47.49	47.67	-47.87	47.76	-.38	.09
3•176•885	340	0	24	26	-45.43	45.95	-45.82	46.01	-.39	.06
3•176•955	340	0	25	50	-45.37	41.55	-45.77	41.58	-.40	.03
3•177•025	340	0	27	14	-46.20	40.73	-46.61	40.76	-.41	.03
3•179•335	340	1	13	26	-79.76	353.08	-80.09	351.38	-.33	-1.70
3•179•370	340	1	14	8	-79.31	340.10	-79.56	338.11	-.25	-1.99
3•179•405	340	1	14	50	-77.57	351.07	-77.89	349.60	-.32	-1.47
3•179•440	340	1	15	32	-77.10	340.33	-77.35	338.67	-.25	-1.66
3•179•475	340	1	16	14	-76.14	347.69	-76.44	346.28	-.30	-1.41
3•179•510	340	1	16	56	-75.72	338.42	-75.96	336.88	-.24	-1.54
3•180•875	340	1	44	14	-33.64	290.73	-33.49	290.34	.15	-.39
3•180•910	340	1	44	56	-31.07	289.15	-30.91	288.79	.16	-.36
3•180•945	340	1	45	38	-28.86	287.53	-28.69	287.19	.17	-.34
3•180•980	340	1	46	20	-26.30	286.17	-26.12	285.85	.18	-.32
3•181•015	340	1	47	2	-24.07	284.73	-23.88	284.43	.19	-.30
3•181•050	340	1	47	44	-21.51	283.53	-21.31	283.26	.20	-.27

rev 45

DAS REF. TIME	DAY	GMT HR	MM	SEC	W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
3•211•045	340	11	47	38	15.05	182.69	14.62	182.58	-.43	-.11
3•211•115	340	11	49	2	17.76	174.93	17.34	174.84	-.42	-.09
3•211•395	340	11	54	38	17.78	215.16	17.39	214.98	-.39	-.18
3•211•465	340	11	56	2	24.09	213.29	23.70	213.09	-.39	-.20
3•211•535	340	11	57	26	26.99	209.58	26.58	209.38	-.41	-.20
3•211•605	340	11	58	50	21.65	211.30	21.25	211.12	-.40	-.18
3•211•780	340	12	2	20	6.32	217.43	5.93	217.29	-.39	-.14
3•211•850	340	12	3	44	-19.85	231.51	-20.18	231.49	-.33	-.02
3•211•920	340	12	5	8	-46.80	241.47	-47.08	241.70	-.28	.23
3•211•990	340	12	6	32	-41.04	201.48	-41.47	201.42	-.43	-.06
3•212•060	340	12	7	56	-14.76	186.45	-15.19	186.31	-.43	-.14
3•212•235	340	12	11	26	-31.40	226.75	-31.76	226.77	-.36	.02
3•212•305	340	12	12	50	-29.44	225.14	-29.81	225.14	-.37	.00
3•212•375	340	12	14	14	-30.17	222.49	-30.55	222.49	-.38	-.00
3•212•445	340	12	15	38	-32.50	222.09	-32.88	222.10	-.38	.01
3•215•315	340	13	13	2	-60.97	175.78	-61.33	175.23	-.36	-.55
3•215•350	340	13	13	44	-61.29	171.10	-61.63	170.49	-.34	-.61
3•215•385	340	13	14	26	-60.68	176.26	-61.04	175.72	-.36	-.54
3•215•420	340	13	15	8	-60.99	171.52	-61.33	170.92	-.34	-.60
3•215•455	340	13	15	50	-60.76	176.09	-61.12	175.54	-.36	-.55
3•215•490	340	13	16	32	-61.05	171.22	-61.39	170.61	-.34	-.61
3•216•715	340	13	41	2	-39.63	111.18	-39.53	110.71	.10	-.47
3•216•750	340	13	41	44	-37.14	109.24	-37.02	108.80	.12	-.44
3•216•785	340	13	42	26	-35.04	107.27	-34.91	106.86	.13	-.41
3•216•820	340	13	43	8	-32.53	105.55	-32.38	105.17	.15	-.38
3•216•855	340	13	43	50	-30.38	103.82	-30.22	103.46	.16	-.36
3•216•890	340	13	44	32	-27.85	102.35	-27.68	102.02	.17	-.33
3•216•925	340	13	45	14	-25.62	100.82	-25.44	100.51	.18	-.31
3•216•960	340	13	45	56	-23.04	99.54	-22.85	99.25	.19	-.29
3•216•995	340	13	46	38	-20.79	98.21	-20.59	97.94	.20	-.27
3•217•030	340	13	47	20	-18.22	97.14	-18.01	96.89	.21	-.25

rev 46

DAS REF. TIME	DAY	GMT HR	MM	SEC	W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
3•246•955	340	23	45	50	*******	*******	*******	*******	*****	******
3•247•025	340	23	47	14	*******	*******	*******	*******	*****	******
3•247•305	340	23	52	50	-46.58	15.51	-47.00	15.48	-.42	-.03
3•247•375	340	23	54	14	-44.08	15.38	-44.50	15.34	-.42	-.04
3•247•445	340	23	55	38	-44.44	9.36	-44.87	9.27	-.43	-.09
3•247•515	340	23	57	2	-46.46	7.82	-46.89	7.76	-.43	-.10
3•247•690	341	0	0	32	5.00	25.93	4.59	25.79	-.41	-.14
3•247•760	341	0	1	56	-23.84	41.55	-24.19	41.54	-.35	-.01
3•247•830	341	0	3	20	-53.37	52.36	-53.67	52.66	-.30	.30
3•247•900	341	0	4	44	-42.87	4.83	-43.30	4.69	-.43	-.14
3•247•970	341	0	6	8	-14.56	351.67	-14.98	351.52	-.42	-.15
3•248•250	341	0	11	44	-3.23	29.32	-3.63	29.21	-.40	-.11
3•248•320	341	0	13	8	-30.01	45.23	-30.36	45.25	-.35	.02
3•248•390	341	0	14	32	-56.44	57.03	-56.73	57.39	-.29	.36
3•248•460	341	0	15	56	-48.08	10.59	-48.51	10.47	-.43	-.12
3•248•530	341	0	17	20	-25.52	359.93	-25.94	359.77	-.42	-.16
3•248•705	341	0	20	50	-14.52	2.86	-14.95	2.72	-.43	-.14
3•248•775	341	0	22	14	-12.25	2.15	-12.68	2.01	-.43	-.14
3•248•845	341	0	23	38	-11.24	358.18	-11.66	358.04	-.42	-.14
3•248•915	341	0	25	2	-13.65	357.59	-14.07	357.44	-.42	-.15
3•251•225	341	1	11	14	-85.38	44.90	-85.78	46.93	-.40	2.03
3•251•260	341	1	11	56	-86.77	14.28	-87.19	12.76	-.42	-1.52
3•251•295	341	1	12	38	-84.62	14.97	-85.05	14.10	-.43	-.87
3•251•330	341	1	13	20	-84.84	348.01	-85.18	344.90	-.34	-3.11
3•251•365	341	1	14	2	-83.47	356.34	-83.85	354.37	-.38	-1.97
3•251•400	341	1	14	44	-83.22	335.05	-83.49	332.07	-.27	-2.98
3•252•765	341	1	42	2	-31.31	279.61	-31.15	279.24	.16	-.37
3•252•800	341	1	42	44	-28.75	278.13	-28.58	277.79	.17	-.34
3•252•835	341	1	43	26	-26.55	276.58	-26.37	276.26	.18	-.32
3•252•870	341	1	44	8	-24.00	275.32	-23.81	275.02	.19	-.30
3•252•905	341	1	44	50	-21.78	273.99	-21.58	273.71	.20	-.28
3•252•940	341	1	45	32	-19.14	272.91	-18.93	272.66	.21	-.25

rev 47

DAS REF. TIME	DAY	GMT HR	MM	SEC	W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
3•282•865	341	11	44	2	-71.13	138.26	-71.46	137.33	-.33	-.93
3•282•935	341	11	45	26	*******	*******	*******	*******	*****	******
3•283•215	341	11	51	2	17.05	193.72	16.63	193.56	-.42	-.16
3•283•285	341	11	52	26	22.42	191.35	22.00	191.19	-.42	-.16
3•283•355	341	11	53	50	24.20	185.65	23.77	185.51	-.43	-.14
3•283•425	341	11	55	14	17.83	188.94	17.40	188.80	-.43	-.14
3•283•600	341	11	58	44	3.75	203.51	3.35	203.38	-.40	-.13
3•283•670	341	12	0	8	-23.44	217.69	-23.79	217.68	-.35	-.01
3•283•740	341	12	1	32	-51.68	227.17	-51.98	227.44	-.30	.27
3•283•810	341	12	2	56	-43.13	182.24	-43.56	182.12	-.43	-.12
3•283•880	341	12	4	20	-16.21	169.13	-16.63	168.98	-.42	-.15
3•284•055	341	12	7	50	-13.09	193.06	-13.51	192.95	-.42	-.11
3•284•125	341	12	9	14	-10.76	192.08	-11.19	191.97	-.43	-.11
3•284•195	341	12	10	38	-10.64	189.22	-11.07	189.10	-.43	-.12
3•284•265	341	12	12	2	-13.14	189.57	-13.57	189.46	-.43	-.11
3•286•715	341	13	1	2	*******	*******	*******	*******	*****	******
3•286•750	341	13	1	44	*******	*******	*******	*******	*****	******
3•287•135	341	13	9	26	-40.56	165.92	-40.92	165.60	-.36	-.32
3•287•170	341	13	10	8	-41.12	162.92	-41.47	162.58	-.35	-.34
3•287•205	341	13	10	50	-40.34	168.18	-40.71	167.87	-.37	-.31
3•287•240	341	13	11	32	-41.20	165.04	-41.56	164.70	-.36	-.34
3•287•275	341	13	12	14	-40.79	170.50	-41.17	170.20	-.38	-.30
3•287•310	341	13	12	56	-41.86	167.49	-42.23	167.16	-.37	-.33
3•288•535	341	13	37	26	-41.22	103.34	-41.13	102.85	.09	-.49
3•288•570	341	13	38	8	-38.71	101.16	-38.60	100.70	.11	-.46
3•288•605	341	13	38	50	-36.59	99.09	-36.47	98.66	.12	-.43
3•288•640	341	13	39	32	-34.10	97.33	-33.96	96.93	.14	-.40
3•288•675	341	13	40	14	-31.96	95.57	-31.81	95.19	.15	-.38
3•288•710	341	13	40	56	-29.45	94.08	-29.29	93.73	.16	-.35
3•288•745	341	13	41	38	-27.29	92.53	-27.12	92.20	.17	-.33
3•288•780	341	13	42	20	-24.77	91.22	-24.59	90.92	.18	-.30
3•288•815	341	13	43	2	-22.57	89.82	-22.38	89.54	.19	-.28

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 48

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3.318.775	341	23	42	14	27.94	346.34	27.51	346.24	-.43	-.10
3.318.845	341	23	43	38	*******	*******	*******	*******	*****	******
3.319.125	341	23	49	14	-41.42	21.90	-41.80	21.96	-.38	.06
3.319.195	341	23	50	38	-38.21	20.75	-38.60	20.76	-.39	.03
3.319.265	341	23	52	2	-39.10	16.00	-39.50	16.00	-.40	.00
3.319.335	341	23	53	26	-41.59	16.05	-41.99	16.06	-.40	.01
3.319.510	341	23	56	56	5.65	18.89	5.25	18.75	-.40	-.14
3.319.580	341	23	58	20	-22.97	33.88	-23.31	33.87	-.34	-.01
3.319.650	341	23	59	44	-52.25	44.28	-52.54	44.57	-.29	.29
3.319.720	342	0	1	8	-42.80	359.68	-43.23	359.58	-.43	-.10
3.319.790	342	0	2	32	-15.93	347.99	-16.36	347.85	-.43	-.14
3.320.070	342	0	8	8	-2.58	21.27	-2.99	21.15	-.40	-.12
3.320.140	342	0	9	32	-29.59	37.31	-29.93	37.34	-.34	.03
3.320.210	342	0	10	56	-56.28	50.94	-56.55	51.33	-.27	.39
3.320.280	342	0	12	20	-46.90	4.93	-47.33	4.85	-.43	-.08
3.320.350	342	0	13	44	-25.15	354.05	-25.58	353.90	-.43	-.15
3.320.805	342	0	22	50	*******	*******	*******	*******	*****	******
3.320.875	342	0	24	14	*******	*******	*******	*******	*****	******
3.320.945	342	0	25	38	*******	*******	*******	*******	*****	******
3.321.015	342	0	27	2	*******	*******	*******	*******	*****	******
3.323.045	342	1	7	38	-30.26	343.90	-30.64	343.65	-.38	-.25
3.323.080	342	1	8	20	-31.20	341.18	-31.56	340.92	-.36	-.26
3.323.115	342	1	9	2	-31.50	343.39	-31.87	343.13	-.37	-.26
3.323.150	342	1	9	44	-33.16	340.63	-33.52	340.35	-.36	-.28
3.323.185	342	1	10	26	-33.80	342.60	-34.17	342.32	-.37	-.28
3.323.220	342	1	11	8	-35.28	339.64	-35.64	339.34	-.36	-.30
3.324.445	342	1	35	38	-41.43	279.03	-41.35	278.53	.08	-.50
3.324.480	342	1	36	20	-38.90	276.70	-38.80	276.24	.10	-.46
3.324.515	342	1	37	2	-36.76	274.45	-36.64	274.02	.12	-.43
3.324.550	342	1	37	44	-34.20	272.53	-34.07	272.13	.13	-.40
3.324.585	342	1	38	26	-32.02	270.75	-31.87	270.37	.15	-.38
3.324.620	342	1	39	8	-29.34	269.23	-29.18	268.88	.16	-.35

rev 49

3.354.685	342	11	40	26	24.26	168.33	23.83	168.20	-.43	-.13
3.354.755	342	11	41	50	30.27	157.23	29.85	157.15	-.42	-.08
3.355.035	342	11	47	26	-45.97	201.69	-46.33	201.81	-.36	.12
3.355.105	342	11	48	50	-43.22	201.43	-43.59	201.52	-.37	.09
3.355.175	342	11	50	14	-43.62	196.92	-44.00	196.99	-.38	.07
3.355.245	342	11	51	38	-46.68	198.67	-47.06	198.77	-.38	.10
3.355.420	342	11	55	8	5.75	194.96	5.36	194.82	-.39	-.14
3.355.490	342	11	56	32	-22.55	209.88	-22.89	209.87	-.34	-.01
3.355.560	342	11	57	56	-51.77	220.81	-52.05	221.10	-.28	.29
3.355.630	342	11	59	20	-40.89	198.00	-41.28	198.04	-.39	.04
3.355.700	342	12	0	44	-18.73	185.35	-19.15	185.26	-.42	-.09
3.355.875	342	12	4	14	-36.83	202.92	-37.20	202.96	-.37	.04
3.355.945	342	12	5	38	-35.37	201.56	-35.75	201.58	-.38	.02
3.356.015	342	12	7	2	-35.65	198.56	-36.04	198.57	-.39	.01
3.356.085	342	12	8	26	-37.20	198.05	-37.59	198.06	-.39	.01
3.358.955	342	13	5	50	-65.22	338.03	-64.85	338.37	.37	.34
3.358.990	342	13	6	32	-62.42	344.19	-62.03	344.40	.39	.21
3.359.025	342	13	7	14	-76.05	343.54	-75.66	344.13	.39	.59
3.359.060	342	13	7	56	-74.73	352.85	-74.31	353.15	.42	.30
3.359.095	342	13	8	38	-80.21	357.85	-79.79	358.19	.42	.34
3.359.130	342	13	9	20	-78.23	8.78	-77.80	8.67	.43	-.11
3.360.355	342	13	33	50	-41.00	90.09	-40.89	89.61	.11	-.48
3.360.390	342	13	34	32	-38.46	88.30	-38.33	87.85	.13	-.45
3.360.425	342	13	35	14	-36.31	86.52	-36.17	86.10	.14	-.42
3.360.460	342	13	35	56	-33.78	84.91	-33.63	84.52	.15	-.39
3.360.495	342	13	36	38	-31.58	83.19	-31.41	82.82	.17	-.37
3.360.530	342	13	37	20	-29.02	81.75	-28.84	81.41	.18	-.34
3.360.565	342	13	38	2	-26.79	80.23	-26.60	79.91	.19	-.32
3.360.600	342	13	38	44	-24.20	78.96	-24.00	78.67	.20	-.29
3.360.635	342	13	39	26	-21.99	77.65	-21.78	77.37	.21	-.28
3.360.670	342	13	40	8	-19.45	76.56	-19.23	76.31	.22	-.25
3.360.705	342	13	40	50	-17.22	75.34	-16.99	75.10	.23	-.24

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3.390.595	342	23	38	37	*******	*******	*******	*******	*****	******
3.390.665	342	23	40	1	*******	*******	*******	*******	*****	******
3.390.945	342	23	45	37	-7.83	63.52	-7.91	63.45	-.08	-.07
3.391.015	342	23	47	1	-10.36	60.36	-10.46	60.31	-.10	-.05
3.391.085	342	23	48	25	-13.54	57.95	-13.66	57.93	-.12	-.02
3.391.155	342	23	49	49	-16.54	56.78	-16.68	56.78	-.14	-.00
3.391.330	342	23	53	19	5.58	10.14	5.19	10.00	-.39	-.14
3.391.400	342	23	54	43	-22.27	26.05	-22.60	26.04	-.33	-.01
3.391.470	342	23	56	7	-50.65	38.18	-50.92	38.47	-.27	.29
3.391.540	342	23	57	31	-43.52	352.40	-43.95	352.32	-.43	-.08
3.391.610	342	23	58	55	-17.11	340.12	-17.54	339.98	-.43	-.14
3.391.890	343	0	4	31	-3.25	13.33	-3.64	13.22	-.39	-.11
3.391.960	343	0	5	55	-28.98	29.64	-29.31	29.67	-.33	.03
3.392.030	343	0	7	19	-54.10	43.30	-54.35	43.66	-.25	.36
3.392.100	343	0	8	43	-47.30	357.50	-47.73	357.44	-.43	-.06
3.392.170	343	0	10	7	-26.96	346.19	-27.39	346.05	-.43	-.14
3.392.345	343	0	13	37	-48.65	354.81	-49.08	354.72	-.43	-.09
3.392.415	343	0	15	1	-46.84	353.67	-47.27	353.57	-.43	-.10
3.392.485	343	0	16	25	-46.95	349.02	-47.38	348.88	-.43	-.14
3.392.555	343	0	17	49	-48.47	347.78	-48.90	347.62	-.43	-.16
3.394.865	343	1	4	1	-31.70	339.23	-32.09	339.00	-.39	-.23
3.394.900	343	1	4	43	-33.28	336.51	-33.66	336.26	-.38	-.25
3.394.935	343	1	5	25	-33.57	338.42	-33.96	338.17	-.39	-.25
3.394.970	343	1	6	7	-35.46	335.48	-35.84	335.21	-.38	-.27
3.395.005	343	1	6	49	-35.86	337.61	-36.25	337.35	-.39	-.26
3.395.040	343	1	7	31	-37.48	334.54	-37.85	334.25	-.37	-.29
3.396.265	343	1	32	1	-41.09	268.85	-40.99	268.36	.09	-.49
3.396.300	343	1	32	43	-38.58	266.41	-38.48	265.95	.10	-.46
3.396.335	343	1	33	25	-36.42	264.31	-36.30	263.88	.12	-.43
3.396.370	343	1	34	7	-33.87	262.58	-33.74	262.18	.13	-.40
3.396.405	343	1	34	49	-31.69	260.86	-31.54	260.49	.15	-.37
3.396.440	343	1	35	31	-29.14	259.41	-28.98	259.06	.16	-.35

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3.426.505	343	11	36	49	31.50	157.49	31.07	157.37	-.43	-.12
3.426.575	343	11	38	13	*******	*******	*******	*******	*****	******
3.426.855	343	11	43	49	17.53	193.97	17.18	193.77	-.35	-.20
3.426.925	343	11	45	13	23.49	192.74	23.13	192.51	-.36	-.23
3.426.995	343	11	46	37	21.56	189.78	21.19	189.57	-.37	-.21
3.427.065	343	11	48	1	17.75	190.80	17.38	190.61	-.37	-.19
3.427.240	343	11	51	31	3.80	186.83	3.41	186.69	-.39	-.14
3.427.310	343	11	52	55	-22.93	202.05	-23.26	202.05	-.33	-.00
3.427.380	343	11	54	19	-50.78	215.20	-51.04	215.50	-.26	.30
3.427.450	343	11	55	43	-43.78	188.19	-44.21	188.11	-.43	-.08
3.427.520	343	11	57	7	-17.73	155.23	-18.16	155.09	-.43	-.14
3.427.695	343	12	0	37	-18.02	168.71	-18.45	168.60	-.43	-.11
3.427.765	343	12	2	1	-16.10	167.55	-16.53	167.44	-.43	-.11
3.427.835	343	12	3	25	-15.38	164.04	-15.81	163.92	-.43	-.12
3.427.905	343	12	4	49	-17.46	163.95	-17.89	163.83	-.43	-.12
3.430.775	343	13	2	13	-32.45	153.82	-32.84	153.58	-.39	-.24
3.430.810	343	13	2	55	-34.17	150.95	-34.55	150.69	-.38	-.26
3.430.845	343	13	3	37	-34.02	153.27	-34.41	153.02	-.39	-.25
3.430.880	343	13	4	19	-35.70	150.52	-36.08	150.25	-.38	-.27
3.430.915	343	13	5	1	-36.04	152.38	-36.43	152.11	-.39	-.27
3.430.950	343	13	5	43	-37.54	149.43	-37.91	149.14	-.37	-.29
3.432.175	343	13	30	13	-40.33	83.28	-40.24	82.80	.09	-.48
3.432.210	343	13	30	55	-37.81	81.15	-37.70	80.70	.11	-.45
3.432.245	343	13	31	37	-35.65	79.08	-35.53	78.66	.12	-.42
3.432.280	343	13	32	19	-33.11	77.31	-32.97	76.92	.14	-.39
3.432.315	343	13	33	1	-30.92	75.55	-30.77	75.18	.15	-.37
3.432.350	343	13	33	43	-28.38	74.06	-28.22	73.72	.16	-.34
3.432.385	343	13	34	25	-26.18	72.51	-26.01	72.19	.17	-.32
3.432.420	343	13	35	7	-23.62	71.22	-23.44	70.93	.18	-.29
3.432.455	343	13	35	49	-21.41	69.84	-21.22	69.57	.19	-.27
3.432.490	343	13	36	31	-18.86	68.71	-18.66	68.46	.20	-.25
3.432.525	343	13	37	13	-16.63	67.49	-16.42	67.25	.21	-.24

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

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CAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3•462•345	343	23	33	37	50.55	357.02	50.16	356.68	-.39	-.34
3•462•415	343	23	35	1	47.45	352.11	47.04	351.83	-.41	-.28
3•462•695	343	23	40	37	-43.76	12.36	-44.10	12.50	-.34	.14
3•462•765	343	23	42	1	-41.80	11.37	-42.14	11.48	-.34	.11
3•462•835	343	23	43	25	-43.45	8.03	-43.81	8.13	-.36	.10
3•462•905	343	23	44	49	-45.31	10.03	-45.66	10.16	-.35	.13
3•463•080	343	23	48	19	6.64	3.09	6.26	2.94	-.38	-.15
3•463•150	343	23	49	43	-20.81	18.85	-21.13	18.84	-.32	-.01
3•463•220	343	23	51	7	-48.47	31.42	-48.72	31.70	-.25	.28
3•463•290	343	23	52	31	-42.01	347.45	-42.43	347.40	-.42	-.05
3•463•360	343	23	53	55	-16.48	332.72	-16.91	332.59	-.43	-.13
3•463•640	343	23	59	31	-1.83	5.85	-2.21	5.73	-.38	-.12
3•463•710	344	0	0	55	-28.01	22.01	-28.32	22.04	-.31	.03
3•463•780	344	0	2	19	-54.00	37.41	-54.22	37.79	-.22	.38
3•463•850	344	0	3	43	-46.46	351.60	-46.88	351.57	-.42	-.03
3•463•920	344	0	5	7	-26.01	340.19	-26.44	340.07	-.43	-.12
3•464•095	344	0	8	37	-52.33	10.30	-52.70	10.46	-.37	.16
3•464•165	344	0	10	1	-50.58	8.89	-50.96	9.01	-.38	.12
3•464•235	344	0	11	25	-50.42	6.36	-50.81	6.46	-.39	.10
3•464•305	344	0	12	49	-52.06	5.73	-52.45	5.83	-.39	.10
3•466•615	344	0	59	1	-87.14	77.41	-87.15	85.94	-.01	8.53
3•466•650	344	0	59	43	-88.88	126.37	-88.55	138.75	.33	12.38
3•466•685	344	1	0	25	-87.28	351.81	-87.71	351.42	-.43	-.39
3•466•720	344	1	1	7	-87.38	293.40	-87.57	284.45	-.19	-8.95
3•466•755	344	1	1	49	-85.19	317.76	-85.52	314.41	-.34	-3.35
3•466•790	344	1	2	31	-84.63	289.27	-84.80	284.87	-.17	-4.40
3•468•155	344	1	29	49	-34.38	253.34	-34.25	252.94	.13	-.40
3•468•190	344	1	30	31	-31.79	251.62	-31.65	251.24	.14	-.38
3•468•225	344	1	31	13	-29.61	249.86	-29.46	249.51	.15	-.35
3•468•260	344	1	31	55	-27.06	248.41	-26.89	248.08	.17	-.33
3•468•295	344	1	32	37	-24.88	246.93	-24.70	246.62	.18	-.31
3•468•330	344	1	33	19	-22.34	245.69	-22.15	245.41	.19	-.28

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CAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3•498•255	344	11	31	49	43.30	175.44	42.92	175.13	-.38	-.31
3•498•325	344	11	33	13	42.22	170.01	41.82	169.74	-.40	-.27
3•498•605	344	11	38	49	.64	174.75	.25	174.62	-.39	-.13
3•498•675	344	11	40	13	3.09	174.08	2.70	173.95	-.39	-.13
3•498•745	344	11	41	37	3.23	170.76	2.83	170.63	-.40	-.13
3•498•815	344	11	43	1	.69	171.68	.29	171.56	-.40	-.12
3•498•990	344	11	46	31	7.25	179.54	6.87	179.39	-.38	-.15
3•499•060	344	11	47	55	-20.95	194.61	-21.26	194.60	-.31	-.01
3•499•130	344	11	49	19	-49.28	207.86	-49.52	208.16	-.24	.30
3•499•200	344	11	50	43	-41.95	163.42	-42.37	163.38	-.42	-.04
3•499•270	344	11	52	7	-17.11	150.84	-17.54	150.71	-.43	-.13
3•499•445	344	11	55	37	9.06	144.82	8.63	144.71	-.43	-.11
3•499•515	344	11	57	1	19.15	138.12	18.73	138.03	-.42	-.09
3•499•585	344	11	58	25	*******	*******	*******	*******	*****	******
3•499•655	344	11	59	49	13.98	139.28	13.56	139.18	-.42	-.10
3•501•965	344	12	46	1	*******	*******	*******	*******	*****	******
3•502•000	344	12	46	43	*******	*******	*******	*******	*****	******
3•502•525	344	12	57	13	-75.66	188.18	-75.46	189.66	-.40	.48
3•502•560	344	12	57	55	-76.65	180.91	-77.07	181.20	-.42	.29
3•502•595	344	12	58	37	-75.48	182.69	-75.90	182.99	-.42	.30
3•502•630	344	12	59	19	-77.29	174.24	-77.72	174.32	-.43	.08
3•502•665	344	13	0	1	-76.48	177.82	-76.91	177.99	-.43	.17
3•502•700	344	13	0	43	-77.90	167.97	-78.33	167.82	-.43	-.15
3•503•925	344	13	25	13	-42.52	76.02	-42.45	75.51	.07	-.51
3•503•960	344	13	25	55	-40.00	73.66	-39.91	73.18	.09	-.48
3•503•995	344	13	26	37	-37.85	71.40	-37.75	70.95	.10	-.45
3•504•030	344	13	27	19	-35.31	69.40	-35.19	68.98	.12	-.42
3•504•065	344	13	28	1	-33.14	67.46	-33.01	67.07	.13	-.39
3•504•100	344	13	28	43	-30.60	65.83	-30.45	65.47	.15	-.36
3•504•135	344	13	29	25	-28.42	64.17	-28.26	63.83	.16	-.34
3•504•170	344	13	30	7	-25.87	62.76	-25.70	62.45	.17	-.31
3•504•205	344	13	30	49	-23.60	61.30	-23.50	61.01	.18	-.29

rev 54

CAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3•534•165	344	23	30	1	*******	*******	*******	*******	*****	******
3•534•235	344	23	31	25	47.13	346.59	46.74	346.28	-.39	-.31
3•534•515	344	23	37	1	-28.51	347.65	-28.90	347.62	-.39	-.03
3•534•585	344	23	38	25	-27.43	346.93	-27.83	346.89	-.40	-.04
3•534•655	344	23	39	49	-27.69	343.65	-28.10	343.60	-.41	-.05
3•534•725	344	23	41	13	-29.85	343.54	-30.26	343.50	-.41	-.04
3•534•900	344	23	44	43	6.57	354.40	6.19	354.25	-.38	-.15
3•534•970	344	23	46	7	-21.18	10.06	-21.49	10.05	-.31	-.01
3•535•040	344	23	47	31	-49.42	24.63	-49.65	24.94	-.23	.31
3•535•110	344	23	48	55	-42.63	338.85	-43.05	338.81	-.42	-.04
3•535•180	344	23	50	19	-17.42	326.04	-17.85	325.91	-.43	-.13
3•535•460	344	23	55	55	-2.78	356.83	-3.18	356.72	-.38	-.11
3•535•530	344	23	57	19	-27.97	13.29	-28.28	13.33	-.31	.04
3•535•600	344	23	58	43	-52.47	28.86	-52.69	29.22	-.22	.36
3•535•670	345	0	0	7	-46.56	343.64	-46.98	343.63	-.42	-.01
3•535•740	345	0	1	31	-26.94	331.32	-27.37	331.20	-.43	-.12
3•535•915	345	0	5	1	-47.20	337.22	-47.63	337.15	-.43	-.07
3•535•985	345	0	6	25	-46.23	336.51	-46.66	336.43	-.43	-.08
3•536•055	345	0	7	49	-46.45	333.47	-46.88	333.36	-.43	-.11
3•536•125	345	0	9	13	-47.52	332.89	-47.95	332.78	-.43	-.11
3•538•435	345	0	55	25	-76.72	344.49	-77.15	344.42	-.43	-.07
3•538•470	345	0	56	7	-77.78	333.90	-78.21	333.45	-.43	-.45
3•538•505	345	0	56	49	-76.19	336.49	-76.62	336.15	-.43	-.34
3•538•540	345	0	57	31	-77.05	325.43	-77.48	324.71	-.41	-.72
3•538•575	345	0	58	13	-76.11	328.78	-76.53	328.20	-.42	-.58
3•538•610	345	0	58	55	-76.67	318.20	-77.08	317.27	-.39	-.93
3•539•975	345	1	26	13	-31.34	241.29	-31.20	240.92	.14	-.37
3•540•010	345	1	26	55	-28.83	239.81	-28.68	239.47	.15	-.34
3•540•045	345	1	27	37	-26.68	238.29	-26.51	237.97	.17	-.32
3•540•080	345	1	28	19	-24.19	237.02	-24.01	236.72	.18	-.30
3•540•115	345	1	29	1	-22.03	235.66	-21.84	235.38	.19	-.28
3•540•150	345	1	29	43	-19.55	234.47	-19.36	234.21	.19	-.26

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CAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3•570•005	345	11	26	49	42.36	167.58	41.99	167.26	-.37	-.32
3•570•075	345	11	28	13	40.98	163.27	40.59	162.98	-.39	-.29
3•570•355	345	11	33	49	14.99	142.52	14.56	142.39	-.43	-.13
3•570•425	345	11	35	13	21.47	138.13	21.04	138.01	-.43	-.12
3•570•495	345	11	36	37	26.95	127.60	26.53	127.52	-.42	-.08
3•570•565	345	11	38	1	18.78	134.41	18.35	134.30	-.43	-.11
3•570•740	345	11	41	31	7.89	170.96	7.52	170.81	-.37	-.15
3•570•810	345	11	42	55	-19.97	185.76	-20.27	185.75	-.30	-.01
3•570•880	345	11	44	19	-48.02	200.52	-48.24	200.81	-.22	.29
3•570•950	345	11	45	43	-41.31	156.88	-41.73	156.86	-.42	-.02
3•571•020	345	11	47	7	-16.66	143.06	-17.09	142.94	-.43	-.12
3•571•195	345	11	50	37	16.21	184.14	15.89	183.93	-.32	-.21
3•571•265	345	11	52	1	21.63	183.09	21.30	182.86	-.33	-.23
3•571•335	345	11	53	25	19.31	179.34	18.96	179.13	-.35	-.21
3•571•405	345	11	54	49	15.10	179.23	14.75	179.04	-.35	-.19
3•574•275	345	12	52	13	-83.98	309.39	-83.60	311.08	.38	1.69
3•574•310	345	12	52	55	-83.12	331.01	-82.69	331.28	.43	.27
3•574•345	345	12	53	37	-88.06	.85	-87.66	356.62	.40	-4.23
3•574•380	345	12	54	19	-85.68	15.59	-85.33	12.25	.35	-3.34
3•574•415	345	12	55	1	-86.48	70.61	-86.47	63.48	.01	-7.13
3•574•450	345	12	55	43	-84.40	53.34	-84.27	49.06	.13	-4.28
3•575•675	345	13	20	13	-43.68	67.91	-43.63	67.38	.05	-.53
3•575•710	345	13	20	55	-41.13	65.13	-41.06	64.64	.07	-.49
3•575•745	345	13	21	37	-39.00	62.58	-38.91	62.12	.09	-.46
3•575•780	345	13	22	19	-36.46	60.46	-36.35	60.03	.11	-.43
3•575•815	345	13	23	1	-34.30	58.54	-34.18	58.14	.12	-.40
3•575•850	345	13	23	43	-31.76	56.88	-31.62	56.50	.14	-.38
3•575•885	345	13	24	25	-29.58	55.21	-29.43	54.86	.15	-.35
3•575•920	345	13	25	7	-27.04	53.80	-26.88	53.47	.16	-.33
3•575•955	345	13	25	49	-24.83	52.34	-24.66	52.03	.17	-.31
3•575•990	345	13	26	31	-22.28	51.11	-22.10	50.83	.18	-.28
3•576•025	345	13	27	13	-20.09	49.79	-19.90	49.53	.19	-.26

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 56

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3.605.915	345	23	25	1	49.61	348.14	49.26	347.72	-.35	-.42
3.605.985	345	23	26	25	44.24	342.95	43.87	342.61	-.37	-.34
3.606.265	345	23	32	1	*******	*******	*******	*******	*****	******
3.606.335	345	23	33	25	-73.80	315.93	-74.23	315.86	-.43	-.07
3.606.405	345	23	34	49	-71.04	307.38	-71.47	307.10	-.43	-.28
3.606.475	345	23	36	13	-75.48	288.83	-75.87	287.96	-.39	-.87
3.606.650	345	23	39	43	5.95	335.90	5.55	335.76	-.40	-.14
3.606.720	345	23	41	7	-22.60	352.95	-22.94	352.94	-.34	-.01
3.606.790	345	23	42	31	-52.02	5.62	-52.30	5.92	-.28	.30
3.606.860	345	23	43	55	-42.31	319.34	-42.74	319.24	-.43	-.10
3.606.930	345	23	45	19	-17.57	314.07	-18.00	313.94	-.43	-.13
3.607.210	345	23	50	55	-2.82	340.34	-3.22	340.23	-.40	-.11
3.607.280	345	23	52	19	-29.18	356.20	-29.52	356.23	-.34	.03
3.607.350	345	23	53	43	-56.59	9.49	-56.86	9.88	-.27	.39
3.607.420	345	23	55	7	-48.67	322.86	-49.10	322.77	-.43	-.09
3.607.490	345	23	56	31	-26.34	312.33	-26.77	312.18	-.43	-.15
3.607.665	346	0	0	1	-84.45	112.26	-84.87	114.09	.38	1.83
3.607.735	346	0	1	25	-81.06	10.31	-81.33	12.34	-.27	2.03
3.607.805	346	0	2	49	-80.79	345.45	-81.18	348.48	-.39	1.03
3.607.875	346	0	4	13	-85.00	326.68	-85.43	327.06	-.43	.38
3.610.185	346	0	50	25	-88.53	115.99	-88.17	123.52	.36	7.53
3.610.220	346	0	51	7	-87.31	178.30	-86.92	174.72	.39	-3.58
3.610.255	346	0	51	49	-87.38	272.52	-87.54	263.62	-.18	-8.90
3.610.290	346	0	52	31	-85.72	236.33	-85.65	230.57	.07	-5.76
3.610.325	346	0	53	13	-84.66	266.99	-84.82	262.51	-.16	-4.48
3.610.360	346	0	53	55	-83.20	247.80	-83.22	244.06	-.02	-3.74
3.611.725	346	1	21	13	-32.48	232.11	-32.35	231.73	.13	-.38
3.611.760	346	1	21	55	-29.96	230.52	-29.81	230.16	.15	-.36
3.611.795	346	1	22	37	-27.78	228.91	-27.62	228.58	.16	-.33
3.611.830	346	1	23	19	-25.22	227.56	-25.05	227.25	.17	-.31
3.611.865	346	1	24	1	-23.02	226.13	-22.84	225.84	.18	-.29
3.611.900	346	1	24	43	-20.47	224.94	-20.28	224.67	.19	-.27

rev 57

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3.641.825	346	11	23	12	39.78	165.28	39.44	164.93	-.34	-.35
3.641.895	346	11	24	36	38.65	160.52	38.29	160.21	-.36	-.31
3.642.175	346	11	30	12	*******	*******	*******	*******	*****	******
3.642.245	346	11	31	36	*******	*******	*******	*******	*****	******
3.642.315	346	11	33	0	*******	*******	*******	*******	*****	******
3.642.385	346	11	34	24	*******	*******	*******	*******	*****	******
3.642.560	346	11	37	54	5.90	167.23	5.55	167.08	-.35	-.15
3.642.630	346	11	39	18	-22.93	168.64	-23.27	168.63	-.34	-.01
3.642.770	346	11	42	6	-43.91	134.44	-44.34	134.34	-.43	-.10
3.642.840	346	11	43	30	-19.33	130.37	-19.76	130.24	-.43	-.13
3.643.015	346	11	47	0	13.82	139.73	13.39	139.59	-.43	-.14
3.643.085	346	11	48	24	20.17	137.14	19.74	137.01	-.43	-.13
3.643.155	346	11	49	48	25.65	129.54	25.22	129.43	-.43	-.11
3.643.225	346	11	51	12	16.52	132.34	16.09	132.22	-.43	-.12
3.646.095	346	12	48	36	-47.48	152.81	-47.91	152.73	-.43	-.08
3.646.130	346	12	49	18	-49.79	148.74	-50.22	148.63	-.43	-.11
3.646.165	346	12	50	0	-47.96	153.83	-48.39	153.76	-.43	-.07
3.646.200	346	12	50	42	-50.36	149.59	-50.79	149.48	-.43	-.11
3.646.235	346	12	51	24	-48.44	155.68	-48.87	155.62	-.43	-.06
3.646.270	346	12	52	6	-51.00	151.23	-51.43	151.13	-.43	-.10
3.647.495	346	13	16	36	-39.62	53.86	-39.54	53.39	.08	-.47
3.647.530	346	13	17	18	-37.10	51.67	-37.00	51.23	.10	-.44
3.647.565	346	13	18	0	-34.99	49.52	-34.88	49.11	.11	-.41
3.647.600	346	13	18	42	-32.46	47.67	-32.33	47.29	.13	-.38
3.647.635	346	13	19	24	-30.31	45.85	-30.17	45.49	.14	-.36
3.647.670	346	13	20	6	-27.80	44.29	-27.64	43.96	.16	-.33
3.647.705	346	13	20	48	-25.63	42.72	-25.46	42.41	.17	-.31

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3.677.665	346	23	20	0	33.93	308.10	33.50	307.94	-.43	-.16
3.677.735	346	23	21	24	39.17	297.60	38.74	297.50	-.43	-.10
3.678.015	346	23	27	0	-23.53	335.42	-23.89	335.40	-.36	-.02
3.678.085	346	23	28	24	-20.82	334.78	-21.19	334.74	-.37	-.04
3.678.155	346	23	29	48	-20.57	331.58	-20.95	331.53	-.38	-.05
3.678.225	346	23	31	12	-22.75	331.81	-23.13	331.77	-.38	-.04
3.678.400	346	23	34	42	6.42	328.54	6.02	328.40	-.40	-.14
3.678.470	346	23	36	6	-21.02	345.26	-21.35	345.24	-.33	-.02
3.678.540	346	23	37	30	-49.50	358.52	-49.76	358.80	-.26	.28
3.678.610	346	23	38	54	-42.44	313.00	-42.87	312.92	-.43	-.08
3.678.680	346	23	40	18	-18.88	307.16	-19.31	307.04	-.43	-.12
3.678.960	346	23	45	54	-2.32	332.16	-2.71	332.04	-.39	-.12
3.679.030	346	23	47	18	-28.56	348.28	-28.89	348.31	-.33	.03
3.679.100	346	23	48	42	-55.67	3.12	-55.92	3.52	-.25	.40
3.679.170	346	23	50	6	-48.09	316.75	-48.52	316.69	-.43	-.06
3.679.240	346	23	51	30	-26.60	305.14	-27.03	305.00	-.43	-.14
3.679.415	346	23	55	0	-83.26	296.76	-83.68	296.44	-.42	-.32
3.679.485	346	23	56	24	-58.63	301.74	-59.06	301.51	-.43	-.23
3.679.555	346	23	57	48	-57.51	298.43	-57.93	298.16	-.42	-.27
3.679.625	346	23	59	12	-59.42	292.36	-59.83	292.00	-.41	-.36
3.681.935	347	0	45	24	-85.54	61.65	-85.45	66.88	.09	5.23
3.681.970	347	0	46	6	-87.05	93.19	-86.75	98.83	.30	5.64
3.682.005	347	0	46	48	-87.79	359.03	-88.12	6.73	-.33	7.70
3.682.040	347	0	47	30	-89.11	274.35	-89.32	246.12	-.21	-28.23
3.682.075	347	0	48	12	-86.46	301.90	-86.86	298.95	-.40	-2.95
3.682.110	347	0	48	54	-86.15	265.13	-86.36	259.25	-.21	-5.88
3.683.475	347	1	16	12	-32.95	222.89	-32.82	222.50	.13	-.39
3.683.510	347	1	16	54	-30.40	221.26	-30.26	220.90	.14	-.36
3.683.545	347	1	17	36	-28.22	219.62	-28.07	219.28	.15	-.34
3.683.580	347	1	18	18	-25.68	218.24	-25.52	217.93	.16	-.31
3.683.615	347	1	19	0	-23.52	216.79	-23.35	216.50	.17	-.29
3.683.650	347	1	19	42	-20.99	215.57	-20.81	215.30	.18	-.27

rev 59

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3.711.125	347	10	29	12	*******	*******	*******	*******	*****	******
3.713.505	347	11	16	48	38.13	122.78	37.70	122.62	-.43	-.16
3.713.575	347	11	18	12	*******	*******	*******	*******	*****	******
3.713.855	347	11	23	48	22.68	134.00	22.27	133.83	-.41	-.17
3.713.925	347	11	25	12	18.61	134.61	18.20	134.45	-.41	-.16
3.713.995	347	11	26	36	15.39	134.82	14.98	134.66	-.41	-.16
3.714.065	347	11	28	0	12.79	134.74	12.38	134.59	-.41	-.15
3.714.240	347	11	31	30	8.48	144.46	8.09	144.31	-.39	-.15
3.714.310	347	11	32	54	-20.39	161.27	-20.71	161.25	-.32	-.02
3.714.380	347	11	34	18	-49.45	175.25	-49.70	175.54	-.25	.29
3.714.450	347	11	35	42	-41.14	130.50	-41.56	130.44	-.42	-.06
3.714.520	347	11	37	6	-16.82	124.54	-17.25	124.42	-.43	-.12
3.714.695	347	11	40	36	-6.53	122.47	-6.96	122.35	-.43	-.12
3.714.765	347	11	42	0	-8.77	121.62	-9.20	121.50	-.43	-.12
3.714.835	347	11	43	24	-10.91	120.57	-11.34	120.44	-.43	-.13
3.714.905	347	11	44	48	-12.62	119.39	-13.05	119.26	-.43	-.13
3.717.775	347	12	42	12	-84.55	312.84	-84.12	313.02	.43	.18
3.717.810	347	12	42	54	-82.70	329.50	-82.28	328.69	.42	-.81
3.717.845	347	12	43	36	-86.57	16.67	-86.33	10.75	.24	-5.92
3.717.880	347	12	44	18	-84.11	10.10	-83.84	6.80	.27	-3.30
3.717.915	347	12	45	0	-84.41	52.01	-84.43	47.48	-.02	-4.53
3.717.950	347	12	45	42	-82.55	37.84	-82.46	34.50	.09	-3.34
3.719.175	347	13	10	12	-44.75	50.06	-44.72	49.51	.03	-.55
3.719.210	347	13	10	54	-42.22	47.28	-42.17	46.77	.05	-.51
3.719.245	347	13	11	36	-40.17	44.77	-40.10	44.29	.07	-.48
3.719.280	347	13	12	18	-37.64	42.47	-37.55	42.02	.09	-.45
3.719.315	347	13	13	0	-35.51	40.29	-35.40	39.87	.11	-.42
3.719.350	347	13	13	42	-32.98	38.41	-32.86	38.02	.12	-.39
3.719.385	347	13	14	24	-30.81	36.56	-30.67	36.19	.14	-.37
3.719.420	347	13	15	6	-28.29	34.98	-28.14	34.64	.15	-.34
3.719.455	347	13	15	48	-26.10	33.38	-25.94	33.06	.16	-.32
3.719.490	347	13	16	30	-23.56	32.02	-23.39	31.72	.17	-.30

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 60

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3•749•415	347	23	15	0	********	*******	*******	*******	*****	******
3•749•485	347	23	16	24	********	*******	*******	*******	*****	******
3•749•765	347	23	22	0	-38.70	326.89	-39.08	326.96	-.38	.07
3•749•835	347	23	23	24	-40.56	326.08	-40.92	326.16	-.36	.08
3•749•905	347	23	24	48	-42.11	325.07	-42.48	325.15	-.37	.08
3•749•975	347	23	26	12	-43.57	324.00	-43.94	324.08	-.37	.08
3•750•150	347	23	29	42	8.14	320.40	7.75	320.25	-.39	-.15
3•750•220	347	23	31	6	-20.57	337.33	-20.89	337.32	-.32	-.01
3•750•290	347	23	32	30	-49.14	351.97	-49.38	352.27	-.24	.30
3•750•360	347	23	33	54	-41.73	306.47	-42.15	306.42	-.42	-.05
3•750•430	347	23	35	18	-17.61	295.89	-18.04	299.78	-.43	-.11
3•750•710	347	23	40	54	-1.94	324.08	-2.33	323.96	-.39	-.12
3•750•780	347	23	42	18	-27.85	340.06	-28.17	340.09	-.32	.03
3•750•850	347	23	43	42	-54.16	355.08	-54.39	355.46	-.23	.38
3•750•920	347	23	45	6	-47.51	309.57	-47.93	309.54	-.42	-.03
3•750•990	347	23	46	30	-27.02	297.92	-27.45	297.79	-.43	-.13
3•751•165	347	23	50	0	-75.17	307.46	-75.60	307.56	-.43	.10
3•751•235	347	23	51	24	-77.84	295.35	-78.27	295.06	-.43	-.29
3•751•305	347	23	52	48	-79.85	271.71	-80.23	270.39	-.38	-1.32
3•751•375	347	23	54	12	-79.41	242.33	-79.63	240.20	-.22	-2.13
3•753•685	348	0	40	24	-79.58	281.35	-79.95	279.99	-.37	-1.36
3•753•720	348	0	41	6	-79.51	268.09	-79.82	266.30	-.31	-1.79
3•753•755	348	0	41	48	-77.20	277.62	-77.55	276.39	-.35	-1.23
3•753•790	348	0	42	30	-77.01	266.85	-77.31	265.36	-.30	-1.49
3•753•825	348	0	43	12	-75.31	274.17	-75.65	273.00	-.34	-1.17
3•753•860	348	0	43	54	-75.06	265.63	-75.35	264.30	-.29	-1.33
3•755•225	348	1	11	12	-33.66	213.52	-33.54	213.12	.12	-.40
3•755•260	348	1	11	54	-31.11	211.82	-30.98	211.45	.13	-.37
3•755•295	348	1	12	36	-28.92	210.13	-28.77	209.78	.15	-.35
3•755•330	348	1	13	18	-26.37	208.69	-26.21	208.37	.16	-.32
3•755•365	348	1	14	0	-24.20	207.21	-24.03	206.91	.17	-.30
3•755•400	348	1	14	42	-21.67	206.02	-21.49	205.74	.18	-.28

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3•785•325	348	11	13	12	22.39	133.73	22.01	133.53	-.38	-.20
3•785•395	348	11	14	36	18.99	133.85	18.61	133.66	-.38	-.19
3•785•675	348	11	20	12	22.78	135.42	22.40	135.21	-.38	-.21
3•785•745	348	11	21	36	19.07	135.48	18.69	135.29	-.38	-.19
3•785•815	348	11	23	0	15.53	135.42	15.15	135.24	-.38	-.18
3•785•885	348	11	24	24	12.39	135.25	12.00	135.09	-.39	-.16
3•786•060	348	11	27	54	5.73	137.58	5.35	137.44	-.38	-.14
3•786•130	348	11	29	18	-21.33	153.09	-21.64	153.08	-.31	-.01
3•786•200	348	11	30	42	-48.84	165.46	-49.09	165.74	-.25	.28
3•786•270	348	11	32	6	-42.48	122.59	-42.90	122.55	-.42	-.04
3•786•340	348	11	33	30	-19.72	117.17	-20.15	117.06	-.43	-.11
3•786•515	348	11	37	0	-3.36	114.77	-3.78	114.65	-.43	-.12
3•786•585	348	11	38	24	.65	113.81	.22	113.69	-.43	-.12
3•786•655	348	11	39	48	2.28	110.62	1.85	110.50	-.43	-.12
3•786•725	348	11	41	12	-.63	112.17	-1.06	112.05	-.43	-.12
3•789•595	348	12	38	36	********	*******	*******	*******	*****	******
3•789•630	348	12	39	18	-16.59	118.69	-17.02	118.55	-.43	-.14
3•789•665	348	12	40	0	********	*******	*******	*******	*****	******
3•789•700	348	12	40	42	-22.12	118.11	-22.55	117.96	-.43	-.15
3•789•735	348	12	41	24	-20.62	120.74	-21.05	120.60	-.43	-.14
3•789•770	348	12	42	6	-27.42	116.58	-27.84	116.41	-.42	-.17
3•790•995	348	13	6	36	-41.22	35.80	-41.16	35.30	.06	-.50
3•791•030	348	13	7	18	-38.69	33.39	-38.61	32.93	.08	-.46
3•791•065	348	13	8	0	-36.56	31.14	-36.46	30.71	.10	-.43
3•791•100	348	13	8	42	-34.01	29.20	-33.90	28.80	.11	-.40
3•791•135	348	13	9	24	-31.85	27.32	-31.72	26.94	.13	-.38
3•791•170	348	13	10	6	-29.32	25.71	-29.18	25.36	.14	-.35
3•791•205	348	13	10	48	-27.15	24.08	-27.00	23.75	.15	-.33
3•791•240	348	13	11	30	-24.61	22.70	-24.45	22.39	.16	-.31
3•791•275	348	13	12	12	-22.42	21.27	-22.24	20.98	.18	-.29
3•791•310	348	13	12	54	-19.87	20.06	-19.69	19.80	.18	-.26
3•791•345	348	13	13	36	-17.67	18.77	-17.48	18.52	.19	-.25

rev 62

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3•821•165	348	23	10	0	44.74	305.37	44.35	305.07	-.39	-.30
3•821•235	348	23	11	24	45.08	298.98	44.67	298.73	-.41	-.25
3•821•515	348	23	17	0	-22.74	323.06	-23.07	323.06	-.33	-.00
3•821•585	348	23	18	24	-22.49	323.43	-22.82	323.42	-.33	-.01
3•821•655	348	23	19	48	-21.88	323.06	-22.21	323.05	-.33	-.01
3•821•725	348	23	21	12	-21.93	323.52	-22.26	323.51	-.33	-.01
3•821•900	348	23	24	42	8.05	304.07	7.64	303.93	-.41	-.14
3•821•970	348	23	26	6	-21.24	321.02	-21.59	321.00	-.35	-.02
3•822•040	348	23	27	30	-50.57	331.41	-50.87	331.67	-.30	.26
3•822•110	348	23	28	54	-43.43	295.58	-43.85	295.53	-.42	-.05
3•822•180	348	23	30	18	-17.77	293.14	-18.20	293.03	-.43	-.11
3•822•460	348	23	35	54	-1.31	311.60	-1.70	311.48	-.39	-.12
3•822•530	348	23	37	18	-27.48	327.86	-27.79	327.68	-.33	.02
3•822•600	348	23	38	42	-54.78	342.14	-55.03	342.52	-.25	.38
3•822•670	348	23	40	6	-47.16	296.27	-47.59	296.21	-.43	-.06
3•822•740	348	23	41	30	-25.81	286.18	-26.24	286.05	-.43	-.13
3•822•915	348	23	45	0	-8.56	321.01	-8.93	320.92	-.37	-.09
3•822•985	348	23	46	24	-11.76	319.58	-12.13	319.50	-.37	-.08
3•823•055	348	23	47	48	-14.88	318.21	-15.24	318.14	-.38	-.07
3•823•125	348	23	49	12	-17.44	317.40	-17.82	317.34	-.38	-.06
3•825•435	349	0	35	24	********	*******	*******	*******	*****	******
3•825•470	349	0	36	6	********	*******	*******	*******	*****	******
3•825•505	349	0	36	48	-10.53	256.24	-10.83	256.06	-.30	-.18
3•825•540	349	0	37	30	-13.86	254.30	-14.15	254.10	-.29	-.20
3•825•575	349	0	38	12	-16.07	257.94	-16.38	257.73	-.31	-.21
3•825•610	349	0	38	54	-16.40	255.32	-16.69	255.10	-.29	-.22
3•826•135	349	0	49	24	-11.00	255.32	-11.28	255.13	-.28	-.19
3•826•975	349	1	6	12	-35.00	204.84	-34.89	204.42	.11	-.42
3•827•010	349	1	6	54	-32.41	203.03	-32.29	202.64	.12	-.39
3•827•045	349	1	7	36	-30.21	201.29	-30.07	200.93	.14	-.36
3•827•080	349	1	8	18	-27.65	199.83	-27.50	199.49	.15	-.34
3•827•115	349	1	9	0	-25.46	198.34	-25.30	198.03	.16	-.31

rev 63

3•852•665	349	9	40	0	********	*******	*******	*******	*****	******
3•854•625	349	10	19	12	********	*******	*******	*******	*****	******
3•854•660	349	10	19	54	********	*******	*******	*******	*****	******
3•854•695	349	10	20	36	********	*******	*******	*******	*****	******
3•854•730	349	10	21	18	********	*******	*******	*******	*****	******
3•854•765	349	10	22	0	********	*******	*******	*******	*****	******
3•854•800	349	10	22	42	********	*******	*******	*******	*****	******
3•857•075	349	11	8	12	39.08	121.15	38.69	120.88	-.39	-.27
3•857•145	349	11	9	36	40.72	115.34	40.31	115.10	-.41	-.24
3•857•425	349	11	15	12	23.87	135.27	23.53	135.03	-.34	-.24
3•857•495	349	11	16	36	19.76	134.59	19.41	134.38	-.35	-.21
3•857•565	349	11	18	0	16.06	133.91	15.71	133.72	-.35	-.19
3•857•635	349	11	19	24	12.64	133.20	12.29	133.02	-.35	-.18
3•857•810	349	11	22	54	7.10	119.51	6.70	119.37	-.40	-.14
3•857•880	349	11	24	18	-21.63	136.49	-21.98	136.47	-.35	-.02
3•857•950	349	11	25	42	-50.08	147.89	-50.37	148.15	-.29	.26
3•858•020	349	11	27	6	-42.37	112.82	-42.79	112.78	-.42	-.04
3•858•090	349	11	28	30	-18.77	109.54	-19.20	109.44	-.43	-.10
3•858•265	349	11	32	0	-2.00	114.37	-2.42	114.25	-.42	-.12
3•858•335	349	11	33	24	.97	113.97	.55	113.85	-.42	-.12
3•858•405	349	11	34	48	1.30	111.03	.87	110.91	-.43	-.12
3•858•475	349	11	36	12	-1.57	111.14	-2.00	111.02	-.43	-.12
3•861•345	349	12	33	36	-16.05	118.78	-16.48	118.66	-.43	-.12
3•861•380	349	12	34	18	-23.89	114.75	-24.31	114.62	-.43	-.13
3•861•415	349	12	35	0	-19.97	117.79	-20.40	117.67	-.43	-.12
3•861•450	349	12	35	42	-26.37	113.97	-26.80	113.83	-.43	-.14
3•861•485	349	12	36	24	-22.54	117.60	-22.97	117.48	-.43	-.12
3•861•520	349	12	37	6	-28.87	113.37	-29.30	113.23	-.43	-.14
3•862•745	349	13	1	36	-42.88	28.42	-42.84	27.90	.04	-.52
3•862•780	349	13	2	18	-40.39	25.74	-40.33	25.25	.06	-.49
3•862•815	349	13	3	0	-38.31	23.29	-38.23	22.83	.08	-.46
3•862•850	349	13	3	42	-35.81	21.16	-35.71	20.73	.10	-.43

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 64

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3.894.455	349	23	35	47	-80.05	356.66	-80.13	358.97	-.08	2.31
3.894.525	349	23	37	11	-83.46	24.34	-83.33	27.76	.13	3.42
3.894.595	349	23	38	35	-82.88	82.28	-82.45	83.07	.41	.79
3.894.665	349	23	39	59	*******	*******	*******	*******	*****	******
3.894.875	349	23	44	11	-57.86	316.74	-58.20	319.05	-.34	.31
3.894.910	349	23	44	53	-60.30	318.38	-60.64	318.73	-.34	.35
3.894.980	349	23	46	17	-43.52	309.83	-43.90	309.91	-.38	.08
3.895.050	349	23	47	41	-27.86	306.32	-28.25	306.30	-.39	-.02
3.895.120	349	23	49	5	-10.47	304.29	-10.87	304.20	-.40	-.09
3.895.190	349	23	50	29	-7.13	281.90	-7.56	281.78	-.43	-.12
3.895.260	349	23	51	53	-31.74	280.78	-32.17	280.65	-.43	-.13
3.895.330	349	23	53	17	-51.97	270.56	-52.39	270.32	-.42	-.24
3.895.400	349	23	54	41	*******	*******	*******	*******	*****	******
3.895.435	349	23	55	23	*******	*******	*******	*******	*****	******
3.895.645	349	23	59	35	-72.48	314.24	-72.85	314.82	-.37	.58
3.895.715	350	0	0	59	-75.46	306.94	-75.86	307.48	-.40	.54
3.895.785	350	0	2	23	-78.13	298.38	-78.55	298.77	-.42	.39
3.895.855	350	0	3	47	-80.78	287.52	-81.21	287.53	-.43	.01
3.897.255	350	0	31	47	-70.02	311.97	-70.42	312.27	-.40	.30
3.897.290	350	0	32	29	-71.77	305.43	-72.19	305.62	-.42	.19
3.897.325	350	0	33	11	-72.77	300.88	-73.20	300.98	-.43	.10
3.897.360	350	0	33	53	-74.15	293.36	-74.58	293.27	-.43	-.09
3.897.395	350	0	34	35	-74.88	287.67	-75.31	287.41	-.43	-.26
3.897.430	350	0	35	17	-75.74	278.47	-76.16	277.92	-.42	-.55
3.898.060	350	0	47	53	-80.67	224.04	-80.80	223.19	-.13	-.85
3.898.095	350	0	48	35	-59.59	219.99	-59.69	219.15	-.10	-.84
3.898.130	350	0	49	17	-57.87	215.85	-57.94	215.05	-.07	-.80
3.898.165	350	0	49	59	-56.48	212.44	-56.53	211.67	-.05	-.77
3.898.200	350	0	50	41	-54.56	209.05	-54.58	208.32	-.02	-.73
3.898.235	350	0	51	23	-53.01	206.18	-53.01	205.48	.00	-.70
3.898.270	350	0	52	5	-51.01	203.37	-50.98	202.72	.03	-.65
3.898.305	350	0	52	47	-49.38	200.92	-49.33	200.30	.05	-.62

rev 65

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3.930.225	350	11	31	11	2.74	113.25	2.34	113.12	-.40	-.13
3.930.295	350	11	32	35	-.88	112.80	-1.28	112.68	-.40	-.12
3.930.365	350	11	33	59	-3.37	112.11	-3.78	112.00	-.41	-.11
3.930.435	350	11	35	23	-3.60	115.12	-4.00	115.01	-.40	-.11
3.930.750	350	11	41	41	-59.03	137.65	-59.35	138.02	-.32	.37
3.930.820	350	11	43	5	-41.78	127.16	-42.15	127.24	-.37	.08
3.930.890	350	11	44	29	-25.74	122.81	-26.12	122.78	-.38	-.03
3.930.960	350	11	45	53	-7.31	120.21	-7.70	120.11	-.39	-.10
3.931.030	350	11	47	17	-5.61	100.01	-6.04	99.89	-.43	-.12
3.931.100	350	11	48	41	-30.37	98.61	-30.80	98.50	-.43	-.11
3.931.170	350	11	50	5	-50.51	89.09	-50.94	88.89	-.43	-.20
3.931.240	350	11	51	29	-66.61	29.28	-66.77	28.23	-.16	-1.05
3.931.485	350	11	56	23	-3.15	122.74	-3.54	122.63	-.39	-.11
3.931.555	350	11	57	47	-7.99	120.81	-8.39	120.71	-.40	-.10
3.931.625	350	11	59	11	-12.37	118.97	-12.78	118.88	-.41	-.09
3.931.905	350	12	4	47	-7.51	94.71	-7.94	94.58	-.43	-.13
3.931.975	350	12	6	11	-11.35	93.47	-11.78	93.34	-.43	-.13
3.933.095	350	12	28	35	-88.40	159.90	-88.61	174.25	-.21	14.35
3.933.130	350	12	29	17	-89.17	357.89	-88.95	334.86	.22	-23.03
3.933.165	350	12	29	59	-87.59	1.17	-87.44	351.71	.15	-9.46
3.933.200	350	12	30	41	-85.27	346.20	-85.04	341.80	.23	-4.40
3.933.235	350	12	31	23	-83.74	349.15	-83.53	345.66	.21	-3.49
3.933.270	350	12	32	5	-81.29	343.37	-81.04	340.97	.25	-2.40
3.933.900	350	12	44	41	-62.33	48.30	-62.53	47.45	-.20	-.85
3.933.935	350	12	45	23	-61.61	43.10	-61.77	42.24	-.16	-.86
3.933.970	350	12	46	5	-60.25	37.84	-60.38	36.99	-.13	-.85
3.934.005	350	12	46	47	-59.10	33.87	-59.20	33.04	-.10	-.83
3.934.040	350	12	47	29	-57.39	29.90	-57.46	29.11	-.07	-.79
3.934.075	350	12	48	11	-56.02	26.60	-56.06	25.84	-.04	-.76
3.934.110	350	12	48	53	-54.11	23.30	-54.12	22.58	-.01	-.72
3.934.145	350	12	49	35	-52.52	20.54	-52.51	19.85	.01	-.69
3.934.180	350	12	50	17	-50.43	17.83	-50.40	17.19	.03	-.64

rev 66

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
3.966.205	350	23	30	47	-11.01	307.26	-11.34	307.19	-.33	-.07
3.966.275	350	23	32	11	-13.39	306.46	-13.73	306.40	-.34	-.06
3.966.345	350	23	33	35	-15.63	305.61	-15.97	305.56	-.34	-.05
3.966.415	350	23	34	59	-17.86	304.64	-18.21	304.60	-.35	-.04
3.966.625	350	23	39	11	-56.91	312.23	-57.23	312.56	-.32	.33
3.966.660	350	23	39	53	-58.98	311.39	-59.30	311.75	-.32	.36
3.966.730	350	23	41	17	-41.43	302.17	-41.80	302.25	-.37	.08
3.966.800	350	23	42	41	-25.43	298.41	-25.81	298.38	-.38	-.03
3.966.870	350	23	44	5	-7.24	296.30	-7.63	296.20	-.39	-.10
3.966.940	350	23	45	29	-6.08	274.95	-6.51	274.83	-.43	-.12
3.967.010	350	23	46	53	-30.52	274.13	-30.95	274.02	-.43	-.11
3.967.080	350	23	48	17	-51.00	265.75	-51.43	265.57	-.43	-.18
3.967.150	350	23	49	41	-67.16	203.85	-67.32	202.77	-.16	-1.08
3.967.185	350	23	50	23	-66.72	206.72	-66.89	205.68	-.17	-1.04
3.967.395	350	23	54	35	-72.49	304.06	-72.86	304.65	-.37	.59
3.967.465	350	23	55	59	-75.59	298.48	-75.98	299.08	-.39	.60
3.967.535	350	23	57	23	-78.38	290.84	-78.79	291.34	-.41	.50
3.967.605	350	23	58	47	-81.07	279.91	-81.50	280.06	-.43	.15
3.969.005	351	0	26	47	*******	*******	*******	*******	*****	******
3.969.040	351	0	27	29	*******	*******	*******	*******	*****	******
3.969.075	351	0	28	11	*******	*******	*******	*******	*****	******
3.969.110	351	0	28	53	*******	*******	*******	*******	*****	******
3.969.145	351	0	29	35	*******	*******	*******	*******	*****	******
3.969.180	351	0	30	17	*******	*******	*******	*******	*****	******
3.969.810	351	0	42	53	-62.06	222.02	-62.27	221.17	-.19	-.85
3.969.845	351	0	43	35	-61.24	217.28	-61.40	216.42	-.16	-.86
3.969.880	351	0	44	17	-59.78	212.35	-59.90	211.51	-.12	-.84
3.969.915	351	0	44	59	-58.62	208.33	-58.71	207.51	-.09	-.82
3.969.950	351	0	45	41	-56.88	204.27	-56.94	203.49	-.06	-.78
3.969.985	351	0	46	23	-55.48	200.89	-55.51	200.14	-.03	-.75
3.970.020	351	0	47	5	-53.54	197.67	-53.55	196.96	-.01	-.71
3.970.055	351	0	47	47	-51.98	194.96	-51.97	194.29	.01	-.67

rev 67

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
4.002.045	351	11	27	35	21.03	104.92	20.63	104.73	-.40	-.19
4.002.115	351	11	28	59	16.60	104.86	16.20	104.69	-.40	-.17
4.002.185	351	11	30	23	12.58	104.70	12.18	104.54	-.40	-.16
4.002.255	351	11	31	47	9.08	104.36	8.68	104.21	-.40	-.15
4.002.570	351	11	38	5	-57.94	128.72	-58.25	129.08	-.31	.36
4.002.640	351	11	39	29	-41.27	118.23	-41.63	118.31	-.36	.08
4.002.710	351	11	40	53	-26.00	113.77	-26.38	113.75	-.38	-.02
4.002.780	351	11	42	17	-7.95	111.22	-8.34	111.12	-.39	-.10
4.002.850	351	11	43	41	-5.84	91.14	-6.27	91.02	-.43	-.12
4.002.920	351	11	45	5	-30.78	89.65	-31.21	89.54	-.43	-.11
4.002.990	351	11	46	29	-51.17	80.83	-51.60	80.65	-.43	-.18
4.003.060	351	11	47	53	-68.53	28.00	-68.75	26.92	-.22	-1.08
4.003.305	351	11	52	47	-12.76	111.64	-13.16	111.56	-.40	-.08
4.003.375	351	11	54	11	-16.26	109.61	-16.66	109.53	-.40	-.08
4.003.445	351	11	55	35	-19.72	108.09	-20.13	108.02	-.41	-.07
4.003.725	351	12	1	11	18.79	105.38	18.37	105.22	-.42	-.16
4.003.795	351	12	2	35	7.52	104.71	7.10	104.57	-.42	-.14
4.004.915	351	12	24	59	-41.67	56.98	-42.00	56.61	-.33	-.37
4.004.950	351	12	25	41	-41.89	53.98	-42.21	53.59	-.32	-.39
4.004.985	351	12	26	23	-40.20	59.96	-40.55	59.62	-.35	-.34
4.005.020	351	12	27	5	-40.64	57.01	-40.97	56.65	-.33	-.36
4.005.055	351	12	27	47	-39.10	62.67	-39.46	62.35	-.36	-.32
4.005.090	351	12	28	29	-39.79	59.71	-40.13	59.37	-.34	-.34
4.005.720	351	12	41	5	-62.04	37.22	-62.23	36.37	-.19	-.85
4.005.755	351	12	41	47	-61.24	32.42	-61.40	31.56	-.16	-.86
4.005.790	351	12	42	29	-59.86	27.41	-59.98	26.57	-.12	-.84
4.005.825	351	12	43	11	-58.74	23.47	-58.83	22.65	-.09	-.82
4.005.860	351	12	43	53	-57.01	19.60	-57.07	18.82	-.06	-.78
4.005.895	351	12	44	35	-55.61	16.39	-55.65	15.64	-.04	-.75
4.005.930	351	12	45	17	-53.65	13.18	-53.66	12.47	-.01	-.71
4.005.965	351	12	45	59	-52.07	10.44	-52.06	9.76	.01	-.68
4.006.000	351	12	46	41	-50.01	7.69	-49.98	7.05	.03	-.64

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 68

DAS REF.	GMT DAY	HR	MM	SEC	INTERCEPTING LAT W/R OLD POLE LAT	LON W/R OLD POLE LON	LAT W/R NEW POLE LAT	LON W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
4.038.025	351	23	27	11	-7.97	321.76	-8.16	321.69	-.19	-.07
4.038.095	351	23	28	35	-11.08	320.08	-11.28	320.03	-.20	-.05
4.038.165	351	23	29	59	-14.22	318.42	-14.43	318.39	-.21	-.03
4.038.235	351	23	31	23	-17.14	316.93	-17.37	316.92	-.23	-.01
4.038.445	351	23	35	35	-55.77	306.15	-56.07	306.49	-.30	.34
4.038.480	351	23	36	17	-57.85	306.26	-58.15	306.64	-.30	.38
4.038.550	351	23	37	41	-41.13	295.46	-41.48	295.56	-.35	.10
4.038.620	351	23	39	5	-25.16	290.71	-25.53	290.69	-.37	-.02
4.038.690	351	23	40	29	-6.60	287.88	-6.98	287.78	-.38	-.10
4.038.760	351	23	41	53	-5.82	266.42	-6.25	266.30	-.43	-.12
4.038.830	351	23	43	17	-30.66	266.37	-31.09	266.27	-.43	-.10
4.038.900	351	23	44	41	-51.07	259.80	-51.50	259.66	-.43	-.14
4.038.970	351	23	46	5	-58.42	190.85	-58.56	190.06	-.14	-.79
4.039.005	351	23	46	47	-55.40	186.33	-55.50	185.60	-.10	-.73
4.039.215	351	23	50	59	-60.18	209.75	-60.43	209.01	-.25	-.74
4.039.285	351	23	52	23	-58.01	199.17	-58.19	198.42	-.18	-.75
4.039.355	351	23	53	47	-49.38	178.02	-49.41	177.39	-.03	-.63
4.039.425	351	23	55	11	*******	*******	*******	*******	*****	*****
4.040.825	352	0	23	11	-57.98	197.48	-58.10	196.69	-.12	-.79
4.040.860	352	0	23	53	-56.50	192.86	-56.58	192.10	-.08	-.76
4.040.895	352	0	24	35	-55.51	191.05	-55.58	190.31	-.07	-.74
4.040.930	352	0	25	17	-53.69	186.71	-53.72	186.00	-.03	-.71
4.040.965	352	0	25	59	-52.55	185.09	-52.57	184.40	-.02	-.69
4.041.000	352	0	26	41	-50.18	180.74	-50.17	180.10	.01	-.64
4.041.630	352	0	39	17	-59.42	200.82	-59.53	199.99	-.11	-.83
4.041.665	352	0	39	59	-58.23	197.20	-58.32	196.39	-.09	-.81
4.041.700	352	0	40	41	-56.51	193.36	-56.57	192.59	-.06	-.77
4.041.735	352	0	41	23	-55.17	190.30	-55.20	189.56	-.03	-.74
4.041.770	352	0	42	5	-53.30	187.20	-53.31	186.50	-.01	-.70
4.041.805	352	0	42	47	-51.79	184.66	-51.78	183.99	.01	-.67
4.041.840	352	0	43	29	-49.81	182.03	-49.78	181.40	.03	-.63
4.041.875	352	0	44	11	-48.20	179.86	-48.15	179.26	.05	-.60

rev 69

4.073.865	352	11	23	59	-.66	96.74	-1.05	96.62	-.39	-.12
4.073.935	352	11	25	23	-3.19	96.22	-3.59	96.11	-.40	-.11
4.074.005	352	11	26	47	-5.63	95.57	-6.03	95.46	-.40	-.11
4.074.075	352	11	28	11	-8.40	94.77	-8.80	94.67	-.40	-.10
4.074.390	352	11	34	29	-56.79	121.59	-57.08	121.95	-.29	.36
4.074.460	352	11	35	53	-40.11	110.34	-40.46	110.43	-.35	.09
4.074.530	352	11	37	17	-24.62	105.55	-24.99	105.53	-.37	-.02
4.074.600	352	11	38	41	-6.82	103.13	-7.20	103.03	-.38	-.10
4.074.670	352	11	40	5	-6.92	83.98	-7.35	83.86	-.43	-.12
4.074.740	352	11	41	29	-30.39	83.21	-30.82	83.12	-.43	-.09
4.074.810	352	11	42	53	-50.61	75.94	-51.04	75.81	-.43	-.13
4.074.880	352	11	44	17	-70.64	25.54	-70.90	24.44	-.26	-1.10
4.075.125	352	11	49	11	.01	124.42	-.29	124.30	-.30	-.12
4.075.195	352	11	50	35	-6.97	121.25	-7.29	121.16	-.32	-.09
4.075.265	352	11	51	59	-12.59	118.60	-12.92	118.54	-.33	-.06
4.075.545	352	11	57	35	12.53	105.72	12.14	105.56	-.39	-.16
4.075.615	352	11	58	59	10.94	103.38	10.54	103.23	-.40	-.15
4.076.735	352	12	21	23	-89.48	155.37	-89.46	202.99	.02	47.62
4.076.770	352	12	22	5	-88.10	318.81	-87.81	309.73	.29	-9.08
4.076.805	352	12	22	47	-86.57	333.70	-86.38	327.29	.19	-6.41
4.076.840	352	12	23	29	-84.20	323.89	-83.95	320.35	.25	-3.54
4.076.875	352	12	24	11	-82.70	326.79	-82.47	323.84	.23	-2.95
4.076.910	352	12	24	53	-80.22	321.66	-79.96	319.55	.26	-2.11
4.077.540	352	12	37	29	-62.31	30.51	-62.53	29.67	-.22	-.84
4.077.575	352	12	38	11	-61.63	25.36	-61.81	24.51	-.18	-.85
4.077.610	352	12	38	53	-60.29	19.95	-60.43	19.11	-.14	-.84
4.077.645	352	12	39	35	-59.23	15.61	-59.34	14.78	-.11	-.83
4.077.680	352	12	40	17	-57.51	11.46	-57.59	10.67	-.08	-.79
4.077.715	352	12	40	59	-56.15	8.05	-56.20	7.29	-.05	-.76
4.077.750	352	12	41	41	-54.25	4.66	-54.27	3.94	-.02	-.72
4.077.785	352	12	42	23	-52.72	1.80	-52.72	1.11	-.00	-.69
4.077.820	352	12	43	5	-50.67	358.98	-50.65	358.33	.02	-.65

rev 70

4.109.845	352	23	23	35	-46.51	270.39	-46.91	270.44	-.40	.05
4.109.915	352	23	24	59	-48.17	268.51	-48.57	268.56	-.40	.05
4.109.985	352	23	26	23	-46.05	274.80	-46.44	274.88	-.39	.08
4.110.055	352	23	27	47	-47.90	273.35	-48.29	273.43	-.39	.08
4.110.265	352	23	31	59	-54.40	300.35	-54.67	300.70	-.27	.35
4.110.300	352	23	32	41	-56.70	299.03	-56.98	299.41	-.28	.38
4.110.370	352	23	34	5	-39.95	287.21	-40.29	287.31	-.34	.10
4.110.440	352	23	35	29	-23.74	281.99	-24.11	281.97	-.37	-.02
4.110.510	352	23	36	53	-5.12	279.31	-5.50	279.21	-.38	-.10
4.110.580	352	23	38	17	-5.81	253.91	-6.24	259.79	-.43	-.12
4.110.650	352	23	39	41	-30.00	258.84	-30.43	258.75	-.43	-.09
4.110.720	352	23	41	5	-49.92	251.41	-50.35	251.28	-.43	-.13
4.110.790	352	23	42	29	-70.68	210.25	-71.00	209.29	-.32	-.96
4.110.825	352	23	43	11	-70.51	209.32	-70.82	208.35	-.31	-.97
4.111.035	352	23	47	23	-71.92	295.98	-72.24	296.77	-.32	.79
4.111.105	352	23	48	47	-74.77	291.07	-75.11	291.93	-.34	.86
4.111.175	352	23	50	11	-77.62	286.08	-77.98	287.03	-.36	.95
4.111.245	352	23	51	35	-80.30	278.14	-80.69	279.07	-.39	.93
4.112.645	353	0	19	35	*******	*******	*******	*******	*****	*****
4.112.680	353	0	20	17	*******	*******	*******	*******	*****	*****
4.112.715	353	0	20	59	*******	*******	*******	*******	*****	*****
4.112.750	353	0	21	41	*******	*******	*******	*******	*****	*****
4.112.785	353	0	22	23	*******	*******	*******	*******	*****	*****
4.112.820	353	0	23	5	*******	*******	*******	*******	*****	*****
4.113.450	353	0	35	41	-62.65	207.79	-62.88	206.96	-.23	-.83
4.113.485	353	0	36	23	-61.96	202.72	-62.16	201.87	-.20	-.85
4.113.520	353	0	37	5	-60.67	197.19	-60.83	196.35	-.16	-.84
4.113.555	353	0	37	47	-59.70	192.77	-59.82	191.94	-.12	-.83
4.113.590	353	0	38	29	-58.14	188.28	-58.23	187.48	-.09	-.80
4.113.625	353	0	39	11	-56.85	184.79	-56.91	184.01	-.06	-.78
4.113.660	353	0	39	53	-55.00	181.30	-55.04	180.56	-.04	-.74
4.113.695	353	0	40	35	-53.51	178.38	-53.52	177.67	-.01	-.71

rev 71

4.145.755	353	11	21	46	-7.19	72.54	-7.61	72.43	-.42	-.11
4.145.825	353	11	23	10	-9.43	72.25	-9.86	72.14	-.43	-.11
4.145.895	353	11	24	34	-11.60	71.37	-12.03	71.26	-.43	-.11
4.145.965	353	11	25	58	-13.47	70.42	-13.90	70.31	-.43	-.11
4.146.280	353	11	32	16	-57.49	113.71	-57.77	114.10	-.28	.39
4.146.350	353	11	33	40	-40.77	101.68	-41.12	101.78	-.35	.10
4.146.420	353	11	35	4	-25.19	97.13	-25.56	97.11	-.37	-.02
4.146.490	353	11	36	28	-7.35	94.78	-7.73	94.68	-.38	-.10
4.146.560	353	11	37	52	-7.44	74.41	-7.87	74.29	-.43	-.12
4.146.630	353	11	39	16	-31.64	73.78	-32.07	73.69	-.43	-.09
4.146.700	353	11	40	40	-52.10	67.47	-52.53	67.35	-.43	-.12
4.146.770	353	11	42	4	-72.07	20.89	-72.36	19.78	-.29	-1.11
4.147.015	353	11	46	58	-11.46	61.73	-11.89	61.60	-.43	-.13
4.147.085	353	11	48	22	-14.80	60.84	-15.23	60.70	-.43	-.14
4.147.155	353	11	49	46	-17.93	59.70	-18.35	59.55	-.42	-.15
4.147.435	353	11	55	22	-50.21	358.61	-50.34	357.99	-.13	-.62
4.147.505	353	11	56	46	-49.39	356.66	-49.50	356.05	-.11	-.61
4.148.625	353	12	19	10	-83.70	122.19	-83.99	124.99	-.29	2.80
4.148.660	353	12	19	52	-86.02	114.24	-86.35	118.23	-.33	3.99
4.148.695	353	12	20	34	-87.06	92.95	-87.47	95.51	-.41	2.56
4.148.730	353	12	21	16	-88.16	39.15	-88.48	28.99	-.32	-10.16
4.148.765	353	12	21	58	-87.12	7.99	-87.24	359.46	-.12	-8.53
4.148.800	353	12	22	40	-85.39	341.17	-85.32	335.80	.07	-5.37
4.149.430	353	12	35	16	-61.37	15.42	-61.55	14.58	-.18	-.84
4.149.465	353	12	35	58	-60.53	10.65	-60.67	9.81	-.14	-.84
4.149.500	353	12	36	40	-59.02	5.98	-59.13	5.18	-.11	-.82
4.149.535	353	12	37	22	-57.80	2.22	-57.88	1.42	-.08	-.80
4.149.570	353	12	38	4	-55.97	358.42	-56.02	357.66	-.05	-.76
4.149.605	353	12	38	46	-54.50	355.27	-54.53	354.54	-.03	-.73
4.149.640	353	12	39	28	-52.46	352.17	-52.46	351.49	-.00	-.68
4.149.675	353	12	40	10	-50.81	349.55	-50.79	348.90	.02	-.65
4.149.710	353	12	40	52	-48.67	346.98	-48.63	346.37	.04	-.61

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 72

DAS REF.	TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
4.181.735		353	23	21	22	*******	*******	*******	*******	*****	******
4.181.805		353	23	22	46	*******	*******	*******	*******	*****	******
4.181.875		353	23	24	10	*******	*******	*******	*******	*****	******
4.181.945		353	23	25	34	*******	*******	*******	*******	*****	******
4.182.155		353	23	29	46	*******	*******	*******	*******	*****	******
4.182.190		353	23	30	28	*******	*******	*******	*******	*****	******
4.182.260		353	23	31	52	*******	*******	*******	*******	*****	******
4.182.330		353	23	33	16	*******	*******	*******	*******	*****	******
4.182.400		353	23	34	40	*******	*******	*******	*******	*****	******
4.182.470		353	23	36	4	*******	*******	*******	*******	*****	******
4.182.540		353	23	37	28	*******	*******	*******	*******	*****	******
4.182.610		353	23	38	52	*******	*******	*******	*******	*****	******
4.182.680		353	23	40	16	*******	*******	*******	*******	*****	******
4.182.715		353	23	40	58	*******	*******	*******	*******	*****	******
4.182.925		353	23	45	10	*******	*******	*******	*******	*****	******
4.182.995		353	23	46	34	*******	*******	*******	*******	*****	******
4.183.065		353	23	47	58	*******	*******	*******	*******	*****	******
4.183.135		353	23	49	22	*******	*******	*******	*******	*****	******
4.184.535		354	0	17	22	-56.10	266.95	-56.52	267.00	-.42	.05
4.184.570		354	0	18	4	-58.15	262.58	-58.57	262.59	-.42	.01
4.184.605		354	0	18	46	-57.25	263.75	-57.67	263.77	-.42	.02
4.184.640		354	0	19	28	-59.20	259.03	-59.63	258.99	-.43	-.04
4.184.675		354	0	20	10	-58.24	260.96	-58.67	260.94	-.43	-.02
4.184.710		354	0	20	52	-59.97	256.17	-60.40	256.10	-.43	-.07
4.185.340		354	0	33	28	-62.08	193.83	-62.28	192.98	-.20	-.85
4.185.375		354	0	34	10	-61.30	189.17	-61.47	188.32	-.17	-.85
4.185.410		354	0	34	52	-59.89	184.22	-60.02	183.39	-.13	-.83
4.185.445		354	0	35	34	-58.77	180.21	-58.87	179.39	-.10	-.82
4.185.480		354	0	36	16	-57.05	176.13	-57.12	175.35	-.07	-.78
4.185.515		354	0	36	58	-55.65	172.76	-55.70	172.01	-.05	-.75
4.185.550		354	0	37	40	-53.73	169.42	-53.75	168.71	-.02	-.71
4.185.585		354	0	38	22	-52.18	166.59	-52.18	165.91	.00	-.68

rev 73

4.212.325		354	9	33	10	*******	*******	*******	*******	*****	******
4.212.605		354	9	38	46	*******	*******	*******	*******	*****	******
4.215.685		354	10	40	22	*******	*******	*******	*******	*****	******
4.217.575		354	11	18	10	-4.86	76.80	-5.25	76.69	-.39	-.11
4.217.645		354	11	19	34	-7.74	75.85	-8.14	75.75	-.40	-.10
4.217.715		354	11	20	58	-10.42	74.87	-10.82	74.78	-.40	-.09
4.217.785		354	11	22	22	-13.09	73.96	-13.49	73.87	-.40	-.09
4.218.100		354	11	28	40	-54.94	107.69	-55.20	108.06	-.26	.37
4.218.170		354	11	30	4	-39.05	94.64	-39.38	94.74	-.33	.10
4.218.240		354	11	31	28	-23.52	89.66	-23.88	89.64	-.36	-.02
4.218.310		354	11	32	52	-5.34	87.07	-5.71	86.97	-.37	-.10
4.218.380		354	11	34	16	-6.92	67.61	-7.34	67.50	-.42	-.11
4.218.450		354	11	35	40	-30.08	66.61	-30.51	66.53	-.43	-.08
4.218.520		354	11	37	4	-50.08	62.13	-50.51	62.05	-.43	-.08
4.218.590		354	11	38	28	-72.69	30.02	-73.07	29.24	-.38	-.78
4.218.635		354	11	43	22	-15.89	73.39	-16.31	73.30	-.42	-.09
4.218.905		354	11	44	46	-19.35	72.34	-19.77	72.25	-.42	-.09
4.218.975		354	11	46	10	-21.21	71.29	-21.63	71.20	-.42	-.09
4.219.255		354	11	51	46	-75.97	225.35	-75.55	225.68	.42	.33
4.219.325		354	11	53	10	*******	*******	*******	*******	*****	******
4.220.445		354	12	15	34	-29.59	97.61	-29.96	97.61	-.37	.00
4.220.480		354	12	16	16	-36.59	92.43	-36.98	92.45	-.39	.02
4.220.515		354	12	16	58	-39.97	89.89	-40.37	89.91	-.40	.02
4.220.550		354	12	17	40	-44.12	85.63	-44.53	85.64	-.41	.01
4.220.585		354	12	18	22	-46.51	83.28	-46.92	83.28	-.41	.00
4.220.620		354	12	19	4	-49.59	79.02	-50.01	79.00	-.42	-.02
4.221.250		354	12	31	40	-62.71	14.17	-62.95	13.34	-.24	-.83
4.221.285		354	12	32	22	-62.09	9.00	-62.29	8.15	-.20	-.85
4.221.320		354	12	33	4	-60.80	3.56	-60.96	2.72	-.16	-.84
4.221.355		354	12	33	46	-59.78	359.25	-59.91	358.42	-.13	-.83
4.221.390		354	12	34	28	-58.17	354.79	-58.27	353.99	-.10	-.80

rev 74

DAS REF.	TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
4.253.625		354	23	19	10	3.84	271.49	3.53	271.35	-.31	-.14
4.253.695		354	23	20	34	.75	270.46	.43	270.33	-.32	-.13
4.253.765		354	23	21	58	-2.27	269.36	-2.60	269.25	-.33	-.11
4.253.835		354	23	23	22	-5.24	268.30	-5.58	268.20	-.34	-.10
4.254.045		354	23	27	34	-54.72	268.04	-55.06	268.29	-.34	.25
4.254.080		354	23	28	16	-56.77	267.48	-57.11	267.76	-.34	.28
4.254.150		354	23	29	40	-39.13	259.55	-39.51	259.60	-.38	.05
4.254.220		354	23	31	4	-22.68	255.45	-23.07	255.40	-.39	-.05
4.254.290		354	23	32	28	-1.64	252.35	-2.04	252.23	-.40	-.12
4.254.360		354	23	33	52	1.41	231.50	.98	231.38	-.43	-.12
4.254.430		354	23	35	16	-27.06	232.73	-27.49	232.61	-.43	-.12
4.254.500		354	23	36	40	-47.11	224.19	-47.54	224.00	-.43	-.19
4.254.570		354	23	38	4	-64.07	176.20	-64.30	175.33	-.23	-.87
4.254.605		354	23	38	46	-63.60	177.88	-63.84	177.04	-.24	-.84
4.254.815		354	23	42	58	-71.35	284.78	-71.62	285.66	-.27	.88
4.254.885		354	23	44	22	-74.55	283.49	-74.83	284.57	-.28	1.08
4.254.955		354	23	45	46	-77.88	281.89	-78.17	283.27	-.29	1.38
4.255.025		354	23	47	10	-81.15	280.10	-81.45	282.00	-.30	1.90
4.256.425		355	0	15	10	*******	*******	*******	*******	*****	******
4.256.460		355	0	15	52	*******	*******	*******	*******	*****	******
4.256.495		355	0	16	34	*******	*******	*******	*******	*****	******
4.256.530		355	0	17	16	*******	*******	*******	*******	*****	******
4.256.565		355	0	17	58	*******	*******	*******	*******	*****	******
4.256.600		355	0	18	40	*******	*******	*******	*******	*****	******
4.258.420		355	0	55	4	-11.93	120.60	-11.65	120.41	.28	-.19
4.258.455		355	0	55	46	-9.74	119.42	-9.45	119.24	.29	-.18
4.258.490		355	0	56	28	-7.19	118.49	-6.89	118.33	.30	-.16
4.258.525		355	0	57	10	-5.04	117.27	-4.74	117.12	.30	-.15
4.258.560		355	0	57	52	-2.52	116.27	-2.21	116.13	.31	-.14
4.258.595		355	0	58	34	-.38	115.00	-.06	114.88	.32	-.12
4.258.630		355	0	59	16	2.11	113.93	2.43	113.82	.32	-.11
4.258.665		355	0	59	58	4.26	112.57	4.59	112.47	.33	-.10

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4.289.465		355	11	15	58	-6.51	71.22	-6.89	71.12	-.38	-.10
4.289.535		355	11	17	22	-9.21	70.35	-9.59	70.26	-.38	-.09
4.289.605		355	11	18	46	-11.89	69.41	-12.28	69.33	-.39	-.08
4.289.675		355	11	20	10	-14.42	68.38	-14.81	68.30	-.39	-.08
4.289.990		355	11	26	28	-55.52	83.57	-55.86	83.84	-.34	.27
4.290.060		355	11	27	52	-38.07	75.66	-38.44	75.71	-.37	.05
4.290.130		355	11	29	16	-21.51	71.73	-21.90	71.68	-.39	-.05
4.290.200		355	11	30	40	.28	68.57	-.12	68.45	-.40	-.12
4.290.270		355	11	32	4	3.00	47.53	2.57	47.41	-.43	-.12
4.290.340		355	11	33	28	-26.32	49.42	-26.75	49.30	-.43	-.12
4.290.410		355	11	34	52	-46.25	42.10	-46.68	41.93	-.43	-.17
4.290.480		355	11	36	16	-65.00	1.05	-65.29	.24	-.29	-.81
4.290.725		355	11	41	10	-16.01	69.21	-16.42	69.13	-.41	-.08
4.290.795		355	11	42	34	-19.50	67.55	-19.91	67.47	-.41	-.08
4.290.865		355	11	43	58	-21.85	65.80	-22.26	65.73	-.41	-.07
4.291.145		355	11	49	34	-27.43	43.37	-27.86	43.22	-.43	-.15
4.291.215		355	11	50	58	-29.62	41.51	-30.04	41.34	-.42	-.17
4.292.335		355	12	13	22	-61.83	336.81	-61.90	335.89	-.07	-.92
4.292.370		355	12	14	4	-60.30	331.87	-60.33	330.99	-.03	-.88
4.292.405		355	12	14	46	-60.76	346.73	-60.90	345.88	-.14	-.85
4.292.440		355	12	15	28	-59.47	342.11	-59.58	341.28	-.11	-.83
4.292.475		355	12	16	10	-58.96	352.43	-59.14	351.65	-.18	-.78
4.292.510		355	12	16	52	-57.90	348.07	-58.05	347.30	-.15	-.77
4.293.140		355	12	29	28	-62.44	3.87	-62.67	3.05	-.23	-.82
4.293.175		355	12	30	10	-61.71	358.93	-61.91	358.09	-.20	-.84
4.293.210		355	12	30	52	-60.40	353.73	-60.56	352.90	-.16	-.83
4.293.245		355	12	31	34	-59.38	349.54	-59.51	348.72	-.13	-.82
4.293.280		355	12	32	16	-57.79	345.11	-57.89	344.32	-.10	-.79
4.293.315		355	12	32	58	-56.51	341.50	-56.58	340.73	-.07	-.77
4.293.350		355	12	33	40	-54.70	337.85	-54.74	337.12	-.04	-.73
4.293.385		355	12	34	22	-53.20	334.80	-53.22	334.10	-.02	-.70

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 76										
4.325.515	355	23	16	58	-24.43	234.68	-24.84	234.61	-.41	-.07
4.325.585	355	23	18	22	-26.25	233.61	-26.67	233.54	-.42	-.07
4.325.655	355	23	19	46	-28.10	232.47	-28.52	232.40	-.42	-.07
4.325.725	355	23	21	10	-29.92	231.33	-30.34	231.26	-.42	-.07
4.325.935	355	23	25	22	-27.80	230.50	-28.23	230.42	-.43	-.08
4.325.970	355	23	26	4	-29.69	229.67	-30.12	229.58	-.43	-.09
4.326.040	355	23	27	28	-29.67	232.37	-30.09	232.29	-.42	-.08
4.326.110	355	23	28	52	-29.83	229.77	-30.26	229.68	-.43	-.09
4.326.180	355	23	30	16	-29.93	229.74	-30.36	229.65	-.43	-.09
4.326.250	355	23	31	40	-29.96	229.66	-30.39	229.57	-.43	-.09
4.326.320	355	23	33	4	-29.94	229.86	-30.37	229.77	-.43	-.09
4.326.390	355	23	34	28	-30.25	230.59	-30.68	230.50	-.43	-.09
4.326.460	355	23	35	52	-29.86	230.78	-30.29	230.69	-.43	-.09
4.326.495	355	23	36	34	-30.09	230.40	-30.52	230.31	-.43	-.09
4.326.705	355	23	40	46	-22.87	231.38	-23.30	231.28	-.43	-.10
4.326.775	355	23	42	10	-25.20	230.03	-25.63	229.93	-.43	-.10
4.326.845	355	23	43	34	-27.12	228.59	-27.55	228.48	-.43	-.11
4.326.915	355	23	44	58	-29.45	226.97	-29.88	226.85	-.43	-.12
4.328.315	356	0	12	58	-77.99	165.72	-78.15	163.71	-.16	-2.01
4.328.350	356	0	13	40	-76.77	155.83	-76.86	153.91	-.09	-1.92
4.328.385	356	0	14	22	-75.34	163.16	-75.49	161.48	-.15	-1.68
4.328.420	356	0	15	4	-74.21	154.95	-74.29	153.33	-.08	-1.62
4.328.455	356	0	15	46	-73.02	160.38	-73.14	158.90	-.12	-1.48
4.328.490	356	0	16	28	-71.79	153.57	-71.86	152.15	-.07	-1.42
4.330.240	356	0	51	28	-11.30	121.56	-11.08	121.36	.22	-.20
4.330.275	356	0	52	10	-9.10	120.45	-8.87	120.27	.23	-.18
4.330.310	356	0	52	52	-6.58	119.52	-6.35	119.36	.23	-.16
4.330.345	356	0	53	34	-4.39	118.45	-4.15	118.30	.24	-.15
4.330.380	356	0	54	16	-1.84	117.56	-1.59	117.43	.25	-.13
4.330.415	356	0	54	58	.37	116.51	.62	116.39	.25	-.12
4.330.450	356	0	55	40	3.02	115.66	3.28	115.56	.26	-.10
4.330.485	356	0	56	22	5.30	114.62	5.57	114.53	.27	-.09
rev 77										
4.361.355	356	11	13	46	-7.31	67.99	-7.66	67.90	-.35	-.09
4.361.425	356	11	15	10	-10.24	66.98	-10.60	66.90	-.36	-.08
4.361.495	356	11	16	34	-13.05	66.01	-13.42	65.94	-.37	-.07
4.361.565	356	11	17	58	-15.57	64.91	-15.94	64.85	-.37	-.06
4.361.880	356	11	24	16	-54.91	76.58	-55.24	76.86	-.33	.28
4.361.950	356	11	25	40	-38.06	67.92	-38.43	67.98	-.37	.06
4.362.020	356	11	27	4	-21.88	63.67	-22.26	63.63	-.38	-.04
4.362.090	356	11	28	28	.09	60.69	-.30	60.57	-.39	-.12
4.362.160	356	11	29	52	2.18	40.12	1.75	40.00	-.43	-.12
4.362.230	356	11	31	16	-26.99	41.51	-27.42	41.40	-.43	-.11
4.362.300	356	11	32	40	-47.28	34.15	-47.71	34.00	-.43	-.15
4.362.370	356	11	34	4	-65.93	357.99	-66.26	357.23	-.33	-.76
4.362.615	356	11	38	58	-16.34	65.61	-16.73	65.54	-.39	-.07
4.362.685	356	11	40	22	-19.69	63.69	-20.07	63.63	-.39	-.06
4.362.755	356	11	41	46	-21.66	61.82	-22.06	61.76	-.40	-.06
4.363.035	356	11	47	22	-73.35	237.68	-72.94	237.17	.41	-.51
4.363.105	356	11	48	46	-70.89	249.86	-70.51	249.17	.38	-.69
4.364.225	356	12	11	10	-62.84	341.06	-63.01	340.16	-.17	-.90
4.364.260	356	12	11	52	-61.85	336.19	-61.98	335.30	-.13	-.89
4.364.295	356	12	12	34	-60.73	347.26	-60.94	346.46	-.21	-.80
4.364.330	356	12	13	16	-59.82	342.55	-60.00	341.75	-.18	-.80
4.364.365	356	12	13	58	-58.64	351.16	-58.87	350.44	-.23	-.72
4.364.400	356	12	14	40	-57.90	346.69	-58.10	345.96	-.20	-.73
4.365.030	356	12	27	16	*******	*******	*******	*******	*****	******
4.365.065	356	12	27	58	*******	*******	*******	*******	*****	******
4.365.100	356	12	28	40	*******	*******	*******	*******	*****	******
4.365.135	356	12	29	22	*******	*******	*******	*******	*****	******
4.365.170	356	12	30	4	*******	*******	*******	*******	*****	******
4.365.205	356	12	30	46	*******	*******	*******	*******	*****	******
4.365.240	356	12	31	28	*******	*******	*******	*******	*****	******
4.365.275	356	12	32	10	*******	*******	*******	*******	*****	******

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 78										
4.397.405	356	23	14	45	-24.70	231.10	-25.10	231.05	-.40	-.05
4.397.475	356	23	16	9	-26.50	230.22	-26.90	230.17	-.40	-.05
4.397.545	356	23	17	33	-28.32	229.34	-28.73	229.30	-.41	-.04
4.397.615	356	23	18	57	-30.18	228.15	-30.59	228.11	-.41	-.04
4.397.825	356	23	23	9	-53.57	252.74	-53.89	253.01	-.32	.27
4.397.860	356	23	23	51	-55.48	252.40	-55.80	252.69	-.32	.29
4.397.930	356	23	25	15	-38.49	243.98	-38.85	244.04	-.36	.06
4.398.000	356	23	26	39	-22.88	240.08	-23.26	240.04	-.38	-.04
4.398.070	356	23	28	3	-2.48	236.78	-2.87	236.67	-.39	-.11
4.398.140	356	23	29	27	.32	214.84	-.11	214.72	-.43	-.12
4.398.210	356	23	30	51	-28.27	216.41	-28.70	216.30	-.43	-.11
4.398.280	356	23	32	15	-48.26	210.45	-48.69	210.30	-.43	-.15
4.398.350	356	23	33	39	-67.09	174.90	-67.42	174.13	-.33	-.77
4.398.385	356	23	34	21	-66.21	174.20	-66.54	173.44	-.33	-.76
4.398.595	356	23	38	33	-72.49	278.76	-72.68	279.88	-.19	1.12
4.398.665	356	23	39	57	-75.76	277.63	-75.95	279.03	-.19	1.40
4.398.735	356	23	41	21	-78.84	276.44	-79.04	278.26	-.20	1.82
4.398.805	356	23	42	45	-81.78	276.24	-81.98	278.78	-.20	2.54
4.400.205	357	0	10	45	-78.32	151.99	-78.46	149.87	-.14	-2.12
4.400.240	357	0	11	27	-76.93	142.33	-76.99	140.37	-.06	-1.96
4.400.275	357	0	12	9	-74.99	160.55	-75.18	159.98	-.19	-1.57
4.400.310	357	0	12	51	-73.96	152.48	-74.10	150.93	-.14	-1.55
4.400.345	357	0	13	33	-72.19	164.58	-72.41	163.29	-.22	-1.29
4.400.380	357	0	14	15	-71.36	157.51	-71.53	156.21	-.17	-1.30
4.402.130	357	0	49	15	-1.03	113.67	-.82	113.54	.21	-.13
4.402.165	357	0	49	57	1.33	112.67	1.54	112.56	.21	-.11
4.402.200	357	0	50	39	4.25	111.86	4.47	111.77	.22	-.09
4.402.235	357	0	51	21	6.74	110.89	6.97	110.81	.23	-.08
4.402.270	357	0	52	3	9.89	110.12	10.12	110.06	.23	-.06
4.402.305	357	0	52	45	12.63	109.18	12.87	109.14	.24	-.04
4.402.340	357	0	53	27	16.15	108.46	16.40	108.44	.25	-.02
4.402.375	357	0	54	9	19.13	107.50	19.38	107.50	.25	-.00
rev 79										
4.433.245	357	11	11	33	-4.64	49.32	-5.03	49.21	-.39	-.11
4.433.315	357	11	12	57	-7.03	48.74	-7.42	48.64	-.39	-.10
4.433.385	357	11	14	21	-9.85	48.13	-10.24	48.04	-.39	-.09
4.433.455	357	11	15	45	-12.49	47.19	-12.89	47.10	-.40	-.09
4.433.770	357	11	22	3	-54.78	69.94	-55.09	70.24	-.31	.30
4.433.840	357	11	23	27	-37.58	60.12	-37.94	60.18	-.36	.06
4.433.910	357	11	24	51	-21.09	55.50	-21.47	55.46	-.38	-.04
4.433.980	357	11	26	15	-.70	52.20	-1.09	52.08	-.39	-.12
4.434.050	357	11	27	39	-.34	32.26	-.77	32.14	-.43	-.12
4.434.120	357	11	29	3	-27.72	32.99	-28.15	32.89	-.43	-.10
4.434.190	357	11	30	27	-47.30	26.28	-47.73	26.14	-.43	-.14
4.434.260	357	11	31	51	-67.33	353.83	-67.68	353.11	-.35	-.72
4.434.505	357	11	36	45	-14.34	47.57	-14.75	47.48	-.41	-.09
4.434.575	357	11	38	9	-18.10	46.56	-18.51	46.48	-.41	-.08
4.434.645	357	11	39	33	-20.57	45.08	-20.99	45.00	-.42	-.08
4.434.925	357	11	45	9	-55.16	307.73	-55.20	306.99	-.04	-.74
4.434.995	357	11	46	33	*******	*******	*******	*******	*****	******
4.436.115	357	12	8	57	-87.55	160.08	-87.29	167.69	.26	7.61
4.436.150	357	12	9	39	-87.15	216.61	-86.72	216.66	.43	.05
4.436.185	357	12	10	21	-87.09	5.82	-87.44	.53	-.35	-5.29
4.436.220	357	12	11	3	-86.43	323.94	-86.52	316.97	-.09	-6.97
4.436.255	357	12	11	45	-83.38	356.73	-83.70	354.01	-.32	-2.72
4.436.290	357	12	12	27	-82.85	337.24	-83.05	334.01	-.20	-3.23
4.436.920	357	12	25	3	-61.27	351.22	-61.54	350.48	-.27	-.74
4.436.955	357	12	25	45	-60.88	345.51	-61.12	344.74	-.24	-.77
4.436.990	357	12	26	27	-59.79	339.32	-59.99	338.53	-.20	-.79
4.437.025	357	12	27	9	-58.97	334.70	-59.13	333.91	-.16	-.79
4.437.060	357	12	27	51	-57.48	329.98	-57.59	329.21	-.13	-.77
4.437.095	357	12	28	33	-56.28	326.18	-56.38	325.43	-.10	-.75
4.437.130	357	12	29	15	-54.52	322.30	-54.59	321.58	-.07	-.72
4.437.165	357	12	29	57	-53.11	319.08	-53.15	318.39	-.04	-.69

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 80

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
4.469.225	357	23	11	9	-24.20	228.03	-24.58	228.00	-.38	-.03
4.469.295	357	23	12	33	-26.27	226.93	-26.65	226.91	-.38	-.02
4.469.365	357	23	13	57	-28.37	225.79	-28.76	225.77	-.39	-.02
4.469.435	357	23	15	21	-30.44	224.58	-30.83	224.56	-.39	-.02
4.469.645	357	23	19	33	-51.85	242.89	-52.17	243.14	-.32	.25
4.469.680	357	23	20	15	-54.10	242.16	-54.43	242.43	-.33	.27
4.469.750	357	23	21	39	-37.44	233.19	-37.81	233.24	-.37	.05
4.469.820	357	23	23	3	-20.83	228.51	-21.22	228.46	-.39	-.05
4.469.890	357	23	24	27	2.18	224.76	1.78	224.63	-.40	-.13
4.469.960	357	23	25	51	4.33	202.98	3.90	202.86	-.43	-.12
4.470.030	357	23	27	15	-26.06	205.29	-26.49	205.18	-.43	-.11
4.470.100	357	23	28	39	-23.59	203.39	-24.02	203.27	-.43	-.12
4.470.170	357	23	30	3	*******	*******	*******	*******	*****	******
4.470.205	357	23	30	45	*******	*******	*******	*******	*****	******
4.470.415	357	23	34	57	*******	*******	*******	*******	*****	******
4.470.485	357	23	36	21	*******	*******	*******	*******	*****	******
4.470.555	357	23	37	45	*******	*******	*******	*******	*****	******
4.470.625	357	23	39	9	*******	*******	*******	*******	*****	******
4.472.025	358	0	7	9	-61.90	179.10	-62.26	178.52	-.36	-.58
4.472.060	358	0	7	51	-62.11	174.36	-62.45	173.72	-.34	-.64
4.472.095	358	0	8	33	-59.88	180.26	-60.24	179.73	-.36	-.53
4.472.130	358	0	9	15	-60.22	175.87	-60.56	175.28	-.34	-.59
4.472.165	358	0	9	57	-58.34	181.11	-58.70	180.61	-.36	-.50
4.472.200	358	0	10	39	-58.73	176.80	-59.07	176.25	-.34	-.55
4.473.880	358	0	44	15	-1.38	113.32	-1.22	113.19	.14	-.13
4.473.915	358	0	44	57	1.12	112.40	1.26	112.29	.14	-.11
4.473.950	358	0	45	39	4.60	111.99	4.75	111.90	.15	-.09
4.473.985	358	0	46	21	7.40	111.31	7.55	111.24	.15	-.07
4.474.020	358	0	47	3	11.38	111.16	11.52	111.12	.16	-.04
4.474.055	358	0	47	45	14.60	110.72	14.76	110.70	.16	-.02
4.474.090	358	0	48	27	19.56	111.13	19.72	111.15	.16	.02
4.474.125	358	0	49	9	23.69	111.18	23.85	111.23	.16	.05

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
4.505.135	358	11	9	21	-4.84	45.28	-5.21	45.18	-.37	-.10
4.505.205	358	11	10	45	-7.85	44.94	-8.22	44.85	-.37	-.09
4.505.275	358	11	12	9	-10.86	44.52	-11.03	44.44	-.37	-.08
4.505.345	358	11	13	33	-13.25	43.76	-13.63	43.69	-.38	-.07
4.505.660	358	11	19	51	-54.93	56.54	-55.26	56.81	-.33	.27
4.505.730	358	11	21	15	-38.06	48.64	-38.43	48.70	-.37	.06
4.505.800	358	11	22	39	-22.51	44.24	-22.89	44.20	-.38	-.04
4.505.870	358	11	24	3	-1.97	40.44	-2.37	40.32	-.40	-.12
4.505.940	358	11	25	27	.57	18.60	.14	18.48	-.43	-.12
4.506.010	358	11	26	51	-27.51	20.48	-27.94	20.37	-.43	-.11
4.506.080	358	11	28	15	-46.84	14.53	-47.27	14.37	-.43	-.16
4.506.150	358	11	29	39	-66.26	337.61	-66.58	336.83	-.32	-.78
4.506.395	358	11	34	33	-14.28	44.34	-14.68	44.26	-.39	-.08
4.506.465	358	11	35	57	-18.07	42.49	-18.47	42.42	-.40	-.07
4.506.535	358	11	37	21	-20.47	41.00	-20.87	40.93	-.40	-.07
4.506.815	358	11	42	57	*******	*******	*******	*******	*****	******
4.506.885	358	11	44	21	*******	*******	*******	*******	*****	******
4.508.005	358	12	6	45	-79.01	52.11	-79.40	52.92	-.39	.81
4.508.040	358	12	7	27	-80.79	42.39	-81.21	42.95	-.42	.56
4.508.075	358	12	8	9	-81.52	32.55	-81.95	32.65	-.43	.10
4.508.110	358	12	8	51	-82.73	17.33	-83.15	16.50	-.42	-.83
4.508.145	358	12	9	33	-82.77	4.13	-83.16	2.51	-.39	-1.62
4.508.180	358	12	10	15	-82.89	344.79	-83.19	342.15	-.30	-2.64
4.508.810	358	12	22	51	-61.27	325.94	-61.44	325.09	-.17	-.85
4.508.845	358	12	23	33	-60.34	321.48	-60.48	320.64	-.14	-.84
4.508.880	358	12	24	15	-58.80	316.95	-58.91	316.14	-.11	-.81
4.508.915	358	12	24	57	-57.52	313.34	-57.60	312.55	-.08	-.79
4.508.950	358	12	25	39	-55.64	309.63	-55.69	308.88	-.05	-.75
4.508.985	358	12	26	21	-54.10	306.64	-54.13	305.92	-.03	-.72
4.509.020	358	12	27	3	-52.10	303.63	-52.10	302.95	-.00	-.68
4.509.055	358	12	27	45	-50.46	301.13	-50.44	300.49	.02	-.64

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
4.541.115	358	23	8	57	-54.82	225.71	-55.17	225.95	-.35	.24
4.541.185	358	23	10	21	-56.75	223.95	-57.11	224.20	-.36	.25
4.541.255	358	23	11	45	-58.71	221.90	-59.08	222.16	-.37	.26
4.541.325	358	23	13	9	-60.59	219.53	-60.97	219.78	-.38	.25
4.541.535	358	23	17	21	-52.27	233.46	-52.59	233.71	-.32	.25
4.541.570	358	23	18	3	-54.54	233.10	-54.86	233.38	-.32	.28
4.541.640	358	23	19	27	-38.05	224.46	-38.41	224.52	-.36	.06
4.541.710	358	23	20	51	-21.55	220.37	-21.93	220.33	-.38	-.04
4.541.780	358	23	22	15	.99	217.08	.60	216.95	-.39	-.13
4.541.850	358	23	23	39	2.97	194.45	2.54	194.33	-.43	-.12
4.541.920	358	23	25	3	-27.14	196.99	-27.57	196.88	-.43	-.11
4.541.990	358	23	26	27	-47.65	191.64	-48.08	191.50	-.43	-.14
4.542.060	358	23	27	51	-67.21	157.54	-67.56	156.80	-.35	-.74
4.542.095	358	23	28	33	-66.44	155.99	-66.78	155.25	-.34	-.74
4.542.305	358	23	32	45	-75.75	219.33	-76.14	219.92	-.39	.59
4.542.375	358	23	34	9	-78.24	210.69	-78.66	211.13	-.42	.44
4.542.445	358	23	35	33	-80.67	196.93	-81.10	196.85	-.43	-.08
4.542.515	358	23	36	57	-82.38	177.51	-82.79	176.29	-.41	-1.22
4.543.915	359	0	4	57	-61.61	181.04	-62.01	180.61	-.40	-.43
4.543.950	359	0	5	39	-62.15	176.12	-62.53	175.62	-.38	-.50
4.543.985	359	0	6	21	-59.77	180.47	-60.17	180.05	-.40	-.42
4.544.020	359	0	7	3	-60.39	175.80	-60.77	175.32	-.38	-.48
4.544.055	359	0	7	45	-58.69	179.64	-59.08	179.22	-.39	-.42
4.544.090	359	0	8	27	-59.31	175.21	-59.69	174.73	-.38	-.48
4.545.630	359	0	39	15	-9.90	89.88	-9.67	89.69	.23	-.19
4.545.665	359	0	39	57	-7.28	88.70	-7.05	88.53	.23	-.17
4.545.700	359	0	40	39	-3.95	87.44	-3.71	87.29	.24	-.15
4.545.735	359	0	41	21	-1.07	86.17	-.82	86.04	.25	-.13
4.545.770	359	0	42	3	2.70	84.77	2.96	84.66	.26	-.11
4.545.805	359	0	42	45	6.01	83.31	6.28	83.22	.27	-.09
4.545.840	359	0	43	27	10.61	81.55	10.89	81.49	.28	-.06
4.545.875	359	0	44	9	14.76	79.65	15.05	79.61	.29	-.04

rev 83

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
4.576.955	359	11	5	45	-28.07	40.88	-28.42	40.90	-.35	.02
4.577.025	359	11	7	9	-30.26	39.97	-30.61	39.99	-.35	.02
4.577.095	359	11	8	33	-32.43	38.95	-32.79	38.98	-.36	.03
4.577.165	359	11	9	57	-34.52	37.90	-34.88	37.94	-.36	.04
4.577.480	359	11	16	15	-54.13	50.40	-54.44	50.69	-.31	.29
4.577.550	359	11	17	39	-36.94	40.63	-37.30	40.69	-.36	.06
4.577.620	359	11	19	3	-20.45	35.98	-20.83	35.94	-.38	-.04
4.577.690	359	11	20	27	.63	32.77	.24	32.65	-.39	-.12
4.577.760	359	11	21	51	1.33	11.81	.90	11.69	-.43	-.12
4.577.830	359	11	23	15	-26.84	12.84	-27.27	12.73	-.43	-.11
4.577.900	359	11	24	39	-46.76	7.54	-47.19	7.41	-.43	-.13
4.577.970	359	11	26	3	-66.94	338.14	-67.31	337.49	-.37	-.65
4.578.215	359	11	30	57	-52.77	33.66	-53.17	33.77	-.40	.11
4.578.285	359	11	32	21	-54.62	30.68	-55.02	30.77	-.40	.09
4.578.355	359	11	33	45	-56.83	27.36	-57.24	27.43	-.41	.07
4.578.635	359	11	39	21	*******	*******	*******	*******	*****	******
4.578.705	359	11	40	45	11.18	56.91	10.87	56.73	-.31	-.18
4.579.825	359	12	3	9	-72.71	8.41	-73.13	8.05	-.42	-.36
4.579.860	359	12	3	51	-73.47	.92	-73.88	.35	-.41	-.57
4.579.895	359	12	4	33	-70.30	.32	-70.71	359.81	-.41	-.51
4.579.930	359	12	5	15	-70.83	353.59	-71.22	352.93	-.39	-.66
4.579.965	359	12	5	57	-69.55	356.35	-69.95	355.78	-.40	-.57
4.580.000	359	12	6	39	-69.99	349.80	-70.37	349.09	-.38	-.71
4.580.630	359	12	19	15	-64.74	340.55	-65.06	339.81	-.32	-.74
4.580.665	359	12	19	57	-64.63	333.43	-64.91	332.62	-.28	-.81
4.580.700	359	12	20	39	-63.68	325.70	-63.91	324.84	-.23	-.86
4.580.735	359	12	21	21	-62.79	319.95	-62.99	319.08	-.20	-.87
4.580.770	359	12	22	3	-61.22	314.08	-61.37	313.22	-.15	-.86
4.580.805	359	12	22	45	-59.97	309.50	-60.09	308.66	-.12	-.84
4.580.840	359	12	23	27	-58.10	304.94	-58.19	304.14	-.09	-.80
4.580.875	359	12	24	9	-56.62	301.24	-56.68	300.47	-.06	-.77

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 84

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
4.613.005	359	23	6	45	-55.88	216.81	-56.22	217.07	-.34	.26
4.613.075	359	23	8	9	-57.88	214.67	-58.23	214.94	-.35	.27
4.613.145	359	23	9	33	-59.89	212.18	-60.26	212.45	-.37	.27
4.613.215	359	23	10	57	-61.88	209.75	-62.26	210.02	-.38	.27
4.613.425	359	23	15	9	-52.75	226.18	-53.06	226.46	-.31	.28
4.613.460	359	23	15	51	-55.00	225.46	-55.31	225.76	-.31	.30
4.613.530	359	23	17	15	-38.57	215.80	-38.93	215.87	-.36	.07
4.613.600	359	23	18	39	-23.21	211.49	-23.59	211.46	-.38	-.03
4.613.670	359	23	20	3	-2.78	208.12	-3.17	208.01	-.39	-.11
4.613.740	359	23	21	27	-.48	186.58	-.91	186.46	-.43	-.12
4.613.810	359	23	22	51	-28.85	187.96	-29.28	187.85	-.43	-.11
4.613.880	359	23	24	15	-48.84	182.02	-49.27	181.88	-.43	-.14
4.613.950	359	23	25	39	-67.85	147.07	-68.19	146.29	-.34	-.78
4.613.985	359	23	26	21	-67.17	147.28	-67.51	146.53	-.34	-.75
4.614.195	359	23	30	33	-76.02	210.21	-76.41	210.83	-.39	.62
4.614.265	359	23	31	57	-78.59	201.62	-79.00	202.10	-.41	.48
4.614.335	359	23	33	21	-81.00	187.76	-81.43	187.71	-.43	-.05
4.614.405	359	23	34	45	-82.74	165.74	-83.14	164.34	-.40	-1.40
4.615.805	360	0	2	45	-62.24	166.61	-62.62	166.11	-.38	-.50
4.615.840	360	0	3	27	-62.59	161.53	-62.95	160.96	-.36	-.57
4.615.875	360	0	4	9	-60.50	166.22	-60.88	165.74	-.38	-.48
4.615.910	360	0	4	51	-60.98	161.53	-61.34	160.98	-.36	-.55
4.615.945	360	0	5	33	-59.45	165.41	-59.83	164.93	-.38	-.48
4.615.980	360	0	6	15	-59.86	160.91	-60.22	160.37	-.36	-.54
4.617.520	360	0	37	3	-5.89	78.58	-5.65	78.42	.24	-.16
4.617.555	360	0	37	45	-3.11	77.31	-2.86	77.17	.25	-.14
4.617.590	360	0	38	27	.47	75.93	.72	75.81	.25	-.12
4.617.625	360	0	39	9	3.58	74.51	3.84	74.41	.26	-.10
4.617.660	360	0	39	51	7.81	72.90	8.08	72.82	.27	-.08
4.617.695	360	0	40	33	11.52	71.25	11.81	71.19	.29	-.06
4.617.720	360	0	41	15	17.16	68.96	17.46	68.93	.30	-.03
4.617.765	360	0	41	57	22.67	66.26	22.98	66.26	.31	.00

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
4.648.775	360	11	2	8	-27.25	33.14	-27.58	33.16	-.33	.02
4.648.845	360	11	3	32	-29.89	32.35	-30.23	32.38	-.34	.03
4.648.915	360	11	4	56	-32.06	31.34	-32.41	31.38	-.35	.04
4.648.985	360	11	6	20	-33.90	30.15	-34.25	30.19	-.35	.04
4.649.300	360	11	12	38	-53.49	43.44	-53.78	43.75	-.29	.31
4.649.370	360	11	14	2	-36.39	33.05	-36.74	33.12	-.35	.07
4.649.440	360	11	15	26	-19.79	28.09	-20.16	28.05	-.37	-.04
4.649.510	360	11	16	50	2.63	24.30	2.24	24.17	-.39	-.13
4.649.580	360	11	18	14	2.56	3.48	2.13	3.34	-.43	-.12
4.649.650	360	11	19	38	-26.51	5.15	-26.94	5.05	-.43	-.10
4.649.720	360	11	21	2	-46.99	.96	-47.42	.86	-.43	-.10
4.649.790	360	11	22	26	-68.64	333.16	-69.03	332.55	-.39	-.61
4.650.035	360	11	27	20	-52.17	26.25	-52.56	26.37	-.39	.12
4.650.105	360	11	28	44	-54.47	23.24	-54.87	23.35	-.40	.11
4.650.175	360	11	30	8	-56.74	19.82	-57.15	19.91	-.41	.09
4.650.455	360	11	35	44	*******	*******	*******	*******	*****	******
4.650.525	360	11	37	8	*******	*******	*******	*******	*****	******
4.651.645	360	11	59	32	-72.74	2.01	-73.17	1.74	-.43	-.27
4.651.680	360	12	0	14	-73.66	354.56	-74.08	354.08	-.42	-.48
4.651.715	360	12	0	56	-70.49	353.22	-70.91	352.77	-.42	-.45
4.651.750	360	12	1	38	-71.13	346.26	-71.53	345.65	-.40	-.61
4.651.785	360	12	2	20	-69.77	348.77	-70.17	348.24	-.40	-.53
4.651.820	360	12	3	2	-70.29	342.19	-70.67	341.51	-.38	-.68
4.652.450	360	12	15	38	-64.49	334.31	-64.83	333.63	-.34	-.68
4.652.485	360	12	16	20	-64.58	327.18	-64.88	326.41	-.30	-.77
4.652.520	360	12	17	2	-63.86	319.16	-64.12	318.33	-.26	-.83
4.652.555	360	12	17	44	-63.25	312.92	-63.47	312.05	-.22	-.87
4.652.590	360	12	18	26	-61.78	306.64	-61.95	305.78	-.17	-.86
4.652.625	360	12	19	8	-60.58	301.76	-60.72	300.91	-.14	-.85
4.652.660	360	12	19	50	-58.74	296.86	-58.84	296.05	-.10	-.81
4.652.695	360	12	20	32	-57.27	292.95	-57.34	292.16	-.07	-.79

rev 86

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
4.684.825	360	23	3	8	-55.28	205.68	-55.63	205.93	-.35	.25
4.684.895	360	23	4	32	-57.01	203.84	-57.37	204.09	-.36	.25
4.684.965	360	23	5	56	-59.01	201.90	-59.38	202.16	-.37	.26
4.685.035	360	23	7	20	-61.26	200.04	-61.64	200.31	-.38	.27
4.685.245	360	23	11	32	-53.00	219.78	-53.29	220.09	-.29	.31
4.685.280	360	23	12	14	-55.06	219.58	-55.35	219.92	-.29	.34
4.685.350	360	23	13	38	-38.02	208.20	-38.37	208.28	-.35	.08
4.685.420	360	23	15	2	-21.62	202.66	-22.29	202.62	-.37	-.04
4.685.490	360	23	16	26	-2.43	199.66	-2.82	199.55	-.39	-.11
4.685.560	360	23	17	50	-2.79	179.36	-3.22	179.24	-.43	-.12
4.685.630	360	23	19	14	-29.10	180.23	-29.53	180.13	-.43	-.10
4.685.700	360	23	20	38	-48.67	174.07	-49.10	173.95	-.43	-.12
4.685.770	360	23	22	2	-68.62	139.19	-68.97	138.42	-.35	-.77
4.685.805	360	23	22	44	-68.25	138.20	-68.60	137.43	-.35	-.77
4.686.015	360	23	26	56	-75.28	200.21	-75.67	200.79	-.39	.58
4.686.085	360	23	28	20	-77.91	189.40	-78.33	189.76	-.42	.36
4.686.155	360	23	29	44	-80.24	177.34	-80.67	177.26	-.43	-.08
4.686.225	360	23	31	8	-82.19	158.88	-82.60	157.74	-.41	-1.14
4.687.625	360	23	59	8	-58.47	210.97	-58.85	211.18	-.38	.21
4.687.660	360	23	59	50	-61.06	205.98	-61.46	206.16	-.40	.18
4.687.695	361	0	0	32	-58.81	208.26	-59.20	208.44	-.39	.18
4.687.730	361	0	1	14	-61.21	203.10	-61.62	203.24	-.41	.14
4.687.765	361	0	1	56	-58.87	206.76	-59.27	206.92	-.40	.16
4.687.800	361	0	2	38	-61.36	201.49	-61.77	201.60	-.41	.11
4.689.340	361	0	33	26	-8.51	72.74	-8.30	72.56	.21	-.18
4.689.375	361	0	34	8	-5.96	71.68	-5.74	71.52	.22	-.16
4.689.410	361	0	34	50	-2.81	70.64	-2.58	70.50	.23	-.14
4.689.445	361	0	35	32	-.11	69.56	.12	69.44	.23	-.12
4.689.480	361	0	36	14	3.37	68.48	3.61	68.38	.24	-.10
4.689.515	361	0	36	56	6.34	67.29	6.59	67.21	.25	-.08
4.689.550	361	0	37	38	10.33	66.03	10.59	65.97	.26	-.06
4.689.585	361	0	38	20	13.75	64.68	14.02	64.64	.27	-.04

rev 87

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
4.720.595	361	10	58	32	*******	*******	*******	*******	*****	******
4.720.665	361	10	59	56	*******	*******	*******	*******	*****	******
4.720.805	361	11	2	44	*******	*******	*******	*******	*****	******
4.721.120	361	11	9	2	-46.53	30.92	-46.84	31.12	-.31	.20
4.721.190	361	11	10	26	-38.57	24.08	-38.91	24.15	-.34	.07
4.721.260	361	11	11	50	-20.58	19.60	-20.94	19.56	-.36	-.04
4.721.330	361	11	13	14	1.23	16.37	.85	16.24	-.38	-.13
4.721.400	361	11	14	38	1.46	354.48	1.03	354.36	-.43	-.12
4.721.470	361	11	16	2	-27.16	357.28	-27.59	357.19	-.43	-.09
4.721.540	361	11	17	26	-47.66	353.70	-48.09	353.62	-.43	-.08
4.721.610	361	11	18	50	-69.11	326.31	-69.51	325.74	-.40	-.57
4.721.855	361	11	23	44	-4.48	5.64	-4.90	5.53	-.42	-.11
4.721.925	361	11	25	8	-9.17	4.76	-9.59	4.65	-.42	-.11
4.721.995	361	11	26	32	-10.07	6.91	-10.48	6.81	-.41	-.10
4.722.275	361	11	32	8	*******	*******	*******	*******	*****	******
4.722.345	361	11	33	32	-58.64	125.11	-58.35	125.50	.29	.39
4.723.405	361	11	55	56	-72.89	322.82	-73.24	321.87	-.35	-.95
4.723.500	361	11	56	38	-72.87	315.44	-73.18	314.35	-.31	-1.09
4.723.535	361	11	57	20	-72.44	314.99	-72.75	313.91	-.31	-1.08
4.723.570	361	11	58	2	-72.16	307.74	-72.43	306.56	-.27	-1.18
4.723.605	361	11	58	44	-72.00	307.36	-72.27	306.18	-.27	-1.18
4.723.640	361	11	59	26	-71.47	300.34	-71.69	299.10	-.22	-1.24
4.724.270	361	12	12	2	-64.65	316.09	-64.95	315.30	-.30	-.79
4.724.305	361	12	12	44	-64.17	309.68	-64.43	308.84	-.26	-.84
4.724.340	361	12	13	26	-62.96	302.72	-63.18	301.86	-.22	-.86
4.724.375	361	12	14	8	-62.04	297.44	-62.22	296.58	-.18	-.86
4.724.410	361	12	14	50	-60.47	291.96	-60.61	291.11	-.14	-.85
4.724.445	361	12	15	32	-59.21	287.65	-59.32	286.82	-.11	-.83
4.724.480	361	12	16	14	-57.34	283.29	-57.41	282.50	-.07	-.79

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 88										
4.759.445	361	23	55	32	-87.07	95.00	-87.12	86.43	-.05	-8.57
4.759.480	361	23	56	14	-85.09	73.70	-85.00	68.72	.09	-4.98
4.759.515	361	23	56	56	-82.73	117.24	-82.96	114.20	-.23	-3.04
4.759.550	361	23	57	38	-81.71	100.97	-81.83	97.98	-.12	-2.99
rev 89										
4.790.385	362	10	14	20	*******	*******	*******	*******	*****	******
4.790.420	362	10	15	2	*******	*******	*******	*******	*****	******
4.790.455	362	10	15	44	*******	*******	*******	*******	*****	******
4.790.490	362	10	16	26	*******	*******	*******	*******	*****	******
4.793.080	362	11	8	14	-21.18	10.77	-21.54	10.74	-.36	-.03
rev 90										
4.828.395	362	22	54	32	-56.30	193.10	-56.61	193.43	-.31	.33
4.831.370	362	23	54	2	-32.54	151.69	-32.96	151.51	-.42	-.18
4.832.840	363	0	23	26	-13.56	51.59	-13.35	51.38	.21	-.21
4.832.875	363	0	24	8	-11.10	50.46	-10.88	50.27	.22	-.19
4.832.910	363	0	24	50	-8.06	49.29	-7.83	49.12	.23	-.17
4.832.945	363	0	25	32	-5.40	48.14	-5.16	47.98	.24	-.16
4.832.980	363	0	26	14	-2.05	46.89	-1.80	46.76	.25	-.13
4.833.015	363	0	26	56	.84	45.63	1.10	45.51	.26	-.12
4.833.050	363	0	27	38	4.62	44.22	4.89	44.13	.27	-.09
4.833.085	363	0	28	20	7.94	42.77	8.21	42.69	.27	-.08
rev 91										
4.864.165	363	10	49	56	-54.32	11.70	-54.61	12.03	-.29	.33
4.864.235	363	10	51	20	-56.73	10.76	-57.03	11.12	-.30	.36
4.864.305	363	10	52	44	-58.42	9.13	-58.73	9.51	-.31	.38
4.864.375	363	10	54	8	-60.05	7.23	-60.37	7.62	-.32	.39
4.864.690	363	11	0	26	-88.78	273.18	-88.98	253.31	-.20	-19.87
4.864.760	363	11	1	50	-52.42	347.22	-52.82	347.30	-.40	.08
4.864.830	363	11	3	14	-30.25	344.45	-30.66	344.40	-.41	-.05
4.864.900	363	11	4	38	-10.40	341.24	-10.82	341.14	-.42	-.10
4.864.970	363	11	6	2	-13.19	340.61	-13.61	340.51	-.42	-.10
4.865.040	363	11	7	26	-36.24	340.14	-36.66	340.08	-.42	-.06
4.865.110	363	11	8	50	-56.77	333.12	-57.20	333.05	-.43	-.07
4.865.180	363	11	10	14	-74.17	238.16	-74.16	236.52	.01	-1.64
4.865.425	363	11	15	8	-44.06	352.74	-44.46	352.78	-.40	.04
4.865.495	363	11	16	32	-46.35	350.65	-46.75	350.69	-.40	.04
4.865.565	363	11	17	56	-48.53	348.33	-48.94	348.36	-.41	.03
4.865.845	363	11	23	32	14.92	358.44	14.53	358.27	-.39	-.17
4.865.915	363	11	24	56	7.54	355.90	7.14	355.76	-.40	-.14
4.867.035	363	11	47	20	-26.02	13.47	-26.37	13.47	-.35	.00
4.867.070	363	11	48	2	-35.68	6.91	-36.06	6.94	-.38	.03
4.867.105	363	11	48	44	-27.19	9.68	-27.56	9.67	-.37	-.01
4.867.140	363	11	49	26	-35.82	3.67	-36.21	3.68	-.39	.01
4.867.175	363	11	50	7	-25.98	6.80	-26.36	6.78	-.38	-.02
4.867.210	363	11	50	49	-36.49	359.41	-36.89	359.40	-.40	-.01
4.867.840	363	12	3	26	-64.51	300.11	-64.83	299.38	-.32	-.73
4.867.875	363	12	4	8	-64.21	293.42	-64.49	292.62	-.28	-.80
4.867.910	363	12	4	50	-63.22	286.13	-63.46	285.29	-.24	-.84
4.867.945	363	12	5	31	-62.43	280.55	-62.63	279.69	-.20	-.86
4.867.980	363	12	6	13	-60.95	274.69	-61.11	273.84	-.16	-.85
4.868.015	363	12	6	55	-59.77	270.08	-59.90	269.25	-.13	-.83
4.868.050	363	12	7	37	-57.95	265.44	-58.04	264.64	-.09	-.80
4.868.085	363	12	8	19	-56.45	261.67	-56.51	260.90	-.06	-.77
rev 92										
4.902.805	363	23	42	43	-24.81	137.93	-25.23	137.76	-.42	-.17
4.902.840	363	23	43	25	-27.44	135.64	-27.85	135.45	-.41	-.19
4.902.875	363	23	44	7	-28.74	134.36	-29.15	134.16	-.41	-.20
4.902.910	363	23	44	49	-30.85	131.92	-31.25	131.71	-.40	-.21
4.902.945	363	23	45	31	-32.03	130.40	-32.43	130.17	-.40	-.23
4.902.980	363	23	46	13	-33.75	127.75	-34.14	127.50	-.39	-.25
4.903.015	363	23	46	55	-34.73	126.09	-35.11	125.83	-.38	-.26
4.903.050	363	23	47	37	-36.10	123.25	-36.47	122.97	-.37	-.28
4.903.085	363	23	48	19	-36.88	121.47	-37.25	121.17	-.37	-.30
4.903.120	363	23	49	1	-37.86	118.49	-38.21	118.17	-.35	-.32
4.903.225	363	23	51	7	-39.42	111.51	-39.74	111.15	-.32	-.36
4.903.260	363	23	51	49	-39.65	108.38	-39.95	108.00	-.30	-.38

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 93										
4.939.695	364	12	0	31	-60.43	259.13	-60.55	258.28	-.12	-.85
4.939.730	364	12	1	13	-58.72	254.58	-58.81	253.76	-.09	-.82
4.939.765	364	12	1	55	-57.32	251.10	-57.38	250.31	-.06	-.79
4.939.800	364	12	2	37	-55.40	247.53	-55.44	246.78	-.04	-.75
4.939.835	364	12	3	19	-53.82	244.64	-53.83	243.93	-.01	-.71
4.939.870	364	12	4	1	-51.75	241.72	-51.74	241.05	.01	-.67
4.939.905	364	12	4	43	-49.99	239.29	-49.96	238.66	.03	-.63
4.939.940	364	12	5	25	-47.78	236.87	-47.73	236.28	.05	-.59
4.939.975	364	12	6	7	-45.92	234.80	-45.85	234.24	.07	-.56
4.940.010	364	12	6	49	-43.65	232.74	-43.57	232.21	.08	-.53
4.940.045	364	12	7	31	-41.74	230.96	-41.64	230.46	.10	-.50
4.940.080	364	12	8	13	-39.39	229.16	-39.28	228.70	.11	-.46
4.940.115	364	12	8	55	-37.41	227.57	-37.29	227.13	.12	-.44
4.940.150	364	12	9	37	-34.98	225.98	-34.84	225.57	.14	-.41
4.940.185	364	12	10	19	-32.92	224.53	-32.77	224.15	.15	-.38
4.940.220	364	12	11	1	-30.42	223.06	-30.26	222.70	.16	-.36
4.940.255	364	12	11	43	-28.28	221.72	-28.11	221.38	.17	-.34
4.940.290	364	12	12	25	-25.67	220.35	-25.49	220.04	.18	-.31
4.940.325	364	12	13	7	-23.37	219.22	-23.18	218.93	.19	-.29
4.940.360	364	12	13	49	-20.55	218.02	-20.35	217.75	.20	-.27
4.940.395	364	12	14	31	-18.15	216.91	-17.94	216.66	.21	-.25
4.940.430	364	12	15	13	-15.28	215.59	-15.06	215.37	.22	-.22
4.940.465	364	12	15	55	-12.85	214.31	-12.63	214.10	.22	-.21
4.940.500	364	12	16	37	-9.78	212.90	-9.55	212.72	.23	-.18
4.940.535	364	12	17	19	-7.06	211.55	-6.82	211.38	.24	-.17
4.940.570	364	12	18	1	-3.52	210.10	-3.27	209.96	.25	-.14
4.940.605	364	12	18	43	-.47	208.79	-.21	208.67	.26	-.12
4.940.640	364	12	19	25	3.63	207.17	3.90	207.07	.27	-.10
4.940.675	364	12	20	7	7.17	205.57	7.45	205.49	.28	-.08
4.940.710	364	12	20	49	12.36	203.28	12.66	203.23	.30	-.05
4.940.745	364	12	21	31	17.32	200.65	17.63	200.62	.31	-.03
4.940.780	364	12	22	13	*******	*******	*******	*******	*****	******
4.940.815	364	12	22	55	*******	*******	*******	*******	*****	******
rev 95										
4.986.238	365	11	41	26	-45.35	304.44	-45.77	304.21	-.42	-.23
4.986.273	365	11	42	8	-46.65	301.29	-47.06	301.03	-.41	-.26
4.986.308	365	11	42	50	-47.33	299.26	-47.74	298.98	-.41	-.28
4.986.343	365	11	43	32	-48.36	295.89	-48.76	295.58	-.40	-.31
4.986.378	365	11	44	14	-48.86	293.73	-49.25	293.40	-.39	-.33
4.986.413	365	11	44	56	-49.63	290.25	-50.01	289.88	-.38	-.37
4.986.448	365	11	45	38	-49.98	287.92	-50.35	287.53	-.37	-.39
4.986.483	365	11	46	20	-50.44	284.29	-50.79	283.86	-.35	-.43
4.986.518	365	11	47	2	-50.59	281.84	-50.93	281.39	-.34	-.45
4.986.553	365	11	47	44	-50.75	278.14	-51.07	277.66	-.32	-.48
4.986.588	365	11	48	26	-50.71	275.64	-51.02	275.15	-.31	-.49
4.986.623	365	11	49	8	-50.59	271.96	-50.88	271.44	-.29	-.52
4.986.658	365	11	49	50	-50.39	269.44	-50.66	268.91	-.27	-.53
4.986.693	365	11	50	32	-50.00	265.70	-50.25	265.16	-.25	-.54
4.986.728	365	11	51	14	-49.61	263.21	-49.84	262.66	-.23	-.55
4.986.763	365	11	51	56	-48.94	259.62	-49.15	259.06	-.21	-.56
4.986.798	365	11	52	38	-48.32	257.22	-48.51	256.66	-.19	-.56
4.986.833	365	11	53	20	-47.32	253.86	-47.49	253.30	-.17	-.56
4.986.868	365	11	54	2	-46.51	251.57	-46.66	251.02	-.15	-.55
4.986.903	365	11	54	44	-45.26	248.44	-45.38	247.90	-.12	-.54
4.986.938	365	11	55	26	-44.27	246.30	-44.38	245.77	-.11	-.53
4.986.973	365	11	56	8	-42.77	243.40	-42.86	242.89	-.09	-.51
4.987.008	365	11	56	50	-41.61	241.45	-41.68	240.95	-.07	-.50
4.987.043	365	11	57	32	-39.82	238.77	-39.87	238.29	-.05	-.48
4.987.078	365	11	58	14	-38.38	237.01	-38.41	236.55	-.03	-.46
4.987.113	365	11	58	56	-36.22	234.62	-36.24	234.18	-.02	-.44
4.987.148	365	11	59	38	-34.63	233.11	-34.63	232.69	-.00	-.42
4.987.183	365	12	0	20	-32.19	230.93	-32.18	230.54	.01	-.39
4.987.218	365	12	1	2	-30.40	229.52	-30.37	229.15	.03	-.37
4.987.253	365	12	1	44	-27.56	227.46	-27.52	227.11	.04	-.35
4.987.288	365	12	2	26	-25.46	226.12	-25.41	225.79	.05	-.33
4.987.323	365	12	3	8	-22.06	224.14	-21.99	223.85	.07	-.29
4.987.358	365	12	3	50	-19.55	222.87	-19.47	222.60	.08	-.27

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
rev 96										
5•022•078	365	23	38	14	-46.82	135.78	-47.25	135.68	-.43	-.10
5•022•113	365	23	38	56	-47.02	129.64	-47.45	129.49	-.43	-.15
5•022•148	365	23	39	38	-47.94	127.28	-48.37	127.11	-.43	-.17
5•022•183	365	23	40	20	-49.38	123.65	-49.80	123.44	-.42	-.21
5•022•218	365	23	41	2	-50.13	121.36	-50.55	121.13	-.42	-.23
5•022•253	365	23	41	44	-51.43	117.87	-51.84	117.60	-.41	-.27
5•022•288	365	23	42	26	-52.13	115.54	-52.54	115.24	-.41	-.30
5•022•323	365	23	43	8	-53.13	111.78	-53.53	111.44	-.40	-.34
5•022•358	365	23	43	50	-53.67	109.26	-54.06	108.89	-.39	-.37
5•022•393	365	23	44	32	-54.39	105.30	-54.77	104.88	-.38	-.42
5•022•428	365	23	45	14	-54.74	102.63	-55.11	102.18	-.37	-.45
5•022•463	365	23	45	56	-55.16	98.52	-55.51	98.03	-.35	-.49
5•022•498	365	23	46	38	-55.24	95.70	-55.57	95.18	-.33	-.52
5•022•533	365	23	47	20	-55.25	91.53	-55.56	90.98	-.31	-.55
5•022•568	365	23	48	2	-55.10	88.68	-55.40	88.10	-.30	-.58
5•022•603	365	23	48	44	-54.82	84.57	-55.09	83.97	-.27	-.60
5•022•638	365	23	49	26	-54.37	81.84	-54.62	81.23	-.25	-.61
5•022•673	365	23	50	8	-53.79	77.88	-54.02	77.26	-.23	-.62
5•022•708	365	23	50	50	-53.23	75.19	-53.44	74.56	-.21	-.63
5•022•743	365	23	51	32	-52.33	71.50	-52.51	70.87	-.18	-.63
5•022•778	365	23	52	14	-51.55	68.94	-51.71	68.31	-.16	-.63
5•022•813	365	23	52	56	-50.38	65.47	-50.52	64.85	-.14	-.62
5•022•848	365	23	53	38	-49.43	63.12	-49.55	62.51	-.12	-.61
5•022•883	365	23	54	20	-48.03	59.94	-48.13	59.35	-.10	-.59
5•022•918	365	23	55	2	-46.90	57.78	-46.98	57.20	-.08	-.58
5•022•953	365	23	55	44	-45.29	54.90	-45.35	54.35	-.06	-.55
5•022•988	365	23	56	26	-44.00	52.94	-44.04	52.40	-.04	-.54
5•023•023	365	23	57	8	-42.15	50.28	-42.17	49.77	-.02	-.51
5•023•058	365	23	57	50	-40.73	48.52	-40.74	48.03	-.01	-.49
5•023•093	365	23	58	32	-38.57	46.17	-38.56	45.70	.01	-.47
5•023•128	365	23	59	14	-36.89	44.62	-36.86	44.17	.03	-.45
5•023•163	365	23	59	56	-34.46	42.44	-34.42	42.02	.04	-.42
5•023•198	1	0	0	38	-32.57	40.99	-32.51	40.59	.06	-.40
rev 97										
5•058•058	1	11	37	49	-63.27	5.20	-63.50	5.80	-.23	.60
5•058•093	1	11	38	31	-66.46	2.24	-66.71	2.93	-.25	.69
5•058•128	1	11	39	13	-68.34	359.00	-68.61	359.73	-.27	.73
5•058•163	1	11	39	55	-71.19	355.32	-71.48	356.13	-.29	.81
5•058•198	1	11	40	37	-72.87	351.24	-73.19	352.08	-.32	.84
5•058•233	1	11	41	19	-75.40	346.13	-75.74	347.03	-.34	.90
5•058•268	1	11	42	1	-76.84	340.32	-77.21	341.18	-.37	.86
5•058•303	1	11	42	43	-78.99	332.26	-79.39	333.03	-.40	.77
5•058•338	1	11	43	25	-80.00	323.47	-80.42	323.96	-.42	.49
5•058•373	1	11	44	7	-81.49	310.02	-81.92	309.91	-.43	-.11
5•058•408	1	11	44	49	-81.86	297.47	-82.28	296.66	-.42	-.81
5•058•443	1	11	45	31	-82.26	279.13	-82.63	277.29	-.37	-1.84
5•058•478	1	11	46	13	-81.70	266.71	-82.01	264.47	-.31	-2.24
5•058•513	1	11	46	55	-80.91	250.92	-81.12	248.42	-.21	-2.50
5•058•548	1	11	47	37	-79.73	242.76	-79.88	240.40	-.15	-2.36
5•058•583	1	11	48	19	-78.20	232.38	-78.28	230.22	-.08	-2.16
5•058•618	1	11	49	1	-76.66	227.79	-76.70	225.86	-.04	-1.93
5•058•653	1	11	49	43	-74.72	221.19	-74.71	219.49	.01	-1.70
5•058•688	1	11	50	25	-73.02	218.44	-72.99	216.91	.03	-1.53
5•058•723	1	11	51	7	-70.93	213.82	-70.87	212.47	.06	-1.35
5•058•758	1	11	51	49	-69.18	211.88	-69.10	210.64	.08	-1.24
5•058•793	1	11	52	31	-66.99	208.41	-66.89	207.30	.10	-1.11
5•058•828	1	11	53	13	-65.19	206.98	-65.08	205.96	.11	-1.02
5•058•863	1	11	53	55	-62.91	204.11	-62.77	203.19	.14	-.92
5•058•898	1	11	54	37	-61.07	202.93	-60.92	202.08	.15	-.85
5•058•933	1	11	55	19	-58.70	200.47	-58.54	199.69	.16	-.78
5•058•968	1	11	56	1	-56.81	199.43	-56.64	198.71	.17	-.72
5•059•003	1	11	56	43	-54.33	197.22	-54.14	196.56	.19	-.66
5•059•038	1	11	57	25	-52.41	196.35	-52.22	195.73	.19	-.62
5•059•073	1	11	58	7	-49.90	194.48	-49.69	193.91	.21	-.57
5•059•108	1	11	58	49	-47.89	193.71	-47.68	193.18	.21	-.53
5•059•143	1	11	59	31	-45.10	191.89	-44.87	191.40	.23	-.49
5•059•178	1	12	0	13	-42.91	191.18	-42.68	190.72	.23	-.46
rev 98										
5•093•968	1	23	36	1	-52.68	155.25	-53.04	155.43	-.36	.18
5•094•003	1	23	36	43	-55.54	151.61	-55.92	151.79	-.38	.18
5•094•038	1	23	37	25	-57.07	149.06	-57.46	149.23	-.39	.17
5•094•073	1	23	38	7	-59.52	145.03	-59.92	145.18	-.40	.15
5•094•108	1	23	38	49	-60.84	142.10	-61.25	142.22	-.41	.12
5•094•143	1	23	39	31	-62.92	137.44	-63.34	137.52	-.42	.08
5•094•178	1	23	40	13	-64.10	133.91	-64.52	133.94	-.42	.03
5•094•213	1	23	40	55	-65.83	128.44	-66.26	128.39	-.43	-.05
5•094•248	1	23	41	37	-66.77	124.26	-67.20	124.13	-.43	-.13
5•094•283	1	23	42	19	-68.09	117.87	-68.52	117.62	-.43	-.25
5•094•318	1	23	43	1	-68.70	113.10	-69.12	112.75	-.42	-.35
5•094•353	1	23	43	43	-69.53	105.94	-69.94	105.43	-.41	-.51
5•094•388	1	23	44	25	-69.81	100.69	-70.20	100.07	-.39	-.62
5•094•423	1	23	45	7	-70.10	93.14	-70.46	92.37	-.36	-.77
5•094•458	1	23	45	49	-70.00	87.75	-70.34	86.89	-.34	-.86
5•094•493	1	23	46	31	-69.76	80.50	-70.06	79.53	-.30	-.97
5•094•528	1	23	47	13	-69.31	75.52	-69.58	74.51	-.27	-1.01
5•094•563	1	23	47	55	-68.60	68.91	-68.83	67.85	-.23	-1.06
5•094•598	1	23	48	37	-67.83	64.52	-68.03	63.46	-.20	-1.06
5•094•633	1	23	49	19	-66.70	58.79	-66.86	57.73	-.16	-1.06
5•094•668	1	23	50	1	-65.60	55.09	-65.73	54.06	-.13	-1.03
5•094•703	1	23	50	43	-64.17	50.37	-64.27	49.38	-.10	-.99
5•094•738	1	23	51	25	-62.89	47.31	-62.96	46.36	-.07	-.95
5•094•773	1	23	52	7	-61.25	43.36	-61.29	42.46	-.04	-.90
5•094•808	1	23	52	49	-59.84	40.83	-59.86	39.97	-.02	-.86
5•094•843	1	23	53	31	-58.01	37.54	-58.01	36.73	.00	-.81
5•094•878	1	23	54	13	-56.49	35.44	-56.47	34.67	.02	-.77
5•094•913	1	23	54	55	-54.52	32.61	-54.48	31.89	.04	-.72
5•094•948	1	23	55	37	-52.91	30.82	-52.85	30.13	.06	-.69
5•094•983	1	23	56	19	-50.82	28.34	-50.74	27.70	.08	-.64
5•095•018	1	23	57	1	-49.10	26.74	-49.01	26.13	.09	-.61
5•095•053	1	23	57	43	-46.77	24.58	-46.66	24.01	.11	-.57
5•095•088	1	23	58	25	-44.88	23.28	-44.76	22.74	.12	-.54
rev 99										
5•129•948	2	11	35	37	-57.06	328.21	-57.43	328.42	-.37	.21
5•129•983	2	11	36	19	-59.62	324.46	-60.01	324.66	-.39	.20
5•130•018	2	11	37	1	-61.05	321.65	-61.45	321.83	-.40	.18
5•130•053	2	11	37	43	-63.27	317.11	-63.68	317.26	-.41	.15
5•130•088	2	11	38	25	-64.48	313.63	-64.90	313.74	-.42	.11
5•130•123	2	11	39	7	-66.32	308.36	-66.75	308.39	-.43	.03
5•130•158	2	11	39	49	-67.29	304.21	-67.72	304.17	-.43	-.04
5•130•193	2	11	40	31	-68.73	297.95	-69.16	297.79	-.43	-.16
5•130•228	2	11	41	13	-69.42	293.17	-69.85	292.91	-.43	-.26
5•130•263	2	11	41	55	-70.41	285.95	-70.83	285.53	-.42	-.42
5•130•298	2	11	42	37	-70.75	280.56	-71.16	280.01	-.41	-.55
5•130•333	2	11	43	19	-71.19	272.75	-71.57	272.03	-.38	-.72
5•130•368	2	11	44	1	-71.17	267.14	-71.53	266.31	-.36	-.83
5•130•403	2	11	44	43	-71.07	259.29	-71.39	258.32	-.32	-.97
5•130•438	2	11	45	25	-70.67	253.94	-70.96	252.90	-.29	-1.04
5•130•473	2	11	46	7	-70.07	246.72	-70.32	245.62	-.25	-1.10
5•130•508	2	11	46	49	-69.33	241.96	-69.55	240.84	-.22	-1.12
5•130•543	2	11	47	31	-68.29	235.80	-68.46	234.68	-.17	-1.12
5•130•578	2	11	48	13	-67.24	231.86	-67.39	230.77	-.15	-1.09
5•130•613	2	11	48	55	-65.87	226.71	-65.98	225.65	-.11	-1.06
5•130•648	2	11	49	37	-64.61	223.47	-64.69	222.45	-.08	-1.02
5•130•683	2	11	50	19	-63.97	219.21	-63.02	218.25	-.05	-.96
5•130•718	2	11	51	1	-61.54	216.60	-61.57	215.68	-.03	-.92
5•130•753	2	11	51	43	-59.72	213.12	-59.72	212.26	-.00	-.86
5•130•788	2	11	52	25	-58.19	210.96	-58.17	210.14	.02	-.82
5•130•823	2	11	53	7	-56.21	207.95	-56.17	207.19	.04	-.76
5•130•858	2	11	53	49	-54.60	206.19	-54.55	205.47	.05	-.72
5•130•893	2	11	54	31	-52.52	203.66	-52.45	202.98	.07	-.68
5•130•928	2	11	55	13	-50.82	202.10	-50.73	201.46	.09	-.64
5•130•963	2	11	55	55	-48.61	199.83	-48.51	199.23	.10	-.60
5•130•998	2	11	56	37	-46.83	198.44	-46.72	197.88	.11	-.56
5•131•033	2	11	57	19	-44.48	196.36	-44.35	195.84	.13	-.52
5•131•068	2	11	58	1	-42.58	195.08	-42.44	194.58	.14	-.50

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 100										
5.164.703	2	23	10	43	-71.43	129.44	-71.83	129.80	-.40	.36
5.164.773	2	23	12	7	-57.26	123.74	-57.68	123.80	-.42	.06
5.164.843	2	23	13	31	-46.01	121.95	-46.43	121.93	-.42	-.02
5.164.913	2	23	14	55	-34.26	121.61	-34.68	121.55	-.42	-.06
5.164.983	2	23	16	19	-18.61	122.14	-19.03	122.05	-.42	-.09
5.166.033	2	23	37	19	-69.36	152.34	-69.70	152.93	-.34	.59
5.166.068	2	23	38	1	-72.73	148.55	-73.09	149.22	-.36	.67
5.166.103	2	23	38	43	-75.14	142.87	-75.52	143.53	-.38	.66
5.166.138	2	23	39	25	-78.16	136.49	-78.56	137.15	-.40	.66
5.166.173	2	23	40	7	-80.00	126.88	-80.42	127.28	-.42	.40
5.166.733	2	23	51	19	-60.95	52.66	-61.13	51.83	-.18	-.83
5.166.768	2	23	52	1	-60.10	48.75	-60.25	47.92	-.15	-.83
5.166.803	2	23	52	43	-58.71	44.31	-58.83	43.50	-.12	-.81
5.166.838	2	23	53	25	-57.50	41.07	-57.59	40.29	-.09	-.78
5.166.873	2	23	54	7	-55.71	37.78	-55.78	37.03	-.07	-.75
5.166.908	2	23	54	49	-54.41	35.66	-54.46	34.94	-.05	-.72
5.166.943	2	23	55	31	-52.57	32.00	-52.59	31.31	-.02	-.69
5.167.153	2	23	59	43	-48.53	27.63	-48.51	27.02	.02	-.61
5.167.188	3	0	0	25	-46.81	25.33	-46.77	24.75	.04	-.58
5.167.223	3	0	1	7	-44.59	23.09	-44.54	22.55	.05	-.54
5.167.258	3	0	1	49	-42.78	21.22	-42.71	20.70	.07	-.52
5.167.293	3	0	2	31	-40.48	19.35	-40.39	18.87	.09	-.48
5.167.328	3	0	3	13	-38.60	17.70	-38.50	17.24	.10	-.46
5.167.363	3	0	3	55	-36.23	16.04	-36.12	15.61	.11	-.43
5.167.398	3	0	4	37	-34.30	14.57	-34.18	14.17	.12	-.40
5.167.433	3	0	5	19	-31.87	13.08	-31.73	12.70	.14	-.38
5.167.468	3	0	6	1	-29.87	11.72	-29.72	11.37	.15	-.35
5.167.503	3	0	6	43	-27.40	10.35	-27.24	10.02	.16	-.33
5.168.483	3	0	26	19	*******	*******	*******	*******	*****	******
5.168.518	3	0	27	1	*******	*******	*******	*******	*****	******
5.168.553	3	0	27	43	*******	*******	*******	*******	*****	******
5.168.623	3	0	29	7	*******	*******	*******	*******	*****	******
5.168.658	3	0	29	49	*******	*******	*******	*******	*****	******
rev 101										
5.200.683	3	11	10	19	-72.90	304.85	-73.30	305.26	-.40	.41
5.200.753	3	11	11	43	-57.92	299.02	-58.34	299.08	-.42	.06
5.200.823	3	11	13	7	-46.05	297.25	-46.47	297.23	-.42	-.02
5.200.893	3	11	14	31	-34.30	296.63	-34.72	296.57	-.42	-.06
5.200.963	3	11	15	55	-20.04	296.81	-20.46	296.72	-.42	-.09
5.201.768	3	11	32	1	-40.05	269.09	-40.46	268.85	-.41	-.24
5.202.013	3	11	36	55	-44.35	265.73	-44.74	265.43	-.39	-.30
5.202.083	3	11	38	19	-43.30	264.47	-43.69	264.17	-.39	-.30
5.202.118	3	11	39	1	-41.37	267.05	-41.77	266.78	-.40	-.27
5.202.153	3	11	39	43	-42.56	263.76	-42.95	263.46	-.39	-.30
5.202.713	3	11	50	55	-60.43	226.53	-60.60	225.71	-.17	-.82
5.202.748	3	11	51	37	-59.34	223.01	-59.48	222.20	-.14	-.81
5.202.783	3	11	52	19	-57.79	218.85	-57.90	218.07	-.11	-.78
5.202.818	3	11	53	1	-56.55	215.70	-56.64	214.94	-.09	-.76
5.202.853	3	11	53	43	-54.88	212.11	-54.94	211.38	-.06	-.73
5.202.888	3	11	54	25	-53.53	209.39	-53.57	208.69	-.04	-.70
5.202.923	3	11	55	7	-51.70	206.35	-51.71	205.68	-.01	-.67
5.203.133	3	11	59	19	-47.77	201.98	-47.74	201.38	.03	-.60
5.203.168	3	12	0	1	-45.98	199.86	-45.94	199.29	.04	-.57
5.203.203	3	12	0	43	-43.68	197.72	-43.62	197.19	.06	-.53
5.203.238	3	12	1	25	-41.81	195.88	-41.73	195.38	.08	-.50
5.203.273	3	12	2	7	-39.49	194.04	-39.40	193.57	.09	-.47
5.203.308	3	12	2	49	-37.62	192.41	-37.52	191.97	.10	-.44
5.203.343	3	12	3	31	-35.31	190.80	-35.19	190.38	.12	-.42
5.203.378	3	12	4	13	-33.42	189.31	-33.29	188.92	.13	-.39
5.203.413	3	12	4	55	-31.04	187.77	-30.90	187.40	.14	-.37
5.203.448	3	12	5	37	-29.03	186.36	-28.88	186.01	.15	-.35
5.203.483	3	12	6	19	-26.54	184.97	-26.38	184.65	.16	-.32
5.204.113	3	12	18	55	22.44	190.34	22.58	190.39	.14	.05
5.204.148	3	12	19	37	26.07	190.32	26.22	190.40	.15	.08
5.204.603	3	12	28	43	53.99	181.24	54.21	181.63	.22	.39
5.204.638	3	12	29	25	61.98	183.79	62.19	184.38	.21	.59
rev 102										
5.236.663	3	23	9	55	-15.85	121.87	-16.25	121.80	-.40	-.07
5.236.733	3	23	11	19	-37.37	118.85	-37.78	118.84	-.41	-.01
5.236.803	3	23	12	43	-53.98	115.14	-54.39	115.18	-.41	.04
5.236.873	3	23	14	7	-40.38	119.71	-40.78	119.71	-.40	.00
5.236.943	3	23	15	31	-23.37	120.08	-23.77	120.02	-.40	-.06
5.237.993	3	23	36	31	-9.74	59.91	-10.04	59.73	-.30	-.18
5.238.028	3	23	37	13	-10.07	58.85	-10.37	58.67	-.30	-.18
5.238.063	3	23	37	55	-9.90	56.28	-10.18	56.10	-.28	-.18
5.238.098	3	23	38	37	-9.01	55.01	-9.28	54.83	-.27	-.18
5.238.133	3	23	39	19	*******	*******	*******	*******	*****	******
5.238.693	3	23	50	31	-59.82	40.62	-59.98	39.81	-.16	-.81
5.238.728	3	23	51	13	-58.82	37.05	-58.95	36.25	-.13	-.80
5.238.763	3	23	51	55	-57.34	32.94	-57.44	32.16	-.10	-.78
5.238.798	3	23	52	37	-56.16	29.88	-56.24	29.12	-.08	-.76
5.238.833	3	23	53	19	-54.46	26.36	-54.51	25.64	-.05	-.72
5.238.868	3	23	54	1	-53.06	23.64	-53.09	22.95	-.03	-.69
5.238.903	3	23	54	43	-51.16	20.68	-51.17	20.02	-.01	-.66
5.239.113	3	23	58	55	-46.86	16.28	-46.83	15.70	.03	-.58
5.239.148	3	23	59	37	-45.05	14.15	-45.00	13.60	.05	-.55
5.239.183	4	0	0	19	-42.77	12.03	-42.70	11.51	.07	-.52
5.239.218	4	0	1	1	-40.98	10.23	-40.90	9.74	.08	-.49
5.239.253	4	0	1	43	-38.69	8.44	-38.59	7.98	.10	-.46
5.239.288	4	0	2	25	-36.81	6.83	-36.70	6.40	.11	-.43
5.239.323	4	0	3	7	-34.44	5.23	-34.32	4.82	.12	-.41
5.239.358	4	0	3	49	-32.46	3.79	-32.33	3.41	.13	-.38
5.239.393	4	0	4	31	-29.99	2.38	-29.84	2.02	.15	-.36
5.239.428	4	0	5	13	-27.95	1.12	-27.79	.78	.16	-.34
5.239.463	4	0	5	55	-25.41	359.88	-25.24	359.55	.17	-.31
5.240.443	4	0	25	31	*******	*******	*******	*******	*****	******
5.240.478	4	0	26	13	*******	*******	*******	*******	*****	******
5.240.513	4	0	26	55	*******	*******	*******	*******	*****	******
5.240.583	4	0	28	19	*******	*******	*******	*******	*****	******
5.240.618	4	0	29	1	*******	*******	*******	*******	*****	******
rev 103										
5.272.643	4	11	9	30	-66.69	255.85	-67.10	255.41	-.41	-.44
5.272.713	4	11	10	54	-54.30	267.40	-54.73	267.20	-.43	-.20
5.272.783	4	11	12	18	-43.13	270.53	-43.56	270.38	-.43	-.15
5.272.853	4	11	13	42	-31.66	271.73	-32.09	271.59	-.43	-.14
5.272.923	4	11	15	6	-16.39	271.84	-16.82	271.71	-.43	-.13
5.273.728	4	11	31	12	-13.31	298.93	-13.72	298.84	-.41	-.09
5.273.973	4	11	36	6	*******	*******	*******	*******	*****	******
5.274.043	4	11	37	30	*******	*******	*******	*******	*****	******
5.274.078	4	11	38	12	-11.87	249.47	-12.24	249.30	-.37	-.17
5.274.113	4	11	38	54	-16.26	246.73	-16.62	246.54	-.36	-.19
5.274.673	4	11	50	6	-59.99	214.66	-60.14	213.84	-.15	-.82
5.274.708	4	11	50	48	-58.89	211.10	-59.01	210.29	-.12	-.81
5.274.743	4	11	51	30	-57.27	207.02	-57.36	206.24	-.09	-.78
5.274.778	4	11	52	12	-55.98	203.99	-56.05	203.24	-.07	-.75
5.274.813	4	11	52	54	-54.19	200.59	-54.23	199.87	-.04	-.72
5.274.848	4	11	53	36	-52.71	198.14	-52.73	197.45	-.02	-.69
5.274.883	4	11	54	18	-50.75	195.39	-50.75	194.74	-.00	-.65
5.275.093	4	11	58	30	-46.45	191.12	-46.41	190.55	.04	-.57
5.275.128	4	11	59	12	-44.64	188.97	-44.59	188.43	.05	-.54
5.275.163	4	11	59	54	-42.34	186.89	-42.27	186.38	.07	-.51
5.275.198	4	12	0	36	-40.49	185.14	-40.40	184.66	.09	-.48
5.275.233	4	12	1	18	-38.20	183.42	-38.10	182.97	.10	-.45
5.275.268	4	12	2	0	-36.34	181.89	-36.23	181.46	.11	-.43
5.275.303	4	12	2	42	-33.99	180.35	-33.87	179.95	.12	-.40
5.275.338	4	12	3	24	-32.04	178.97	-31.90	178.59	.14	-.38
5.275.373	4	12	4	6	-29.59	177.58	-29.44	177.23	.15	-.35
5.275.408	4	12	4	48	-27.55	176.29	-27.39	175.96	.16	-.33
5.275.443	4	12	5	30	-25.01	175.00	-24.84	174.69	.17	-.31
5.276.073	4	12	18	6	-1.55	160.96	-1.27	160.83	.28	-.13
5.276.108	4	12	18	48	.53	159.80	.81	159.68	.28	-.12
5.276.563	4	12	27	54	46.41	173.22	46.62	173.49	.21	.27
5.276.598	4	12	28	36	50.14	173.32	50.35	173.65	.21	.33

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 104					INTERCEPTING LAT AND LON					
	GMT				W/R OLD POLE		W/R NEW POLE		CHANGES IN	
DAS REF. TIME	DAY	HR	MM	SEC	LAT	LON	LAT	LON	LAT	LON
5•310•863	4	23	53	54	-50.22	10.27	-50.22	9.63	.00	-.64
5•311•073	4	23	58	6	-46.11	6.39	-46.07	5.82	.04	-.57
5•311•108	4	23	58	48	-44.28	4.34	-44.23	3.80	.05	-.54
5•311•143	4	23	59	30	-41.95	2.25	-41.88	1.75	.07	-.50
5•311•178	5	0	0	12	-40.06	.44	-39.97	359.96	.09	-.48
5•311•213	5	0	0	54	-37.69	358.63	-37.59	358.18	.10	-.45
5•311•248	5	0	1	36	-35.74	357.03	-35.63	356.61	.11	-.42
5•311•283	5	0	2	18	-33.31	355.43	-33.18	355.04	.13	-.39
5•311•318	5	0	3	0	-31.30	353.97	-31.16	353.60	.14	-.37
5•311•353	5	0	3	42	-28.80	352.59	-28.65	352.25	.15	-.34
5•311•388	5	0	4	24	-26.80	351.34	-26.64	351.02	.16	-.32
5•311•423	5	0	5	6	-24.35	350.10	-24.18	349.80	.17	-.30
5•312•403	5	0	24	42	40.29	339.99	40.55	340.16	.26	.17
5•312•438	5	0	25	24	38.73	339.80	39.00	339.95	.27	.15
rev 105										
5•344•603	5	11	8	42	-66.66	250.09	-67.08	249.71	-.42	-.38
5•344•673	5	11	10	6	-54.96	258.97	-55.39	258.78	-.43	-.19
5•344•743	5	11	11	30	-43.84	262.02	-44.27	261.87	-.43	-.15
5•344•813	5	11	12	54	-32.41	263.27	-32.84	263.14	-.43	-.13
5•344•883	5	11	14	18	-18.60	263.62	-19.03	263.49	-.43	-.13
5•345•688	5	11	30	24	-14.15	290.91	-14.53	290.84	-.38	-.07
5•345•933	5	11	35	18	*******	*******	*******	*******	*****	******
5•346•003	5	11	36	42	*******	*******	*******	*******	*****	******
5•346•038	5	11	37	24	*******	*******	*******	*******	*****	******
5•346•073	5	11	38	6	-15.83	247.75	-16.22	247.58	-.39	-.17
5•346•633	5	11	49	18	-59.27	204.82	-59.42	204.01	-.15	-.81
5•346•668	5	11	50	0	-59.09	201.36	-58.21	200.57	-.12	-.79
5•346•703	5	11	50	42	-56.50	197.39	-56.59	196.63	-.09	-.76
5•346•738	5	11	51	24	-55.23	194.41	-55.30	193.67	-.07	-.74
5•346•773	5	11	52	6	-53.48	191.08	-53.52	190.38	-.04	-.70
5•346•808	5	11	52	48	-52.06	188.54	-52.08	187.87	-.02	-.67
5•346•843	5	11	53	30	-50.15	185.72	-50.15	185.08	.00	-.64
5•347•053	5	11	57	42	-45.79	181.67	-45.75	181.11	.04	-.56
5•347•088	5	11	58	24	-44.01	179.61	-43.95	179.08	.06	-.53
5•347•123	5	11	59	6	-41.73	177.57	-41.66	177.07	.07	-.50
5•347•158	5	11	59	48	-39.84	175.77	-39.75	175.30	.09	-.47
5•347•193	5	12	0	30	-37.47	173.98	-37.37	173.54	.10	-.44
5•347•228	5	12	1	12	-35.51	172.38	-35.40	171.96	.11	-.42
5•347•263	5	12	1	54	-33.13	170.78	-33.00	170.39	.13	-.39
5•347•298	5	12	2	36	-31.17	169.31	-31.03	168.94	.14	-.37
5•347•333	5	12	3	18	-28.72	167.83	-28.57	167.49	.15	-.34
5•347•368	5	12	4	0	-26.64	166.66	-26.48	166.34	.16	-.32
5•347•403	5	12	4	42	-24.08	165.50	-23.91	165.20	.17	-.30
5•348•033	5	12	17	18	7.48	147.69	7.78	147.61	.30	-.08
5•348•068	5	12	18	0	9.89	146.29	10.20	146.22	.31	-.07
5•348•523	5	12	27	6	7.77	147.61	8.08	147.53	.31	-.08
5•348•558	5	12	27	48	9.50	146.40	9.82	146.33	.32	-.07

rev 106					INTERCEPTING LAT AND LON					
	GMT				W/R OLD POLE		W/R NEW POLE		CHANGES IN	
DAS REF. TIME	DAY	HR	MM	SEC	LAT	LON	LAT	LON	LAT	LON
5•380•513	5	23	6	54	-64.26	64.11	-64.68	63.74	-.42	-.37
5•380•583	5	23	8	18	-51.93	72.78	-52.36	72.59	-.43	-.19
5•380•653	5	23	9	42	-40.42	76.00	-40.85	75.85	-.43	-.15
5•380•723	5	23	11	6	-27.91	77.39	-28.34	77.25	-.43	-.14
5•380•793	5	23	12	30	-9.48	76.94	-9.91	76.81	-.43	-.13
5•381•843	5	23	33	30	-59.79	111.00	-60.18	111.19	-.39	.19
5•381•878	5	23	34	12	-61.08	109.20	-61.48	109.39	-.40	.19
5•381•913	5	23	34	54	-63.40	103.87	-63.81	104.01	-.41	.14
5•381•948	5	23	35	36	-61.96	107.74	-62.36	107.91	-.40	.17
5•381•983	5	23	36	18	-64.28	101.80	-64.70	101.91	-.42	.11
5•382•543	5	23	47	30	-61.18	25.75	-61.37	24.92	-.19	-.83
5•382•578	5	23	48	12	-60.27	21.90	-60.43	21.07	-.16	-.83
5•382•613	5	23	48	54	-58.89	17.48	-59.02	16.67	-.13	-.81
5•382•648	5	23	49	36	-57.70	14.25	-57.80	13.46	-.10	-.79
5•382•683	5	23	50	18	-55.99	10.54	-56.06	9.79	-.07	-.75
5•382•718	5	23	51	0	-54.57	7.88	-54.62	7.16	-.05	-.72
5•382•753	5	23	51	42	-52.68	4.88	-52.71	4.19	-.03	-.69
5•382•963	5	23	55	54	-48.87	.26	-48.86	359.64	.01	-.62
5•382•998	5	23	56	36	-47.26	357.89	-47.23	357.30	.03	-.59
5•383•033	5	23	57	18	-45.05	355.71	-45.00	355.16	.05	-.55
5•383•068	5	23	58	0	-43.19	353.91	-43.13	353.39	.06	-.52
5•383•103	5	23	58	42	-40.87	352.08	-40.79	351.59	.08	-.49
5•383•138	5	23	59	24	-38.95	350.42	-38.86	349.96	.09	-.46
5•383•173	6	0	0	6	-36.59	348.64	-36.48	348.21	.11	-.43
5•383•208	6	0	0	48	-34.62	347.04	-34.50	346.63	.12	-.41
5•383•243	6	0	1	30	-32.15	345.42	-32.02	345.04	.13	-.38
5•383•278	6	0	2	12	-30.13	344.03	-29.99	343.67	.14	-.36
5•383•313	6	0	2	54	-27.63	342.70	-27.48	342.37	.15	-.33
5•384•293	6	0	22	30	13.92	325.79	14.21	325.75	.29	-.04
5•384•328	6	0	23	12	13.82	325.52	13.91	325.48	.29	-.04
5•384•363	6	0	23	54	16.08	324.53	16.38	324.50	.30	-.03
5•384•433	6	0	25	18	14.38	325.42	14.68	325.38	.30	-.04
5•384•468	6	0	26	0	16.19	324.57	16.49	324.54	.30	-.03
rev 107										
5•416•493	6	11	6	30	-64.24	243.22	-64.66	242.91	-.42	-.31
5•416•563	6	11	7	54	-52.12	249.94	-52.55	249.76	-.43	-.18
5•416•633	6	11	9	18	-40.76	251.96	-41.19	251.81	-.43	-.15
5•416•703	6	11	10	42	-28.25	252.71	-28.68	252.57	-.43	-.14
5•416•773	6	11	12	6	-9.38	252.32	-9.81	252.19	-.43	-.13
5•417•578	6	11	28	12	*******	*******	*******	*******	*****	******
5•417•823	6	11	33	6	-37.87	289.55	-38.25	289.59	-.38	.04
5•417•893	6	11	34	30	-35.49	290.26	-35.87	290.29	-.38	.03
5•417•928	6	11	35	12	*******	*******	*******	*******	*****	******
5•417•963	6	11	35	54	-36.33	289.18	-36.71	289.20	-.38	.02
5•418•523	6	11	47	6	-61.30	200.91	-61.49	200.08	-.19	-.83
5•418•558	6	11	47	48	-60.30	197.13	-60.46	196.30	-.16	-.83
5•418•593	6	11	48	30	-58.86	192.72	-58.99	191.91	-.13	-.81
5•418•628	6	11	49	12	-57.66	189.50	-57.76	188.72	-.10	-.78
5•418•663	6	11	49	54	-56.00	185.79	-56.07	185.04	-.07	-.75
5•418•698	6	11	50	36	-54.64	183.03	-54.69	182.30	-.05	-.73
5•418•733	6	11	51	18	-52.81	179.90	-52.84	179.21	-.03	-.69
5•418•943	6	11	55	30	-48.98	175.69	-48.87	175.07	.01	-.62
5•418•978	6	11	56	12	-47.10	173.51	-47.07	172.93	.03	-.58
5•419•013	6	11	56	54	-44.89	171.18	-44.84	170.63	.05	-.55
5•419•048	6	11	57	36	-43.14	169.15	-43.08	168.63	.06	-.52
5•419•083	6	11	58	18	-40.90	167.10	-40.82	166.61	.08	-.49
5•419•118	6	11	59	0	-39.07	165.33	-38.98	164.87	.09	-.46
5•419•153	6	11	59	42	-36.66	163.64	-36.55	163.21	.11	-.43
5•419•188	6	12	0	24	-34.68	162.15	-34.56	161.74	.12	-.41
5•419•223	6	12	1	6	-32.22	160.63	-32.09	160.25	.13	-.38
5•419•258	6	12	1	48	-30.18	159.32	-30.04	158.96	.14	-.36
5•419•293	6	12	2	30	-27.68	158.03	-27.53	157.70	.15	-.33
5•419•923	6	12	15	6	14.78	137.45	15.08	137.41	.30	-.04
5•419•958	6	12	15	48	17.96	135.63	18.27	135.61	.31	-.02
5•420•413	6	12	24	54	16.95	136.78	17.27	136.75	.32	-.03
5•420•448	6	12	25	36	18.76	135.38	19.08	135.36	.32	-.02

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 108										
5,452,473	6	23	6	6	-70.53	51.85	-70.94	51.33	-.41	-.52
5,452,543	6	23	7	30	-57.30	64.10	-57.73	63.90	-.43	-.20
5,452,613	6	23	8	54	-45.83	67.22	-46.26	67.07	-.43	-.15
5,452,683	6	23	10	18	-33.93	68.41	-34.36	68.27	-.43	-.14
5,452,753	6	23	11	42	-19.67	68.53	-20.10	68.40	-.43	-.13
5,453,803	6	23	32	42	-76.19	82.43	-76.62	82.48	-.43	.05
5,453,838	6	23	33	24	-73.42	68.34	-73.85	67.99	-.43	-.35
5,453,873	6	23	34	6	-74.34	60.47	-74.75	59.89	-.41	-.58
5,453,908	6	23	34	48	-70.99	51.81	-71.38	51.14	-.39	-.67
5,453,943	6	23	35	30	-70.97	43.87	-71.33	43.04	-.36	-.83
5,454,503	6	23	46	42	-61.14	16.48	-61.33	15.65	-.19	-.83
5,454,538	6	23	47	24	-60.19	12.62	-60.35	11.80	-.16	-.82
5,454,573	6	23	48	6	-58.79	8.11	-58.92	7.31	-.13	-.80
5,454,608	6	23	48	48	-57.61	4.87	-57.71	4.09	-.10	-.78
5,454,643	6	23	49	30	-55.97	1.10	-56.04	.35	-.07	-.75
5,454,678	6	23	50	12	-54.61	358.34	-54.66	357.61	-.05	-.73
5,454,713	6	23	50	54	-52.81	355.35	-52.84	354.66	-.03	-.69
5,454,923	6	23	55	6	-48.89	351.32	-48.88	350.70	.01	-.62
5,454,958	6	23	55	48	-47.20	348.99	-47.17	349.40	.03	-.59
5,454,993	6	23	56	30	-45.03	346.63	-44.98	346.08	.05	-.55
5,455,028	6	23	57	12	-43.27	344.63	-43.21	344.11	.08	-.52
5,455,063	6	23	57	54	-40.99	342.63	-40.91	342.14	.08	-.49
5,455,098	6	23	58	36	-39.05	341.01	-38.96	340.55	.09	-.46
5,455,133	6	23	59	18	-36.66	339.36	-36.55	338.93	.11	-.43
5,455,168	7	0	0	0	-34.71	337.93	-34.59	337.52	.12	-.41
5,455,203	7	0	0	42	-32.29	336.47	-32.16	336.09	.13	-.38
5,455,238	7	0	1	24	-30.29	335.16	-30.15	334.80	.14	-.36
5,455,273	7	0	2	6	-27.82	333.81	-27.67	333.48	.15	-.33
5,456,253	7	0	21	42	40.85	330.41	41.05	330.62	.20	.21
5,456,288	7	0	22	24	38.93	329.66	39.14	329.84	.21	.18
5,456,323	7	0	23	6	44.96	331.16	45.16	331.42	.20	.26
5,456,393	7	0	24	30	41.12	331.49	41.32	331.70	.20	.21
5,456,428	7	0	25	12	44.24	331.42	44.44	331.67	.20	.25
rev 109										
5,488,453	7	11	5	42	-70.47	226.19	-70.88	225.65	-.41	-.54
5,488,523	7	11	7	6	-56.83	240.53	-57.26	240.34	-.43	-.19
5,488,593	7	11	8	30	-45.51	244.28	-45.94	244.14	-.43	-.14
5,488,663	7	11	9	54	-33.78	245.40	-34.21	245.27	-.43	-.13
5,488,733	7	11	11	18	-19.22	245.10	-19.65	244.97	-.43	-.13
5,489,538	7	11	27	24	-84.31	48.52	-83.91	49.94	.40	1.42
5,489,783	7	11	32	18	-85.30	49.02	-84.90	50.80	.40	1.78
5,489,853	7	11	33	42	-84.34	46.21	-83.95	47.89	.39	1.68
5,489,888	7	11	34	24	-84.29	46.09	-83.90	47.78	.39	1.69
5,489,923	7	11	35	6	-83.50	68.21	-83.07	68.38	.43	.17
5,490,483	7	11	46	18	-60.96	193.11	-61.16	192.29	-.20	-.82
5,490,518	7	11	47	0	-60.07	189.32	-60.24	188.51	-.17	-.81
5,490,553	7	11	47	42	-58.81	184.65	-58.95	183.85	-.14	-.80
5,490,588	7	11	48	24	-57.74	181.28	-57.85	180.50	-.11	-.78
5,490,623	7	11	49	6	-56.22	177.33	-56.30	176.57	-.08	-.76
5,490,658	7	11	49	48	-54.93	174.41	-54.99	173.68	-.06	-.73
5,490,693	7	11	50	30	-53.05	171.24	-53.08	170.55	-.03	-.69
5,490,903	7	11	54	42	-49.24	167.51	-49.24	166.89	.00	-.62
5,490,938	7	11	55	24	-47.57	165.15	-47.55	164.56	.02	-.59
5,490,973	7	11	56	6	-45.39	162.71	-45.35	162.15	.04	-.56
5,491,008	7	11	56	48	-43.62	160.65	-43.56	160.12	.06	-.53
5,491,043	7	11	57	30	-41.36	158.55	-41.29	158.05	.07	-.50
5,491,078	7	11	58	12	-39.51	156.81	-39.42	156.34	.09	-.47
5,491,113	7	11	58	54	-37.17	155.16	-37.07	154.72	.10	-.44
5,491,148	7	11	59	36	-35.20	153.81	-35.09	153.40	.11	-.41
5,491,183	7	12	0	18	-32.79	152.39	-32.67	152.00	.12	-.39
5,491,218	7	12	1	0	-30.79	151.04	-30.65	150.67	.14	-.37
5,491,253	7	12	1	42	-28.29	149.57	-28.14	149.23	.15	-.34
5,491,883	7	12	14	18	-11.73	125.36	-11.41	125.18	.32	-.18
5,491,918	7	12	15	0	-9.71	124.02	-9.39	123.85	.32	-.17
5,492,373	7	12	24	6	17.64	135.91	17.91	135.90	.27	-.01
5,492,408	7	12	24	48	19.61	134.77	19.89	134.77	.28	-.00
rev 110										
5,524,503	7	23	6	41	-67.29	47.87	-67.71	47.50	-.42	-.37
5,524,573	7	23	8	5	-56.00	55.76	-56.43	55.57	-.43	-.19
5,524,643	7	23	9	29	-46.51	57.95	-46.94	57.79	-.43	-.16
5,524,713	7	23	10	53	-35.92	58.99	-36.35	58.85	-.43	-.14
5,524,783	7	23	12	17	-23.53	58.98	-23.96	58.85	-.43	-.13
5,525,833	7	23	33	17	-61.08	347.41	-61.15	346.52	-.07	-.89
5,525,868	7	23	33	59	-60.62	346.69	-60.68	345.81	-.06	-.88
5,525,903	7	23	34	41	-58.71	341.88	-58.73	341.05	-.02	-.83
5,525,938	7	23	35	23	-60.43	346.54	-60.49	345.66	-.06	-.88
5,525,973	7	23	36	5	-58.58	342.03	-58.60	341.20	-.02	-.83
5,526,533	7	23	47	17	-60.77	5.11	-60.94	4.28	-.17	-.83
5,526,568	7	23	47	59	-59.58	1.46	-59.72	.64	-.14	-.82
5,526,603	7	23	48	41	-57.96	357.25	-58.07	356.46	-.11	-.79
5,526,638	7	23	49	23	-56.58	354.18	-56.67	353.42	-.09	-.76
5,526,673	7	23	50	5	-54.77	350.67	-54.83	349.94	-.06	-.73
5,526,708	7	23	50	47	-53.35	348.10	-53.39	347.40	-.04	-.70
5,526,743	7	23	51	29	-51.57	345.06	-51.59	344.39	-.02	-.67
5,526,953	7	23	55	41	-47.47	340.50	-47.45	339.91	.02	-.59
5,526,988	7	23	56	23	-45.68	338.36	-45.64	337.80	.04	-.56
5,527,023	7	23	57	5	-43.40	336.20	-43.34	335.67	.06	-.53
5,527,058	7	23	57	47	-41.53	334.35	-41.46	333.85	.07	-.50
5,527,093	7	23	58	29	-39.21	332.49	-39.12	332.02	.09	-.47
5,527,128	7	23	59	11	-37.33	330.88	-37.20	330.44	.10	-.44
5,527,163	7	23	59	53	-34.95	329.25	-34.84	328.84	.11	-.41
5,527,198	8	0	0	35	-33.03	327.81	-32.90	327.42	.13	-.39
5,527,233	8	0	1	17	-30.63	326.35	-30.49	325.99	.14	-.36
5,527,268	8	0	1	59	-28.63	325.01	-28.48	324.67	.15	-.34
5,527,303	8	0	2	41	-26.15	323.74	-25.99	323.42	.16	-.32
5,528,283	8	0	22	17	*******	*******	*******	*******	*****	******
5,528,318	8	0	22	59	39.06	268.68	39.49	268.61	.43	-.07
5,528,353	8	0	23	41	*******	*******	*******	*******	*****	******
5,528,423	8	0	25	5	42.63	280.23	43.04	280.24	.41	.01
5,528,458	8	0	25	47	46.50	273.44	46.92	273.42	.42	-.02
rev 111										
5,553,378	8	8	44	11	*******	*******	*******	*******	*****	******
5,560,483	8	11	6	17	-67.69	227.05	-68.11	226.75	-.42	-.30
5,560,553	8	11	7	41	-55.74	233.26	-56.17	233.10	-.43	-.16
5,560,623	8	11	9	5	-45.68	235.29	-46.11	235.15	-.43	-.14
5,560,693	8	11	10	29	-35.40	236.14	-35.83	236.01	-.43	-.13
5,560,763	8	11	11	53	-23.46	236.16	-23.89	236.03	-.43	-.13
5,561,568	8	11	27	59	-57.95	224.18	-58.36	223.84	-.41	-.34
5,561,813	8	11	32	53	-57.44	224.76	-57.85	224.42	-.41	-.34
5,561,883	8	11	34	17	-57.44	224.64	-57.85	224.30	-.41	-.34
5,561,918	8	11	34	59	-57.91	223.57	-58.31	223.21	-.40	-.36
5,561,953	8	11	35	41	-58.67	219.10	-59.06	218.68	-.39	-.42
5,562,513	8	11	46	53	-60.92	181.95	-61.10	181.12	-.18	-.83
5,562,548	8	11	47	35	-59.88	178.10	-60.03	177.28	-.15	-.82
5,562,583	8	11	48	17	-58.40	173.63	-58.52	172.83	-.12	-.80
5,562,618	8	11	48	59	-57.16	170.38	-57.26	169.61	-.10	-.77
5,562,653	8	11	49	41	-55.47	166.69	-55.54	165.95	-.07	-.74
5,562,688	8	11	50	23	-54.07	163.98	-54.12	163.27	-.05	-.71
5,562,723	8	11	51	5	-52.21	160.91	-52.23	160.23	-.02	-.68
5,562,933	8	11	55	17	-48.18	157.12	-48.17	156.52	.01	-.60
5,562,968	8	11	55	59	-46.44	154.93	-46.41	154.36	.03	-.57
5,563,003	8	11	56	41	-44.20	152.69	-44.15	152.15	.05	-.54
5,563,038	8	11	57	23	-42.37	150.80	-42.31	150.29	.06	-.51
5,563,073	8	11	58	5	-40.08	148.88	-40.00	148.40	.08	-.48
5,563,108	8	11	58	47	-38.19	147.22	-38.10	146.77	.09	-.45
5,563,143	8	11	59	29	-35.84	145.52	-35.73	145.10	.11	-.42
5,563,178	8	12	0	11	-33.93	144.05	-33.81	143.65	.12	-.40
5,563,213	8	12	0	53	-31.56	142.55	-31.43	142.18	.13	-.37
5,563,248	8	12	1	35	-29.62	141.21	-29.48	140.86	.14	-.35
5,563,283	8	12	2	17	-27.12	139.83	-26.97	139.50	.15	-.33
5,563,913	8	12	14	53	-1.85	114.53	-1.52	114.40	.33	-.13
5,563,948	8	12	15	35	.24	112.95	.57	112.83	.33	-.12
5,564,403	8	12	24	41	-1.16	114.46	-.82	114.33	.34	-.13

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 112										
5•596•463	8	23	5	53	-67.10	44.82	-67.53	44.57	-.43	-.25
5•596•533	8	23	7	17	-55.07	50.44	-55.50	50.30	-.43	-.14
5•596•603	8	23	8	41	-44.86	51.95	-45.29	51.82	-.43	-.13
5•596•673	8	23	10	5	-34.92	52.50	-35.35	52.37	-.43	-.13
5•596•743	8	23	11	29	-23.33	52.47	-23.76	52.34	-.43	-.13
5•597•793	8	23	32	29	-49.00	41.35	-49.41	41.08	-.41	-.27
5•597•828	8	23	33	11	-49.78	40.66	-50.19	40.38	-.41	-.28
5•597•863	8	23	33	53	-50.89	37.25	-51.29	36.93	-.40	-.32
5•597•898	8	23	34	35	-49.80	40.92	-50.21	40.64	-.41	-.28
5•597•933	8	23	35	17	-50.96	37.31	-51.36	36.99	-.40	-.32
5•598•493	8	23	46	29	-61.03	358.66	-61.22	357.84	-.19	-.82
5•598•528	8	23	47	11	-59.98	355.03	-60.15	354.22	-.17	-.81
5•598•563	8	23	47	53	-58.53	350.69	-58.66	349.90	-.13	-.79
5•598•598	8	23	48	35	-57.36	347.60	-57.47	346.83	-.11	-.77
5•598•633	8	23	49	17	-55.80	343.88	-55.88	343.11	-.08	-.75
5•598•668	8	23	49	59	-54.50	341.10	-54.56	340.38	-.06	-.72
5•598•703	8	23	50	41	-52.76	337.86	-52.79	337.17	-.03	-.69
5•598•913	8	23	54	53	-49.05	333.35	-49.04	332.73	.01	-.62
5•598•948	8	23	55	35	-47.36	331.12	-47.33	330.53	.03	-.59
5•598•983	8	23	56	17	-45.18	328.82	-45.14	328.27	.04	-.55
5•599•018	8	23	56	59	-43.41	326.90	-43.35	326.37	.06	-.53
5•599•053	8	23	57	41	-41.11	324.93	-41.04	324.44	.07	-.49
5•599•088	8	23	58	23	-39.22	323.26	-39.13	322.79	.09	-.47
5•599•123	8	23	59	5	-36.83	321.52	-36.73	321.08	.10	-.44
5•599•158	8	23	59	47	-34.89	320.04	-34.78	319.63	.11	-.41
5•599•193	9	0	0	29	-32.49	318.51	-32.36	318.13	.13	-.38
5•599•228	9	0	1	11	-30.52	317.17	-30.38	316.81	.14	-.36
5•599•263	9	0	1	53	-28.05	315.75	-27.90	315.41	.15	-.34
5•600•243	9	0	21	29	19.60	296.78	19.90	296.77	.30	-.01
5•600•278	9	0	22	11	21.90	295.30	22.21	295.30	.31	.00
5•600•313	9	0	22	53	24.86	294.10	25.17	294.12	.31	.02
5•600•383	9	0	24	17	30.40	291.20	30.73	291.24	.33	.04
5•600•418	9	0	24	59	32.88	289.43	33.22	289.48	.34	.05
rev 113										
5•632•513	9	11	6	53	-68.32	218.80	-68.75	218.51	-.43	-.29
5•632•583	9	11	8	17	-56.17	225.48	-56.60	225.33	-.43	-.15
5•632•653	9	11	9	41	-46.12	227.00	-46.55	226.87	-.43	-.13
5•632•723	9	11	11	5	-36.53	227.24	-36.96	227.11	-.43	-.13
5•632•793	9	11	12	29	-25.21	227.00	-25.64	226.87	-.43	-.13
5•633•598	9	11	28	35	-76.79	156.59	-76.88	154.67	-.09	-1.92
5•633•843	9	11	33	29	-75.52	165.06	-75.67	163.36	-.15	-1.70
5•633•913	9	11	34	53	-75.88	162.80	-76.01	161.03	-.13	-1.77
5•633•948	9	11	35	35	-75.50	162.65	-75.63	160.93	-.13	-1.72
5•633•983	9	11	36	17	-74.23	154.78	-74.30	153.15	-.07	-1.63
5•634•543	9	11	47	29	-60.42	171.26	-60.59	170.44	-.17	-.82
5•634•578	9	11	48	11	-59.31	167.61	-59.45	166.80	-.14	-.81
5•634•613	9	11	48	53	-57.76	163.37	-57.87	162.59	-.11	-.78
5•634•648	9	11	49	35	-56.48	160.39	-56.57	159.63	-.09	-.76
5•634•683	9	11	50	17	-54.76	156.94	-54.82	156.21	-.06	-.73
5•634•718	9	11	50	59	-53.35	154.37	-53.39	153.67	-.04	-.70
5•634•753	9	11	51	41	-51.47	151.41	-51.49	150.75	-.02	-.66
5•634•963	9	11	55	53	-47.49	147.15	-47.47	146.56	.02	-.59
5•634•998	9	11	56	35	-45.65	144.96	-45.61	144.40	.04	-.56
5•635•033	9	11	57	17	-43.32	142.75	-43.26	142.23	.06	-.52
5•635•068	9	11	57	59	-41.45	140.88	-41.38	140.38	.07	-.50
5•635•103	9	11	58	41	-39.13	138.99	-39.04	138.52	.09	-.47
5•635•138	9	11	59	23	-37.27	137.35	-37.17	136.91	.10	-.44
5•635•173	9	12	0	5	-34.94	135.70	-34.83	135.29	.11	-.41
5•635•208	9	12	0	47	-33.02	134.26	-32.90	133.87	.12	-.39
5•635•243	9	12	1	29	-30.64	132.86	-30.50	132.50	.14	-.36
5•635•278	9	12	2	11	-28.62	131.60	-28.47	131.26	.15	-.34
5•635•313	9	12	2	53	-26.10	130.30	-25.94	129.98	.16	-.32
5•635•943	9	12	15	29	-18.06	110.78	-18.76	110.55	.30	-.23
5•635•978	9	12	16	11	-17.01	109.57	-16.70	109.36	.31	-.21
5•636•433	9	12	25	17	9.78	105.92	10.11	105.85	.33	-.07
5•636•468	9	12	25	59	11.46	104.67	11.80	104.60	.34	-.07

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 114										
5•668•493	9	23	6	29	-67.30	39.58	-67.73	39.39	-.43	-.19
5•668•563	9	23	7	53	-55.71	43.34	-56.14	43.22	-.43	-.12
5•668•633	9	23	9	17	-46.16	44.07	-46.59	43.95	-.43	-.12
5•668•703	9	23	10	41	-36.14	44.34	-36.57	44.22	-.43	-.12
5•668•773	9	23	12	5	-24.47	44.21	-24.90	44.09	-.43	-.12
5•669•823	9	23	33	5	*******	*******	*******	*******	*****	******
5•669•858	9	23	33	47	*******	*******	*******	*******	*****	******
5•669•893	9	23	34	29	-24.69	60.65	-25.11	60.57	-.42	-.08
5•669•928	9	23	35	11	*******	*******	*******	*******	*****	******
5•669•963	9	23	35	53	-26.74	59.18	-27.21	59.09	-.43	-.09
5•670•523	9	23	47	5	-60.61	349.02	-60.80	348.21	-.19	-.81
5•670•558	9	23	47	47	-59.59	345.30	-59.75	344.49	-.16	-.81
5•670•593	9	23	48	29	-58.19	340.91	-58.32	340.12	-.13	-.79
5•670•628	9	23	49	11	-57.02	337.74	-57.12	336.97	-.10	-.77
5•670•663	9	23	49	53	-55.40	334.03	-55.47	333.29	-.07	-.74
5•670•698	9	23	50	35	-54.05	331.30	-54.10	330.59	-.05	-.71
5•670•733	9	23	51	17	-52.28	328.15	-52.29	327.47	-.03	-.68
5•670•943	9	23	55	29	-48.31	323.69	-48.30	323.08	.01	-.61
5•670•978	9	23	56	11	-46.58	321.53	-46.55	320.95	.03	-.58
5•671•013	9	23	56	53	-44.35	319.29	-44.30	318.75	.05	-.54
5•671•048	9	23	57	35	-42.54	317.43	-42.48	316.92	.06	-.51
5•671•083	9	23	58	17	-40.27	315.51	-40.19	315.03	.08	-.48
5•671•118	9	23	58	59	-38.40	313.90	-38.31	313.44	.09	-.46
5•671•153	9	23	59	41	-36.05	312.25	-35.95	311.82	.10	-.43
5•671•188	10	0	0	23	-34.10	310.81	-33.98	310.41	.12	-.40
5•671•223	10	0	1	5	-31.69	309.32	-31.56	308.94	.13	-.38
5•671•258	10	0	1	47	-29.69	308.00	-29.55	307.65	.14	-.35
5•671•293	10	0	2	29	-27.21	306.62	-27.06	306.29	.15	-.33
5•672•273	10	0	22	5	11.10	289.75	11.39	289.69	.29	-.06
5•672•308	10	0	22	47	13.10	288.51	13.40	288.46	.30	-.05
5•672•343	10	0	23	29	15.59	287.55	15.89	287.52	.30	-.03
5•672•413	10	0	24	53	20.09	285.36	20.40	285.35	.31	-.01
5•672•448	10	0	25	35	22.08	284.11	22.40	284.11	.32	-.00
rev 115										
5•704•473	10	11	6	5	-66.93	217.14	-67.36	216.99	-.43	-.15
5•704•543	10	11	7	29	-55.25	219.67	-55.68	219.56	-.43	-.11
5•704•613	10	11	8	53	-45.65	220.56	-46.08	220.45	-.43	-.11
5•704•683	10	11	10	17	-35.06	220.90	-35.49	220.79	-.43	-.11
5•704•753	10	11	11	41	-22.16	220.53	-22.59	220.41	-.43	-.12
5•705•558	10	11	27	47	*******	*******	*******	*******	*****	******
5•705•803	10	11	32	41	-39.95	250.66	-40.34	250.70	-.39	.04
5•705•873	10	11	34	5	-26.27	263.44	-26.61	263.45	-.34	.01
5•705•908	10	11	34	47	*******	*******	*******	*******	*****	******
5•705•943	10	11	35	29	-37.85	254.31	-38.23	254.35	-.38	.04
5•706•503	10	11	46	41	-61.39	165.29	-61.58	164.46	-.19	-.83
5•706•538	10	11	47	23	-60.41	161.58	-60.58	160.76	-.17	-.82
5•706•573	10	11	48	5	-59.00	157.12	-59.13	156.31	-.13	-.81
5•706•608	10	11	48	47	-57.82	153.93	-57.93	153.14	-.11	-.79
5•706•643	10	11	49	29	-56.18	150.18	-56.26	149.40	-.08	-.78
5•706•678	10	11	50	11	-54.83	147.46	-54.89	146.73	-.06	-.73
5•706•713	10	11	50	53	-53.04	144.27	-53.07	143.58	-.03	-.69
5•706•923	10	11	55	5	-49.17	140.53	-49.17	139.91	.00	-.62
5•706•958	10	11	55	47	-47.55	138.21	-47.53	137.62	.02	-.59
5•706•993	10	11	56	29	-45.43	135.78	-45.39	135.22	.04	-.56
5•707•028	10	11	57	11	-43.61	133.78	-43.55	133.25	.06	-.53
5•707•063	10	11	57	53	-41.29	131.72	-41.22	131.23	.07	-.49
5•707•098	10	11	58	35	-39.37	129.99	-39.28	129.52	.09	-.47
5•707•133	10	11	59	17	-36.96	128.27	-36.86	127.83	.10	-.44
5•707•168	10	11	59	59	-34.99	126.82	-34.88	126.41	.11	-.41
5•707•203	10	12	0	41	-32.58	125.27	-32.46	124.88	.12	-.39
5•707•238	10	12	1	23	-30.59	123.93	-30.46	123.57	.13	-.36
5•707•273	10	12	2	5	-28.13	122.51	-27.98	122.17	.15	-.34
5•707•903	10	12	14	41	-11.67	96.85	-11.35	96.67	.32	-.18
5•707•938	10	12	15	23	-9.66	95.44	-9.33	95.27	.33	-.17
5•708•383	10	12	24	29	40.48	116.82	40.70	117.02	.22	.20
5•708•428	10	12	25	11	43.49	115.98	43.72	116.21	.23	.23

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 116										
5•740•523	10	23	7	5	-68.50	31.85	-68.93	31.68	-.43	-.17
5•740•593	10	23	8	29	-56.18	35.10	-56.61	34.98	-.43	-.12
5•740•663	10	23	9	53	-45.50	35.89	-45.93	35.78	-.43	-.11
5•740•733	10	23	11	17	-36.85	35.55	-37.28	35.43	-.43	-.12
5•740•803	10	23	12	41	-25.25	35.35	-25.68	35.23	-.43	-.12
5•741•853	10	23	33	41	-86.89	18.16	-87.28	14.56	-.39	-3.60
5•741•888	10	23	34	23	-86.89	20.57	-87.29	17.29	-.40	-3.28
5•741•923	10	23	35	5	-86.70	336.67	-86.86	329.44	-.16	-7.23
5•741•958	10	23	35	47	-86.58	6.40	-86.92	1.70	-.34	-4.70
5•741•993	10	23	36	29	-85.75	330.30	-85.87	324.58	-.12	-5.78
5•742•553	10	23	47	41	-60.37	337.80	-60.54	336.98	-.17	-.82
5•742•588	10	23	48	23	-59.33	334.15	-59.47	333.34	-.14	-.81
5•742•623	10	23	49	5	-57.89	329.97	-58.00	329.18	-.11	-.79
5•742•658	10	23	49	47	-56.70	326.97	-56.79	326.21	-.09	-.76
5•742•693	10	23	50	29	-55.05	323.45	-55.11	322.72	-.06	-.73
5•742•728	10	23	51	11	-53.62	320.89	-53.66	320.19	-.04	-.70
5•742•763	10	23	51	53	-51.76	317.93	-51.78	317.26	-.02	-.67
5•743•113	10	23	58	53	-45.46	311.91	-45.42	311.35	.04	-.56
5•743•148	10	23	59	35	-43.38	309.89	-43.33	309.36	.05	-.53
5•743•183	11	0	0	17	-40.89	307.93	-40.82	307.44	.07	-.49
5•743•218	11	0	0	59	-38.88	306.19	-38.80	305.73	.08	-.46
5•743•253	11	0	1	41	-36.63	304.37	-36.53	303.94	.10	-.43
5•743•288	11	0	2	23	-34.65	302.77	-34.54	302.36	.11	-.41
5•743•323	11	0	3	5	-32.29	301.22	-32.17	300.84	.12	-.38
5•743•358	11	0	3	47	-30.30	299.73	-30.16	299.37	.14	-.36
5•743•393	11	0	4	29	-27.82	298.41	-27.67	298.07	.15	-.34
5•743•428	11	0	5	11	-25.71	297.17	-25.55	296.86	.16	-.31
5•743•463	11	0	5	53	-23.11	296.02	-22.94	295.73	.17	-.29
5•744•303	11	0	22	41	8.99	280.78	9.28	280.71	.29	-.07
5•744•338	11	0	23	23	9.35	280.43	9.64	280.36	.29	-.07
5•744•373	11	0	24	5	11.75	279.61	12.05	279.55	.30	-.06
5•744•443	11	0	25	29	10.16	280.44	10.45	280.38	.29	-.06
5•744•478	11	0	26	11	11.82	279.51	12.12	279.45	.30	-.06
rev 117										
5•773•388	11	10	4	22	*******	*******	*******	*******	*****	******
5•776•503	11	11	6	40	-67.63	209.87	-68.06	209.75	-.43	-.12
5•776•573	11	11	8	4	-55.92	212.56	-56.35	212.47	-.43	-.09
5•776•643	11	11	9	28	-46.35	212.92	-46.78	212.82	-.43	-.10
5•776•713	11	11	10	52	-36.29	212.63	-36.72	212.52	-.43	-.11
5•776•783	11	11	12	16	-24.26	212.00	-24.69	211.88	-.43	-.12
5•777•588	11	11	28	22	-59.03	181.20	-59.39	180.68	-.36	-.52
5•777•833	11	11	33	16	-59.07	181.54	-59.42	181.01	-.35	-.53
5•777•903	11	11	34	40	-58.94	181.69	-59.29	181.16	-.35	-.53
5•777•938	11	11	35	22	-58.93	181.23	-59.28	180.69	-.35	-.54
5•777•973	11	11	36	4	-59.00	176.73	-59.33	176.14	-.33	-.59
5•778•533	11	11	47	16	-60.88	154.79	-61.06	153.96	-.18	-.83
5•778•568	11	11	47	58	-59.77	151.21	-59.93	150.40	-.16	-.81
5•778•603	11	11	48	40	-58.25	146.99	-58.38	146.20	-.13	-.79
5•778•638	11	11	49	22	-56.95	143.96	-57.05	143.19	-.10	-.77
5•778•673	11	11	50	4	-55.23	140.38	-55.30	139.65	-.07	-.73
5•778•708	11	11	50	46	-53.86	137.84	-53.91	137.13	-.05	-.71
5•778•743	11	11	51	28	-52.04	134.78	-52.07	134.11	-.03	-.67
5•779•093	11	11	58	28	-46.41	128.64	-46.38	128.07	.03	-.57
5•779•128	11	11	59	10	-44.54	126.32	-44.49	125.78	.05	-.54
5•779•163	11	11	59	52	-42.14	124.11	-42.08	123.60	.06	-.51
5•779•198	11	12	0	34	-40.19	122.14	-40.11	121.66	.08	-.48
5•779•233	11	12	1	16	-37.69	120.44	-37.60	119.99	.09	-.45
5•779•268	11	12	1	58	-35.62	118.87	-35.51	118.45	.11	-.42
5•779•303	11	12	2	40	-33.11	117.40	-32.99	117.01	.12	-.39
5•779•338	11	12	3	22	-31.08	116.02	-30.95	115.65	.13	-.37
5•779•373	11	12	4	4	-28.60	114.67	-28.46	114.33	.14	-.34
5•779•408	11	12	4	46	-26.61	113.27	-26.46	112.95	.15	-.32
5•779•443	11	12	5	28	-24.18	111.94	-24.02	111.64	.16	-.30
5•779•933	11	12	15	16	-1.89	113.81	-1.73	113.68	.16	-.13
5•779•968	11	12	15	58	.13	112.75	.30	112.63	.17	-.12
5•780•423	11	12	25	4	11.74	93.70	12.04	93.64	.30	-.06
rev 118										
5•812•483	11	23	6	16	-66.41	19.68	-66.84	19.47	-.43	-.21
5•812•553	11	23	7	40	-54.76	24.22	-55.19	24.09	-.43	-.13
5•812•623	11	23	9	4	-45.09	25.31	-45.52	25.19	-.43	-.12
5•812•693	11	23	10	28	-34.74	25.56	-35.17	25.44	-.43	-.12
5•812•763	11	23	11	52	-22.14	25.05	-22.57	24.92	-.43	-.13
5•813•813	11	23	32	52	-30.05	346.86	-30.36	346.56	-.31	-.30
5•813•848	11	23	33	34	-30.02	346.04	-30.32	345.74	-.30	-.30
5•813•883	11	23	34	16	-29.93	343.13	-30.21	342.82	-.28	-.31
5•813•918	11	23	34	58	-29.66	345.64	-29.96	345.34	-.30	-.30
5•813•953	11	23	35	40	-29.53	342.74	-29.81	342.43	-.28	-.31
5•814•513	11	23	46	52	-61.43	331.33	-61.62	330.49	-.19	-.84
5•814•548	11	23	47	34	-60.33	327.52	-60.49	326.70	-.16	-.82
5•814•583	11	23	48	16	-58.77	323.11	-58.90	322.31	-.13	-.80
5•814•618	11	23	48	58	-57.40	319.96	-57.51	319.18	-.11	-.78
5•814•653	11	23	49	40	-55.68	316.28	-55.76	315.54	-.08	-.74
5•814•688	11	23	50	22	-54.34	313.74	-54.40	313.02	-.06	-.72
5•814•723	11	23	51	4	-52.61	310.62	-52.64	309.94	-.03	-.68
5•815•073	11	23	58	4	-47.03	304.93	-47.01	304.35	.02	-.58
5•815•108	11	23	58	46	-45.11	302.66	-45.07	302.11	.04	-.55
5•815•143	11	23	59	28	-42.69	300.49	-42.63	299.97	.06	-.52
5•815•178	12	0	0	10	-40.74	298.60	-40.67	298.11	.07	-.49
5•815•213	12	0	0	52	-38.31	296.78	-38.22	296.32	.09	-.46
5•815•248	12	0	1	34	-36.40	295.03	-36.30	294.60	.10	-.43
5•815•283	12	0	2	16	-34.04	293.37	-33.93	292.97	.11	-.40
5•815•318	12	0	2	58	-32.09	291.82	-31.96	291.44	.13	-.38
5•815•353	12	0	3	40	-29.68	290.41	-29.54	290.06	.14	-.35
5•815•388	12	0	4	22	-27.65	289.16	-27.50	288.83	.15	-.33
5•815•423	12	0	5	4	-25.15	287.96	-24.99	287.65	.16	-.31
5•816•263	12	0	21	52	40.21	270.65	40.50	270.80	.29	.15
5•816•298	12	0	22	34	37.85	266.96	38.16	267.07	.31	.11
5•816•333	12	0	23	16	43.56	264.24	43.89	264.39	.33	.15
5•816•403	12	0	24	40	40.38	270.72	40.67	270.87	.29	.15
5•816•438	12	0	25	22	43.71	269.55	44.01	269.72	.30	.17
rev 119										
5•848•533	12	11	7	16	-68.22	192.39	-68.65	192.11	-.43	-.28
5•848•603	12	11	8	40	-56.03	198.25	-56.46	198.10	-.43	-.15
5•848•673	12	11	10	4	-45.88	199.65	-46.31	199.52	-.43	-.13
5•848•743	12	11	11	28	-36.06	199.99	-36.49	199.86	-.43	-.13
5•848•813	12	11	12	52	-24.44	199.77	-24.87	199.64	-.43	-.13
5•849•618	12	11	28	58	-76.05	300.87	-76.01	302.27	.04	1.40
5•849•863	12	11	33	52	-65.66	303.84	-65.61	304.66	.05	.82
5•849•933	12	11	35	16	-73.64	302.02	-73.60	303.36	.04	1.34
5•849•968	12	11	35	58	-76.58	300.41	-76.55	302.09	.03	1.68
5•850•003	12	11	36	40	-79.21	305.94	-79.14	308.04	.07	2.10
5•850•563	12	11	47	52	-60.13	144.13	-60.30	143.32	-.17	-.81
5•850•598	12	11	48	34	-59.14	140.44	-59.28	139.64	-.14	-.80
5•850•633	12	11	49	16	-57.71	136.08	-57.82	135.30	-.11	-.78
5•850•668	12	11	49	58	-56.49	132.91	-56.58	132.15	-.09	-.76
5•850•703	12	11	50	40	-54.82	129.26	-54.88	128.53	-.06	-.73
5•850•738	12	11	51	22	-53.31	126.72	-53.35	126.02	-.04	-.70
5•850•773	12	11	52	4	-51.40	123.82	-51.42	123.16	-.02	-.66
5•851•123	12	11	59	4	-45.01	118.18	-44.97	117.63	.04	-.55
5•851•158	12	11	59	46	-43.09	116.03	-43.03	115.51	.06	-.52
5•851•193	12	12	0	28	-40.66	113.99	-40.59	113.50	.07	-.49
5•851•228	12	12	1	10	-38.70	112.18	-38.61	111.70	.09	-.48
5•851•263	12	12	1	52	-36.25	110.51	-36.15	110.08	.10	-.43
5•851•298	12	12	2	34	-34.26	108.98	-34.15	108.58	.11	-.40
5•851•333	12	12	3	16	-31.82	107.54	-31.70	107.16	.12	-.38
5•851•368	12	12	3	58	-29.77	106.17	-29.63	105.81	.14	-.36
5•851•403	12	12	4	40	-27.23	104.90	-27.08	104.57	.15	-.33
5•851•438	12	12	5	22	-25.16	103.62	-25.00	103.31	.16	-.31
5•851•473	12	12	6	4	-22.65	102.42	-22.48	102.13	.17	-.29
5•851•963	12	12	15	52	-7.74	84.33	-7.45	84.17	.29	-.16
5•851•998	12	12	16	34	-5.76	83.07	-5.46	82.92	.30	-.15
5•852•453	12	12	25	40	42.15	106.66	42.32	106.90	.17	.24
5•852•488	12	12	26	22	45.02	106.38	45.19	106.66	.17	.28

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 120

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
5•884•513	12	23	6	52	-74.12	28.56	-74.54	28.78	-.42	.22
5•884•583	12	23	8	16	-64.92	8.20	-65.35	7.95	-.43	-.25
5•884•653	12	23	9	40	-51.92	12.86	-52.35	12.70	-.43	-.16
5•884•723	12	23	11	4	-40.22	15.17	-40.65	15.04	-.43	-.13
5•884•793	12	23	12	28	-26.32	16.08	-26.75	15.93	-.43	-.15
5•885•843	12	23	33	28	*******	*******	*******	*******	*****	******
5•885•878	12	23	34	10	*******	*******	*******	*******	*****	******
5•885•913	12	23	34	52	-35.23	46.17	-35.63	46.17	-.40	.00
5•885•948	12	23	35	34	-27.35	51.70	-27.73	51.69	-.38	-.01
5•885•983	12	23	36	16	-38.40	43.29	-38.80	43.29	-.40	-.00
5•886•543	12	23	47	28	-60.29	319.02	-60.46	318.20	-.17	-.82
5•886•578	12	23	48	10	-59.23	315.52	-59.37	314.71	-.14	-.81
5•886•613	12	23	48	52	-57.71	311.35	-57.82	310.57	-.11	-.78
5•886•648	12	23	49	34	-56.40	308.36	-56.49	307.60	-.09	-.76
5•886•683	12	23	50	16	-54.67	304.84	-54.73	304.12	-.06	-.72
5•886•718	12	23	50	58	-53.22	302.29	-53.26	301.59	-.04	-.70
5•886•753	12	23	51	40	-51.32	299.27	-51.34	298.61	-.02	-.66
5•887•103	12	23	58	40	-45.16	293.85	-45.12	293.30	.04	-.55
5•887•138	12	23	59	22	-43.27	291.66	-43.22	291.14	.05	-.52
5•887•173	13	0	0	4	-40.89	289.59	-40.82	289.10	.07	-.49
5•887•208	13	0	0	46	-38.93	287.74	-38.84	287.28	.09	-.46
5•887•243	13	0	1	28	-36.44	286.06	-36.34	285.63	.10	-.43
5•887•278	13	0	2	10	-34.38	284.50	-34.27	284.09	.11	-.41
5•887•313	13	0	2	52	-31.88	283.03	-31.76	282.65	.12	-.38
5•887•348	13	0	3	34	-29.81	281.64	-29.68	281.28	.13	-.36
5•887•383	13	0	4	16	-27.33	280.33	-27.18	280.00	.15	-.33
5•887•418	13	0	4	58	-25.27	279.05	-25.11	278.74	.16	-.31
5•887•453	13	0	5	40	-22.90	277.83	-22.74	277.54	.16	-.29
5•888•293	13	0	22	28	45.21	268.79	45.46	269.02	.25	.23
5•888•328	13	0	23	10	42.24	267.57	42.50	267.76	.26	.19
5•888•363	13	0	23	52	48.44	267.09	48.70	267.36	.26	.27
5•888•433	13	0	25	16	51.37	265.95	51.64	266.25	.27	.30
5•888•468	13	0	25	58	56.54	265.07	56.82	265.45	.28	.38

rev 121

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
5•918•708	13	10	30	46	*******	*******	*******	*******	*****	******
5•920•493	13	11	6	28	-73.99	205.91	-74.41	206.18	-.42	.27
5•920•563	13	11	7	52	-65.53	186.09	-65.96	185.88	-.43	-.21
5•920•633	13	11	9	16	-52.16	190.19	-52.59	190.05	-.43	-.14
5•920•703	13	11	10	40	-39.61	191.07	-40.04	190.94	-.43	-.13
5•920•773	13	11	12	4	-24.91	191.31	-25.34	191.18	-.43	-.13
5•921•578	13	11	28	10	-65.53	206.79	-65.95	206.84	-.42	.05
5•921•823	13	11	33	4	-65.65	205.58	-66.08	205.59	-.43	.01
5•921•893	13	11	34	28	-65.41	204.94	-65.84	204.93	-.43	-.01
5•921•928	13	11	35	10	-65.16	206.29	-65.59	206.30	-.43	.01
5•921•963	13	11	35	52	-66.83	200.62	-67.26	200.54	-.43	-.08
5•922•523	13	11	47	4	-60.36	134.04	-60.53	133.22	-.17	-.82
5•922•558	13	11	47	46	-59.27	130.61	-59.41	129.80	-.14	-.81
5•922•593	13	11	48	28	-57.81	126.58	-57.92	125.79	-.11	-.79
5•922•628	13	11	49	10	-56.57	123.72	-56.66	122.96	-.09	-.76
5•922•663	13	11	49	52	-54.92	120.31	-54.98	119.58	-.06	-.73
5•922•698	13	11	50	34	-53.50	117.85	-53.54	117.15	-.04	-.70
5•922•733	13	11	51	16	-51.63	114.95	-51.65	114.28	-.02	-.67
5•923•083	13	11	58	16	-45.70	109.56	-45.67	109.00	.03	-.56
5•923•118	13	11	58	58	-43.76	107.29	-43.71	106.76	.05	-.53
5•923•153	13	11	59	40	-41.31	105.20	-41.24	104.70	.07	-.50
5•923•188	13	12	0	22	-39.28	103.44	-39.20	102.97	.08	-.47
5•923•223	13	12	1	4	-36.79	101.80	-36.69	101.36	.10	-.44
5•923•258	13	12	1	46	-34.78	100.29	-34.67	99.88	.11	-.41
5•923•293	13	12	2	28	-32.32	98.85	-32.20	98.47	.12	-.38
5•923•328	13	12	3	10	-30.31	97.44	-30.18	97.08	.13	-.36
5•923•363	13	12	3	52	-27.84	96.06	-27.70	95.72	.14	-.34
5•923•398	13	12	4	34	-25.79	94.74	-25.64	94.42	.15	-.32
5•923•433	13	12	5	16	-23.30	93.47	-23.14	93.18	.16	-.29
5•923•923	13	12	15	4	-13.60	71.21	-13.29	71.02	.31	-.19
5•923•958	13	12	15	46	-11.61	69.86	-11.29	69.68	.32	-.18
5•924•413	13	12	24	52	41.29	99.47	41.44	99.70	.15	.23

rev 122

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
5•956•473	13	23	6	4	-73.34	22.48	-73.75	22.76	-.41	.28
5•956•543	13	23	7	28	-64.97	3.06	-65.40	2.87	-.43	-.19
5•956•613	13	23	8	52	-52.25	7.27	-52.68	7.15	-.43	-.12
5•956•683	13	23	10	16	-40.38	7.98	-40.81	7.86	-.43	-.12
5•956•753	13	23	11	40	-25.93	7.70	-26.36	7.58	-.43	-.12
5•957•803	13	23	32	40	*******	*******	*******	*******	*****	******
5•957•838	13	23	33	22	-28.94	43.21	-29.31	43.21	-.37	-.00
5•957•873	13	23	34	4	-37.69	36.54	-38.09	36.55	-.40	.01
5•957•908	13	23	34	46	-32.02	40.82	-32.40	40.82	-.38	.00
5•957•943	13	23	35	28	-40.10	33.97	-40.50	33.97	-.40	.00
5•958•503	13	23	46	40	-60.56	309.38	-60.73	308.55	-.17	-.83
5•958•538	13	23	47	22	-59.46	305.86	-59.60	305.04	-.14	-.82
5•958•573	13	23	48	4	-57.94	301.69	-58.05	300.90	-.11	-.79
5•958•608	13	23	48	46	-56.62	298.79	-56.71	298.03	-.09	-.76
5•958•643	13	23	49	28	-54.90	295.29	-54.96	294.56	-.06	-.73
5•958•678	13	23	50	10	-53.41	292.86	-53.45	292.16	-.04	-.70
5•958•713	13	23	50	52	-51.51	289.98	-51.53	289.32	-.02	-.66
5•959•063	13	23	57	52	-45.47	284.96	-45.44	284.40	.03	-.56
5•959•098	13	23	58	34	-43.58	282.86	-43.53	282.33	.05	-.53
5•959•133	13	23	59	16	-41.18	280.83	-41.11	280.34	.07	-.49
5•959•168	13	23	59	58	-39.26	279.03	-39.18	278.56	.08	-.47
5•959•203	14	0	0	40	-36.86	277.31	-36.78	276.87	.10	-.44
5•959•238	14	0	1	22	-34.87	275.73	-34.76	275.32	.11	-.41
5•959•273	14	0	2	4	-32.44	274.22	-32.32	273.84	.12	-.38
5•959•308	14	0	2	46	-30.43	272.80	-30.30	272.44	.13	-.36
5•959•343	14	0	3	28	-27.97	271.45	-27.83	271.11	.14	-.34
5•959•378	14	0	4	10	-25.88	270.14	-25.73	269.82	.15	-.32
5•959•413	14	0	4	52	-23.33	268.89	-23.17	268.60	.16	-.29
5•960•253	14	0	21	40	15.64	258.44	15.90	258.42	.26	-.02
5•960•288	14	0	22	22	15.23	257.99	15.49	257.96	.26	-.03
5•960•323	14	0	23	4	17.76	257.16	18.03	257.15	.27	-.01
5•960•393	14	0	24	28	15.90	258.13	16.16	258.11	.26	-.02
5•960•428	14	0	25	10	17.78	257.43	18.05	257.42	.27	-.01

rev 123

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
5•992•453	14	11	5	40	-73.25	202.29	-73.66	202.68	-.40	.39
5•992•523	14	11	7	4	-65.01	179.76	-65.44	179.60	-.43	-.16
5•992•593	14	11	8	28	-52.05	182.58	-52.48	182.46	-.43	-.12
5•992•663	14	11	9	52	-40.25	183.51	-40.68	183.39	-.43	-.12
5•992•733	14	11	11	16	-26.28	183.85	-26.71	183.73	-.43	-.12
5•993•538	14	11	27	22	-35.20	186.37	-35.63	186.24	-.43	-.13
5•993•783	14	11	32	16	-33.55	148.13	-33.88	147.82	-.33	-.31
5•993•853	14	11	33	40	-33.62	148.49	-33.95	148.18	-.33	-.31
5•993•888	14	11	34	22	-34.33	150.59	-34.67	150.28	-.34	-.31
5•993•923	14	11	35	4	-34.87	148.05	-35.19	147.73	-.32	-.32
5•994•483	14	11	46	16	-60.58	124.81	-60.75	123.98	-.17	-.83
5•994•518	14	11	46	58	-59.36	121.35	-59.50	120.54	-.14	-.81
5•994•553	14	11	47	40	-57.76	117.19	-57.87	116.41	-.11	-.78
5•994•588	14	11	48	22	-56.38	114.32	-56.47	113.56	-.09	-.76
5•994•623	14	11	49	4	-54.61	110.94	-54.67	110.22	-.06	-.72
5•994•658	14	11	49	46	-53.12	108.58	-53.16	107.89	-.04	-.69
5•994•693	14	11	50	28	-51.28	105.67	-51.30	105.01	-.02	-.66
5•995•043	14	11	57	28	-45.45	100.39	-45.42	99.83	.03	-.56
5•995•078	14	11	58	10	-43.50	98.27	-43.45	97.74	.05	-.53
5•995•113	14	11	58	52	-41.06	96.22	-40.99	95.73	.07	-.49
5•995•148	14	11	59	34	-39.10	94.43	-39.02	93.96	.08	-.47
5•995•183	14	12	0	16	-36.76	92.72	-36.67	92.28	.09	-.44
5•995•218	14	12	0	58	-34.83	91.15	-34.72	90.74	.11	-.41
5•995•253	14	12	1	40	-32.46	89.65	-32.34	89.27	.12	-.38
5•995•288	14	12	2	22	-30.48	88.24	-30.35	87.88	.13	-.36
5•995•323	14	12	3	4	-28.03	86.88	-27.89	86.54	.14	-.34
5•995•358	14	12	3	46	-26.00	85.58	-25.85	85.26	.15	-.32
5•995•393	14	12	4	28	-23.47	84.32	-23.31	84.03	.16	-.29
5•995•883	14	12	14	16	-13.75	71.21	-13.49	71.01	.26	-.20
5•995•918	14	12	14	58	-11.74	70.07	-11.47	69.88	.27	-.19
5•996•373	14	12	20	4	28.34	63.17	28.66	63.19	.32	.02
5•996•408	14	12	24	46	28.44	61.72	28.77	61.75	.33	.03

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 124

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.028.433	14	23	5	15	-33.93	6.24	-34.36	6.16	-.43	-.08
6.028.503	14	23	6	39	-36.28	4.05	-36.71	3.96	-.43	-.09
6.028.573	14	23	8	3	-38.46	1.72	-38.89	1.62	-.43	-.10
6.028.643	14	23	9	27	-40.57	359.15	-41.00	359.03	-.43	-.12
6.028.713	14	23	10	51	-42.55	356.33	-42.98	356.19	-.43	-.14
6.029.763	14	23	31	51	-85.86	22.40	-86.27	24.39	-.41	1.99
6.029.798	14	23	32	33	-86.06	355.40	-86.49	354.23	-.43	-1.17
6.029.833	14	23	33	15	-86.26	319.94	-86.56	314.82	-.30	-5.12
6.029.868	14	23	33	57	-85.75	355.03	-86.17	353.87	-.42	-1.16
6.029.903	14	23	34	39	-86.49	324.91	-86.81	319.86	-.32	-5.05
6.030.463	14	23	45	51	-60.29	299.69	-60.45	298.87	-.16	-.82
6.030.498	14	23	46	33	-59.14	296.21	-59.28	295.40	-.14	-.81
6.030.533	14	23	47	15	-57.61	292.15	-57.72	291.37	-.11	-.78
6.030.568	14	23	47	57	-56.31	289.32	-56.39	288.56	-.08	-.76
6.030.603	14	23	48	39	-54.60	285.98	-54.66	285.24	-.06	-.72
6.030.638	14	23	49	21	-53.17	283.55	-53.21	282.85	-.04	-.70
6.030.673	14	23	50	3	-51.32	280.68	-51.34	280.02	-.02	-.66
6.031.023	14	23	57	3	-46.28	275.57	-46.25	275.01	.03	-.56
6.031.058	14	23	57	45	-43.32	273.51	-43.27	272.98	.05	-.53
6.031.093	14	23	58	27	-40.90	271.53	-40.83	271.04	.07	-.49
6.031.128	14	23	59	9	-38.97	269.77	-38.89	269.31	.08	-.46
6.031.163	14	23	59	51	-36.57	268.05	-36.48	267.62	.09	-.43
6.031.198	15	0	0	33	-34.62	266.42	-34.51	266.01	.11	-.41
6.031.233	15	0	1	15	-32.15	264.85	-32.03	264.47	.12	-.38
6.031.268	15	0	1	57	-30.11	263.38	-29.98	263.02	.13	-.36
6.031.303	15	0	2	39	-27.61	261.96	-27.47	261.63	.14	-.33
6.031.338	15	0	3	21	-25.53	260.70	-25.38	260.39	.15	-.31
6.031.373	15	0	4	3	-23.01	259.51	-22.85	259.22	.16	-.29
6.032.213	15	0	20	51	15.64	249.07	15.80	248.85	.26	-.22
6.032.248	15	0	21	33	15.11	248.82	15.37	248.79	.26	-.03
6.032.283	15	0	22	15	17.61	248.12	17.87	248.11	.26	-.01
6.032.353	15	0	23	39	15.82	248.99	16.08	248.97	.26	-.02
6.032.388	15	0	24	21	17.62	248.41	17.89	248.40	.27	-.01

rev 125

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.064.413	15	11	4	51	-33.97	182.87	-34.39	182.80	-.42	-.07
6.064.483	15	11	6	15	-36.67	180.67	-37.10	180.59	-.43	-.08
6.064.553	15	11	7	39	-39.23	178.12	-39.66	178.03	-.43	-.09
6.064.623	15	11	9	3	-41.20	175.26	-41.63	175.15	-.43	-.11
6.064.693	15	11	10	27	-42.89	172.09	-43.31	171.95	-.43	-.14
6.065.498	15	11	26	33	-76.53	229.81	-76.79	231.13	-.26	1.32
6.065.743	15	11	31	27	-34.29	153.20	-34.68	152.95	-.39	-.25
6.065.813	15	11	32	51	-31.53	152.56	-31.91	152.32	-.38	-.24
6.065.848	15	11	33	33	-33.17	150.74	-33.55	150.48	-.38	-.26
6.065.883	15	11	34	15	-34.66	147.91	-35.03	147.63	-.37	-.28
6.066.443	15	11	45	27	-60.24	114.58	-60.40	113.76	-.16	-.82
6.066.478	15	11	46	9	-59.02	111.22	-59.15	110.41	-.13	-.81
6.066.513	15	11	46	51	-57.40	107.18	-57.50	106.40	-.10	-.78
6.066.548	15	11	47	33	-56.01	104.35	-56.09	103.60	-.08	-.75
6.066.583	15	11	48	15	-54.22	101.00	-54.28	100.28	-.06	-.72
6.066.618	15	11	48	57	-52.69	98.60	-52.73	97.91	-.04	-.69
6.066.653	15	11	49	39	-50.79	95.66	-50.80	95.01	-.01	-.65
6.067.003	15	11	56	39	-44.90	90.46	-44.86	89.91	.04	-.55
6.067.038	15	11	57	21	-42.98	88.40	-42.93	87.88	.05	-.52
6.067.073	15	11	58	3	-40.53	86.41	-40.46	85.93	.07	-.48
6.067.108	15	11	58	45	-38.56	84.61	-38.48	84.15	.08	-.46
6.067.143	15	11	59	27	-36.17	82.84	-36.07	82.41	.10	-.43
6.067.178	15	12	0	9	-34.21	81.22	-34.10	80.82	.11	-.40
6.067.213	15	12	0	51	-31.80	79.65	-31.68	79.27	.12	-.38
6.067.248	15	12	1	33	-29.79	78.27	-29.65	77.91	.14	-.36
6.067.283	15	12	2	15	-27.31	77.02	-27.16	76.69	.15	-.33
6.067.318	15	12	2	57	-25.23	75.83	-25.07	75.52	.16	-.31
6.067.353	15	12	3	39	-22.72	74.70	-22.56	74.41	.16	-.29
6.067.843	15	12	13	27	21.92	64.74	22.16	64.76	.24	.02
6.067.878	15	12	14	9	25.49	63.54	25.74	63.59	.25	.05
6.068.333	15	12	23	15	20.72	65.37	20.98	65.38	.26	.01
6.068.368	15	12	23	57	22.70	64.28	22.96	64.30	.26	.02

rev 126

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.100.323	15	23	3	3	-72.25	5.29	-72.66	5.59	-.41	.30
6.100.393	15	23	4	27	-64.38	353.48	-64.81	353.45	-.43	-.03
6.100.463	15	23	5	51	-51.49	353.62	-51.92	353.55	-.43	-.07
6.100.533	15	23	7	15	-39.74	353.19	-40.17	353.10	-.43	-.09
6.100.603	15	23	8	39	-24.87	352.50	-25.30	352.39	-.43	-.11
6.101.653	15	23	29	39	-72.23	257.47	-72.17	256.02	.06	-1.45
6.101.688	15	23	30	21	-70.67	256.49	-70.61	255.15	.06	-1.34
6.101.723	15	23	31	3	-68.40	251.18	-68.30	250.00	.10	-1.18
6.101.758	15	23	31	45	-70.20	255.46	-70.13	254.16	.07	-1.30
6.101.793	15	23	32	27	-67.95	250.42	-67.84	249.27	.11	-1.15
6.102.353	15	23	43	39	-61.28	297.15	-61.49	296.34	-.21	-.81
6.102.388	15	23	44	21	-60.48	293.28	-60.66	292.47	-.18	-.81
6.102.423	15	23	45	3	-59.17	288.59	-59.32	287.74	-.15	-.80
6.102.458	15	23	45	45	-57.98	285.15	-58.10	284.37	-.12	-.78
6.102.493	15	23	46	27	-56.39	281.14	-56.48	280.38	-.09	-.76
6.102.528	15	23	47	9	-55.02	278.27	-55.09	277.54	-.07	-.73
6.102.563	15	23	47	51	-53.22	275.00	-53.27	274.30	-.05	-.70
6.102.913	15	23	54	51	-46.68	267.51	-46.64	266.93	.02	-.58
6.102.948	15	23	55	33	-44.80	265.42	-44.76	264.87	.04	-.55
6.102.983	15	23	56	15	-42.48	263.37	-42.42	262.86	.06	-.51
6.103.018	15	23	56	57	-40.59	261.57	-40.52	261.08	.07	-.49
6.103.053	15	23	57	39	-38.17	259.81	-38.09	259.36	.08	-.45
6.103.088	15	23	58	21	-36.20	258.19	-36.10	257.76	.10	-.43
6.103.123	15	23	59	3	-33.76	256.56	-33.65	256.16	.11	-.40
6.103.158	15	23	59	45	-31.77	255.07	-31.65	254.69	.12	-.38
6.103.193	16	0	0	27	-29.32	253.62	-29.19	253.27	.13	-.35
6.103.228	16	0	1	9	-27.29	252.26	-27.14	251.93	.15	-.33
6.103.263	16	0	1	51	-24.79	250.99	-24.63	250.68	.16	-.31
6.104.103	16	0	18	39	15.42	240.26	15.67	240.24	.25	-.02
6.104.138	16	0	19	21	15.07	240.01	15.32	239.98	.25	-.03
6.104.173	16	0	20	3	17.62	239.24	17.88	239.23	.26	-.01
6.104.243	16	0	21	27	15.79	239.90	16.05	239.88	.26	-.02
6.104.278	16	0	22	9	17.69	239.08	17.95	239.07	.26	-.01

rev 127

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.136.303	16	11	2	39	-73.12	179.44	-73.53	179.73	-.41	.29
6.136.373	16	11	4	3	-65.33	167.51	-65.76	167.46	-.43	-.05
6.136.443	16	11	5	27	-52.06	168.32	-52.49	168.24	-.43	-.08
6.136.513	16	11	6	51	-39.69	167.91	-40.12	167.81	-.43	-.10
6.136.583	16	11	8	15	-25.19	167.31	-25.62	167.20	-.43	-.11
6.137.388	16	11	24	21	-60.50	144.21	-60.89	143.77	-.39	-.44
6.137.633	16	11	29	15	-60.56	145.04	-60.95	144.60	-.39	-.44
6.137.703	16	11	30	39	-60.42	144.99	-60.81	144.54	-.39	-.45
6.137.738	16	11	31	21	-60.47	144.16	-60.86	143.70	-.39	-.46
6.137.773	16	11	32	3	-60.84	139.44	-61.21	138.92	-.37	-.52
6.138.333	16	11	43	15	-61.15	110.85	-61.35	110.03	-.20	-.82
6.138.368	16	11	43	57	-60.07	107.06	-60.24	106.25	-.17	-.81
6.138.403	16	11	44	39	-58.60	102.53	-58.74	101.74	-.14	-.79
6.138.438	16	11	45	21	-57.31	99.35	-57.43	98.58	-.12	-.77
6.138.473	16	11	46	3	-55.64	95.57	-55.73	94.83	-.09	-.74
6.138.508	16	11	46	45	-54.18	92.89	-54.25	92.18	-.07	-.71
6.138.543	16	11	47	27	-52.35	89.72	-52.39	89.04	-.04	-.68
6.138.893	16	11	54	27	-45.91	82.33	-45.88	81.76	.03	-.57
6.138.928	16	11	55	9	-44.10	80.22	-44.06	79.68	.04	-.54
6.138.963	16	11	55	51	-41.74	78.14	-41.68	77.64	.06	-.50
6.138.998	16	11	56	33	-39.83	76.32	-39.76	75.84	.07	-.48
6.139.033	16	11	57	15	-37.42	74.55	-37.33	74.11	.09	-.44
6.139.068	16	11	57	57	-35.45	72.96	-35.35	72.54	.10	-.42
6.139.103	16	11	58	39	-32.99	71.39	-32.88	71.00	.11	-.39
6.139.138	16	11	59	21	-30.94	69.95	-30.81	69.58	.13	-.37
6.139.173	16	12	0	3	-28.46	68.55	-28.32	68.21	.14	-.34
6.139.208	16	12	0	45	-26.39	67.24	-26.24	66.92	.15	-.32
6.139.243	16	12	1	27	-23.86	65.95	-23.70	65.65	.16	-.30
6.139.733	16	12	11	15	-2.45	62.00	-2.25	61.86	.20	-.14
6.139.768	16	12	11	57	-.36	60.99	-.15	60.87	.21	-.12
6.140.223	16	12	21	3	54.78	73.37	54.92	73.83	.14	.46
6.140.258	16	12	21	45	*******	*******	*******	*******	*****	******

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 128

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
6•172•283	16	23	2	15	-74.01	355.59	-74.42	355.93	-.41	.34
6•172•353	16	23	3	39	-65.95	342.32	-66.38	342.26	-.43	-.06
6•172•423	16	23	5	3	-52.79	342.44	-53.22	342.35	-.43	-.09
6•172•493	16	23	6	27	-40.72	342.34	-41.15	342.24	-.43	-.10
6•172•563	16	23	7	51	-26.56	342.12	-26.99	342.01	-.43	-.11
6•173•613	16	23	28	51	-66.47	330.54	-66.89	330.17	-.42	-.37
6•173•648	16	23	29	33	-66.57	326.16	-66.98	325.71	-.41	-.45
6•173•683	16	23	30	15	-67.02	320.15	-67.41	319.59	-.39	-.56
6•173•718	16	23	30	57	-65.62	324.18	-66.02	323.71	-.40	-.47
6•173•753	16	23	31	39	-66.22	318.72	-66.60	318.15	-.38	-.57
6•174•313	16	23	42	51	-60.55	284.38	-60.74	283.57	-.19	-.81
6•174•348	16	23	43	33	-59.50	280.65	-59.66	279.85	-.16	-.80
6•174•383	16	23	44	15	-58.07	276.27	-58.20	275.49	-.13	-.78
6•174•418	16	23	44	57	-56.81	273.09	-56.91	272.33	-.10	-.76
6•174•453	16	23	45	39	-55.18	269.39	-55.24	268.66	-.08	-.73
6•174•488	16	23	46	21	-53.76	266.77	-53.82	266.06	-.06	-.71
6•174•523	16	23	47	3	-51.96	263.66	-51.99	262.99	-.03	-.67
6•174•873	16	23	54	3	-45.03	256.53	-44.99	255.98	.04	-.55
6•174•908	16	23	54	45	-43.10	254.47	-43.05	253.95	.05	-.52
6•174•943	16	23	55	27	-40.69	252.49	-40.62	252.00	.07	-.49
6•174•978	16	23	56	9	-38.72	250.74	-38.64	250.28	.08	-.46
6•175•013	16	23	56	51	-36.30	249.05	-36.20	248.62	.10	-.43
6•175•048	16	23	57	33	-34.32	247.51	-34.22	247.10	.11	-.41
6•175•083	16	23	58	15	-31.90	246.03	-31.78	245.65	.12	-.38
6•175•118	16	23	58	57	-29.86	244.65	-29.73	244.29	.13	-.36
6•175•153	16	23	59	39	-27.35	243.31	-27.21	242.98	.14	-.33
6•175•188	17	0	0	21	-25.28	242.04	-25.13	241.73	.15	-.31
6•175•223	17	0	1	3	-22.75	240.81	-22.59	240.52	.16	-.29
6•176•063	17	0	17	51	50.55	227.93	50.82	228.22	.27	.29
6•176•098	17	0	18	33	43.70	228.26	43.97	228.46	.27	.20
6•176•133	17	0	19	15	51.11	227.79	51.38	228.09	.27	.30
6•176•203	17	0	20	39	99.85	227.11	50.13	227.38	.28	.27
6•176•238	17	0	21	21	54.02	225.29	54.31	225.61	.29	.32

rev 129

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
6•208•193	17	11	0	27	-72.54	177.24	-72.98	177.69	-.39	.45
6•208•263	17	11	1	51	-64.88	161.76	-65.31	161.77	-.43	.01
6•208•333	17	11	3	15	-51.87	160.61	-52.30	160.55	-.43	-.06
6•208•403	17	11	4	39	-39.76	160.26	-40.19	160.18	-.43	-.08
6•208•473	17	11	6	3	-25.43	159.56	-25.86	159.46	-.43	-.10
6•209•278	17	11	22	9	*******	*******	*******	*******	*****	******
6•209•523	17	11	27	3	*******	*******	*******	*******	*****	******
6•209•593	17	11	28	27	*******	*******	*******	*******	*****	******
6•209•628	17	11	29	9	*******	*******	*******	*******	*****	******
6•209•663	17	11	29	51	*******	*******	*******	*******	*****	******
6•210•223	17	11	41	3	-61.46	102.17	-61.67	101.35	-.21	-.82
6•210•258	17	11	41	45	-60.47	98.42	-60.65	97.60	-.18	-.82
6•210•293	17	11	42	27	-59.13	93.90	-59.28	93.10	-.15	-.80
6•210•328	17	11	43	9	-57.93	90.70	-58.05	89.92	-.12	-.78
6•210•363	17	11	43	51	-56.36	86.87	-56.45	86.11	-.09	-.76
6•210•398	17	11	44	33	-54.99	84.14	-55.06	83.41	-.07	-.73
6•210•433	17	11	45	15	-53.18	80.91	-53.23	80.22	-.05	-.69
6•210•783	17	11	52	15	-46.67	73.19	-46.65	72.61	.02	-.58
6•210•818	17	11	52	57	-44.72	71.01	-44.68	70.46	.04	-.55
6•210•853	17	11	53	39	-42.22	68.93	-42.16	68.42	.06	-.51
6•210•888	17	11	54	21	-40.22	67.17	-40.15	66.69	.07	-.48
6•210•923	17	11	55	3	-37.81	65.45	-37.72	65.00	.09	-.45
6•210•958	17	11	55	45	-35.90	63.88	-35.80	63.46	.10	-.42
6•210•993	17	11	56	27	-33.54	62.30	-33.43	61.90	.11	-.40
6•211•028	17	11	57	9	-31.61	60.83	-31.49	60.45	.12	-.38
6•211•063	17	11	57	51	-29.18	59.41	-29.05	59.06	.13	-.35
6•211•098	17	11	58	33	-27.15	58.07	-27.01	57.74	.14	-.33
6•211•133	17	11	59	15	-24.67	56.75	-24.52	56.44	.15	-.31
6•211•623	17	12	9	3	-27.86	53.38	-27.67	53.06	.19	-.32
6•211•658	17	12	9	45	-25.27	52.21	-25.07	51.91	.20	-.30
6•212•113	17	12	18	51	55.92	51.17	56.14	51.60	.22	.43
6•212•148	17	12	19	33	*******	*******	*******	*******	*****	******

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
6•244•173	17	23	0	3	-75.37	338.56	-75.79	338.73	-.42	.17
6•244•243	17	23	1	27	-61.75	337.33	-62.18	337.33	-.43	-.00
6•244•313	17	23	2	51	-49.49	336.36	-49.92	336.30	-.43	-.06
6•244•383	17	23	4	15	-38.66	335.32	-39.09	335.23	-.43	-.09
6•244•453	17	23	5	39	-24.06	334.30	-24.49	334.19	-.43	-.11
6•245•538	17	23	27	21	-64.57	335.80	-65.00	335.69	-.43	-.11
6•245•608	17	23	28	45	-66.45	325.96	-66.87	325.57	-.42	-.39
6•245•643	17	23	29	27	-67.40	319.76	-67.81	319.35	-.41	-.41
6•245•678	17	23	30	9	-67.63	315.04	-68.03	314.54	-.40	-.50
6•245•713	17	23	30	51	-68.14	308.44	-68.52	307.81	-.38	-.63
6•246•203	17	23	40	39	-60.56	275.33	-60.75	274.52	-.19	-.81
6•246•238	17	23	41	21	-59.52	271.59	-59.68	270.79	-.16	-.80
6•246•273	17	23	42	3	-58.12	267.13	-58.25	266.35	-.13	-.78
6•246•308	17	23	42	45	-56.87	263.94	-56.98	263.18	-.11	-.76
6•246•343	17	23	43	27	-55.24	260.20	-55.32	259.47	-.08	-.73
6•246•378	17	23	44	9	-53.83	257.54	-53.89	256.83	-.06	-.71
6•246•413	17	23	44	51	-52.06	254.39	-52.09	253.72	-.03	-.67
6•246•763	17	23	51	51	-45.39	247.37	-45.36	246.81	.03	-.56
6•246•798	17	23	52	33	-43.49	245.20	-43.44	244.67	.05	-.53
6•246•833	17	23	53	15	-41.11	243.04	-41.04	242.55	.07	-.49
6•246•868	17	23	53	57	-39.15	241.25	-39.07	240.78	.08	-.47
6•246•903	17	23	54	39	-36.73	239.54	-36.64	239.11	.09	-.43
6•246•938	17	23	55	21	-34.71	238.03	-34.60	237.62	.11	-.41
6•246•973	17	23	56	3	-32.20	236.65	-32.08	236.27	.12	-.38
6•247•008	17	23	56	45	-30.13	235.34	-30.00	234.98	.13	-.36
6•247•043	17	23	57	27	-27.60	234.04	-27.46	233.71	.14	-.33
6•247•078	17	23	58	9	-25.58	232.71	-25.43	232.40	.15	-.31
6•247•113	17	23	58	51	-23.13	231.36	-22.97	231.07	.16	-.29
6•247•918	18	0	14	57	10.67	207.98	11.00	207.91	.33	-.07
6•247•953	18	0	15	39	13.02	206.73	13.35	206.67	.33	-.06
6•247•988	18	0	16	21	14.95	205.10	15.29	205.05	.34	-.05
6•248•023	18	0	17	3	17.42	203.63	17.77	203.59	.35	-.04
6•248•058	18	0	17	45	19.34	201.77	19.70	201.73	.36	-.04

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
6•278•438	18	10	25	20	*******	*******	*******	*******	*****	******
6•280•083	18	10	58	14	-74.78	161.72	-75.19	162.10	-.41	.38
6•280•153	18	10	59	38	-60.79	156.99	-61.21	157.04	-.42	.05
6•280•223	18	11	1	2	-48.52	154.35	-48.94	154.31	-.42	-.04
6•280•293	18	11	2	26	-37.73	152.23	-38.16	152.15	-.43	-.08
6•280•363	18	11	3	50	-23.29	150.38	-23.72	150.28	-.43	-.10
6•281•168	18	11	19	56	-70.18	81.68	-70.35	80.44	-.16	-1.24
6•281•448	18	11	25	32	-60.31	325.03	-59.88	324.98	.43	-.05
6•281•483	18	11	26	14	*******	*******	*******	*******	*****	******
6•281•518	18	11	26	56	*******	*******	*******	*******	*****	******
6•281•553	18	11	27	38	*******	*******	*******	*******	*****	******
6•282•113	18	11	38	50	-61.56	93.33	-61.77	92.51	-.21	-.82
6•282•148	18	11	39	32	-60.57	89.28	-60.75	88.46	-.18	-.82
6•282•183	18	11	40	14	-59.18	84.53	-59.33	83.73	-.15	-.80
6•282•218	18	11	40	56	-57.90	81.27	-58.02	80.49	-.12	-.78
6•282•253	18	11	41	38	-56.27	77.39	-56.37	76.64	-.10	-.75
6•282•288	18	11	42	20	-54.84	74.64	-54.91	73.91	-.07	-.73
6•282•323	18	11	43	2	-53.05	71.37	-53.10	70.68	-.05	-.69
6•282•673	18	11	50	2	-46.74	64.06	-46.72	63.48	.02	-.58
6•282•708	18	11	50	44	-44.89	61.83	-44.84	61.28	.04	-.55
6•282•743	18	11	51	26	-42.51	59.64	-42.46	59.13	.05	-.51
6•282•778	18	11	52	8	-40.62	57.75	-40.55	57.26	.07	-.49
6•282•813	18	11	52	50	-38.23	55.88	-38.15	55.43	.08	-.45
6•282•848	18	11	53	32	-36.23	54.22	-36.13	53.79	.10	-.43
6•282•883	18	11	54	14	-33.77	52.60	-33.66	52.20	.11	-.40
6•282•918	18	11	54	56	-31.74	51.22	-31.62	50.84	.12	-.38
6•282•953	18	11	55	38	-29.26	49.86	-29.13	49.51	.13	-.35
6•282•988	18	11	56	20	-27.20	48.60	-27.06	48.27	.14	-.33
6•283•023	18	11	57	2	-24.68	47.38	-24.54	47.05	.15	-.31
6•283•513	18	12	6	50	.69	53.68	.81	53.56	.12	-.12
6•283•548	18	12	7	32	2.73	52.70	2.86	52.60	.13	-.10
6•284•003	18	12	16	38	45.69	45.54	45.89	45.81	.20	.27

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.316.063	18	22	57	50	-75.18	332.64	-75.60	332.91	-.42	.27
6.316.133	18	22	59	14	-61.41	330.53	-61.83	330.56	-.42	.03
6.316.203	18	23	0	38	-49.50	329.14	-49.93	329.10	-.43	-.04
6.316.273	18	23	2	2	-38.62	327.21	-39.05	327.13	-.43	-.08
6.316.343	18	23	3	26	-23.6F	325.23	-24.08	325.12	-.43	-.11
6.317.428	18	23	25	8	-67.69	9.08	-68.00	9.69	-.31	.61
6.317.498	18	23	26	32	-72.10	359.34	-72.46	359.97	-.36	.63
6.317.533	18	23	27	14	-74.46	352.97	-74.84	353.56	-.38	.59
6.317.5F8	18	23	27	56	-75.66	345.97	-76.07	346.43	-.41	.46
6.317.603	18	23	28	38	-77.47	336.73	-77.89	336.96	-.42	.23
6.318.093	18	23	38	26	-60.71	265.64	-60.90	264.83	-.19	-.81
6.318.128	18	23	39	8	-59.72	261.9X	-59.89	261.16	-.17	-.81
6.318.163	18	23	39	50	-58.30	257.58	-58.43	256.79	-.13	-.79
6.318.198	18	23	40	32	-56.99	254.51	-57.10	253.75	-.11	-.76
6.318.233	18	23	41	14	-55.31	250.85	-55.39	250.12	-.08	-.73
6.318.2F8	18	23	41	56	-53.86	248.28	-53.92	247.57	-.06	-.71
6.318.303	18	23	42	38	-52.02	245.20	-52.0F	244.53	-.04	-.67
6.318.653	18	23	49	38	-45.34	237.85	-45.31	237.29	.03	-.56
6.318.6F8	18	23	50	20	-43.44	235.71	-43.39	235.18	.05	-.53
6.318.723	18	23	51	2	-41.04	233.61	-40.98	233.12	.06	-.49
6.318.7F8	18	23	51	44	-39.14	231.80	-39.06	231.33	.08	-.47
6.318.793	18	23	52	26	-36.74	230.03	-36.65	229.59	.09	-.44
6.318.828	18	23	53	8	-34.74	228.49	-34.63	228.08	.11	-.41
6.318.863	18	23	53	50	-32.28	227.03	-32.16	226.65	.12	-.38
6.318.898	18	23	54	32	-30.24	225.68	-30.11	225.32	.13	-.36
6.318.933	18	23	55	14	-27.77	224.37	-27.63	224.03	.14	-.34
6.318.9F8	18	23	55	56	-25.70	223.12	-25.55	222.80	.15	-.32
6.319.003	18	23	56	38	-23.19	221.92	-23.03	221.63	.16	-.29
6.319.808	19	0	12	44	10.45	206.9F	10.73	206.90	.28	-.06
6.319.843	19	0	13	26	12.87	206.18	13.15	206.13	.28	-.05
6.319.878	19	0	14	8	14.83	205.13	15.12	205.09	.29	-.04
6.319.913	19	0	14	50	17.32	204.24	17.62	204.22	.30	-.02
6.319.948	19	0	15	32	19.33	203.00	19.63	202.99	.30	-.01

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.350.468	19	10	25	56	********	********	********	********	*****	******
6.351.973	19	10	56	2	-74.51	154.61	-74.91	155.05	-.40	.44
6.352.043	19	10	57	26	-60.95	148.84	-61.37	148.92	-.42	.08
6.352.113	19	10	58	50	-48.51	146.30	-48.93	146.28	-.42	-.02
6.352.183	19	11	0	14	-37.43	144.26	-37.86	144.19	-.43	-.07
6.352.253	19	11	1	38	-22.39	142.35	-22.82	142.25	-.43	-.10
6.353.058	19	11	17	44	-86.95	110.41	-87.32	105.83	-.37	-4.58
6.353.338	19	11	23	20	-85.80	164.97	-86.19	167.51	-.39	2.54
6.353.373	19	11	24	2	-87.49	136.97	-87.92	136.04	-.43	-.93
6.353.408	19	11	24	44	-86.9F	101.59	-87.28	95.69	-.32	-5.90
6.353.443	19	11	25	26	-86.14	64.69	-86.22	58.21	-.08	-6.48
6.354.003	19	11	3E	38	-61.4C	83.06	-61.61	82.24	-.21	-.82
6.354.038	19	11	37	20	-60.39	79.06	-60.57	78.25	-.18	-.81
6.354.073	19	11	38	2	-58.99	74.42	-59.14	73.62	-.15	-.80
6.354.108	19	11	38	44	-57.74	71.23	-57.86	70.45	-.12	-.78
6.354.143	19	11	39	26	-56.13	67.44	-56.22	66.69	-.09	-.75
6.354.178	19	11	40	8	-54.73	64.75	-54.80	64.03	-.07	-.72
6.354.213	19	11	40	50	-52.95	61.55	-53.00	60.86	-.05	-.69
6.354.563	19	11	47	50	-46.40	54.14	-46.38	53.57	.02	-.57
6.354.598	19	11	48	32	-44.43	52.07	-44.49	51.53	.04	-.54
6.354.633	19	11	49	14	-42.21	50.02	-42.16	49.51	.05	-.51
6.354.6F8	19	11	49	56	-40.34	48.26	-40.27	47.78	.07	-.48
6.354.703	19	11	50	38	-38.00	46.52	-37.92	46.07	.08	-.45
6.354.738	19	11	51	20	-36.04	44.97	-35.95	44.54	.09	-.43
6.354.773	19	11	52	2	-33.58	43.42	-33.47	43.02	.11	-.40
6.354.808	19	11	52	44	-31.54	41.94	-31.42	41.56	.12	-.38
6.354.843	19	11	53	26	-29.06	40.48	-28.93	40.13	.13	-.35
6.354.878	19	11	54	8	-27.0C	39.11	-26.86	38.78	.14	-.33
6.354.913	19	11	54	50	-24.47	37.77	-24.32	37.47	.15	-.30
6.355.403	19	12	4	38	-2.68	48.63	-2.59	48.49	.09	-.14
6.355.438	19	12	5	20	-.69	47.57	-.58	47.44	.10	-.13
6.355.893	19	12	14	26	40.31	30.46	40.54	30.65	.23	.19

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.387.953	19	22	55	38	-75.20	329.44	-75.60	329.89	-.40	.45
6.388.023	19	22	57	2	-61.77	323.00	-62.19	323.07	-.42	.07
6.388.093	19	22	58	26	-49.28	320.25	-49.70	320.22	-.42	-.03
6.388.163	19	22	59	50	-38.35	318.34	-38.78	318.27	-.43	-.07
6.388.233	19	23	1	14	-25.06	316.83	-25.49	316.73	-.43	-.10
6.389.318	19	23	22	56	-39.87	274.72	-40.19	274.36	-.32	-.36
6.389.388	19	23	24	20	-39.64	269.92	-39.94	269.54	-.30	-.38
6.389.423	19	23	25	2	-39.48	2F8.88	-39.76	266.49	-.28	-.39
6.389.458	19	23	25	44	-38.97	265.07	-39.24	264.67	-.27	-.40
6.389.493	19	23	26	26	-38.50	2F2.08	-38.75	2F1.68	-.25	-.40
6.389.983	19	23	36	14	-60.61	255.81	-60.80	255.00	-.19	-.81
6.390.018	19	23	36	56	-59.48	2F2.2F	-59.64	2F1.46	-.16	-.80
6.390.053	19	23	37	38	-58.02	247.89	-58.15	247.11	-.13	-.78
6.390.088	19	23	38	20	-56.7F	244.83	-56.87	244.07	-.11	-.76
6.390.123	19	23	39	2	-55.12	241.14	-55.20	240.41	-.08	-.73
6.390.158	19	23	39	44	-53.71	238.52	-53.77	237.82	-.06	-.70
6.390.193	19	23	40	26	-51.90	235.43	-51.94	234.76	-.04	-.67
6.390.543	19	23	47	2E	-45.36	228.36	-45.33	227.80	.03	-.56
6.390.578	19	23	48	8	-43.42	226.27	-43.37	225.74	.05	-.53
6.390.613	19	23	48	50	-41.03	224.24	-40.97	223.75	.06	-.49
6.390.648	19	23	49	32	-39.11	222.48	-39.03	222.01	.08	-.47
6.390.6B3	19	23	50	14	-36.71	220.75	-36.62	220.31	.09	-.44
6.390.718	19	23	50	56	-34.75	219.20	-34.65	218.79	.10	-.41
6.390.753	19	23	51	38	-32.29	217.68	-32.17	217.30	.12	-.38
6.390.788	19	23	52	20	-30.25	216.28	-30.12	215.92	.13	-.36
6.390.823	19	23	53	2	-27.7F	214.92	-27.62	214.58	.14	-.34
6.390.858	19	23	53	44	-25.6F	213.64	-25.53	213.32	.15	-.32
6.390.893	19	23	54	2E	-23.17	212.39	-23.01	212.10	.16	-.29
6.391.698	20	0	10	32	19.27	214.44	19.44	214.46	.17	.02
6.391.733	20	0	11	14	22.08	214.14	22.25	214.18	.17	.04
6.391.768	20	0	11	56	24.30	213.35	24.48	213.41	.18	.06
6.391.803	20	0	12	38	27.31	213.14	27.49	213.22	.18	.08
6.391.838	20	0	13	20	29.59	212.53	29.78	212.63	.19	.10

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.423.863	20	10	53	50	-73.64	151.51	-74.02	152.07	-.38	.56
6.423.933	20	10	55	14	-60.41	141.49	-60.82	141.59	-.41	.10
6.424.003	20	10	56	38	-48.51	137.09	-48.93	137.07	-.42	-.02
6.424.073	20	10	58	2	-37.81	134.78	-38.24	134.71	-.43	-.07
6.424.143	20	10	59	26	-23.39	133.20	-23.82	133.10	-.43	-.10
6.424.948	20	1.	15	32	-65.96	124.60	-66.39	124.39	-.43	-.21
6.425.228	20	11	21	8	-63.02	133.78	-63.45	133.70	-.43	-.08
6.425.263	20	11	21	50	-64.43	128.51	-64.86	128.34	-.43	-.17
6.425.298	20	11	22	32	-64.98	124.23	-65.41	123.99	-.43	-.24
6.425.333	20	11	23	14	-66.03	118.52	-66.45	118.18	-.42	-.34
6.425.893	20	11	34	2E	-61.25	73.08	-61.4E	72.26	-.21	-.82
6.425.928	20	11	35	8	-60.28	69.24	-60.46	68.43	-.18	-.81
6.425.963	20	11	35	50	-58.9E	64.69	-59.11	63.89	-.15	-.80
6.425.998	20	11	36	32	-57.76	61.59	-57.88	60.81	-.12	-.78
6.426.033	20	11	37	14	-56.22	57.78	-56.31	57.03	-.09	-.75
6.426.068	20	11	37	56	-54.79	55.11	-54.86	54.39	-.07	-.72
6.426.103	20	11	38	38	-52.99	51.94	-53.04	51.25	-.05	-.69
6.426.453	20	11	45	38	-46.57	44.71	-46.55	44.13	.02	-.58
6.426.488	20	11	46	20	-44.68	42.48	-44.64	41.93	.04	-.55
6.426.523	20	11	47	2	-42.32	40.31	-42.27	39.80	.05	-.51
6.426.558	20	11	47	44	-40.43	38.53	-40.36	38.05	.07	-.48
6.426.593	20	11	48	26	-38.00	36.75	-37.92	36.30	.08	-.45
6.426.628	20	11	49	8	-36.00	35.19	-35.90	34.7E	.10	-.43
6.426.663	20	11	49	50	-33.56	33.65	-33.45	33.25	.11	-.40
6.426.6E8	20	11	50	32	-31.54	32.25	-31.42	31.88	.12	-.37
6.426.733	20	11	51	14	-29.07	30.88	-28.94	30.53	.13	-.35
6.426.768	20	11	51	5E	-27.02	29.60	-26.88	29.27	.14	-.33
6.426.803	20	11	52	38	-24.52	28.33	-24.37	28.03	.15	-.30
6.427.293	20	12	2	26	7.26	19.13	7.49	19.06	.23	-.07
6.427.328	20	12	3	8	9.71	18.16	9.95	18.10	.24	-.06
6.427.783	20	12	12	14	40.82	30.59	40.99	30.81	.17	.22
6.427.818	20	12	12	56	43.94	30.60	44.11	30.86	.17	.26

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 136

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.459.843	20	22	53	26	-75.00	322.96	-75.40	323.49	-.40	.53
6.459.913	20	22	54	50	-61.42	315.37	-61.84	315.46	-.42	.09
6.459.983	20	22	56	14	-49.49	312.43	-49.91	312.41	-.42	-.02
6.460.053	20	22	57	38	-39.11	310.15	-39.54	310.09	-.43	-.06
6.460.123	20	22	59	2	-29.74	308.15	-29.17	308.05	-.43	-.10
6.4E1.208	20	23	20	44	-38.61	274.54	-38.98	274.24	-.37	-.30
6.4E1.278	20	23	22	8	-39.60	269.38	-39.94	269.04	-.34	-.34
6.4E1.313	20	23	22	50	-40.04	266.39	-40.37	266.03	-.33	-.36
6.4E1.348	20	23	23	32	-39.99	264.55	-40.31	264.18	-.32	-.37
6.461.383	20	23	24	14	-40.17	261.53	-40.47	261.15	-.30	-.38
6.4E1.873	20	23	34	2	-60.49	245.99	-60.68	245.18	-.19	-.81
6.4E1.908	20	23	34	44	-59.30	242.31	-59.46	241.51	-.16	-.80
6.4E1.943	20	23	35	26	-57.76	237.98	-57.89	237.21	-.13	-.77
6.4E1.978	20	23	36	8	-56.39	234.97	-56.50	234.22	-.11	-.75
6.4E2.013	20	23	36	50	-54.72	231.43	-54.80	230.71	-.08	-.72
6.4E2.048	20	23	37	32	-53.30	228.89	-53.36	228.20	-.06	-.69
6.462.083	20	23	38	14	-51.51	225.83	-51.55	225.17	-.04	-.66
6.462.433	20	23	45	14	-45.08	218.74	-45.05	218.19	.03	-.55
6.4E2.468	20	23	45	56	-43.10	216.67	-43.05	216.15	.05	-.52
6.4E2.503	20	23	46	38	-40.68	214.65	-40.62	214.16	.06	-.49
6.4E2.538	20	23	47	20	-38.73	212.90	-38.65	212.44	.08	-.46
6.4E2.573	20	23	48	2	-36.36	211.20	-36.27	210.77	.09	-.43
6.4E2.608	20	23	48	44	-34.44	209.69	-34.34	209.28	.10	-.41
6.4E2.643	20	23	49	26	-31.99	208.19	-31.88	207.81	.11	-.38
6.4E2.678	20	23	50	8	-29.99	206.82	-29.86	206.46	.13	-.36
6.4E2.713	20	23	50	50	-27.53	205.47	-27.39	205.14	.14	-.33
6.462.748	20	23	51	32	-25.50	204.21	-25.35	203.90	.15	-.31
6.462.783	20	23	52	14	-22.98	202.97	-22.82	202.68	.16	-.29
6.463.588	21	0	8	20	35.95	186.78	36.23	186.90	.28	.12
6.463.623	21	0	9	2	41.17	184.89	41.46	185.05	.29	.16
6.463.658	21	0	9	44	45.30	182.75	45.61	182.94	.31	.19
6.463.693	21	0	10	26	53.57	179.21	53.90	179.47	.33	.26
6.463.728	21	0	11	8	*******	*******	*******	*******	*****	******

rev 137

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.495.753	21	10	51	38	-73.16	145.11	-73.53	145.72	-.37	.61
6.495.823	21	10	53	2	-60.19	134.60	-60.60	134.73	-.41	.13
6.495.893	21	10	54	26	-48.43	129.71	-48.85	129.71	-.42	-.00
6.495.963	21	10	55	50	-37.71	126.56	-38.13	126.50	-.42	-.06
6.496.033	21	10	57	14	-22.84	124.30	-23.27	124.20	-.43	-.10
6.496.838	21	11	13	20	-80.46	150.42	-80.83	151.65	-.37	1.23
6.497.118	21	11	18	56	-79.79	148.71	-80.17	149.73	-.38	1.02
6.497.153	21	11	19	38	-81.72	138.34	-82.13	139.12	-.41	.78
6.497.188	21	11	20	20	-80.19	147.44	-80.58	148.44	-.39	1.00
6.497.223	21	11	21	2	-82.18	138.26	-82.59	139.07	-.41	.81
6.497.783	21	11	32	14	-60.99	63.78	-61.20	62.97	-.21	-.81
6.497.818	21	11	32	56	-60.03	59.90	-60.21	59.10	-.18	-.80
6.497.853	21	11	33	38	-58.76	55.34	-58.91	54.55	-.15	-.79
6.497.888	21	11	34	20	-57.69	52.29	-57.81	51.51	-.12	-.78
6.497.923	21	11	35	2	-56.10	48.43	-56.20	47.68	-.10	-.75
6.497.958	21	11	35	44	-54.69	45.76	-54.76	45.04	-.07	-.72
6.497.993	21	11	36	26	-52.92	42.55	-52.97	41.86	-.05	-.69
6.498.343	21	11	43	26	-46.60	35.51	-46.58	34.93	.02	-.58
6.498.378	21	11	44	8	-44.76	33.24	-44.73	32.69	.03	-.55
6.498.413	21	11	44	50	-42.34	31.02	-42.29	30.51	.05	-.51
6.498.448	21	11	45	32	-40.30	29.23	-40.23	28.75	.07	-.48
6.498.483	21	11	46	14	-37.78	27.48	-37.70	27.03	.08	-.45
6.498.518	21	11	46	56	-35.74	25.94	-35.65	25.52	.09	-.42
6.498.553	21	11	47	38	-33.32	24.42	-33.21	24.02	.11	-.40
6.498.588	21	11	48	20	-31.33	23.00	-31.21	22.63	.12	-.37
6.498.623	21	11	49	2	-28.93	21.56	-28.80	21.21	.13	-.35
6.498.658	21	11	49	44	-26.93	20.25	-26.79	19.92	.14	-.33
6.498.693	21	11	50	26	-24.45	18.93	-24.30	18.63	.15	-.30
6.499.103	21	12	0	14	.34	.35	.62	.23	.28	-.12
6.499.218	21	12	0	56	2.53	358.99	2.82	358.88	.29	-.11
6.499.673	21	12	10	2	-5.93	1.95	-5.64	1.80	.29	-.15
6.499.708	21	12	10	44	-4.03	.77	-3.73	.63	.30	-.14

rev 138

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.531.733	21	22	51	13	-74.08	317.84	-74.46	318.44	-.38	.60
6.531.803	21	22	52	37	-61.09	308.00	-61.50	308.12	-.41	.12
6.531.873	21	22	54	1	-49.32	304.24	-49.74	304.24	-.42	-.00
6.531.943	21	22	55	25	-38.42	301.93	-38.84	301.87	-.42	-.06
6.532.013	21	22	56	49	-23.87	299.97	-24.30	299.88	-.43	-.09
6.533.098	21	23	18	31	-38.38	275.24	-38.78	274.99	-.40	-.25
6.533.168	21	23	19	55	-39.80	270.28	-40.18	270.00	-.38	-.28
6.533.203	21	23	20	37	-40.75	267.06	-41.12	266.75	-.37	-.31
6.533.238	21	23	21	19	-41.11	264.90	-41.47	264.57	-.36	-.33
6.533.273	21	23	22	1	-41.83	261.65	-42.18	261.30	-.35	-.35
6.533.763	21	23	31	49	-60.76	236.79	-60.95	235.98	-.19	-.81
6.533.798	21	23	32	31	-59.56	233.11	-59.73	232.31	-.17	-.80
6.533.833	21	23	33	13	-58.05	228.72	-58.18	227.94	-.13	-.78
6.533.868	21	23	33	55	-56.75	225.73	-56.86	224.97	-.11	-.76
6.533.903	21	23	34	37	-55.13	222.16	-55.21	221.43	-.08	-.73
6.533.938	21	23	35	19	-53.73	219.58	-53.79	218.88	-.06	-.70
6.533.973	21	23	36	1	-51.96	216.47	-52.00	215.80	-.04	-.67
6.534.323	21	23	43	1	-45.36	209.35	-45.33	208.79	.03	-.56
6.534.358	21	23	43	43	-43.38	207.26	-43.32	206.73	.04	-.53
6.534.393	21	23	44	25	-40.88	205.21	-40.82	204.72	.06	-.49
6.534.428	21	23	45	7	-38.84	203.44	-38.77	202.98	.07	-.46
6.534.463	21	23	45	49	-36.34	201.70	-36.25	201.27	.09	-.43
6.534.498	21	23	46	31	-34.34	200.17	-34.24	199.76	.10	-.41
6.534.533	21	23	47	13	-31.92	198.67	-31.81	198.29	.11	-.38
6.534.568	21	23	47	55	-29.91	197.29	-29.79	196.93	.12	-.36
6.534.603	21	23	48	37	-27.45	195.94	-27.31	195.61	.14	-.33
6.534.638	21	23	49	19	-25.42	194.68	-25.27	194.37	.15	-.31
6.534.673	21	23	50	1	-22.93	193.43	-22.77	193.14	.16	-.29
6.535.478	22	0	6	7	32.09	186.24	32.32	186.35	.23	.11
6.535.513	22	0	6	49	36.20	185.58	36.43	185.73	.23	.15
6.535.548	22	0	7	31	39.48	184.63	39.72	184.80	.24	.17
6.535.583	22	0	8	13	44.85	184.39	45.09	184.62	.24	.23
6.535.618	22	0	8	55	49.25	183.70	49.50	183.99	.25	.29

rev 139

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.568.728	22	11	11	7	-77.42	91.78	-77.83	91.02	-.41	-.76
6.568.973	22	11	16	1	*******	*******	*******	*******	*****	******
6.569.043	22	11	17	25	*******	*******	*******	*******	*****	******
6.569.078	22	11	18	7	*******	*******	*******	*******	*****	******
6.569.638	22	11	29	19	-57.61	40.69	-57.73	39.91	-.12	-.78
6.569.918	22	11	34	55	-53.62	30.23	-53.65	29.52	-.03	-.71
6.570.723	22	11	51	1	-24.82	10.08	-24.67	9.77	.15	-.31
6.570.758	22	11	51	43	-22.58	8.88	-22.42	8.59	.16	-.29
6.570.793	22	11	52	25	-19.96	7.87	-19.79	7.60	.17	-.27
6.570.828	22	11	53	7	-17.86	6.82	-17.69	6.57	.17	-.25
6.570.863	22	11	53	49	-15.41	5.90	-15.23	5.67	.18	-.23
6.570.898	22	11	54	31	-13.37	4.81	-13.18	4.60	.19	-.21
6.570.933	22	11	55	13	-10.89	3.84	-10.69	3.65	.20	-.19
6.570.968	22	11	55	55	-8.82	2.76	-8.61	2.58	.21	-.18
6.571.003	22	11	56	37	-6.31	1.80	-6.10	1.64	.21	-.16
6.571.038	22	11	57	19	-4.22	.73	-4.00	.58	.22	-.15
6.571.318	22	12	2	55	-3.64	2.02	-3.42	1.88	.22	-.14
6.571.353	22	12	3	37	-1.23	1.11	-1.00	.98	.23	-.13
6.571.388	22	12	4	19	.78	359.96	1.02	359.84	.24	-.12
6.571.423	22	12	5	1	3.26	359.17	3.50	359.07	.24	-.10
6.571.458	22	12	5	43	5.23	358.16	5.48	358.07	.25	-.09
6.571.493	22	12	6	25	7.62	357.49	7.88	357.42	.26	-.07
6.571.528	22	12	7	7	9.50	356.53	9.76	356.47	.26	-.06
6.571.563	22	12	7	49	11.87	355.86	12.14	355.81	.27	-.05
6.571.598	22	12	8	31	13.68	354.85	13.95	354.81	.27	-.04
6.571.633	22	12	9	13	15.96	354.13	16.24	354.10	.28	-.03
6.571.843	22	12	13	25	6.68	351.01	6.98	350.93	.30	-.08
6.571.913	22	12	14	49	15.41	350.76	15.72	350.72	.31	-.04
6.571.948	22	12	15	31	17.12	349.62	17.43	349.59	.31	-.03
6.571.983	22	12	16	13	23.19	350.38	23.50	350.39	.31	.01
6.572.123	22	12	19	1	45.17	353.43	45.47	353.63	.30	.20
6.572.158	22	12	19	43	43.99	350.68	44.30	350.85	.31	.17

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 140

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.604.708	22	23	10	43	-80.05	244.91	-80.38	243.12	-.32	-1.79
6.604.953	22	23	15	37	-56.35	303.50	-56.76	303.57	-.41	.07
6.605.023	22	23	17	1	-43.02	310.13	-43.42	310.17	-.40	.04
6.605.058	22	23	17	43	-45.64	306.72	-46.05	306.75	-.41	.03
6.605.618	22	23	28	55	-57.41	216.24	-57.53	215.47	-.12	-.77
6.605.898	22	23	34	31	-44.09	196.38	-44.05	195.84	.04	-.54
6.606.703	22	23	50	37	-23.65	184.96	-23.50	184.66	.15	-.30
6.606.738	22	23	51	19	-21.43	183.84	-21.27	183.56	.16	-.28
6.606.773	22	23	52	1	-18.83	182.90	-18.66	182.64	.17	-.26
6.606.808	22	23	52	43	-16.78	181.86	-16.60	181.62	.18	-.24
6.606.843	22	23	53	25	-14.31	180.85	-14.13	180.63	.18	-.22
6.606.878	22	23	54	7	-12.28	179.69	-12.09	179.49	.19	-.20
6.606.913	22	23	54	49	-9.82	178.67	-9.62	178.48	.20	-.19
6.606.948	22	23	55	31	-7.76	177.55	-7.55	177.38	.21	-.17
6.606.983	22	23	56	13	-5.22	176.59	-5.00	176.44	.22	-.15
6.607.018	22	23	56	55	-3.09	175.61	-2.87	175.47	.22	-.14
6.607.298	23	0	2	31	-2.60	177.21	-2.38	177.07	.22	-.14
6.607.333	23	0	3	13	-.10	176.36	.13	176.24	.23	-.12
6.607.368	23	0	3	55	1.87	175.23	2.11	175.12	.24	-.11
6.607.403	23	0	4	37	4.31	174.40	4.55	174.31	.24	-.09
6.607.438	23	0	5	19	6.25	173.35	6.50	173.27	.25	-.08
6.607.473	23	0	6	1	8.63	172.62	8.89	172.55	.26	-.07
6.607.508	23	0	6	43	10.49	171.65	10.75	171.59	.26	-.06
6.607.543	23	0	7	25	12.76	170.95	13.03	170.91	.27	-.04
6.607.578	23	0	8	7	14.48	169.90	14.76	169.87	.28	-.03
6.607.613	23	0	8	49	16.73	169.17	17.01	169.15	.28	-.02
6.607.823	23	0	13	1	8.02	165.98	8.32	165.90	.30	-.08
6.607.893	23	0	14	25	16.47	165.60	16.78	165.57	.31	-.03
6.607.928	23	0	15	7	18.11	164.42	18.43	164.40	.32	-.02
6.607.963	23	0	15	49	24.37	165.20	24.68	165.21	.31	.01
6.608.103	23	0	18	37	43.59	166.91	43.90	167.08	.31	.17
6.608.138	23	0	19	19	45.23	165.64	45.54	165.82	.31	.18

rev 141

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.640.128	23	10	59	7	-7.46	122.72	-7.85	122.62	-.39	-.10
6.640.163	23	10	59	49	-14.35	120.62	-14.75	120.54	-.40	-.08
6.640.688	23	11	10	19	-74.90	68.32	-75.26	67.31	-.36	-1.01
6.640.933	23	11	15	13	-80.57	86.84	-80.92	85.15	-.35	-1.69
6.641.003	23	11	16	37	-86.03	139.20	-86.37	143.13	-.34	3.93
6.641.038	23	11	17	19	-87.01	110.89	-87.44	112.12	-.43	1.23
6.641.598	23	11	28	31	-61.63	31.20	-61.74	30.31	-.11	-.89
6.641.878	23	11	34	7	-61.37	31.00	-61.47	30.11	-.10	-.89
6.642.683	23	11	50	13	-22.76	359.95	-22.61	359.66	.15	-.29
6.642.718	23	11	50	55	-20.59	358.67	-20.43	358.40	.16	-.27
6.642.753	23	11	51	37	-17.99	357.59	-17.82	357.34	.17	-.25
6.642.788	23	11	52	19	-15.82	356.47	-15.64	356.24	.18	-.23
6.642.823	23	11	53	1	-13.24	355.51	-13.05	355.30	.19	-.21
6.642.858	23	11	53	43	-11.15	354.44	-10.95	354.24	.20	-.20
6.642.893	23	11	54	25	-8.67	353.53	-8.47	353.35	.20	-.18
6.642.928	23	11	55	7	-6.60	352.50	-6.39	352.34	.21	-.16
6.642.963	23	11	55	49	-4.10	351.61	-3.88	351.46	.22	-.15
6.642.998	23	11	56	31	-2.03	350.58	-1.80	350.45	.23	-.13
6.643.278	23	12	2	7	-1.82	352.06	-1.59	351.93	.23	-.13
6.643.313	23	12	2	49	.69	351.23	.92	351.11	.23	-.12
6.643.348	23	12	3	31	2.68	350.14	2.92	350.04	.24	-.10
6.643.383	23	12	4	13	5.14	349.32	5.39	349.23	.25	-.09
6.643.418	23	12	4	55	7.10	348.29	7.35	348.21	.25	-.08
6.643.453	23	12	5	37	9.51	347.56	9.77	347.50	.26	-.06
6.643.488	23	12	6	19	11.34	346.52	11.61	346.47	.27	-.05
6.643.523	23	12	7	1	13.61	345.80	13.88	345.76	.27	-.04
6.643.558	23	12	7	43	15.38	344.74	15.64	344.71	.28	-.03
6.643.593	23	12	8	25	17.63	344.00	17.91	343.98	.28	-.02
6.643.803	23	12	12	37	8.94	340.95	9.25	340.88	.31	-.07
6.643.873	23	12	14	1	17.59	340.73	17.90	340.70	.31	-.03
6.643.908	23	12	14	43	19.22	339.55	19.54	339.53	.32	-.02
6.643.943	23	12	15	25	25.26	340.29	25.57	340.31	.31	.02

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.676.808	23	23	12	43	-77.65	305.62	-78.03	306.47	-.38	.85
6.676.843	23	23	13	25	-79.46	297.38	-79.86	298.09	-.40	.71
6.676.878	23	23	14	7	-78.46	300.88	-78.85	301.63	-.39	.75
6.676.948	23	23	15	31	-77.55	296.06	-77.96	296.57	-.41	.51
6.677.508	23	23	26	43	-56.10	203.73	-56.20	202.98	-.10	-.75
6.677.788	23	23	32	19	-34.63	187.69	-34.60	187.27	.03	-.42
6.678.593	23	23	48	25	-25.18	176.79	-25.04	176.48	.14	-.31
6.678.628	23	23	49	7	-23.05	175.47	-22.90	175.18	.15	-.29
6.678.663	23	23	49	49	-20.49	174.30	-20.33	174.03	.16	-.27
6.678.698	23	23	50	31	-18.42	173.09	-18.25	172.84	.17	-.25
6.678.733	23	23	51	13	-15.90	172.02	-15.72	171.79	.18	-.23
6.678.768	23	23	51	55	-13.82	170.87	-13.64	170.65	.19	-.22
6.678.803	23	23	52	37	-11.33	169.85	-11.13	169.65	.20	-.20
6.678.838	23	23	53	19	-9.16	168.86	-8.96	168.68	.20	-.18
6.678.873	23	23	54	1	-6.55	167.98	-6.34	167.82	.21	-.16
6.678.908	23	23	54	43	-4.37	167.00	-4.15	166.85	.22	-.15
6.679.188	24	0	0	19	-3.82	168.43	-3.60	168.28	.22	-.15
6.679.223	24	0	1	1	-1.28	167.54	-1.06	167.41	.22	-.13
6.679.258	24	0	1	43	.72	166.40	.95	166.28	.23	-.12
6.679.293	24	0	2	25	3.15	165.54	3.39	165.44	.24	-.10
6.679.328	24	0	3	7	5.06	164.50	5.31	164.41	.25	-.09
6.679.363	24	0	3	49	7.42	163.81	7.67	163.74	.25	-.07
6.679.398	24	0	4	31	9.26	162.80	9.52	162.74	.26	-.06
6.679.433	24	0	5	13	11.57	162.08	11.83	162.03	.26	-.05
6.679.468	24	0	5	55	13.39	161.05	13.66	161.01	.27	-.04
6.679.503	24	0	6	37	15.73	160.32	16.01	160.29	.28	-.03
6.679.713	24	0	10	49	5.67	158.06	5.97	157.97	.30	-.09
6.679.783	24	0	12	13	14.52	157.96	14.82	157.92	.30	-.04
6.679.818	24	0	12	55	16.25	156.80	16.55	156.77	.30	-.03
6.679.853	24	0	13	37	22.32	157.54	22.62	157.55	.30	.01
6.679.993	24	0	16	25	36.81	156.63	37.12	156.73	.31	.10
6.680.028	24	0	17	7	38.47	155.41	38.72	155.52	.32	.11

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.714.608	24	11	48	43	-22.57	350.67	-22.42	350.38	.15	-.29
6.714.643	24	11	49	25	-20.08	349.48	-19.92	349.21	.16	-.27
6.714.678	24	11	50	7	-17.98	348.22	-17.81	347.97	.17	-.25
6.714.713	24	11	50	49	-15.45	347.11	-15.27	346.88	.18	-.23
6.714.748	24	11	51	31	-13.28	346.02	-13.09	345.81	.19	-.21
6.714.783	24	11	52	13	-10.66	345.07	-10.46	344.88	.20	-.19
6.714.818	24	11	52	55	-8.53	344.03	-8.33	343.85	.20	-.18
6.714.853	24	11	53	37	-5.99	343.14	-5.78	342.98	.21	-.16
6.714.888	24	11	54	19	-3.90	342.13	-3.68	341.98	.22	-.15
6.715.168	24	11	59	55	-3.67	343.53	-3.45	343.39	.22	-.14
6.715.203	24	12	0	37	-1.13	342.66	-.90	342.53	.23	-.13
6.715.238	24	12	1	19	.89	341.52	1.12	341.41	.23	-.11
6.715.273	24	12	2	1	3.37	340.77	3.61	340.67	.24	-.10
6.715.308	24	12	2	43	5.34	339.75	5.59	339.66	.25	-.09
6.715.343	24	12	3	25	7.77	339.03	8.02	338.96	.25	-.07
6.715.448	24	12	5	31	13.67	336.27	13.94	336.23	.27	-.04
6.715.483	24	12	6	13	15.93	335.54	16.21	335.51	.28	-.03
6.715.693	24	12	10	25	6.29	333.24	6.59	333.15	.30	-.09
6.715.763	24	12	11	49	14.92	333.05	15.22	333.01	.30	-.04
6.715.798	24	12	12	31	16.59	331.97	16.90	331.94	.31	-.03
6.715.833	24	12	13	13	22.81	332.89	23.11	332.90	.30	.01
6.715.973	24	12	16	1	37.61	332.49	37.92	332.60	.31	.11

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.748.768	24	23	11	55	-73.07	227.29	-73.40	226.23	-.33	-1.06
6.748.803	24	23	12	37	-72.77	219.26	-73.05	218.08	-.28	-1.18
6.748.838	24	23	13	19	-73.19	228.86	-73.52	227.82	-.33	-1.04
6.748.908	24	23	14	43	-73.69	227.17	-74.01	226.06	-.32	-1.11
6.749.468	24	23	25	55	-58.00	199.81	-58.13	199.03	-.13	-.78
6.749.748	24	23	31	31	-58.24	200.53	-58.37	199.74	-.13	-.79
6.750.553	24	23	47	37	-24.34	167.22	-24.20	166.92	.14	-.30
6.750.588	24	23	48	19	-22.23	165.95	-22.08	165.66	.15	-.29
6.750.623	24	23	49	1	-19.87	164.80	-19.51	164.54	.16	-.26
6.750.658	24	23	49	43	-17.53	163.59	-17.36	163.34	.17	-.25
6.750.693	24	23	50	25	-14.95	162.53	-14.77	162.31	.18	-.22
6.750.728	24	23	51	7	-12.82	161.37	-12.63	161.16	.19	-.21
6.750.763	24	23	51	49	-10.31	160.36	-10.11	160.17	.20	-.19
6.750.798	24	23	52	31	-8.20	159.26	-7.99	159.09	.21	-.17
6.750.833	24	23	53	13	-5.66	158.35	-5.45	158.19	.21	-.16
6.750.868	24	23	53	55	-3.55	157.34	-3.33	157.20	.22	-.14
6.751.148	24	23	59	31	-3.20	158.78	-2.98	158.64	.22	-.14
6.751.183	25	0	0	13	-.73	157.89	-.50	157.76	.23	-.13
6.751.218	25	0	0	55	1.22	156.74	1.46	156.63	.24	-.11
6.751.253	25	0	1	37	3.65	155.90	3.89	155.80	.24	-.10
6.751.288	25	0	2	19	5.56	154.88	5.81	154.79	.25	-.09
6.751.323	25	0	3	1	7.92	154.20	8.17	154.13	.25	-.07
6.751.358	25	0	3	43	9.77	153.23	10.03	153.17	.26	-.06
6.751.393	25	0	4	25	12.09	152.56	12.36	152.51	.27	-.05
6.751.428	25	0	5	7	13.91	151.57	14.18	151.53	.27	-.04
6.751.463	25	0	5	49	16.21	150.86	16.49	150.84	.28	-.02
6.751.673	25	0	10	1	6.45	148.69	6.75	148.61	.30	-.08
6.751.743	25	0	11	25	15.25	148.60	15.55	148.56	.30	-.04
6.751.778	25	0	12	7	16.93	147.55	17.23	147.52	.30	-.03
6.751.813	25	0	12	49	22.98	148.43	23.28	148.44	.30	.01
6.751.953	25	0	15	37	60.34	167.38	60.53	167.94	.19	.56
6.751.988	25	0	16	19	59.95	162.83	60.17	163.35	.22	.52

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.781.038	25	9	57	19	*******	*******	*******	*******	*****	******
6.784.538	25	11	7	18	-86.62	48.28	-86.97	43.62	-.35	-4.66
6.784.783	25	11	12	12	-88.29	100.76	-88.70	106.31	-.41	5.55
6.784.818	25	11	12	54	-88.25	89.56	-88.68	91.40	-.43	1.84
6.784.888	25	11	14	18	-88.36	49.82	-88.69	39.04	-.33	-10.78
6.785.448	25	11	25	30	-59.47	14.43	-59.60	13.61	-.13	-.82
6.785.728	25	11	31	6	-49.36	358.09	-49.36	357.47	.00	-.62
6.786.533	25	11	47	12	-24.33	342.33	-24.19	342.03	.14	-.30
6.786.568	25	11	47	54	-22.14	341.28	-21.99	341.00	.15	-.28
6.786.603	25	11	48	36	-19.59	340.25	-19.43	339.99	.16	-.26
6.786.638	25	11	49	18	-17.51	339.06	-17.34	338.81	.17	-.25
6.786.673	25	11	50	0	-15.05	338.01	-14.87	337.78	.18	-.23
6.786.708	25	11	50	42	-12.97	336.87	-12.78	336.66	.19	-.21
6.786.743	25	11	51	24	-10.41	335.83	-10.21	335.64	.20	-.19
6.786.778	25	11	52	6	-8.28	334.69	-8.07	334.51	.21	-.18
6.786.813	25	11	52	48	-5.70	333.74	-5.49	333.58	.21	-.16
6.786.848	25	11	53	30	-3.61	332.73	-3.39	332.59	.22	-.14
6.787.128	25	11	59	6	-3.32	334.27	-3.10	334.13	.22	-.14
6.787.163	25	11	59	48	-.81	333.41	-.58	333.28	.23	-.13
6.787.198	25	12	0	30	1.14	332.28	1.37	332.17	.23	-.11
6.787.233	25	12	1	12	3.58	331.45	3.82	331.35	.24	-.10
6.787.268	25	12	1	54	5.52	330.39	5.77	330.30	.25	-.09
6.787.303	25	12	2	36	7.91	329.65	8.16	329.58	.25	-.07
6.787.338	25	12	3	18	9.80	328.63	10.06	328.57	.26	-.06
6.787.373	25	12	4	0	12.13	327.92	12.40	327.87	.27	-.05
6.787.408	25	12	4	42	13.99	326.90	14.26	326.86	.27	-.04
6.787.443	25	12	5	24	16.25	326.16	16.53	326.14	.28	-.02
6.787.653	25	12	9	36	6.32	324.49	6.61	324.40	.29	-.09
6.787.723	25	12	11	0	15.15	324.34	15.45	324.30	.30	-.04
6.787.758	25	12	11	42	16.89	323.21	17.19	323.18	.30	-.03
6.787.793	25	12	12	24	23.08	324.05	23.36	324.06	.30	.01
6.787.933	25	12	15	12	60.02	341.92	60.21	342.47	.19	.55

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.820.728	25	23	11	6	-62.27	257.28	-62.70	257.14	-.43	-.14
6.820.763	25	23	11	48	-63.40	252.55	-63.83	252.34	-.43	-.21
6.820.798	25	23	12	30	-61.72	254.58	-62.15	254.40	-.43	-.18
6.820.868	25	23	13	54	-61.93	254.81	-62.36	254.63	-.43	-.18
6.821.428	25	23	25	6	-59.86	196.74	-60.04	195.94	-.18	-.80
6.821.708	25	23	30	42	-59.85	196.88	-60.02	196.07	-.17	-.81
6.822.513	25	23	46	48	-24.56	158.06	-24.36	157.75	.14	-.31
6.822.548	25	23	47	30	-22.41	156.66	-22.26	156.37	.15	-.29
6.822.583	25	23	48	12	-19.91	155.42	-19.75	155.16	.16	-.26
6.822.618	25	23	48	54	-17.80	154.25	-17.63	154.00	.17	-.25
6.822.653	25	23	49	36	-15.21	153.30	-15.03	153.07	.18	-.23
6.822.688	25	23	50	18	-13.05	152.27	-12.86	152.06	.19	-.21
6.822.723	25	23	51	0	-10.45	151.38	-10.25	151.19	.20	-.19
6.822.758	25	23	51	42	-8.32	150.35	-8.12	150.17	.20	-.18
6.822.793	25	23	52	24	-5.74	149.39	-5.53	149.23	.21	-.16
6.822.828	25	23	53	6	-3.62	148.32	-3.40	148.18	.22	-.14
6.823.108	25	23	58	42	-3.30	149.67	-3.08	149.53	.22	-.14
6.823.143	25	23	59	24	-.85	148.79	-.62	148.65	.23	-.13
6.823.178	26	0	0	6	1.11	147.63	1.34	147.52	.23	-.11
6.823.213	26	0	0	48	3.55	146.82	3.79	146.72	.24	-.10
6.823.248	26	0	1	30	5.50	145.81	5.75	145.72	.25	-.09
6.823.283	26	0	2	12	7.92	145.10	8.17	145.03	.25	-.07
6.823.318	26	0	2	54	9.81	144.13	10.07	144.07	.26	-.06
6.823.353	26	0	3	36	12.16	143.47	12.42	143.42	.26	-.05
6.823.388	26	0	4	18	14.03	142.49	14.30	142.45	.27	-.04
6.823.423	26	0	5	0	16.30	141.77	16.58	141.75	.28	-.02
6.823.633	26	0	9	12	6.40	140.25	6.69	140.17	.29	-.08
6.823.703	26	0	10	36	14.86	139.90	15.15	139.86	.29	-.04
6.823.738	26	0	11	18	16.59	138.76	16.88	138.73	.30	-.03
6.823.773	26	0	12	0	22.84	139.62	23.14	139.63	.30	.01
6.823.913	26	0	14	48	21.04	132.88	21.38	132.86	.34	-.02
6.823.948	26	0	15	30	22.36	131.70	22.70	131.69	.34	-.01
6.823.983	26	0	16	12	24.42	130.84	24.77	130.84	.35	-.00

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
6.856.498	26	11	6	30	-67.08	83.69	-67.50	83.76	-.42	.07
6.856.743	26	11	11	24	-53.05	40.82	-53.41	40.38	-.36	-.44
6.856.778	26	11	12	6	-57.48	41.36	-57.84	40.87	-.36	-.49
6.856.848	26	11	13	30	-56.85	40.42	-57.21	39.92	-.36	-.50
6.857.408	26	11	24	42	-58.65	358.93	-58.73	358.11	-.08	-.82
6.857.688	26	11	30	18	-49.86	356.90	-49.92	356.27	-.06	-.63
6.858.493	26	11	46	24	-24.84	333.71	-24.70	333.40	.14	-.31
6.858.528	26	11	47	6	-22.74	332.42	-22.59	332.13	.15	-.29
6.858.563	26	11	47	48	-20.21	331.22	-20.05	330.95	.16	-.27
6.858.598	26	11	48	30	-18.13	329.95	-17.98	329.70	.17	-.25
6.858.633	26	11	49	12	-15.60	328.86	-15.42	328.63	.18	-.23
6.858.668	26	11	49	54	-13.49	327.81	-13.30	327.60	.19	-.21
6.858.703	26	11	50	36	-10.92	326.89	-10.73	326.70	.19	-.19
6.858.738	26	11	51	18	-8.78	325.87	-8.58	325.69	.20	-.18
6.858.773	26	11	52	0	-6.23	324.97	-6.02	324.81	.21	-.16
6.858.808	26	11	52	42	-4.10	323.96	-3.88	323.81	.22	-.15
6.859.088	26	11	58	18	-3.73	325.33	-3.51	325.19	.22	-.14
6.859.123	26	11	59	0	-1.20	324.47	-.98	324.34	.22	-.13
6.859.158	26	11	59	42	.81	323.34	1.04	323.22	.23	-.12
6.859.193	26	12	0	24	3.28	322.50	3.52	322.40	.24	-.10
6.859.228	26	12	1	6	5.24	321.44	5.49	321.35	.25	-.09
6.859.263	26	12	1	48	7.63	320.76	7.88	320.69	.25	-.07
6.859.298	26	12	2	30	9.52	319.78	9.78	319.72	.26	-.06
6.859.333	26	12	3	12	11.82	319.07	12.08	319.02	.26	-.05
6.859.368	26	12	3	54	13.60	318.03	13.87	317.99	.27	-.04
6.859.403	26	12	4	36	15.88	317.28	16.16	317.25	.28	-.03
6.859.613	26	12	8	48	5.73	316.19	6.02	316.10	.29	-.09
6.859.683	26	12	10	12	14.23	315.99	14.52	315.95	.29	-.04
6.859.718	26	12	10	54	15.97	314.93	16.27	314.90	.30	-.03
6.859.753	26	12	11	36	22.25	315.85	22.54	315.86	.29	.01
6.859.893	26	12	14	24	67.37	355.81	67.39	356.72	.02	.91
6.859.928	26	12	15	6	71.27	8.90	71.20	10.03	-.07	1.13

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 148										
6.892.688	26	23	10	18	-69.14	227.98	-69.54	227.44	-.40	-.54
6.892.723	26	23	11	0	-69.61	221.70	-69.99	221.03	-.38	-.67
6.892.758	26	23	11	42	-68.60	224.97	-68.99	224.38	-.39	-.59
6.892.828	26	23	13	6	-69.65	225.78	-70.04	225.17	-.39	-.61
6.893.388	26	23	24	18	-51.26	168.79	-51.30	168.13	-.04	-.66
6.893.668	26	23	29	54	-45.49	158.30	-45.45	157.74	.04	-.56
6.894.473	26	23	46	0	-25.39	149.57	-25.25	149.26	.14	-.31
6.894.508	26	23	46	42	-23.37	148.28	-23.22	147.98	.15	-.30
6.894.543	26	23	47	24	-20.90	147.00	-20.74	146.73	.16	-.27
6.894.578	26	23	48	6	-18.73	145.66	-18.56	145.40	.17	-.26
6.894.613	26	23	48	48	-16.14	144.61	-15.96	144.38	.18	-.23
6.894.648	26	23	49	30	-13.95	143.58	-13.77	143.36	.18	-.22
6.894.683	26	23	50	12	-11.33	142.69	-11.14	142.49	.19	-.20
6.894.718	26	23	50	54	-9.17	141.72	-8.97	141.54	.20	-.18
6.894.753	26	23	51	36	-6.65	140.81	-6.44	140.65	.21	-.16
6.894.788	26	23	52	18	-4.56	139.73	-4.35	139.58	.21	-.15
6.895.068	26	23	57	54	-4.21	140.85	-3.99	140.70	.22	-.15
6.895.103	26	23	58	36	-1.67	139.99	-1.45	139.86	.22	-.13
6.895.138	26	23	59	18	.34	138.85	.57	138.73	.23	-.12
6.895.173	27	0	0	0	2.82	138.03	3.06	137.93	.24	-.10
6.895.208	27	0	0	42	4.81	137.02	5.05	136.93	.24	-.09
6.895.243	27	0	1	24	7.24	136.21	7.49	136.23	.25	-.08
6.895.278	27	0	2	6	9.10	135.35	9.36	135.29	.26	-.06
6.895.313	27	0	2	48	11.38	134.65	11.64	134.60	.26	-.05
6.895.348	27	0	3	30	13.19	133.64	13.45	133.60	.27	-.04
6.895.383	27	0	4	12	15.46	132.93	15.73	132.90	.27	-.03
6.895.593	27	0	8	24	4.94	132.21	5.22	132.12	.28	-.09
6.895.663	27	0	9	48	13.65	131.93	13.94	131.89	.29	-.04
6.895.698	27	0	10	30	15.36	130.78	15.65	130.75	.29	-.03
6.895.733	27	0	11	12	21.46	131.63	21.75	131.64	.29	.01
6.895.873	27	0	14	0	47.94	139.24	48.19	139.51	.25	.27
6.895.908	27	0	14	42	49.84	138.25	50.10	138.54	.26	.29
6.895.943	27	0	15	24	52.70	138.25	52.96	138.59	.26	.34
rev 149										
6.918.168	27	7	39	54	********	********	********	********	*****	******
6.928.528	27	11	7	6	-64.04	346.46	-64.13	345.47	-.09	-.99
6.928.773	27	11	12	0	-61.40	347.44	-61.49	346.54	-.09	-.90
6.928.808	27	11	12	42	-61.05	347.65	-61.14	346.77	-.09	-.88
6.928.878	27	11	14	6	-59.88	346.69	-59.96	345.84	-.08	-.85
6.929.438	27	11	25	18	-59.41	359.24	-59.56	358.43	-.15	-.81
6.929.718	27	11	30	54	-54.52	358.87	-54.68	358.18	-.14	-.69
6.930.523	27	11	47	0	-23.07	323.81	-22.92	323.52	.15	-.29
6.930.558	27	11	47	42	-20.84	322.67	-20.78	322.40	.16	-.27
6.930.593	27	11	48	24	-18.33	321.57	-18.17	321.32	.16	-.25
6.930.628	27	11	49	6	-16.21	320.40	-16.04	320.17	.17	-.24
6.930.663	27	11	49	48	-13.67	319.36	-13.49	319.14	.18	-.22
6.930.698	27	11	50	30	-11.55	318.24	-11.36	318.04	.19	-.20
6.930.733	27	11	51	12	-9.03	317.27	-8.83	317.09	.20	-.18
6.930.768	27	11	51	54	-6.95	316.20	-6.74	316.03	.21	-.17
6.930.803	27	11	52	36	-4.44	315.25	-4.23	315.10	.21	-.15
6.930.838	27	11	53	18	-2.34	314.17	-2.12	314.03	.22	-.14
6.931.118	27	11	58	54	-2.21	315.69	-1.99	315.56	.22	-.13
6.931.153	27	11	59	36	.27	314.85	.50	314.73	.23	-.12
6.931.188	27	12	0	18	2.24	313.72	2.48	313.61	.24	-.11
6.931.223	27	12	1	0	4.68	312.90	4.92	312.81	.24	-.09
6.931.258	27	12	1	42	6.60	311.79	6.85	311.71	.25	-.08
6.931.293	27	12	2	24	8.95	311.09	9.21	311.02	.26	-.07
6.931.328	27	12	3	6	10.79	310.11	11.05	310.06	.26	-.05
6.931.363	27	12	3	48	13.14	309.44	13.41	309.40	.27	-.04
6.931.398	27	12	4	30	14.93	308.43	15.20	308.40	.27	-.03
6.931.433	27	12	5	12	17.24	307.73	17.52	307.71	.28	-.02
6.931.643	27	12	9	24	7.90	306.55	8.19	306.47	.29	-.08
6.931.713	27	12	10	48	16.23	306.18	16.53	306.15	.30	-.03
6.931.748	27	12	11	30	17.91	305.03	18.21	305.01	.30	-.02
6.931.783	27	12	12	12	24.14	305.96	24.44	305.98	.30	.02
6.931.923	27	12	15	0	47.33	311.69	47.60	311.94	.27	.25
rev 150										
6.964.718	27	23	10	54	-75.76	163.20	-75.85	161.41	-.09	-1.79
6.964.753	27	23	11	36	-74.68	157.13	-74.72	155.44	-.04	-1.69
6.964.788	27	23	12	18	-75.50	162.25	-75.58	160.49	-.08	-1.76
6.964.858	27	23	13	42	-74.02	160.90	-74.09	159.29	-.07	-1.61
6.965.418	27	23	24	54	-57.20	173.33	-57.34	172.58	-.14	-.75
6.965.698	27	23	30	30	-38.72	141.08	-38.61	140.62	.11	-.46
6.966.503	27	23	46	36	-23.93	139.85	-23.79	139.55	.14	-.30
6.966.538	27	23	47	18	-21.92	138.53	-21.77	138.25	.15	-.28
6.966.573	27	23	48	0	-19.44	137.29	-19.28	137.03	.16	-.26
6.966.608	27	23	48	42	-17.31	136.01	-17.14	135.77	.17	-.24
6.966.643	27	23	49	24	-14.72	135.05	-14.54	134.83	.18	-.22
6.966.678	27	23	50	6	-12.57	134.02	-12.38	133.81	.19	-.21
6.966.713	27	23	50	48	-9.98	133.13	-9.78	132.94	.20	-.19
6.966.748	27	23	51	30	-7.82	132.13	-7.62	131.96	.20	-.17
6.966.783	27	23	52	12	-5.25	131.22	-5.04	131.07	.21	-.15
6.966.818	27	23	52	54	-3.16	130.12	-2.94	129.98	.22	-.14
6.967.098	27	23	58	30	-2.79	131.61	-2.57	131.47	.22	-.14
6.967.133	27	23	59	12	-.29	130.75	-.07	130.63	.22	-.12
6.967.168	27	23	59	54	1.70	129.62	1.93	129.51	.23	-.11
6.967.203	28	0	0	36	4.14	128.79	4.38	128.70	.24	-.09
6.967.238	28	0	1	18	6.07	127.73	6.32	127.65	.25	-.08
6.967.273	28	0	2	0	8.46	126.99	8.71	126.92	.25	-.07
6.967.308	28	0	2	42	10.31	125.99	10.57	125.93	.26	-.06
6.967.343	28	0	3	24	12.59	125.28	12.85	125.24	.26	-.04
6.967.378	28	0	4	6	14.38	124.26	14.65	124.23	.27	-.03
6.967.413	28	0	4	48	16.67	123.53	16.95	123.51	.28	-.02
6.967.623	28	0	9	0	6.60	122.89	6.89	122.81	.29	-.08
6.967.693	28	0	10	24	15.28	122.59	15.57	122.56	.29	-.03
6.967.728	28	0	11	6	16.97	121.40	17.27	121.38	.30	-.02
6.967.763	28	0	11	48	23.04	122.22	23.33	122.23	.29	.01
6.968.673	28	0	30	0	********	********	********	********	*****	******
6.968.708	28	0	30	42	********	********	********	********	*****	******
6.968.743	28	0	31	24	********	********	********	********	*****	******
rev 151										
7.000.488	28	11	6	18	-85.01	108.40	-85.25	112.47	-.24	4.07
7.000.733	28	11	11	12	-85.33	87.77	-85.69	90.68	-.36	2.91
7.000.768	28	11	11	54	-85.22	80.46	-85.61	82.67	-.39	2.21
7.000.838	28	11	13	18	-84.85	105.05	-85.12	108.73	-.27	3.68
7.001.398	28	11	24	30	-54.89	343.69	-55.00	342.97	-.11	-.72
7.001.678	28	11	30	6	-55.05	344.15	-55.15	343.43	-.10	-.72
7.002.483	28	11	46	12	-25.13	315.79	-24.99	315.48	.14	-.31
7.002.518	28	11	46	54	-23.00	314.49	-22.85	314.20	.15	-.29
7.002.553	28	11	47	36	-20.45	313.32	-20.29	313.05	.16	-.27
7.002.588	28	11	48	18	-18.32	312.09	-18.15	311.84	.17	-.25
7.002.623	28	11	49	0	-15.77	311.00	-15.59	310.77	.18	-.23
7.002.658	28	11	49	42	-13.66	309.84	-13.48	309.63	.18	-.21
7.002.693	28	11	50	24	-11.10	308.86	-10.91	308.66	.19	-.20
7.002.728	28	11	51	6	-8.94	307.80	-8.74	307.62	.20	-.18
7.002.763	28	11	51	48	-6.35	306.87	-6.14	306.71	.21	-.16
7.002.798	28	11	52	30	-4.21	305.83	-3.99	305.68	.22	-.15
7.003.078	28	11	58	6	-3.87	307.36	-3.66	307.21	.21	-.15
7.003.113	28	11	58	48	-1.40	306.49	-1.18	306.36	.22	-.13
7.003.148	28	11	59	30	.56	305.34	.79	305.22	.23	-.12
7.003.183	28	12	0	12	3.03	304.50	3.27	304.40	.24	-.10
7.003.218	28	12	0	54	4.99	303.43	5.23	303.34	.24	-.09
7.003.253	28	12	1	36	7.40	302.73	7.65	302.66	.25	-.07
7.003.288	28	12	2	18	9.29	301.75	9.55	301.69	.26	-.06
7.003.323	28	12	3	0	11.62	301.06	11.88	301.01	.26	-.05
7.003.358	28	12	3	42	13.49	300.06	13.76	300.02	.27	-.04
7.003.393	28	12	4	24	15.81	299.33	16.08	299.30	.27	-.03
7.003.603	28	12	8	36	5.06	299.25	5.34	299.16	.28	-.09
7.003.673	28	12	10	0	13.79	298.91	14.07	298.87	.28	-.04
7.003.708	28	12	10	42	15.61	297.77	15.90	297.74	.29	-.03
7.003.743	28	12	11	24	21.80	298.64	22.09	298.65	.29	.01
7.003.883	28	12	14	12	20.08	291.78	20.41	291.76	.33	-.02
7.003.918	28	12	14	54	21.45	290.61	21.78	290.60	.33	-.01

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 152

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7•036•678	28	23	10	5	-75.64	165.17	-75.81	163.49	-.17	-1.68
7•036•713	28	23	10	47	-74.93	155.89	-75.03	154.21	-.10	-1.68
7•036•748	28	23	11	29	-75.72	161.80	-75.87	160.08	-.15	-1.72
7•036•818	28	23	12	53	-75.63	155.23	-75.75	157.49	-.12	-1.74
7•037•378	28	23	24	5	-38.26	168.48	-38.43	167.72	-.17	-.76
7•037•658	28	23	29	41	-38.27	130.85	-38.16	130.40	.11	-.45
7•038•463	28	23	45	47	-26.00	131.66	-25.87	131.34	.13	-.32
7•038•498	28	23	46	29	-23.85	130.52	-23.71	130.22	.14	-.30
7•038•533	28	23	47	11	-21.28	129.47	-21.13	129.19	.15	-.28
7•038•568	28	23	47	53	-19.17	128.25	-19.01	127.99	.16	-.26
7•038•603	28	23	48	35	-16.64	127.16	-16.47	126.92	.17	-.24
7•038•638	28	23	49	17	-14.58	126.02	-14.38	125.80	.18	-.22
7•038•673	28	23	49	59	-12.08	124.98	-11.89	124.78	.19	-.20
7•038•708	28	23	50	41	-10.02	123.86	-9.82	123.67	.20	-.19
7•038•743	28	23	51	23	-7.54	122.87	-7.34	122.70	.20	-.17
7•038•778	28	23	52	5	-5.44	121.85	-5.23	121.69	.21	-.16
7•039•058	28	23	57	41	-4.64	123.24	-4.43	123.09	.21	-.15
7•039•093	28	23	58	23	-2.19	122.31	-1.97	122.18	.22	-.13
7•039•128	28	23	59	5	-.23	121.13	-.00	121.01	.23	-.12
7•039•163	28	23	59	47	2.20	120.27	2.43	120.16	.23	-.11
7•039•198	29	0	0	29	4.13	119.25	4.37	119.16	.24	-.09
7•039•233	29	0	1	11	6.52	118.58	6.77	118.50	.25	-.08
7•039•268	29	0	1	53	8.43	117.61	8.68	117.54	.25	-.07
7•039•303	29	0	2	35	10.78	116.91	11.04	116.88	.26	-.05
7•039•338	29	0	3	17	12.66	115.91	12.93	115.87	.27	-.04
7•039•373	29	0	3	59	14.94	115.16	15.21	115.13	.27	-.03
7•039•583	29	0	8	11	3.47	115.61	3.74	115.51	.27	-.10
7•039•653	29	0	9	35	12.39	115.34	12.67	115.29	.28	-.05
7•039•688	29	0	10	17	14.18	114.21	14.47	114.17	.29	-.04
7•039•723	29	0	10	59	20.37	115.12	20.65	115.12	.28	.00
7•039•863	29	0	13	47	42.75	117.44	43.02	117.63	.27	.19
7•039•898	29	0	14	29	44.63	116.43	44.91	116.64	.28	.21
7•039•933	29	0	15	11	47.17	116.03	47.45	116.26	.28	.23

rev 153

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7•072•518	29	11	6	53	-61.18	354.78	-61.45	354.05	-.27	-.73
7•072•763	29	11	11	47	-60.12	346.37	-60.33	345.59	-.21	-.78
7•072•798	29	11	12	29	-60.40	347.22	-60.61	346.44	-.21	-.78
7•072•868	29	11	13	53	-61.40	346.76	-61.61	345.94	-.21	-.82
7•073•428	29	11	25	5	-58.30	341.12	-58.45	340.34	-.15	-.78
7•073•708	29	11	30	41	-45.18	319.05	-45.16	318.50	.02	-.55
7•074•513	29	11	46	47	-24.04	306.32	-23.90	306.02	.14	-.30
7•074•548	29	11	47	29	-21.88	305.12	-21.73	304.84	.15	-.28
7•074•583	29	11	48	11	-19.30	304.08	-19.14	303.82	.16	-.26
7•074•618	29	11	48	53	-17.17	302.98	-17.00	302.74	.17	-.24
7•074•653	29	11	49	35	-14.63	302.01	-14.45	301.79	.18	-.22
7•074•688	29	11	50	17	-12.56	300.96	-12.38	300.75	.18	-.21
7•074•723	29	11	50	59	-10.06	300.00	-9.87	299.81	.19	-.19
7•074•758	29	11	51	41	-8.00	298.89	-7.80	298.72	.20	-.17
7•074•793	29	11	52	23	-5.49	297.91	-5.28	297.75	.21	-.16
7•074•828	29	11	53	5	-3.42	296.80	-3.20	296.66	.22	-.14
7•075•108	29	11	58	41	-2.95	298.17	-2.73	298.03	.22	-.14
7•075•143	29	11	59	23	-.50	297.25	-.28	297.13	.22	-.12
7•075•178	29	12	0	5	1.42	296.05	1.65	295.94	.23	-.11
7•075•213	29	12	0	47	3.89	295.28	4.13	295.18	.24	-.10
7•075•248	29	12	1	29	5.83	294.28	6.06	294.20	.25	-.08
7•075•283	29	12	2	11	8.21	293.60	8.46	293.53	.25	-.07
7•075•318	29	12	2	53	10.09	292.61	10.35	292.55	.26	-.06
7•075•353	29	12	3	35	12.44	291.93	12.70	291.89	.26	-.04
7•075•388	29	12	4	17	14.30	290.91	14.57	290.88	.27	-.03
7•075•423	29	12	4	59	16.56	290.16	16.83	290.14	.27	-.02
7•075•633	29	12	9	11	6.00	290.24	6.28	290.15	.28	-.09
7•075•703	29	12	10	35	14.65	290.08	14.93	290.05	.28	-.03
7•075•738	29	12	11	17	16.41	288.98	16.70	288.95	.29	-.03
7•075•773	29	12	11	59	22.59	289.95	22.88	289.96	.29	.01
7•075•913	29	12	14	47	32.91	280.58	33.25	280.63	.34	.05
7•075•948	29	12	15	29	34.26	279.24	34.60	279.30	.34	.06

rev 154

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7•108•708	29	23	10	41	-58.92	181.10	-59.24	180.51	-.32	-.59
7•108•743	29	23	11	23	-58.97	176.61	-59.27	175.97	-.30	-.64
7•108•778	29	23	12	5	-59.32	180.52	-59.64	179.91	-.32	-.61
7•108•848	29	23	13	29	-59.58	181.70	-59.90	181.09	-.32	-.61
7•109•408	29	23	24	41	-60.31	181.04	-60.49	180.23	-.18	-.81
7•109•688	29	23	30	17	-12.33	122.63	-12.22	122.42	.11	-.21
7•110•493	29	23	40	23	-25.18	122.68	-25.05	122.37	.13	-.31
7•110•528	29	23	47	5	-23.08	121.37	-22.94	121.08	.14	-.29
7•110•563	29	23	47	47	-20.56	120.13	-20.41	119.86	.15	-.27
7•110•598	29	23	48	29	-18.48	118.86	-18.32	118.61	.16	-.25
7•110•633	29	23	49	11	-15.97	117.76	-15.80	117.53	.17	-.23
7•110•668	29	23	49	53	-13.86	116.71	-13.68	116.49	.18	-.22
7•110•703	29	23	50	35	-11.32	115.79	-11.14	115.59	.19	-.20
7•110•738	29	23	51	17	-9.18	114.75	-8.98	114.57	.20	-.18
7•110•773	29	23	51	59	-6.58	113.83	-6.38	113.67	.20	-.16
7•110•808	29	23	52	41	-4.45	112.81	-4.24	112.66	.21	-.15
7•111•088	29	23	58	17	-4.06	114.04	-3.85	113.89	.21	-.15
7•111•123	29	23	58	59	-1.51	113.16	-1.29	113.03	.22	-.13
7•111•158	29	23	59	41	.54	112.02	.77	111.90	.23	-.12
7•111•193	30	0	0	23	3.03	111.18	3.26	111.08	.23	-.10
7•111•228	30	0	1	5	5.00	110.19	5.24	110.10	.24	-.09
7•111•263	30	0	1	47	7.31	109.49	7.56	109.42	.25	-.07
7•111•298	30	0	2	29	9.11	108.49	9.36	108.43	.25	-.06
7•111•333	30	0	3	11	11.37	107.77	11.63	107.72	.26	-.05
7•111•368	30	0	3	53	13.15	106.75	13.42	106.71	.27	-.04
7•111•403	30	0	4	35	15.40	106.01	15.67	105.98	.27	-.03
7•111•613	30	0	8	47	4.37	106.56	4.64	106.47	.27	-.09
7•111•683	30	0	10	11	13.30	106.37	13.58	106.33	.28	-.04
7•111•718	30	0	10	53	15.04	105.26	15.32	105.23	.28	-.03
7•111•753	30	0	11	35	21.13	106.19	21.41	106.20	.28	.01
7•111•893	30	0	14	23	42.67	103.12	42.97	103.29	.30	.17
7•111•928	30	0	15	5	44.34	101.78	44.65	101.95	.31	.17
7•111•963	30	0	15	47	46.80	100.99	47.11	101.19	.31	.20

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7•144•548	30	11	7	29	-57.66	42.81	-58.09	42.76	-.43	-.05
7•144•793	30	11	12	23	-55.71	46.32	-56.14	46.29	-.43	-.03
7•144•828	30	11	13	5	-56.69	43.31	-57.12	43.25	-.43	-.06
7•144•898	30	11	14	29	-55.99	42.30	-56.42	42.22	-.43	-.08
7•145•458	30	11	25	41	-59.11	333.89	-59.27	333.10	-.16	-.79
7•145•738	30	11	31	17	-48.19	313.55	-48.20	312.95	-.01	-.60
7•146•543	30	11	47	23	-23.30	297.23	-23.16	296.93	.14	-.30
7•146•578	30	11	48	5	-21.26	295.91	-21.11	295.63	.15	-.28
7•146•613	30	11	48	47	-18.74	294.72	-18.58	294.46	.16	-.26
7•146•648	30	11	49	29	-16.61	293.44	-16.44	293.20	.17	-.24
7•146•683	30	11	50	11	-14.03	292.44	-13.85	292.22	.18	-.22
7•146•718	30	11	50	53	-11.88	291.38	-11.69	291.18	.19	-.20
7•146•753	30	11	51	35	-9.33	290.46	-9.13	290.28	.20	-.18
7•146•788	30	11	52	17	-7.21	289.45	-7.01	289.28	.20	-.17
7•146•823	30	11	52	59	-4.67	288.57	-4.46	288.42	.21	-.15
7•146•858	30	11	53	41	-2.55	287.57	-2.33	287.43	.22	-.14
7•147•138	30	11	59	17	-2.35	288.97	-2.13	288.83	.22	-.14
7•147•173	30	11	59	59	.16	288.12	.38	288.00	.22	-.12
7•147•208	30	12	0	41	2.18	287.00	2.41	286.89	.23	-.11
7•147•243	30	12	1	23	4.65	286.19	4.89	286.10	.24	-.09
7•147•278	30	12	2	5	6.58	285.10	6.83	285.02	.25	-.08
7•147•313	30	12	2	47	8.96	284.44	9.21	284.38	.25	-.06
7•147•348	30	12	3	29	10.80	283.44	11.06	283.39	.26	-.05
7•147•383	30	12	4	11	13.06	282.73	13.32	282.69	.26	-.04
7•147•418	30	12	4	53	14.82	281.69	15.09	281.66	.27	-.03
7•147•453	30	12	5	35	17.08	280.96	17.36	280.94	.28	-.02
7•147•663	30	12	9	47	6.90	281.24	7.18	281.16	.28	-.08
7•147•733	30	12	11	11	15.43	281.12	15.71	281.09	.28	-.03
7•147•768	30	12	11	53	17.16	279.99	17.45	279.97	.29	-.02
7•147•803	30	12	12	35	23.54	281.07	23.83	281.09	.29	.02
7•147•943	30	12	15	23	21.67	273.83	22.00	273.82	.33	-.01
7•147•978	30	12	16	5	22.96	272.73	23.29	272.73	.33	-.00

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 156

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.180.738	30	23	11	17	-58.04	183.07	-58.41	182.60	-.37	-.47
7.180.773	30	23	11	59	-58.34	178.81	-58.69	178.29	-.35	-.52
7.180.808	30	23	12	41	-58.65	181.40	-58.92	180.90	-.37	-.50
7.180.878	30	23	14	5	-57.73	180.97	-58.09	180.48	-.36	-.49
7.181.438	30	23	25	17	-59.73	151.05	-59.91	150.25	-.18	-.80
7.181.718	30	23	30	53	-38.41	111.53	-38.29	111.10	.12	-.43
7.182.523	30	23	46	59	-29.25	113.31	-29.11	113.01	.14	-.30
7.182.558	30	23	47	41	-22.12	111.95	-21.97	111.67	.15	-.28
7.182.593	30	23	48	23	-19.56	110.75	-19.40	110.49	.16	-.26
7.182.628	30	23	49	5	-17.43	109.49	-17.26	109.25	.17	-.24
7.182.663	30	23	49	47	-14.86	108.43	-14.68	108.21	.18	-.22
7.182.698	30	23	50	29	-12.72	107.40	-12.54	107.19	.18	-.21
7.182.733	30	23	51	11	-10.20	106.50	-10.01	106.31	.19	-.19
7.182.768	30	23	51	53	-8.14	105.52	-7.94	105.35	.20	-.17
7.182.803	30	23	52	35	-5.65	104.65	-5.44	104.49	.21	-.16
7.182.838	30	23	53	17	-3.61	103.88	-3.40	103.54	.21	-.14
7.183.118	30	23	58	53	-3.13	104.78	-2.92	104.64	.21	-.14
7.183.153	30	23	59	35	-.60	103.89	-.38	103.77	.22	-.12
7.183.188	31	0	0	17	1.39	102.72	1.62	102.61	.23	-.11
7.183.223	31	0	0	59	3.86	101.91	4.10	101.81	.24	-.10
7.183.258	31	0	1	41	5.79	100.95	6.02	100.87	.24	-.08
7.183.293	31	0	2	23	8.14	100.30	8.39	100.23	.25	-.07
7.183.328	31	0	3	5	10.01	99.34	10.27	99.28	.26	-.06
7.183.363	31	0	3	47	12.34	98.67	12.60	98.63	.26	-.04
7.183.398	31	0	4	29	14.13	97.67	14.40	97.64	.27	-.03
7.183.433	31	0	5	11	16.38	96.95	16.65	96.93	.27	-.02
7.183.643	31	0	9	23	5.45	97.49	5.73	97.40	.28	-.09
7.183.713	31	0	10	47	14.33	97.30	14.61	97.20	.28	-.04
7.183.748	31	0	11	29	16.06	96.17	16.35	96.14	.29	-.03
7.183.783	31	0	12	11	22.14	97.11	22.42	97.12	.28	.01
7.183.923	31	0	14	59	28.71	93.62	29.01	93.67	.30	.05
7.183.958	31	0	15	41	30.06	92.51	30.37	92.56	.31	.05
7.183.993	31	0	16	23	32.08	91.88	32.40	91.94	.32	.06

rev 157

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.216.508	31	11	6	41	-71.69	3.83	-72.08	3.18	-.39	-.65
7.216.753	31	11	11	35	-71.57	3.78	-71.96	3.10	-.39	-.68
7.216.788	31	11	12	17	-70.95	3.09	-71.34	2.42	-.39	-.67
7.216.858	31	11	13	41	-71.71	2.15	-72.09	1.43	-.38	-.72
7.217.418	31	11	24	53	-57.69	325.22	-57.86	324.47	-.17	-.75
7.217.698	31	11	30	29	-58.31	325.30	-58.47	324.53	-.16	-.77
7.218.503	31	11	46	35	-25.11	289.32	-24.98	289.01	.13	-.31
7.218.538	31	11	47	17	-23.09	287.98	-22.95	287.69	.14	-.29
7.218.573	31	11	47	59	-20.64	286.71	-20.49	286.44	.15	-.27
7.218.608	31	11	48	41	-18.58	285.42	-18.42	285.17	.16	-.25
7.218.643	31	11	49	23	-16.01	284.38	-15.84	284.15	.17	-.23
7.218.678	31	11	50	5	-13.88	283.34	-13.70	283.12	.18	-.22
7.218.713	31	11	50	47	-11.30	282.43	-11.11	282.23	.19	-.20
7.218.748	31	11	51	29	-9.16	281.44	-8.97	281.26	.19	-.18
7.218.783	31	11	52	11	-6.58	280.55	-6.38	280.39	.20	-.16
7.218.818	31	11	52	53	-4.47	279.63	-4.26	279.38	.21	-.15
7.219.098	31	11	58	29	-3.98	280.70	-3.77	280.55	.21	-.15
7.219.133	31	11	59	11	-1.47	279.79	-1.25	279.66	.22	-.13
7.219.168	31	11	59	53	.47	278.62	.70	278.50	.23	-.12
7.219.203	31	12	0	35	2.94	277.84	3.17	277.74	.23	-.10
7.219.238	31	12	1	17	4.92	276.81	5.16	276.72	.24	-.09
7.219.273	31	12	1	59	7.32	276.11	7.57	276.04	.25	-.07
7.219.308	31	12	2	41	9.20	275.14	9.45	275.08	.25	-.06
7.219.343	31	12	3	23	11.55	274.46	11.81	274.41	.26	-.05
7.219.378	31	12	4	5	13.41	273.46	13.67	273.42	.26	-.04
7.219.413	31	12	4	47	15.73	272.74	16.00	272.71	.27	-.03
7.219.623	31	12	8	59	4.05	273.88	4.32	273.76	.27	-.10
7.219.693	31	12	10	23	12.87	273.62	13.14	273.58	.27	-.04
7.219.728	31	12	11	5	14.65	272.46	14.93	272.43	.28	-.03
7.219.763	31	12	11	47	21.02	273.50	21.30	273.51	.28	.01
7.219.903	31	12	14	35	42.36	268.82	42.66	268.98	.30	.16
7.219.938	31	12	15	17	44.03	267.36	44.34	267.53	.31	.17

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.252.768	31	23	11	53	-49.66	193.45	-50.08	193.23	-.42	-.22
7.252.803	31	23	12	35	-50.84	189.91	-51.26	189.66	-.42	-.25
7.252.838	31	23	13	17	-49.13	191.85	-49.55	191.62	-.42	-.23
7.252.908	31	23	14	41	-49.71	192.17	-50.13	191.94	-.42	-.23
7.253.468	31	23	25	53	-57.02	136.91	-57.16	136.16	-.14	-.75
7.253.748	31	23	31	29	-35.07	101.18	-34.94	100.77	.13	-.41
7.254.553	31	23	47	35	-22.54	103.37	-22.40	103.08	.14	-.29
7.254.588	31	23	48	17	-20.47	102.08	-20.32	101.81	.15	-.27
7.254.623	31	23	48	59	-17.94	100.93	-17.78	100.68	.16	-.25
7.254.658	31	23	49	41	-15.86	99.71	-15.69	99.48	.17	-.23
7.254.693	31	23	50	23	-13.33	98.70	-13.15	98.49	.18	-.21
7.254.728	31	23	51	5	-11.22	97.72	-11.03	97.52	.19	-.20
7.254.763	31	23	51	47	-8.68	96.88	-8.48	96.70	.20	-.18
7.254.798	31	23	52	29	-6.51	95.89	-6.31	95.73	.20	-.16
7.254.833	31	23	53	11	-3.89	95.00	-3.68	94.85	.21	-.15
7.254.868	31	23	53	53	-1.74	93.94	-1.52	93.81	.22	-.13
7.255.148	31	23	59	29	-1.68	95.21	-1.46	95.08	.22	-.13
7.255.183	32	0	0	11	.77	94.33	1.00	94.21	.23	-.12
7.255.218	32	0	0	53	2.76	93.18	2.99	93.08	.23	-.10
7.255.253	32	0	1	35	5.18	92.39	5.42	92.30	.24	-.09
7.255.288	32	0	2	17	7.11	91.37	7.36	91.29	.25	-.08
7.255.323	32	0	2	59	9.47	90.68	9.72	90.62	.25	-.06
7.255.358	32	0	3	41	11.34	89.71	11.60	89.66	.26	-.05
7.255.393	32	0	4	23	13.66	89.03	13.92	88.99	.26	-.04
7.255.428	32	0	5	5	15.47	88.02	15.74	87.99	.27	-.03
7.255.463	32	0	5	47	17.78	87.31	18.06	87.30	.28	-.01
7.255.673	32	0	9	59	9.15	84.98	9.45	84.91	.30	-.07
7.255.743	32	0	11	23	17.31	84.71	17.61	84.69	.30	-.02
7.255.778	32	0	12	5	18.96	83.52	19.27	83.50	.31	-.02
7.255.813	32	0	12	47	25.08	84.63	25.38	84.65	.30	.02
7.255.953	32	0	15	35	30.32	80.41	30.65	80.46	.33	.05
7.255.988	32	0	16	17	31.62	79.13	31.95	79.18	.33	.05
7.256.023	32	0	16	59	33.59	78.32	33.93	78.38	.34	.06

rev 159

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.283.428	32	9	25	4	*******	*******	*******	*******	*****	******
7.288.538	32	11	7	16	-85.84	48.88	-86.21	52.06	-.37	3.18
7.288.783	32	11	12	10	-84.64	35.44	-85.05	36.68	-.41	1.24
7.288.818	32	11	12	52	-84.49	34.11	-84.91	35.19	-.42	1.08
7.288.888	32	11	14	16	-85.45	34.27	-85.87	35.61	-.42	1.34
7.289.448	32	11	25	28	-56.42	311.20	-56.55	310.46	-.13	-.74
7.289.728	32	11	31	4	-56.89	310.97	-57.01	310.21	-.12	-.76
7.290.533	32	11	47	10	-23.03	278.00	-22.89	278.71	.14	-.29
7.290.568	32	11	47	52	-20.95	277.82	-20.80	277.55	.15	-.27
7.290.603	32	11	48	34	-18.40	276.79	-18.24	276.54	.16	-.25
7.290.638	32	11	49	16	-16.28	275.68	-16.11	275.44	.17	-.24
7.290.673	32	11	49	58	-13.80	274.64	-13.62	274.42	.18	-.22
7.290.708	32	11	50	40	-11.75	273.48	-11.56	273.28	.19	-.20
7.290.743	32	11	51	22	-9.27	272.44	-9.08	272.26	.19	-.18
7.290.778	32	11	52	4	-7.16	271.43	-6.96	271.26	.20	-.17
7.290.813	32	11	52	46	-4.59	270.53	-4.38	270.38	.21	-.15
7.290.848	32	11	53	28	-2.46	269.52	-2.24	269.38	.22	-.14
7.291.128	32	11	59	4	-2.13	270.85	-1.91	270.72	.22	-.13
7.291.163	32	11	59	46	.38	270.00	.60	269.88	.22	-.12
7.291.198	32	12	0	28	2.39	268.88	2.62	268.78	.23	-.10
7.291.233	32	12	1	10	4.88	268.06	5.12	267.97	.24	-.09
7.291.268	32	12	1	52	6.83	267.03	7.08	266.95	.25	-.08
7.291.303	32	12	2	34	9.21	266.38	9.46	266.32	.25	-.06
7.291.338	32	12	3	16	11.02	265.38	11.28	265.33	.26	-.05
7.291.373	32	12	3	58	13.31	264.70	13.57	264.66	.26	-.04
7.291.408	32	12	4	40	15.08	263.68	15.35	263.65	.27	-.03
7.291.443	32	12	5	22	17.35	262.96	17.62	262.94	.27	-.02
7.291.693	32	12	9	34	8.37	261.15	8.66	261.08	.29	-.07
7.291.723	32	12	10	58	16.49	260.98	16.78	260.95	.29	-.03
7.291.758	32	12	11	40	18.16	259.84	18.46	259.82	.30	-.02
7.291.793	32	12	12	22	24.29	260.86	24.59	260.88	.30	.02
7.291.933	32	12	15	10	41.95	267.66	42.21	267.85	.26	.19

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.324.728	32	23	11	4	-71.66	223.19	-72.04	223.70	-.38	.51
7.324.763	32	23	11	46	-73.64	217.27	-74.04	217.72	-.40	.45
7.324.798	32	23	12	28	-71.93	217.74	-72.33	218.14	-.40	.40
7.324.868	32	23	13	52	-72.25	221.59	-72.64	222.08	-.39	.49
7.325.428	32	23	25	4	-59.55	131.71	-58.72	130.94	-.17	-.77
7.325.708	32	23	30	40	-33.83	90.73	-33.69	90.34	.14	-.39
7.326.513	32	23	46	46	-23.48	94.78	-23.34	94.48	.14	-.30
7.326.548	32	23	47	28	-21.46	93.50	-21.31	93.22	.15	-.28
7.326.583	32	23	48	10	-18.96	92.29	-18.80	92.03	.16	-.26
7.326.618	32	23	48	52	-16.86	91.04	-16.69	90.80	.17	-.24
7.326.653	32	23	49	34	-14.24	90.01	-14.06	89.79	.18	-.22
7.326.688	32	23	50	16	-12.02	88.92	-11.83	88.72	.19	-.20
7.326.723	32	23	50	58	-9.42	88.03	-9.23	87.85	.19	-.18
7.326.758	32	23	51	40	-7.31	87.07	-7.11	86.90	.20	-.17
7.326.793	32	23	52	22	-4.83	86.23	-4.62	86.08	.21	-.15
7.326.828	32	23	53	4	-2.81	85.25	-2.60	85.11	.21	-.14
7.327.108	32	23	58	40	-2.53	86.51	-2.32	86.37	.21	-.14
7.327.143	32	23	59	22	.00	85.64	.22	85.52	.22	-.12
7.327.178	33	0	0	4	2.02	84.48	2.25	84.37	.23	-.11
7.327.213	33	0	0	46	4.50	83.69	4.74	83.60	.24	-.09
7.327.248	33	0	1	28	6.46	82.70	6.70	82.62	.24	-.08
7.327.283	33	0	2	10	8.85	82.05	9.10	81.99	.25	-.06
7.327.318	33	0	2	52	10.66	81.03	10.92	80.98	.26	-.05
7.327.353	33	0	3	34	12.95	80.34	13.21	80.30	.26	-.04
7.327.388	33	0	4	16	14.73	79.29	15.00	79.26	.27	-.03
7.327.423	33	0	4	58	17.00	78.57	17.27	78.55	.27	-.02
7.327.633	33	0	9	10	7.69	76.98	7.98	76.90	.29	-.08
7.327.703	33	0	10	34	16.02	76.81	16.31	76.78	.29	-.03
7.327.738	33	0	11	16	17.75	75.67	18.05	75.65	.30	-.02
7.327.773	33	0	11	58	23.87	76.72	24.16	76.74	.29	.02
7.327.843	33	0	13	22	21.36	66.24	21.71	66.22	.35	-.02
7.327.878	33	0	14	4	22.26	64.80	22.61	64.78	.35	-.02
7.327.913	33	0	14	46	24.28	63.81	24.64	63.80	.36	-.01

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7.357.768	33	10	11	52	*******	*******	*******	*******	*****	******
7.360.358	33	11	3	40	*******	*******	*******	*******	*****	******
7.360.743	33	11	11	22	-30.18	346.05	-30.57	345.83	-.39	-.22
7.360.778	33	11	12	4	-38.07	350.50	-38.48	350.26	-.41	-.24
7.360.848	33	11	13	28	-37.85	350.37	-38.25	350.13	-.40	-.24
7.361.408	33	11	24	40	-59.64	307.36	-59.81	306.56	-.17	-.80
7.361.688	33	11	30	16	-51.43	292.52	-51.49	291.86	-.06	-.66
7.362.493	33	11	46	22	-23.59	270.21	-23.45	269.91	.14	-.30
7.362.528	33	11	47	4	-21.53	268.70	-21.38	268.42	.15	-.28
7.362.563	33	11	47	46	-18.93	267.68	-18.77	267.42	.16	-.26
7.362.598	33	11	48	28	-16.78	266.63	-16.61	266.39	.17	-.24
7.362.633	33	11	49	10	-14.23	265.73	-14.06	265.51	.17	-.22
7.362.668	33	11	49	52	-12.15	264.74	-11.97	264.54	.18	-.20
7.362.703	33	11	50	34	-9.68	263.79	-9.49	263.60	.19	-.19
7.362.738	33	11	51	16	-7.61	262.74	-7.41	262.57	.20	-.17
7.362.773	33	11	51	58	-5.08	261.79	-4.87	261.64	.21	-.15
7.362.808	33	11	52	40	-2.96	260.74	-2.75	260.60	.21	-.14
7.363.088	33	11	58	16	-2.61	261.90	-2.40	261.76	.21	-.14
7.363.123	33	11	58	58	-.09	261.03	.13	260.91	.22	-.12
7.363.158	33	11	59	40	1.93	259.88	2.16	259.77	.23	-.11
7.363.193	33	12	0	22	4.41	259.06	4.65	258.97	.24	-.09
7.363.228	33	12	1	4	6.36	258.08	6.60	258.00	.24	-.08
7.363.263	33	12	1	46	8.74	257.42	8.99	257.35	.25	-.07
7.363.298	33	12	2	28	10.56	256.41	10.82	256.35	.26	-.06
7.363.333	33	12	3	10	12.85	255.71	13.11	255.67	.26	-.04
7.363.368	33	12	3	52	14.62	254.66	14.89	254.63	.27	-.03
7.363.403	33	12	4	34	16.90	253.94	17.17	253.92	.27	-.02
7.363.613	33	12	8	46	7.40	252.76	7.69	252.68	.29	-.08
7.363.683	33	12	10	10	15.73	252.58	16.02	252.55	.29	-.03
7.363.718	33	12	10	52	17.46	251.43	17.76	251.41	.30	-.02
7.363.753	33	12	11	34	23.64	252.49	23.93	252.51	.29	.02
7.363.893	33	12	14	22	60.48	251.35	60.78	251.78	.30	.43

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.396.688	33	23	10	16	-59.05	171.05	-59.47	170.75	-.42	-.30
7.396.723	33	23	10	58	-59.75	166.68	-60.16	166.32	-.41	-.36
7.396.758	33	23	11	40	-58.52	169.47	-58.93	169.15	-.41	-.32
7.396.828	33	23	13	4	-58.87	169.88	-59.28	169.56	-.41	-.32
7.397.368	33	23	24	16	-56.27	116.95	-56.40	116.21	-.13	-.74
7.397.668	33	23	29	52	-56.61	117.11	-56.73	116.36	-.12	-.75
7.398.473	33	23	45	58	-23.56	85.42	-23.42	85.12	.14	-.30
7.398.508	33	23	46	40	-21.44	84.19	-21.29	83.91	.15	-.28
7.398.543	33	23	47	22	-18.90	83.10	-18.74	82.84	.16	-.26
7.398.578	33	23	48	4	-16.80	81.95	-16.63	81.71	.17	-.24
7.398.613	33	23	48	46	-14.24	81.00	-14.07	80.78	.17	-.22
7.398.648	33	23	49	28	-12.13	79.99	-11.95	79.79	.18	-.20
7.398.683	33	23	50	10	-9.58	79.10	-9.39	78.91	.19	-.19
7.398.718	33	23	50	52	-7.48	78.11	-7.28	77.94	.20	-.17
7.398.753	33	23	51	34	-4.96	77.22	-4.76	77.07	.20	-.15
7.398.788	33	23	52	16	-2.91	76.16	-2.70	76.02	.21	-.14
7.398.823	33	23	52	58	-2.60	77.42	-2.39	77.28	.21	-.14
7.399.103	33	23	58	34	-.17	76.55	.05	76.43	.22	-.12
7.399.138	33	23	59	16	1.77	75.40	2.00	75.29	.23	-.11
7.399.173	33	23	59	58	4.23	74.56	4.46	74.47	.23	-.09
7.399.208	34	0	0	40	6.16	73.50	6.40	73.42	.24	-.08
7.399.243	34	0	1	22	8.56	72.82	8.81	72.75	.25	-.07
7.399.278	34	0	2	4	10.43	71.86	10.68	71.80	.25	-.06
7.399.313	34	0	2	46	12.77	71.21	13.03	71.17	.26	-.04
7.399.348	34	0	3	28	14.59	70.22	14.86	70.19	.27	-.03
7.399.383	34	0	4	10	16.92	69.54	17.19	69.52	.27	-.02
7.399.593	34	0	8	22	7.28	68.48	7.56	68.40	.28	-.08
7.399.663	34	0	9	46	15.55	68.29	15.84	68.25	.29	-.03
7.399.698	34	0	10	28	17.20	67.09	17.49	67.07	.29	-.02
7.399.733	34	0	11	10	23.26	68.15	23.55	68.17	.29	.02
7.399.873	34	0	13	58	54.43	67.55	54.73	67.87	.30	.32
7.399.908	34	0	14	40	56.66	65.90	56.97	66.25	.31	.35
7.399.943	34	0	15	22	60.02	64.96	60.33	65.36	.31	.40

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7.432.458	34	11	5	40	-58.91	9.95	-59.33	9.96	-.42	.01
7.432.703	34	11	10	34	-58.31	11.42	-58.73	11.43	-.42	.01
7.432.738	34	11	11	16	-58.42	10.35	-58.85	10.34	-.43	-.01
7.432.808	34	11	12	40	-58.87	10.22	-59.30	10.21	-.43	-.01
7.433.368	34	11	23	52	-58.50	293.01	-58.64	292.22	-.14	-.79
7.433.648	34	11	29	28	-54.07	281.76	-54.11	281.05	-.04	-.71
7.434.453	34	11	45	34	-23.27	260.76	-23.13	260.46	.14	-.30
7.434.488	34	11	46	16	-21.20	259.73	-21.05	259.45	.15	-.28
7.434.523	34	11	46	58	-18.70	258.55	-18.54	258.29	.16	-.26
7.434.558	34	11	47	40	-16.57	257.26	-16.40	257.02	.17	-.24
7.434.593	34	11	48	22	-14.00	256.15	-13.82	255.93	.18	-.22
7.434.628	34	11	49	4	-11.85	255.08	-11.67	254.88	.18	-.20
7.434.663	34	11	49	46	-9.27	254.14	-9.08	253.96	.19	-.18
7.434.698	34	11	50	28	-7.11	253.09	-6.91	252.92	.20	-.17
7.434.733	34	11	51	10	-4.57	252.18	-4.36	252.03	.21	-.15
7.434.768	34	11	51	52	-2.48	251.16	-2.27	251.02	.21	-.14
7.435.048	34	11	57	28	-2.27	252.80	-2.06	252.67	.21	-.13
7.435.083	34	11	58	10	.22	251.96	.44	251.84	.22	-.12
7.435.118	34	11	58	52	2.19	250.84	2.42	250.73	.23	-.11
7.435.153	34	11	59	34	4.62	250.01	4.85	249.92	.23	-.09
7.435.188	34	12	0	16	6.55	248.95	6.79	248.87	.24	-.08
7.435.223	34	12	0	58	8.94	248.22	9.19	248.16	.25	-.06
7.435.258	34	12	1	40	10.80	247.18	11.05	247.13	.25	-.05
7.435.293	34	12	2	22	13.09	246.48	13.35	246.44	.26	-.04
7.435.328	34	12	3	4	14.87	245.44	15.14	245.41	.27	-.03
7.435.363	34	12	3	46	17.13	244.71	17.40	244.69	.27	-.02
7.435.573	34	12	7	58	7.53	243.97	7.81	243.89	.28	-.08
7.435.643	34	12	9	22	15.93	243.82	16.22	243.79	.29	-.03
7.435.678	34	12	10	4	17.71	242.67	18.00	242.65	.29	-.02
7.435.713	34	12	10	46	23.79	242.69	24.08	243.71	.29	.02
7.435.853	34	12	13	34	27.26	229.83	27.62	229.83	.36	.00
7.435.888	34	12	14	16	26.38	226.48	26.75	226.47	.37	-.01

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.468.648	34	23	9	28	-77.22	150.05	-77.61	149.07	-.39	-.98
7.468.683	34	23	10	10	-77.30	139.61	-77.64	138.31	-.34	-1.30
7.468.718	34	23	10	52	-78.07	146.63	-78.44	145.46	-.37	-1.17
7.468.788	34	23	12	16	-78.61	154.21	-79.01	153.24	-.40	-.97
7.469.348	34	23	23	28	-57.54	109.17	-57.68	108.41	-.14	-.76
7.469.628	34	23	29	4	-32.72	80.49	-32.64	80.10	.08	-.39
7.470.433	34	23	45	10	-22.54	75.93	-22.40	75.64	.14	-.29
7.470.468	34	23	45	52	-20.49	74.66	-20.34	74.39	.15	-.27
7.470.503	34	23	46	34	-17.96	73.52	-17.80	73.27	.16	-.25
7.470.538	34	23	47	16	-15.87	72.73	-15.70	72.10	.17	-.23
7.470.573	34	23	47	58	-13.35	71.25	-13.17	71.04	.18	-.21
7.470.608	34	23	48	40	-11.24	70.16	-11.05	69.96	.19	-.20
7.470.643	34	23	49	22	-8.70	69.22	-8.51	69.04	.19	-.18
7.470.678	34	23	50	4	-6.58	68.24	-6.38	68.08	.20	-.16
7.470.713	34	23	50	46	-4.01	67.40	-3.80	67.25	.21	-.15
7.470.748	34	23	51	28	-1.87	66.46	-1.65	66.33	.22	-.13
7.471.028	34	23	57	4	-1.60	67.91	-1.39	67.78	.21	-.13
7.471.063	34	23	57	46	.88	67.05	1.10	66.94	.22	-.11
7.471.098	34	23	58	28	2.86	65.90	3.09	65.80	.23	-.10
7.471.133	34	23	59	10	5.27	65.10	5.51	65.01	.24	-.09
7.471.168	34	23	59	52	7.16	64.04	7.40	63.96	.24	-.08
7.471.203	35	0	0	34	9.48	63.34	9.73	63.28	.25	-.06
7.471.238	35	0	1	16	11.31	62.37	11.57	62.32	.26	-.05
7.471.273	35	0	1	58	13.64	61.69	13.90	61.65	.26	-.04
7.471.308	35	0	2	40	15.46	60.67	15.73	60.64	.27	-.03
7.471.343	35	0	3	22	17.72	59.95	17.99	59.94	.27	-.01
7.471.553	35	0	7	34	7.98	59.30	8.26	59.23	.28	-.07
7.471.623	35	0	8	58	16.38	59.19	16.67	59.17	.29	-.02
7.471.658	35	0	9	40	18.15	58.00	18.44	57.98	.29	-.02
7.471.693	35	0	10	22	24.25	59.16	24.54	59.19	.29	.03
7.471.833	35	0	13	10	49.82	63.62	50.08	63.90	.26	.28
7.471.868	35	0	13	52	51.74	62.42	52.01	62.73	.27	.31
7.471.903	35	0	14	34	54.67	62.21	54.94	62.56	.27	.35

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.504.348	35	11	3	28	-65.58	325.44	-65.97	324.92	-.39	-.52
7.504.593	35	11	8	22	-65.25	325.63	-65.64	325.10	-.39	-.53
7.504.628	35	11	9	4	-64.40	325.99	-64.79	325.48	-.39	-.51
7.504.698	35	11	10	28	-65.14	323.82	-65.52	323.26	-.38	-.56
7.505.258	35	11	21	40	-56.20	282.66	-56.33	281.92	-.13	-.74
7.505.538	35	11	27	16	-55.16	274.89	-55.22	274.16	-.06	-.73
7.506.343	35	11	43	22	-24.96	252.34	-24.83	252.03	.13	-.31
7.506.378	35	11	44	4	-22.88	250.96	-22.74	250.67	.14	-.29
7.506.413	35	11	44	46	-20.37	249.72	-20.22	249.45	.15	-.27
7.506.448	35	11	45	28	-18.21	248.63	-18.05	248.38	.16	-.25
7.506.483	35	11	46	10	-15.61	247.66	-15.44	247.43	.17	-.23
7.506.518	35	11	46	52	-13.45	246.66	-13.27	246.45	.18	-.21
7.506.553	35	11	47	34	-10.88	245.72	-10.70	245.53	.18	-.19
7.506.588	35	11	48	16	-8.78	244.66	-8.59	244.48	.19	-.18
7.506.623	35	11	48	58	-6.22	243.68	-6.02	243.52	.20	-.16
7.506.658	35	11	49	40	-4.12	242.63	-3.91	242.48	.21	-.15
7.506.938	35	11	55	16	-3.73	243.86	-3.52	243.72	.21	-.14
7.506.973	35	11	55	58	-1.19	242.97	-.97	242.84	.22	-.13
7.507.008	35	11	56	40	.81	241.80	1.03	241.69	.22	-.11
7.507.043	35	11	57	22	3.29	241.02	3.52	240.92	.23	-.10
7.507.078	35	11	58	4	5.28	239.98	5.52	239.89	.24	-.09
7.507.113	35	11	58	46	7.69	239.30	7.93	239.23	.24	-.07
7.507.148	35	11	59	28	9.54	238.29	9.79	238.23	.25	-.06
7.507.183	35	12	0	10	11.84	237.58	12.10	237.53	.26	-.05
7.507.218	35	12	0	52	13.63	236.52	13.89	236.48	.26	-.04
7.507.253	35	12	1	34	15.89	235.77	16.16	235.75	.27	-.02
7.507.463	35	12	5	46	4.67	236.26	4.94	236.17	.27	-.09
7.507.533	35	12	7	10	13.34	236.19	13.61	236.15	.27	-.04
7.507.568	35	12	7	52	15.14	235.09	15.42	235.06	.28	-.03
7.507.603	35	12	8	34	21.18	236.12	21.46	236.13	.28	.01
7.507.743	35	12	11	22	32.02	223.58	32.36	223.62	.34	.04
7.507.778	35	12	12	4	33.38	222.10	33.73	222.14	.35	.04

rev 166

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.540.538	35	23	7	15	-38.70	147.58	-39.11	147.35	-.41	-.23
7.540.573	35	23	7	57	-40.01	144.87	-40.41	144.61	-.40	-.26
7.540.608	35	23	8	39	-33.71	148.29	-34.12	148.08	-.41	-.21
7.540.678	35	23	10	3	-33.37	150.86	-33.78	150.66	-.41	-.20
7.541.238	35	23	21	15	-61.09	107.73	-61.29	106.91	-.20	-.82
7.541.518	35	23	26	51	-50.54	81.21	-50.54	80.57	.00	-.64
7.542.323	35	23	42	57	-23.99	67.10	-23.86	66.80	.13	-.30
7.542.358	35	23	43	39	-21.84	66.06	-21.70	65.78	.14	-.28
7.542.393	35	23	44	21	-19.36	64.95	-19.21	64.69	.15	-.26
7.542.428	35	23	45	3	-17.32	63.71	-17.16	63.47	.16	-.24
7.542.463	35	23	45	45	-14.83	62.58	-14.66	62.36	.17	-.22
7.542.498	35	23	46	27	-12.67	61.43	-12.49	61.22	.18	-.21
7.542.533	35	23	47	9	-10.05	60.49	-9.86	60.30	.19	-.19
7.542.568	35	23	47	51	-7.86	59.48	-7.66	59.31	.20	-.17
7.542.603	35	23	48	33	-5.30	58.59	-5.10	58.43	.20	-.16
7.542.638	35	23	49	15	-3.21	57.63	-3.00	57.49	.21	-.14
7.542.918	35	23	54	51	-2.72	58.98	-2.51	58.84	.21	-.14
7.542.953	35	23	55	33	-.21	58.07	.01	57.95	.22	-.12
7.542.988	35	23	56	15	1.77	56.96	2.00	56.85	.23	-.11
7.543.023	35	23	56	57	4.20	56.11	4.43	56.02	.23	-.09
7.543.058	35	23	57	39	6.14	55.10	6.38	55.02	.24	-.08
7.543.093	35	23	58	21	8.50	54.43	8.74	54.36	.24	-.07
7.543.128	35	23	59	3	10.35	53.44	10.60	53.38	.25	-.06
7.543.163	35	23	59	45	12.66	52.74	12.92	52.70	.26	-.04
7.543.198	36	0	0	27	14.45	51.71	14.71	51.68	.26	-.03
7.543.233	36	0	1	9	16.76	50.99	17.03	50.97	.27	-.02
7.543.443	36	0	5	21	6.24	50.46	6.52	50.38	.28	-.08
7.543.513	36	0	6	45	15.63	50.81	15.91	50.78	.28	-.03
7.543.548	36	0	7	27	17.42	49.74	17.71	49.72	.29	-.02
7.543.583	36	0	8	9	24.20	51.25	24.48	51.28	.28	.03
7.543.723	36	0	10	57	52.89	53.94	53.15	54.27	.26	.33
7.543.758	36	0	11	39	55.09	52.92	55.36	53.28	.27	.36
7.543.793	36	0	12	21	58.48	53.02	58.75	53.45	.27	.43

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.576.308	36	11	2	39	-59.06	336.01	-59.49	335.83	-.43	-.18
7.576.553	36	11	7	33	-62.27	176.81	-61.85	176.48	.42	-.33
7.576.588	36	11	8	15	*******	*******	*******	*******	*****	******
7.576.658	36	11	9	39	-62.37	182.37	-61.96	181.97	.41	-.40
7.577.218	36	11	20	51	-59.67	281.04	-59.86	280.25	-.19	-.79
7.577.498	36	11	26	27	-51.24	262.65	-51.28	261.99	-.04	-.66
7.578.303	36	11	42	33	-22.76	241.99	-22.62	241.70	.14	-.29
7.578.338	36	11	43	15	-20.75	240.74	-20.60	240.47	.15	-.27
7.578.373	36	11	43	57	-18.27	239.62	-18.11	239.37	.16	-.25
7.578.408	36	11	44	39	-16.19	238.43	-16.02	238.19	.17	-.24
7.578.443	36	11	45	21	-13.66	237.35	-13.48	237.13	.18	-.22
7.578.478	36	11	46	3	-11.46	236.33	-11.28	236.13	.18	-.20
7.578.513	36	11	46	45	-8.82	235.40	-8.63	235.22	.19	-.18
7.578.548	36	11	47	27	-6.66	234.41	-6.46	234.25	.20	-.16
7.578.583	36	11	48	9	-4.12	233.54	-3.91	233.39	.21	-.15
7.578.618	36	11	48	51	-2.04	232.58	-1.83	232.45	.21	-.13
7.578.898	36	11	54	27	-1.71	233.99	-1.50	233.86	.21	-.13
7.578.933	36	11	55	9	.75	233.16	.97	233.05	.22	-.11
7.578.968	36	11	55	51	2.74	232.09	2.97	231.94	.23	-.10
7.579.003	36	11	56	33	5.17	231.22	5.40	231.13	.23	-.09
7.579.038	36	11	57	15	7.09	230.12	7.33	230.04	.24	-.08
7.579.073	36	11	57	57	9.44	229.38	9.69	229.32	.25	-.06
7.579.108	36	11	58	39	11.26	228.38	11.51	228.33	.25	-.05
7.579.143	36	11	59	21	13.55	227.69	13.81	227.65	.26	-.04
7.579.178	36	12	0	3	15.32	226.64	15.59	226.61	.27	-.03
7.579.213	36	12	0	45	17.59	225.93	17.86	225.92	.27	-.01
7.579.423	36	12	4	57	7.54	225.51	7.82	225.43	.28	-.08
7.579.483	36	12	6	21	17.00	225.85	17.28	225.83	.28	-.02
7.579.528	36	12	7	3	18.75	224.67	19.04	224.66	.29	-.01
7.579.563	36	12	7	45	25.42	226.09	25.70	226.13	.28	.04
7.579.703	36	12	10	33	31.96	224.46	32.25	224.54	.29	.08
7.579.738	36	12	11	15	33.36	223.25	33.66	223.33	.30	.08

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.612.428	36	23	5	3	-86.78	69.62	-86.77	61.84	.01	-7.78
7.612.463	36	23	5	45	-84.81	51.85	-84.68	47.25	.13	-4.60
7.612.498	36	23	6	27	-85.13	10.59	-84.76	7.88	.37	-2.71
7.612.568	36	23	7	51	-84.44	22.54	-84.13	19.45	.31	-3.09
7.613.128	36	23	19	3	-61.67	100.58	-61.89	99.76	-.22	-.82
7.613.408	36	23	24	39	-51.55	81.24	-51.62	80.58	-.07	-.66
7.614.213	36	23	40	45	-24.65	57.97	-24.52	57.66	.13	-.31
7.614.248	36	23	41	27	-22.57	56.79	-22.43	56.50	.14	-.29
7.614.283	36	23	42	9	-20.05	55.72	-19.90	55.45	.15	-.27
7.614.318	36	23	42	51	-17.96	54.62	-17.80	54.37	.16	-.25
7.614.353	36	23	43	33	-15.40	53.60	-15.23	53.37	.17	-.23
7.614.388	36	23	44	15	-13.27	52.55	-13.10	52.34	.17	-.21
7.614.423	36	23	44	57	-10.74	51.51	-10.56	51.32	.18	-.19
7.614.458	36	23	45	39	-8.64	50.40	-8.45	50.22	.19	-.18
7.614.493	36	23	46	21	-6.10	49.36	-5.90	49.20	.20	-.16
7.614.528	36	23	47	3	-3.99	48.28	-3.78	48.13	.21	-.15
7.614.808	36	23	52	39	-3.52	49.86	-3.31	49.72	.21	-.14
7.614.843	36	23	53	21	-.98	49.00	-.77	48.87	.21	-.13
7.614.878	36	23	54	3	.99	47.84	1.21	47.73	.22	-.11
7.614.913	36	23	54	45	3.42	46.99	3.65	46.89	.23	-.10
7.614.948	36	23	55	27	5.39	45.96	5.62	45.87	.24	-.09
7.614.983	36	23	56	9	7.73	45.23	7.97	45.16	.24	-.07
7.615.018	36	23	56	51	9.56	44.24	9.81	44.18	.25	-.06
7.615.053	36	23	57	33	11.84	43.54	12.09	43.49	.25	-.05
7.615.088	36	23	58	15	13.63	42.51	13.89	42.47	.26	-.04
7.615.123	36	23	58	57	15.88	41.77	16.15	41.75	.27	-.02
7.615.333	37	0	3	9	5.23	41.68	5.50	41.59	.27	-.09
7.615.403	37	0	4	33	14.75	42.06	15.02	42.03	.27	-.03
7.615.438	37	0	5	15	16.59	40.92	16.87	40.90	.28	-.02
7.615.473	37	0	5	57	23.31	42.38	23.58	42.40	.27	.02
7.615.613	37	0	8	45	40.61	30.51	40.95	30.62	.34	.11
7.615.648	37	0	9	27	42.20	28.61	42.55	28.72	.35	.11
7.615.683	37	0	10	9	44.58	27.14	44.94	27.26	.36	.12

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7.648.198	37	11	0	27	-67.16	325.15	-67.59	324.92	-.43	-.23
7.648.443	37	11	5	21	-65.32	325.06	-65.75	324.82	-.43	-.24
7.648.478	37	11	6	3	-66.22	323.85	-66.65	323.58	-.43	-.27
7.648.548	37	11	7	27	-65.31	322.81	-65.73	322.52	-.42	-.29
7.649.108	37	11	18	39	-59.32	271.04	-59.50	270.26	-.18	-.78
7.649.388	37	11	24	15	-50.27	253.43	-50.32	252.79	-.05	-.64
7.650.193	37	11	40	21	-23.24	232.48	-23.10	232.18	.14	-.30
7.650.228	37	11	41	3	-20.99	231.36	-20.84	231.08	.15	-.28
7.650.263	37	11	41	45	-18.38	230.37	-18.23	230.12	.15	-.25
7.650.298	37	11	42	27	-16.32	229.35	-16.16	229.11	.16	-.24
7.650.333	37	11	43	9	-13.84	228.35	-13.67	228.13	.17	-.22
7.650.368	37	11	43	51	-11.81	227.21	-11.63	227.01	.18	-.20
7.650.403	37	11	44	33	-9.34	226.17	-9.15	225.99	.19	-.18
7.650.438	37	11	45	15	-7.24	225.05	-7.04	224.88	.20	-.17
7.650.473	37	11	45	57	-4.67	224.09	-4.47	223.94	.20	-.15
7.650.508	37	11	46	39	-2.52	223.15	-2.31	223.01	.21	-.14
7.650.788	37	11	52	15	-2.09	224.68	-1.88	224.55	.21	-.13
7.650.823	37	11	52	57	.41	223.84	.63	223.72	.22	-.12
7.650.858	37	11	53	39	2.34	222.68	2.57	222.58	.23	-.10
7.650.893	37	11	54	21	4.73	221.82	4.96	221.73	.23	-.09
7.650.928	37	11	55	3	6.63	220.71	6.87	220.63	.24	-.08
7.650.963	37	11	55	45	8.92	220.00	9.17	219.94	.25	-.06
7.650.998	37	11	56	27	10.73	218.98	10.98	218.93	.25	-.05
7.651.033	37	11	57	9	13.02	218.26	13.28	218.22	.26	-.04
7.651.068	37	11	57	51	14.78	217.20	15.05	217.17	.27	-.03
7.651.103	37	11	58	33	17.05	216.45	17.32	216.43	.27	-.02
7.651.313	37	12	2	45	7.25	216.55	7.53	216.47	.28	-.08
7.651.383	37	12	4	9	16.18	216.70	16.46	216.68	.28	-.02
7.651.418	37	12	4	51	17.75	215.46	18.04	215.44	.29	-.02
7.651.453	37	12	5	33	24.54	216.94	24.82	216.97	.28	.03
7.651.593	37	12	8	21	23.58	204.95	23.92	204.94	.34	-.01
7.651.628	37	12	9	3	24.72	203.49	25.07	203.49	.35	-.00

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.684.318	37	23	2	51	-56.55	136.37	-56.97	136.12	-.42	-.25
7.684.353	37	23	3	33	-57.81	133.08	-58.23	132.79	-.42	-.29
7.684.388	37	23	4	15	-56.73	135.95	-57.15	135.70	-.42	-.25
7.684.458	37	23	5	39	-57.01	135.45	-57.43	135.18	-.42	-.27
7.685.018	37	23	16	51	-57.90	83.04	-58.06	82.28	-.16	-.76
7.685.298	37	23	22	27	-50.47	68.50	-50.52	67.86	-.05	-.64
7.686.103	37	23	38	33	-24.71	48.60	-24.58	48.29	.13	-.31
7.686.138	37	23	39	15	-22.63	47.42	-22.49	47.13	.14	-.29
7.686.173	37	23	39	57	-20.17	46.25	-20.02	45.98	.15	-.27
7.686.208	37	23	40	39	-18.15	45.07	-17.99	44.82	.16	-.25
7.686.243	37	23	41	21	-15.62	43.96	-15.45	43.73	.17	-.23
7.686.278	37	23	42	3	-13.48	42.79	-13.30	42.58	.18	-.21
7.686.313	37	23	42	45	-10.87	41.80	-10.69	41.61	.18	-.19
7.686.348	37	23	43	27	-8.68	40.78	-8.49	40.60	.19	-.18
7.686.383	37	23	44	9	-6.06	39.91	-5.86	39.75	.20	-.16
7.686.418	37	23	44	51	-3.91	38.98	-3.70	38.83	.21	-.15
7.686.698	37	23	50	27	-3.46	40.36	-3.25	40.22	.21	-.14
7.686.733	37	23	51	9	-1.04	39.46	-.83	39.33	.21	-.13
7.686.768	37	23	51	51	.90	38.30	1.12	38.19	.22	-.11
7.686.803	37	23	52	33	3.27	37.43	3.50	37.33	.23	-.10
7.686.838	37	23	53	15	5.16	36.35	5.40	36.26	.24	-.09
7.686.873	37	23	53	57	7.52	35.60	7.76	35.53	.24	-.07
7.686.908	37	23	54	39	9.36	34.50	9.61	34.54	.25	-.06
7.686.943	37	23	55	21	11.67	33.91	11.92	33.86	.25	-.05
7.686.978	37	23	56	3	13.49	32.90	13.75	32.86	.26	-.04
7.687.013	37	23	56	45	15.80	32.21	16.07	32.13	.27	-.02
7.687.223	38	0	0	57	6.86	29.97	7.15	29.89	.29	-.08
7.687.293	38	0	2	21	14.95	29.90	15.24	29.87	.29	-.03
7.687.328	38	0	3	3	16.63	28.67	16.93	28.64	.30	-.03
7.687.363	38	0	3	45	22.60	29.76	22.89	29.77	.29	.01
7.687.503	38	0	6	33	38.75	31.01	39.04	31.15	.29	.14
7.687.538	38	0	7	15	40.47	29.82	40.76	29.97	.29	.15
7.687.573	38	0	7	57	42.85	29.20	43.15	29.37	.30	.17

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7.720.088	38	10	58	15	-67.85	323.10	-68.28	323.01	-.43	-.09
7.720.333	38	11	3	9	-68.65	336.34	-69.07	336.48	-.42	.14
7.720.368	38	11	3	51	-67.13	322.12	-67.56	321.99	-.43	-.13
7.720.438	38	11	5	15	-66.07	319.92	-66.50	319.74	-.43	-.18
7.720.998	38	11	16	27	-52.59	261.00	-52.77	260.37	-.18	-.63
7.721.278	38	11	22	3	-52.91	260.79	-53.08	260.14	-.17	-.65
7.722.083	38	11	38	9	-23.03	222.95	-22.89	222.66	.14	-.29
7.722.118	38	11	38	51	-20.96	222.01	-20.82	221.73	.14	-.28
7.722.153	38	11	39	33	-18.53	220.91	-18.38	220.66	.15	-.25
7.722.188	38	11	40	15	-16.53	219.69	-16.37	219.45	.16	-.24
7.722.223	38	11	40	57	-14.01	218.55	-13.84	218.33	.17	-.22
7.722.258	38	11	41	39	-11.85	217.45	-11.67	217.25	.18	-.20
7.722.293	38	11	42	21	-9.21	216.49	-9.02	216.31	.19	-.18
7.722.328	38	11	43	3	-7.02	215.53	-6.82	215.36	.20	-.17
7.722.363	38	11	43	45	-4.46	214.68	-4.26	214.53	.20	-.15
7.722.398	38	11	44	27	-2.34	213.76	-2.13	213.62	.21	-.14
7.722.678	38	11	50	3	-2.19	215.01	-1.98	214.88	.21	-.13
7.722.713	38	11	50	45	.26	214.13	.48	214.01	.22	-.12
7.722.748	38	11	51	27	2.22	212.96	2.45	212.85	.23	-.11
7.722.783	38	11	52	9	4.65	212.13	4.88	212.04	.23	-.09
7.722.818	38	11	52	51	6.58	211.12	6.82	211.04	.24	-.08
7.722.853	38	11	53	33	8.95	210.45	9.19	210.39	.24	-.06
7.722.888	38	11	54	15	10.83	209.47	11.08	209.42	.25	-.05
7.722.923	38	11	54	57	13.18	208.80	13.44	208.76	.26	-.04
7.722.958	38	11	55	39	15.03	207.77	15.29	207.74	.26	-.03
7.722.993	38	11	56	21	17.35	207.07	17.62	207.06	.27	-.01
7.723.203	38	12	0	33	8.68	204.35	8.97	204.28	.29	-.07
7.723.273	38	12	1	57	16.83	204.34	17.12	204.32	.29	-.02
7.723.308	38	12	2	39	18.54	203.18	18.84	203.16	.30	-.02
7.723.343	38	12	3	21	24.55	204.32	24.84	204.34	.29	.02
7.725.933	38	12	55	9	*******	*******	*******	*******	*****	******
7.725.968	38	12	55	51	*******	*******	*******	*******	*****	******

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.756.208	38	23	0	39	-75.89	96.09	-76.21	94.81	-.32	-1.28
7.756.243	38	23	1	21	-75.63	87.18	-75.90	85.73	-.27	-1.45
7.756.278	38	23	2	3	-75.17	90.89	-75.46	89.55	-.29	-1.34
7.756.348	38	23	3	27	-75.94	87.05	-76.21	85.56	-.27	-1.49
7.756.908	38	23	14	39	-61.24	70.31	-61.38	69.44	-.14	-.87
7.757.188	38	23	20	15	-56.42	46.78	-56.38	46.01	.04	-.77
7.757.993	38	23	36	21	-24.52	38.99	-24.39	38.68	.13	-.31
7.758.028	38	23	37	3	-22.42	37.75	-22.28	37.46	.14	-.29
7.758.063	38	23	37	45	-19.89	36.62	-19.74	36.35	.15	-.27
7.758.098	38	23	38	27	-17.81	35.47	-17.65	35.22	.16	-.25
7.758.133	38	23	39	9	-15.28	34.41	-15.11	34.18	.17	-.23
7.758.168	38	23	39	51	-13.19	33.31	-13.02	33.10	.17	-.21
7.758.203	38	23	40	33	-10.64	32.30	-10.46	32.11	.18	-.19
7.758.238	38	23	41	15	-8.55	31.15	-8.36	30.97	.19	-.18
7.758.273	38	23	41	57	-5.90	30.39	-5.70	30.23	.20	-.16
7.758.308	38	23	42	39	-3.97	29.51	-3.77	29.36	.20	-.15
7.758.588	38	23	48	15	-3.48	30.78	-3.27	30.64	.21	-.14
7.758.623	38	23	48	57	-1.02	29.92	-.81	29.79	.21	-.13
7.758.658	38	23	49	39	.97	28.74	1.19	28.63	.22	-.11
7.758.693	38	23	50	21	3.42	27.93	3.65	27.83	.23	-.10
7.758.728	38	23	51	3	5.40	26.88	5.63	26.79	.23	-.09
7.758.763	38	23	51	45	7.77	26.21	8.01	26.14	.24	-.07
7.758.798	38	23	52	27	9.67	25.26	9.92	25.20	.25	-.06
7.758.833	38	23	53	9	12.01	24.58	12.26	24.53	.25	-.05
7.758.868	38	23	53	51	13.87	23.59	14.13	23.56	.26	-.03
7.758.903	38	23	54	33	16.18	22.89	16.44	22.87	.26	-.02
7.759.113	38	23	58	45	6.61	20.66	6.89	20.58	.28	-.08
7.759.183	39	0	0	9	14.95	20.70	15.23	20.67	.28	-.03
7.759.218	39	0	0	51	16.69	19.55	16.98	19.53	.29	-.02
7.759.253	39	0	1	33	22.73	20.69	23.02	20.71	.29	.02
7.759.393	39	0	4	21	46.11	15.33	46.43	15.51	.32	.18
7.759.428	39	0	5	3	45.10	14.96	45.42	15.13	.32	.17
7.759.463	39	0	5	45	47.46	13.94	47.79	14.13	.33	.19

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.791.978	39	10	56	2	-87.31	344.30	-87.66	349.85	-.35	5.55
7.792.223	39	11	0	56	-76.72	300.42	-77.14	299.89	-.42	-.53
7.792.258	39	11	1	38	-75.46	288.98	-75.85	288.16	-.39	-.82
7.792.328	39	11	3	2	-76.52	291.35	-76.92	290.53	-.40	-.82
7.792.888	39	11	14	14	-56.44	244.59	-56.57	243.85	-.13	-.74
7.793.168	39	11	19	50	-52.63	231.51	-52.66	230.83	-.03	-.68
7.793.938	39	11	35	14	-25.48	214.72	-25.36	214.40	.12	-.32
7.794.008	39	11	36	38	-20.97	212.37	-20.83	212.09	.14	-.28
7.794.043	39	11	37	20	-18.42	211.16	-18.27	210.91	.15	-.25
7.794.078	39	11	38	2	-16.26	209.91	-16.10	209.67	.16	-.24
7.794.113	39	11	38	44	-13.65	208.91	-13.48	208.69	.17	-.22
7.794.148	39	11	39	26	-11.47	207.89	-11.29	207.69	.18	-.20
7.794.183	39	11	40	8	-8.88	206.98	-8.69	206.80	.19	-.18
7.794.218	39	11	40	50	-6.76	206.01	-6.57	205.84	.19	-.17
7.794.253	39	11	41	32	-4.23	205.12	-4.03	204.97	.20	-.15
7.794.288	39	11	42	14	-2.14	204.15	-1.93	204.02	.21	-.13
7.794.568	39	11	47	50	-2.00	205.54	-1.79	205.41	.21	-.13
7.794.603	39	11	48	32	.49	204.69	.71	204.57	.22	-.12
7.794.638	39	11	49	14	2.50	203.56	2.72	203.46	.22	-.10
7.794.673	39	11	49	56	4.96	202.74	5.19	202.65	.23	-.09
7.794.708	39	11	50	38	6.94	201.70	7.18	201.62	.24	-.08
7.794.743	39	11	51	20	9.35	201.03	9.59	200.97	.24	-.06
7.794.778	39	11	52	2	11.19	200.06	11.44	200.01	.25	-.05
7.794.813	39	11	52	44	13.47	199.37	13.73	199.33	.26	-.04
7.794.848	39	11	53	26	15.24	198.35	15.50	198.32	.26	-.03
7.794.883	39	11	54	8	17.50	197.63	17.77	197.62	.27	-.01
7.795.093	39	11	58	20	8.57	195.25	8.86	195.18	.29	-.07
7.795.163	39	11	59	44	16.89	195.36	17.17	195.34	.29	-.02
7.795.198	39	12	0	26	18.58	194.23	18.88	194.22	.30	-.01
7.795.233	39	12	1	8	24.41	195.27	24.70	195.30	.29	.03
7.795.373	39	12	3	56	40.99	185.01	41.34	185.11	.35	.10
7.795.408	39	12	4	38	42.53	183.23	42.89	183.34	.35	.11

rev 174

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.828.098	39	22	58	26	-73.21	112.63	-73.63	112.12	-.42	-.51
7.828.133	39	22	59	8	-73.76	104.51	-74.15	103.78	-.39	-.73
7.828.168	39	22	59	50	-77.72	91.67	-78.06	90.33	-.34	-1.34
7.828.238	39	23	1	14	-77.20	86.41	-77.52	84.98	-.32	-1.43
7.828.798	39	23	12	26	-57.54	62.09	-57.69	61.33	-.15	-.76
7.829.078	39	23	18	2	-27.11	29.41	-27.01	29.08	.10	-.33
7.829.883	39	23	34	8	-24.31	29.35	-24.18	29.04	.13	-.31
7.829.918	39	23	34	50	-22.27	28.21	-22.13	27.92	.14	-.29
7.829.953	39	23	35	32	-19.75	27.18	-19.60	26.89	.15	-.27
7.829.988	39	23	36	14	-17.67	26.02	-17.51	25.77	.16	-.25
7.830.023	39	23	36	56	-15.14	24.97	-14.98	24.74	.16	-.23
7.830.058	39	23	37	38	-13.07	23.88	-12.90	23.67	.17	-.21
7.830.093	39	23	38	20	-10.55	22.88	-10.37	22.69	.18	-.19
7.830.128	39	23	39	2	-8.46	21.82	-8.27	21.64	.19	-.18
7.830.163	39	23	39	44	-5.86	20.82	-5.68	20.66	.20	-.16
7.830.198	39	23	40	26	-3.71	19.75	-3.50	19.61	.21	-.14
7.830.478	39	23	46	2	-3.28	21.27	-3.08	21.13	.20	-.14
7.830.513	39	23	46	44	-.78	20.38	-.57	20.26	.21	-.12
7.830.548	39	23	47	26	1.23	19.22	1.45	19.11	.22	-.11
7.830.583	39	23	48	8	3.67	18.36	3.90	18.26	.23	-.10
7.830.618	39	23	48	50	5.56	17.33	5.79	17.25	.23	-.08
7.830.653	39	23	49	32	7.91	16.67	8.15	16.60	.24	-.07
7.830.688	39	23	50	14	9.78	15.71	10.03	15.65	.25	-.06
7.830.723	39	23	50	56	12.11	15.04	12.36	15.00	.25	-.04
7.830.758	39	23	51	38	13.95	14.04	14.21	14.01	.26	-.03
7.830.793	39	23	52	20	16.26	13.34	16.52	13.32	.26	-.02
7.831.003	39	23	56	32	6.62	11.52	6.90	11.44	.28	-.08
7.831.073	39	23	57	56	14.94	11.58	15.22	11.55	.28	-.03
7.831.108	39	23	58	38	16.70	10.46	16.99	10.44	.29	-.02
7.831.143	39	23	59	20	22.73	11.63	23.01	11.65	.28	.02
7.831.283	40	0	2	8	50.64	15.58	50.90	15.88	.26	.30
7.831.318	40	0	2	50	49.94	15.09	50.21	15.37	.27	.28

rev 175

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
7.863.868	40	10	53	50	-72.12	326.67	-72.51	327.11	-.39	.44
7.864.113	40	10	58	44	-74.09	279.94	-74.48	279.20	-.39	-.74
7.864.148	40	10	59	26	-77.05	286.12	-77.47	287.48	-.42	-.64
7.864.218	40	11	0	50	-76.44	286.77	-76.85	286.10	-.41	-.67
7.864.778	40	11	12	2	-59.67	241.88	-59.85	241.09	-.18	-.79
7.865.058	40	11	17	38	-52.90	231.81	-53.00	231.13	-.10	-.68
7.865.863	40	11	33	44	-22.86	203.90	-22.73	203.61	.13	-.29
7.865.898	40	11	34	26	-20.71	202.55	-20.56	202.28	.15	-.27
7.865.933	40	11	35	8	-18.18	201.48	-18.03	201.23	.15	-.25
7.865.968	40	11	35	50	-16.09	200.40	-15.92	200.17	.16	-.23
7.866.003	40	11	36	32	-13.58	199.43	-13.41	199.21	.17	-.22
7.866.038	40	11	37	14	-11.53	198.40	-11.35	198.20	.18	-.20
7.866.073	40	11	37	56	-9.03	197.44	-8.84	197.26	.19	-.18
7.866.108	40	11	38	38	-6.90	196.40	-6.71	196.23	.19	-.17
7.866.143	40	11	39	20	-4.32	195.45	-4.12	195.30	.20	-.15
7.866.178	40	11	40	2	-2.24	194.41	-2.03	194.28	.21	-.13
7.866.458	40	11	45	38	-1.97	196.08	-1.76	195.95	.21	-.13
7.866.493	40	11	46	20	.50	195.23	.71	195.11	.21	-.12
7.866.528	40	11	47	2	2.45	194.08	2.67	193.98	.22	-.10
7.866.563	40	11	47	44	4.86	193.24	5.09	193.15	.23	-.09
7.866.598	40	11	48	26	6.76	192.11	7.00	192.03	.24	-.08
7.866.633	40	11	49	8	9.08	191.42	9.32	191.36	.24	-.06
7.866.668	40	11	49	50	10.92	190.42	11.17	190.37	.25	-.05
7.866.703	40	11	50	32	13.21	189.72	13.47	189.68	.26	-.04
7.866.738	40	11	51	14	15.00	188.67	15.26	188.64	.26	-.03
7.866.773	40	11	51	56	17.28	187.93	17.55	187.92	.27	-.01
7.866.983	40	11	55	8	8.64	186.42	8.92	186.35	.28	-.07
7.867.053	40	11	57	32	16.48	186.21	16.77	186.19	.29	-.02
7.867.088	40	11	58	14	18.13	184.99	18.42	184.97	.29	-.02
7.867.123	40	11	58	56	24.15	186.11	24.44	186.13	.29	.02
7.867.263	40	12	1	44	40.98	185.49	41.28	185.64	.30	.15
7.867.298	40	12	2	26	42.58	184.20	42.88	184.36	.30	.16

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 176										
7.899.988	40	22	56	14	-87.39	285.28	-86.97	286.99	.42	1.71
7.900.023	40	22	56	56	-85.82	316.89	-85.41	315.07	.41	-1.82
7.900.058	40	22	57	38	-86.65	84.50	-87.00	79.76	-.35	-4.74
7.900.128	40	22	59	2	-86.94	81.32	-87.27	75.67	-.33	-5.65
7.900.698	40	23	10	14	-58.38	55.65	-58.55	54.89	-.17	-.76
7.900.968	40	23	15	50	-25.70	19.43	-25.60	19.11	.10	-.32
7.901.773	40	23	31	56	-24.43	19.77	-24.30	19.46	.13	-.31
7.901.808	40	23	32	38	-22.34	18.62	-22.20	18.33	.14	-.29
7.901.843	40	23	33	20	-19.78	17.57	-19.63	17.30	.15	-.27
7.901.878	40	23	34	2	-17.67	16.49	-17.51	16.24	.16	-.25
7.901.913	40	23	34	44	-15.13	15.44	-14.97	15.21	.16	-.23
7.901.948	40	23	35	26	-13.03	14.34	-12.86	14.13	.17	-.21
7.901.983	40	23	36	8	-10.50	13.33	-10.32	13.14	.18	-.19
7.902.018	40	23	36	50	-8.39	12.25	-8.20	12.07	.19	-.18
7.902.053	40	23	37	32	-5.84	11.25	-5.64	11.09	.20	-.16
7.902.088	40	23	38	14	-3.72	10.19	-3.52	10.05	.20	-.14
7.902.368	40	23	43	50	-3.28	11.77	-3.08	11.63	.20	-.14
7.902.403	40	23	44	32	-.77	10.93	-.56	10.81	.21	-.12
7.902.438	40	23	45	14	1.22	9.80	1.44	9.69	.22	-.11
7.902.473	40	23	45	56	3.67	8.97	3.89	8.87	.22	-.10
7.902.508	40	23	46	38	5.61	7.85	5.84	7.77	.23	-.08
7.902.543	40	23	47	20	7.95	7.11	8.19	7.04	.24	-.07
7.902.578	40	23	48	2	9.81	6.12	10.06	6.06	.25	-.06
7.902.613	40	23	48	44	12.15	5.44	12.40	5.40	.25	-.04
7.902.648	40	23	49	26	14.00	4.42	14.26	4.39	.26	-.03
7.902.683	40	23	50	8	16.28	3.68	16.54	3.66	.26	-.02
7.902.893	40	23	54	20	6.22	2.68	6.50	2.60	.28	-.08
7.902.963	40	23	55	44	14.65	2.71	14.93	2.68	.28	-.03
7.902.998	40	23	56	26	16.43	1.55	16.71	1.53	.28	-.02
7.903.033	40	23	57	8	22.50	2.72	22.78	2.74	.28	.02
7.903.173	40	23	59	56	56.08	15.95	56.28	16.40	.20	.45
7.903.208	41	0	0	38	55.13	14.80	55.34	15.22	.21	.42
7.903.243	41	0	1	20	58.74	16.49	58.94	17.00	.20	.51
rev 177										
7.935.758	41	10	51	38	-57.20	283.05	-57.63	282.82	-.43	-.23
7.936.003	41	10	56	32	-38.40	270.78	-38.80	270.50	-.40	-.26
7.936.038	41	10	57	14	-44.57	265.60	-44.95	265.28	-.38	-.32
7.936.108	41	10	58	38	-44.14	264.23	-44.51	263.90	-.37	-.33
7.936.668	41	11	9	50	-59.99	232.99	-60.18	232.19	-.19	-.80
7.936.948	41	11	15	26	-54.06	220.27	-54.15	219.57	-.09	-.70
7.937.753	41	11	31	32	-23.04	194.36	-22.91	194.07	.13	-.29
7.937.788	41	11	32	14	-20.80	193.25	-20.68	192.98	.14	-.27
7.937.823	41	11	32	56	-18.19	192.26	-18.04	192.01	.15	-.25
7.937.858	41	11	33	38	-16.11	191.25	-15.95	191.01	.16	-.24
7.937.893	41	11	34	20	-13.63	190.23	-13.46	190.01	.17	-.22
7.937.928	41	11	35	2	-11.58	189.10	-11.40	188.90	.18	-.20
7.937.963	41	11	35	44	-9.10	188.06	-8.92	187.88	.18	-.18
7.937.998	41	11	36	26	-7.08	186.96	-6.87	186.79	.19	-.17
7.938.033	41	11	37	8	-4.55	186.02	-4.35	185.87	.20	-.15
7.938.068	41	11	37	50	-2.43	185.02	-2.22	184.88	.21	-.14
7.938.348	41	11	43	26	-2.01	186.54	-1.80	186.41	.21	-.13
7.938.383	41	11	44	8	.49	185.68	.70	185.56	.21	-.12
7.938.418	41	11	44	50	2.47	184.52	2.69	184.42	.22	-.10
7.938.453	41	11	45	32	4.92	183.72	5.15	183.63	.23	-.09
7.938.488	41	11	46	14	6.84	182.68	7.08	182.60	.24	-.08
7.938.523	41	11	46	56	9.13	181.98	9.37	181.92	.24	-.06
7.938.558	41	11	47	38	10.92	180.96	11.17	180.91	.25	-.05
7.938.593	41	11	48	20	13.19	180.25	13.44	180.21	.25	-.04
7.938.628	41	11	49	2	14.93	179.19	15.19	179.16	.26	-.03
7.938.663	41	11	49	44	17.19	178.43	17.46	178.42	.27	-.01
7.938.873	41	11	53	56	7.97	177.49	8.25	177.42	.28	-.07
7.938.943	41	11	55	20	15.98	177.39	16.26	177.36	.28	-.03
7.938.978	41	11	56	2	17.62	176.18	17.91	176.16	.29	-.02
7.939.013	41	11	56	44	23.61	177.33	23.89	177.35	.28	.02
7.939.153	41	11	59	32	61.90	175.15	62.20	175.62	.30	.47
7.939.188	41	12	0	14	62.66	172.00	62.98	172.45	.32	.45

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 178										
7.971.948	41	22	55	26	-53.10	99.11	-53.52	98.89	-.42	-.22
7.972.018	41	22	56	50	-52.23	97.63	-52.65	97.40	-.42	-.23
7.972.053	41	22	57	32	-52.39	100.53	-52.82	100.32	-.43	-.21
7.972.088	41	22	58	14	-52.79	97.62	-53.21	97.38	-.42	-.24
7.972.368	41	23	3	50	-57.85	61.96	-58.13	61.32	-.28	-.64
7.972.438	41	23	5	14	-58.09	61.49	-58.37	60.84	-.28	-.65
7.972.998	41	23	16	26	-25.61	19.69	-25.58	19.36	.03	-.33
7.973.068	41	23	17	50	-25.04	18.81	-25.00	18.49	.04	-.32
7.973.138	41	23	19	14	-24.29	18.99	-24.25	18.68	.04	-.31
7.973.208	41	23	20	38	-23.10	19.54	-23.06	19.24	.04	-.30
7.973.453	41	23	25	32	-29.63	18.69	-29.57	18.33	.06	-.36
7.973.523	41	23	26	56	-25.24	15.68	-25.16	15.36	.08	-.32
7.973.558	41	23	27	38	-23.17	14.50	-23.08	14.20	.09	-.30
7.973.593	41	23	28	20	-20.68	13.26	-20.58	12.98	.10	-.28
7.973.663	41	23	29	44	-16.12	10.98	-16.00	10.74	.12	-.24
7.973.733	41	23	31	8	-11.43	8.81	-11.29	8.61	.14	-.20
7.973.803	41	23	32	32	-6.65	6.71	-6.49	6.54	.16	-.17
7.973.908	41	23	34	38	2.59	358.45	2.81	358.35	.22	-.10
7.975.063	41	23	57	44	29.19	349.88	29.48	349.93	.30	.05
7.975.098	41	23	58	26	30.70	348.50	31.01	348.56	.31	.06
7.975.203	42	0	0	32	36.43	345.07	36.76	345.16	.33	.09
7.975.238	42	0	1	14	37.84	343.47	38.18	343.56	.34	.09
7.975.343	42	0	3	20	43.31	339.89	43.67	340.00	.36	.11
7.975.378	42	0	4	2	44.80	338.18	44.98	338.29	.36	.11
7.975.553	42	0	7	32	61.72	349.53	62.03	349.96	.31	.43
7.975.588	42	0	8	14	63.28	347.27	63.61	347.71	.33	.44
7.975.623	42	0	8	56	65.90	346.22	66.23	346.72	.33	.50
7.975.658	42	0	9	38	67.40	343.26	67.75	343.76	.35	.50
7.975.833	42	0	13	8	67.76	335.90	68.14	336.28	.38	.38
7.975.868	42	0	13	50	68.89	332.45	69.28	332.80	.39	.35
rev 179										
8.007.928	42	10	55	2	-70.35	255.93	-70.73	255.22	-.38	-.71
8.007.998	42	10	56	26	-69.38	254.37	-69.75	253.66	-.37	-.71
8.008.033	42	10	57	8	-70.44	258.72	-70.83	259.05	-.39	-.67
8.008.068	42	10	57	50	-70.13	253.73	-70.50	252.98	-.37	-.75
8.008.348	42	11	3	26	-60.06	234.47	-60.32	233.76	-.26	-.71
8.008.418	42	11	4	50	-60.13	233.09	-60.38	232.36	-.25	-.73
8.009.118	42	11	18	50	-39.58	204.32	-39.61	203.84	-.03	-.48
8.009.188	42	11	20	14	-39.88	203.72	-39.90	203.24	-.02	-.48
8.009.433	42	11	25	8	-29.65	193.97	-29.59	193.61	.06	-.36
8.009.503	42	11	26	32	-25.17	190.93	-25.09	190.61	.08	-.32
8.009.538	42	11	27	14	-23.13	189.68	-23.04	189.38	.09	-.30
8.009.573	42	11	27	56	-20.66	188.37	-20.56	188.09	.10	-.28
8.009.643	42	11	29	20	-16.10	186.05	-15.98	185.81	.12	-.24
8.009.678	42	11	30	2	-13.99	185.04	-13.88	184.82	.13	-.22
8.009.713	42	11	30	44	-11.41	184.02	-11.27	183.82	.14	-.20
8.009.783	42	11	32	8	-6.62	182.15	-6.46	181.98	.16	-.17
8.010.063	42	11	37	44	-8.05	175.66	-7.84	175.49	.21	-.17
8.010.098	42	11	38	26	-6.01	174.55	-5.79	174.39	.22	-.16
8.011.043	42	11	57	20	29.36	164.97	29.66	165.02	.30	.05
8.011.078	42	11	58	2	30.70	163.91	31.01	163.97	.31	.06
8.011.183	42	12	0	8	36.44	160.88	36.77	160.97	.33	.09
8.011.218	42	12	0	50	37.84	159.37	38.17	159.46	.33	.09
8.011.323	42	12	2	56	43.47	155.73	43.82	155.85	.35	.12
8.011.358	42	12	3	38	44.74	153.99	45.10	154.10	.36	.11
8.011.533	42	12	7	8	54.84	164.98	55.15	165.28	.31	.30
8.011.568	42	12	7	50	56.15	162.86	56.48	163.16	.33	.30
8.011.603	42	12	8	32	58.37	161.70	58.70	162.03	.33	.33
8.011.638	42	12	9	14	59.60	159.16	59.94	159.48	.34	.32
8.011.813	42	12	12	44	72.91	308.88	72.48	309.63	-.43	-.25
8.011.848	42	12	13	26	69.15	316.22	68.73	315.85	-.42	-.37
8.011.883	42	12	14	8	77.80	145.96	78.20	146.62	.40	.66

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
8.043.908	42	22	54	37	-82.08	63.75	-82.42	61.73	-.34	-2.02
8.043.978	42	22	56	1	-82.34	70.26	-82.71	68.47	-.37	-1.79
8.044.013	42	22	56	43	-84.24	85.25	-84.66	83.94	-.42	-1.31
8.044.048	42	22	57	25	-83.94	70.30	-84.31	68.01	-.37	-2.29
8.044.328	42	23	3	1	-80.50	63.75	-80.84	61.99	-.34	-1.76
8.044.398	42	23	4	25	-81.19	73.30	-81.57	71.78	-.38	-1.52
8.044.958	42	23	15	37	-42.28	7.91	-42.21	7.40	.05	-.51
8.045.028	42	23	17	1	-41.48	8.24	-41.43	7.74	.05	-.50
8.045.098	42	23	18	25	-41.38	7.97	-41.30	7.47	.06	-.50
8.045.168	42	23	19	49	-41.03	6.42	-40.96	5.93	.07	-.49
8.045.413	42	23	24	44	-29.79	8.72	-29.73	8.36	.06	-.36
8.045.483	42	23	26	7	-25.45	5.58	-25.36	5.26	.09	-.32
8.045.518	42	23	26	49	-23.32	4.29	-23.22	3.99	.10	-.30
8.045.553	42	23	27	31	-20.75	3.01	-20.64	2.73	.11	-.28
8.045.623	42	23	28	55	-16.02	.83	-15.89	.59	.13	-.24
8.045.693	42	23	30	19	-11.41	358.77	-11.26	358.57	.15	-.20
8.045.763	42	23	31	43	-6.73	356.71	-6.57	356.54	.16	-.17
8.045.868	42	23	33	49	-5.67	357.82	-5.51	357.66	.16	-.16
8.047.023	42	23	56	55	29.14	340.83	29.44	340.88	.30	.05
8.047.058	42	23	57	37	30.65	339.46	30.96	339.52	.31	.06
8.047.163	42	23	59	43	36.38	336.09	36.71	336.18	.33	.09
8.047.198	43	0	0	25	37.77	334.58	38.11	334.67	.34	.09
8.047.303	43	0	2	31	43.21	331.35	43.56	331.47	.35	.12
8.047.338	43	0	3	13	44.35	329.66	44.71	329.77	.36	.11
8.047.513	43	0	6	43	39.84	330.70	40.20	330.78	.36	.08
8.047.548	43	0	7	25	40.93	329.08	41.30	329.16	.37	.08
8.047.583	43	0	8	7	42.87	328.01	43.24	328.09	.37	.08
8.047.618	43	0	8	49	43.90	326.23	44.28	326.31	.38	.08
8.047.793	43	0	12	19	86.14	135.23	85.73	133.46	-.41	-1.77
8.047.828	43	0	13	1	82.94	151.29	82.57	149.39	-.37	-1.90
8.047.863	43	0	13	43	75.11	305.78	75.54	305.86	.43	.08

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
8.079.608	43	10	48	37	*******	*******	*******	*******	*****	******
8.079.643	43	10	49	19	*******	*******	*******	*******	*****	******
8.079.818	43	10	52	49	-70.30	255.26	-70.71	254.73	-.41	-.53
8.079.888	43	10	54	13	-69.70	252.94	-70.10	252.37	-.40	-.57
8.079.923	43	10	54	55	-70.46	258.70	-70.87	258.23	-.41	-.47
8.079.958	43	10	55	37	-70.40	254.14	-70.80	253.57	-.40	-.57
8.080.238	43	11	1	13	-74.83	229.05	-75.12	227.73	-.29	-1.32
8.080.308	43	11	2	37	-75.52	226.79	-75.79	225.36	-.27	-1.43
8.081.008	43	11	16	37	-34.59	187.02	-34.56	186.60	.03	-.42
8.081.078	43	11	18	1	-34.00	186.78	-33.97	186.37	.03	-.41
8.081.323	43	11	22	55	-29.58	183.66	-29.52	183.30	.06	-.36
8.081.393	43	11	24	19	-25.12	180.97	-25.03	180.65	.09	-.32
8.081.428	43	11	25	1	-23.09	179.83	-22.99	179.53	.10	-.30
8.081.463	43	11	25	43	-20.66	178.54	-20.55	178.26	.11	-.28
8.081.533	43	11	27	7	-16.13	176.20	-16.00	175.96	.13	-.24
8.081.568	43	11	27	49	-14.04	175.14	-13.91	174.92	.13	-.22
8.081.603	43	11	28	31	-11.44	173.96	-11.30	173.76	.14	-.20
8.081.673	43	11	29	55	-8.46	171.79	-8.30	171.63	.16	-.16
8.081.953	43	11	35	31	19.19	203.02	19.13	203.05	-.06	.03
8.081.988	43	11	36	13	21.95	203.93	21.88	203.98	-.07	.05
8.082.933	43	11	55	7	29.31	156.28	29.61	156.34	.30	.06
8.082.968	43	11	55	49	30.90	155.16	31.20	155.22	.30	.06
8.083.073	43	11	57	55	36.77	151.74	37.09	151.83	.32	.09
8.083.108	43	11	58	37	38.16	150.25	38.49	150.35	.33	.10
8.083.213	43	12	0	43	43.50	146.49	43.85	146.61	.35	.12
8.083.248	43	12	1	25	44.78	144.78	45.14	144.90	.36	.12
8.083.423	43	12	4	55	52.66	151.93	52.99	152.17	.33	.24
8.083.458	43	12	5	37	53.98	149.84	54.22	150.08	.24	.24
8.083.493	43	12	6	19	57.93	153.37	58.26	153.70	.33	.33
8.083.528	43	12	7	1	59.25	151.13	59.59	151.47	.34	.34

rev 182

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
8.115.798	43	22	52	25	-75.81	66.56	-76.20	65.74	-.39	-.82
8.115.868	43	22	53	49	-77.12	73.25	-77.53	72.56	-.41	-.69
8.115.903	43	22	54	31	-72.90	65.02	-73.29	64.28	-.39	-.74
8.115.938	43	22	55	13	-72.13	58.60	-72.49	57.75	-.36	-.85
8.116.218	43	23	0	49	-82.87	7.02	-82.89	3.45	-.02	-3.57
8.116.288	43	23	2	13	-84.41	2.47	-84.39	357.95	.02	-4.52
8.116.848	43	23	13	25	-24.93	19.60	-25.04	19.29	-.11	-.31
8.116.918	43	23	14	49	-24.29	19.59	-24.39	19.28	-.10	-.31
8.116.988	43	23	16	13	-24.68	18.71	-24.78	18.40	-.10	-.31
8.117.058	43	23	17	37	-25.21	18.46	-25.30	18.14	-.09	-.32
8.117.303	43	23	22	31	-29.97	359.18	-29.91	358.81	.06	-.37
8.117.373	43	23	23	55	-25.38	356.51	-25.30	356.19	.08	-.32
8.117.408	43	23	24	37	-23.32	355.27	-23.23	354.97	.09	-.30
8.117.443	43	23	25	19	-20.84	353.94	-20.73	353.66	.11	-.28
8.117.513	43	23	26	43	-16.29	351.59	-16.15	351.35	.13	-.24
8.117.583	43	23	28	7	-11.62	349.35	-11.48	349.15	.14	-.20
8.117.653	43	23	29	31	-6.84	347.18	-6.68	347.01	.16	-.17
8.117.758	43	23	31	37	-5.86	340.44	-5.65	340.28	.21	-.16
8.118.913	43	23	54	43	28.99	331.55	29.29	331.60	.30	.05
8.118.948	43	23	55	25	30.47	330.15	30.78	330.21	.31	.06
8.119.053	43	23	57	31	36.16	326.68	36.49	326.77	.33	.09
8.119.088	43	23	58	13	37.58	325.11	37.91	325.20	.33	.09
8.119.193	44	0	0	19	43.14	321.76	43.49	321.87	.35	.11
8.119.228	44	0	1	1	44.49	320.12	44.85	320.24	.36	.12
8.119.403	44	0	4	31	52.47	326.97	52.80	327.21	.33	.24
8.119.438	44	0	5	13	53.64	324.81	53.98	325.05	.34	.24
8.119.473	44	0	5	55	57.61	329.44	57.93	329.78	.32	.34
8.119.508	44	0	6	37	59.17	327.39	59.50	327.73	.33	.34
8.119.683	44	0	10	7	48.76	312.36	49.16	312.44	.40	.08
8.119.718	44	0	10	49	49.59	310.21	49.99	310.27	.40	.06

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DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
8.151.778	44	10	52	1	-80.56	269.71	-80.99	269.79	-.43	.08
8.151.848	44	10	53	25	-79.72	260.63	-80.15	260.29	-.43	-.34
8.151.883	44	10	54	7	-78.96	261.62	-79.39	261.33	-.43	-.29
8.151.918	44	10	54	49	-78.94	251.95	-79.38	251.27	-.42	-.68
8.152.198	44	11	0	25	-72.07	213.34	-72.32	212.12	-.25	-1.22
8.152.268	44	11	1	49	-73.00	216.05	-73.26	214.80	-.26	-1.25
8.152.968	44	11	15	49	-26.76	183.79	-26.78	183.45	-.02	-.34
8.153.038	44	11	17	13	-25.84	184.14	-25.86	183.81	-.02	-.33
8.153.283	44	11	22	7	-30.07	174.49	-30.01	174.12	.06	-.37
8.153.353	44	11	23	31	-25.43	171.82	-25.35	171.50	.08	-.32
8.153.388	44	11	24	13	-23.34	170.68	-23.25	170.38	.09	-.30
8.153.423	44	11	24	55	-20.88	169.34	-20.75	169.06	.11	-.28
8.153.493	44	11	26	19	-16.26	166.91	-16.13	166.67	.13	-.24
8.153.528	44	11	27	1	-14.19	165.82	-14.06	165.60	.13	-.22
8.153.563	44	11	27	43	-11.67	164.66	-11.53	164.46	.14	-.20
8.153.633	44	11	29	7	-6.91	162.63	-6.75	162.46	.16	-.17
8.153.913	44	11	34	43	-2.87	165.35	-2.72	165.21	.15	-.14
8.153.948	44	11	35	25	-.84	164.29	-.68	164.16	.16	-.13
8.154.893	44	11	54	19	29.19	146.46	29.49	146.51	.30	.05
8.154.928	44	11	55	1	30.75	145.19	31.06	145.25	.31	.06
8.155.033	44	11	57	7	36.60	142.16	36.93	142.25	.33	.09
8.155.068	44	11	57	49	37.91	140.72	38.24	140.81	.33	.09
8.155.173	44	11	59	55	43.08	137.21	43.43	137.33	.35	.12
8.155.208	44	12	0	37	44.28	135.48	44.64	135.59	.36	.11
8.155.383	44	12	4	7	48.30	137.17	48.66	137.32	.36	.15
8.155.418	44	12	4	49	49.38	135.28	49.74	135.43	.36	.15
8.155.453	44	12	5	31	51.31	134.04	51.68	134.20	.37	.16
8.155.488	44	12	6	13	52.29	131.92	52.67	132.07	.38	.15
8.155.663	44	12	9	43	85.94	213.62	85.74	223.79	-.20	5.17
8.155.698	44	12	10	25	86.78	252.59	86.39	256.08	-.37	3.49

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 184

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
8.187.764	44	22	51	44	-84.54	64.07	-84.95	62.55	-.41	-1.52
8.187.834	44	22	53	8	-84.75	80.67	-85.18	80.51	-.43	-.16
8.187.869	44	22	53	50	-85.12	73.60	-85.55	72.74	-.43	-.86
8.187.904	44	22	54	32	-84.45	52.25	-84.82	49.81	-.37	-2.44
8.188.184	44	23	0	8	-73.64	3.09	-73.71	1.52	-.07	-1.57
8.188.254	44	23	1	32	-75.16	3.59	-75.23	1.86	-.07	-1.73
8.188.814	44	23	12	44	-22.15	10.50	-22.26	10.21	-.11	-.29
8.188.884	44	23	14	8	-20.59	11.14	-20.70	10.86	-.11	-.28
8.188.954	44	23	15	32	-21.35	10.52	-21.45	10.24	-.10	-.28
8.189.024	44	23	16	56	-22.15	9.76	-22.25	9.47	-.10	-.29
8.189.269	44	23	21	50	-30.19	349.86	-30.13	349.49	.06	-.37
8.189.339	44	23	23	14	-25.65	347.23	-25.57	346.91	.08	-.32
8.189.374	44	23	23	56	-23.59	346.00	-23.50	345.70	.09	-.30
8.189.409	44	23	24	38	-21.12	344.62	-21.01	344.34	.11	-.28
8.189.479	44	23	26	2	-16.52	342.14	-16.39	341.90	.13	-.24
8.189.549	44	23	27	26	-11.78	339.94	-11.64	339.74	.14	-.20
8.189.619	44	23	28	50	-6.91	337.87	-6.75	337.70	.16	-.17
8.189.794	44	23	32	20	-8.23	334.94	-8.04	334.76	.19	-.18
8.190.879	44	23	54	2	29.32	322.36	29.62	322.42	.30	.06
8.190.914	44	23	54	44	30.74	320.90	31.05	320.96	.31	.06
8.191.019	44	23	56	50	36.21	317.48	36.54	317.57	.33	.09
8.191.054	44	23	57	32	37.59	316.05	37.92	316.14	.33	.09
8.191.159	44	23	59	38	43.08	312.60	43.43	312.72	.35	.12
8.191.194	45	0	0	20	44.41	310.96	44.77	311.08	.36	.12
8.191.369	45	0	3	50	65.19	343.46	65.36	344.19	.18	.73
8.191.404	45	0	4	32	66.82	341.94	67.01	342.73	.19	.79
8.191.439	45	0	5	14	71.21	61.19	70.87	61.83	-.34	.64
8.191.474	45	0	5	56	68.80	76.57	68.40	76.86	-.40	.29
8.191.649	45	0	9	26	73.83	93.38	73.40	93.42	-.43	.04
8.191.684	45	0	10	8	70.92	102.78	70.49	102.60	-.43	-.18

rev 185

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
8.223.744	45	10	51	20	-81.69	264.40	-82.12	264.73	-.43	.33
8.223.814	45	10	52	44	-81.40	254.75	-81.83	254.54	-.43	-.21
8.223.849	45	10	53	26	-82.03	259.99	-82.46	260.06	-.43	.07
8.223.884	45	10	54	8	-82.03	245.29	-82.45	244.52	-.42	-.77
8.224.164	45	10	59	44	-72.74	209.45	-73.02	208.78	-.28	-1.17
8.224.234	45	11	1	8	-72.77	206.54	-73.03	205.31	-.26	-1.23
8.224.934	45	11	15	8	-34.49	177.57	-34.53	177.15	-.04	-.42
8.225.004	45	11	16	32	-34.32	177.14	-34.36	176.73	-.04	-.41
8.225.249	45	11	21	26	-30.03	165.27	-29.97	164.90	.06	-.37
8.225.319	45	11	22	50	-25.60	162.67	-25.52	162.25	.08	-.22
8.225.354	45	11	23	32	-23.53	161.40	-23.44	161.10	.09	-.30
8.225.389	45	11	24	14	-21.07	160.06	-20.96	159.78	.11	-.28
8.225.459	45	11	25	38	-16.51	157.69	-16.39	157.45	.12	-.24
8.225.494	45	11	26	20	-14.39	156.61	-14.26	156.39	.13	-.22
8.225.529	45	11	27	2	-11.83	155.45	-11.69	155.25	.14	-.20
8.225.599	45	11	28	26	-6.98	153.33	-6.80	153.16	.16	-.17
8.225.879	45	11	34	2	-.69	157.49	-.55	157.37	.14	-.12
8.225.914	45	11	34	44	1.35	156.39	1.50	156.28	.15	-.11
8.226.859	45	11	53	38	29.14	137.62	29.44	137.68	.30	.06
8.226.894	45	11	54	20	30.58	136.20	30.89	136.26	.31	.06
8.226.999	45	11	56	26	36.03	132.91	36.36	133.00	.33	.09
8.227.034	45	11	57	8	37.39	131.56	37.72	131.65	.33	.09
8.227.139	45	11	59	14	42.78	128.33	43.13	128.44	.35	.11
8.227.174	45	11	59	56	44.05	126.71	44.41	126.82	.36	.11
8.227.349	45	12	3	26	52.73	132.79	53.06	133.03	.33	.24
8.227.384	45	12	4	8	53.97	131.04	54.31	131.28	.34	.24
8.227.419	45	12	4	50	58.37	134.86	58.70	135.20	.33	.34
8.227.454	45	12	5	32	59.63	132.92	59.97	133.28	.34	.35
8.227.629	45	12	9	2	74.67	142.27	74.96	143.33	.29	1.06
8.227.664	45	12	9	44	76.21	138.89	76.52	140.01	.31	1.12

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
8.259.724	45	22	50	56	-57.35	41.11	-57.72	40.65	-.37	-.46
8.259.794	45	22	52	20	-56.96	41.82	-57.33	41.36	-.37	-.46
8.259.829	45	22	53	2	-53.30	39.36	-53.66	38.92	-.36	-.44
8.259.864	45	22	53	44	-52.85	36.92	-53.20	36.47	-.35	-.45
8.260.144	45	22	59	20	*******	*******	*******	*******	*****	******
8.260.214	45	23	0	44	-56.38	267.84	-55.96	267.57	.42	-.27
8.260.774	45	23	11	56	-23.19	343.45	-23.17	343.15	.02	-.30
8.260.844	45	23	13	20	-22.65	343.19	-22.62	342.89	.03	-.30
8.260.914	45	23	14	44	-22.84	342.55	-22.80	342.25	.04	-.30
8.260.984	45	23	16	8	-23.28	342.76	-23.22	342.46	.04	-.30
8.261.229	45	23	21	2	-29.71	340.81	-29.65	340.45	.06	-.36
8.261.299	45	23	22	26	-25.25	337.85	-25.18	337.53	.09	-.32
8.261.334	45	23	23	8	-23.10	336.72	-23.01	336.42	.09	-.30
8.261.369	45	23	23	50	-20.52	335.47	-20.42	335.19	.10	-.28
8.261.439	45	23	25	14	-15.89	333.14	-15.77	332.90	.12	-.24
8.261.509	45	23	26	38	-11.30	330.89	-11.16	330.69	.14	-.20
8.261.579	45	23	28	2	-6.50	328.79	-6.34	328.63	.16	-.16
8.261.824	45	23	32	56	-8.29	334.67	-8.16	334.49	.13	-.18
8.262.839	45	23	53	14	29.64	313.27	29.94	313.33	.30	.06
8.262.874	45	23	53	56	31.09	311.78	31.39	311.85	.30	.07
8.262.979	45	23	56	2	36.56	308.31	36.88	308.40	.32	.09
8.263.014	45	23	56	44	37.95	306.88	38.28	306.98	.33	.10
8.263.119	45	23	58	50	43.47	303.61	43.82	303.73	.35	.12
8.263.154	45	23	59	32	44.80	301.97	45.16	302.09	.36	.12
8.263.329	46	0	3	2	52.90	307.71	53.24	307.95	.34	.24
8.263.364	46	0	3	44	54.08	305.98	54.42	306.20	.34	.24
8.263.399	46	0	4	26	58.31	310.09	58.64	310.43	.33	.34
8.263.434	46	0	5	8	59.52	307.99	59.86	308.33	.34	.34
8.263.609	46	0	8	38	80.98	.34	80.97	2.93	-.01	2.59
8.263.644	46	0	9	20	82.80	5.43	82.75	8.69	-.05	3.26

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
8.295.704	46	10	50	32	-79.37	241.65	-79.80	241.31	-.43	-.34
8.295.774	46	10	51	56	-80.93	238.47	-81.38	237.92	-.43	-.55
8.295.809	46	10	52	38	-87.41	174.76	-87.51	165.16	-.10	-9.60
8.295.844	46	10	53	20	-85.49	168.38	-85.55	162.81	-.06	-5.57
8.296.124	46	10	58	56	-73.41	213.14	-73.76	212.16	-.35	-.98
8.296.194	46	11	0	20	-73.67	208.66	-73.95	207.57	-.33	-1.09
8.296.824	46	11	12	56	*******	*******	*******	*******	*****	******
8.296.894	46	11	14	20	*******	*******	*******	*******	*****	******
8.297.279	46	11	22	2	-26.66	156.35	-26.60	156.02	.06	-.33
8.297.349	46	11	23	26	-22.28	153.45	-22.19	153.16	.09	-.29
8.297.384	46	11	24	8	-20.18	152.32	-20.08	152.05	.10	-.27
8.297.419	46	11	24	50	-17.62	151.11	-17.51	150.86	.11	-.25
8.297.489	46	11	26	14	-12.89	148.97	-12.77	148.76	.12	-.21
8.297.524	46	11	28	56	-10.74	147.95	-10.61	147.75	.13	-.20
8.297.559	46	11	27	38	-8.12	146.85	-7.98	146.67	.14	-.18
8.297.629	46	11	29	2	-3.24	144.81	-3.08	144.67	.16	-.14
8.297.839	46	11	33	14	14.62	134.04	14.86	134.02	.24	-.02
8.297.874	46	11	33	56	17.52	132.98	17.76	132.97	.24	-.01
8.298.819	46	11	52	50	29.36	128.56	29.66	128.62	.30	.06
8.298.854	46	11	53	32	30.75	127.07	31.05	127.13	.30	.06
8.298.959	46	11	55	38	36.58	123.54	36.91	123.63	.33	.09
8.298.994	46	11	56	20	38.00	122.11	38.33	122.21	.33	.10
8.299.099	46	11	58	26	43.61	118.64	43.96	118.76	.35	.12
8.299.134	46	11	59	8	44.81	116.86	45.17	116.98	.36	.12
8.299.309	46	12	2	38	40.12	111.75	40.50	111.80	.38	.05
8.299.344	46	12	3	20	41.19	109.86	41.58	109.90	.39	.04
8.299.379	46	12	4	2	48.35	110.41	48.74	110.50	.39	.09
8.299.414	46	12	4	44	49.44	108.15	49.84	108.23	.40	.08
8.299.589	46	12	8	14	*******	*******	*******	*******	*****	******
8.299.624	46	12	8	56	*******	*******	*******	*******	*****	******

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 188

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
8.331.754	46	22	51	32	-87.15	20.30	-87.45	13.66	-.30	-6.64
8.331.824	46	22	52	56	-86.59	357.94	-86.75	350.93	-.16	-7.01
8.331.859	46	22	53	38	-89.01	148.84	-89.95	172.88	.06	24.04
8.331.894	46	22	54	20	-88.73	349.05	-88.78	329.13	-.05	-19.92
8.332.174	46	22	59	56	-68.40	357.79	-68.57	356.66	-.17	-1.13
8.332.244	46	23	1	20	-68.39	354.77	-68.53	353.62	-.14	-1.15
8.332.804	46	23	12	32	-31.30	336.36	-31.29	335.98	.01	-.38
8.332.874	46	23	13	56	-31.20	335.99	-31.18	335.61	.02	-.38
8.332.944	46	23	15	20	-30.95	335.86	-30.83	335.48	.02	-.38
8.333.014	46	23	16	44	-30.53	335.40	-30.50	335.03	.03	-.37
8.333.259	46	23	21	38	-29.55	331.46	-29.49	331.10	.06	-.36
8.333.329	46	23	23	2	-29.99	328.87	-29.90	328.55	.09	-.32
8.333.364	46	23	23	44	-22.97	327.72	-22.88	327.42	.09	-.30
8.333.399	46	23	24	26	-20.51	326.40	-20.40	326.12	.11	-.28
8.333.469	46	23	25	50	-15.90	324.00	-15.77	323.76	.13	-.24
8.333.539	46	23	27	14	-11.14	321.73	-11.00	321.53	.14	-.20
8.333.609	46	23	28	38	-6.37	319.72	-6.21	319.56	.16	-.16
8.333.854	46	23	33	32	-8.54	323.41	-8.40	323.23	.14	-.18
8.334.869	46	23	53	50	29.52	303.63	29.82	303.69	.30	.06
8.334.904	46	23	54	32	31.02	302.22	31.33	302.28	.31	.06
8.335.009	46	23	56	38	36.82	298.97	37.15	299.06	.33	.09
8.335.044	46	23	57	20	38.23	297.56	38.56	297.66	.33	.10
8.335.149	46	23	59	26	43.20	294.02	43.55	294.13	.35	.11
8.335.184	47	0	0	8	44.31	292.28	44.67	292.39	.36	.11
8.335.359	47	0	3	38	70.25	1.24	70.16	2.29	-.09	1.05
8.335.394	47	0	4	20	71.99	4.29	71.88	5.45	-.11	1.16
8.335.429	47	0	5	2	*******	*******	*******	*******	*****	******
8.335.464	47	0	5	44	*******	*******	*******	*******	*****	******
8.335.639	47	0	9	14	*******	*******	*******	*******	*****	******
8.335.674	47	0	9	56	*******	*******	*******	*******	*****	******

rev 189

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
8.367.734	47	10	51	7	-71.90	227.82	-72.32	227.46	-.42	-.36
8.367.804	47	10	52	31	-72.82	223.27	-73.24	222.78	-.42	-.49
8.367.839	47	10	53	13	-70.96	220.43	-71.37	219.92	-.41	-.51
8.367.874	47	10	53	55	-70.74	214.69	-71.13	214.06	-.39	-.63
8.368.154	47	10	59	31	-74.74	211.42	-75.12	210.53	-.38	-.89
8.368.224	47	11	0	55	-74.49	207.37	-74.85	206.39	-.36	-.98
8.368.784	47	11	12	7	*******	*******	*******	*******	*****	******
8.368.854	47	11	13	31	-14.92	171.20	-15.05	170.97	-.13	-.23
8.369.099	47	11	18	25	-29.29	146.50	-29.23	146.14	.06	-.36
8.369.169	47	11	19	49	-24.70	143.73	-24.62	143.42	.08	-.31
8.369.204	47	11	20	31	-22.55	142.55	-22.46	142.26	.09	-.29
8.369.239	47	11	21	13	-20.08	141.08	-19.95	140.81	.11	-.27
8.369.309	47	11	22	37	-15.24	138.65	-15.11	138.42	.13	-.23
8.369.344	47	11	23	19	-12.95	137.67	-12.82	137.46	.13	-.21
8.369.379	47	11	24	1	-10.17	136.37	-10.03	136.18	.14	-.19
8.369.449	47	11	25	25	-4.75	134.09	-4.59	133.94	.16	-.15
8.369.869	47	11	33	49	-10.81	121.42	-10.55	121.24	.26	-.18
8.369.904	47	11	34	31	-8.67	120.08	-8.40	119.89	.27	-.17
8.370.849	47	11	53	25	29.50	119.49	29.80	119.55	.30	.06
8.370.884	47	11	54	7	30.81	118.14	31.11	118.20	.30	.06
8.370.989	47	11	56	13	36.66	114.73	36.98	114.82	.32	.09
8.371.024	47	11	56	55	38.14	113.18	38.47	113.28	.33	.10
8.371.129	47	11	59	1	43.42	109.76	43.77	109.88	.35	.12
8.371.164	47	11	59	43	44.54	108.06	44.90	108.18	.36	.12
8.371.339	47	12	3	13	52.93	113.98	53.27	114.22	.34	.24
8.371.374	47	12	3	55	54.22	112.14	54.57	112.38	.35	.24
8.371.409	47	12	4	37	58.36	115.46	58.69	115.79	.33	.33
8.371.444	47	12	5	19	59.71	113.39	60.05	113.72	.34	.33
8.371.619	47	12	8	49	81.27	187.24	81.11	189.70	-.16	2.46
8.371.654	47	12	9	31	82.35	201.12	82.10	203.57	-.25	2.45

rev 190

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
8.403.719	47	22	50	43	-12.96	50.33	-13.39	50.21	-.43	-.12
8.403.784	47	22	52	7	-11.33	48.86	-11.76	48.73	-.43	-.13
8.403.819	47	22	52	49	-30.39	41.87	-30.81	41.70	-.42	-.17
8.403.854	47	22	53	31	-31.41	39.97	-31.83	39.79	-.42	-.18
8.404.134	47	22	59	7	-68.15	349.93	-68.33	348.82	-.18	-1.11
8.404.204	47	23	0	31	-68.43	347.65	-68.59	346.51	-.16	-1.14
8.404.764	47	23	11	43	-47.04	334.46	-47.08	333.88	-.04	-.58
8.404.834	47	23	13	7	-43.30	330.04	-43.31	329.51	-.01	-.53
8.404.904	47	23	14	31	-39.35	326.35	-39.33	325.88	.02	-.47
8.404.974	47	23	15	55	-35.22	323.08	-35.17	322.66	.05	-.42
8.405.219	47	23	20	49	-29.49	322.73	-29.42	322.37	.06	-.36
8.405.289	47	23	22	13	-24.95	319.79	-24.87	319.47	.08	-.32
8.405.324	47	23	22	55	-22.86	318.58	-22.77	318.28	.09	-.30
8.405.359	47	23	23	37	-20.39	317.28	-20.29	317.01	.10	-.27
8.405.429	47	23	25	1	-15.80	315.01	-15.68	314.77	.12	-.24
8.405.499	47	23	26	25	-11.20	312.88	-11.06	312.68	.14	-.20
8.405.569	47	23	27	49	-6.43	310.81	-6.27	310.65	.16	-.16
8.405.674	47	23	29	55	-1.59	306.34	-1.40	306.21	.19	-.13
8.406.829	47	23	53	1	29.54	294.67	29.84	294.73	.30	.06
8.406.864	47	23	53	43	31.03	293.21	31.34	293.27	.31	.06
8.406.969	47	23	55	49	36.71	289.62	37.04	289.71	.33	.09
8.407.004	47	23	56	31	38.10	288.18	38.43	288.27	.33	.09
8.407.109	47	23	58	37	43.62	284.85	43.97	284.97	.35	.12
8.407.144	47	23	59	19	44.88	283.14	45.24	283.26	.36	.12
8.407.319	48	0	2	49	53.05	288.84	53.39	289.08	.34	.24
8.407.354	48	0	3	31	54.20	286.80	54.55	287.03	.35	.23
8.407.389	48	0	4	13	58.37	290.68	58.70	291.01	.33	.33
8.407.424	48	0	4	55	59.75	288.53	60.09	288.86	.34	.33
8.407.599	48	0	8	25	70.35	297.93	70.65	298.69	.30	.76
8.407.634	48	0	9	7	71.78	295.02	72.09	295.80	.31	.78

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DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
8.439.764	48	10	51	43	-73.48	157.67	-73.61	156.16	-.13	-1.51
8.439.834	48	10	53	7	-74.40	160.11	-74.55	158.53	-.15	-1.58
8.439.869	48	10	53	49	-76.41	166.49	-76.60	164.76	-.19	-1.73
8.439.904	48	10	54	31	-75.18	162.64	-75.32	161.01	-.16	-1.63
8.440.184	48	11	0	7	-73.29	205.08	-73.68	204.32	-.39	-.76
8.440.254	48	11	1	31	-74.15	202.12	-74.53	201.24	-.38	-.88
8.440.954	49	11	15	31	-26.20	140.41	-26.17	140.08	.03	-.33
8.441.024	48	11	16	55	-25.13	140.27	-25.09	139.95	.04	-.32
8.441.269	48	11	21	49	-29.45	138.55	-29.39	138.19	.06	-.36
8.441.339	48	11	23	13	-25.05	135.48	-24.97	135.16	.08	-.32
8.441.374	48	11	23	55	-22.90	134.38	-22.81	134.08	.09	-.30
8.441.409	48	11	24	37	-20.37	133.21	-20.27	132.94	.10	-.27
8.441.479	48	11	26	1	-15.76	130.89	-15.64	130.65	.12	-.24
8.441.514	48	11	26	43	-13.68	129.81	-13.55	129.59	.13	-.22
8.441.549	48	11	27	25	-11.19	128.62	-11.05	128.42	.14	-.20
8.441.619	48	11	28	49	-6.51	126.50	-6.35	126.33	.16	-.17
8.441.899	48	11	34	25	-8.76	120.70	-8.55	120.52	.21	-.18
8.441.934	48	11	35	7	-6.73	119.51	-6.51	119.35	.22	-.16
8.442.879	48	11	54	1	29.71	109.75	30.01	109.81	.30	.06
8.442.914	48	11	54	43	30.93	109.06	31.24	109.12	.31	.06
8.443.019	48	11	56	49	36.56	105.79	36.88	105.88	.32	.09
8.443.054	48	11	57	31	37.97	104.15	38.30	104.24	.33	.09
8.443.159	48	11	59	37	43.44	100.43	43.79	100.55	.35	.12
8.443.194	48	12	0	19	44.71	98.78	45.07	98.90	.36	.12
8.443.369	48	12	3	49	64.18	135.00	64.33	135.71	.15	.71
8.443.404	48	12	4	31	66.02	134.33	66.18	135.11	.16	.78
8.443.439	48	12	5	13	69.01	205.72	68.68	206.33	-.33	.61
8.443.474	48	12	5	55	68.16	216.50	67.79	216.92	-.37	.42
8.443.649	48	12	9	25	*******	*******	*******	*******	*****	******
8.443.684	48	12	10	7	*******	*******	*******	*******	*****	******

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 192		GMT			INTERCEPTING LAT AND LON W/R OLD POLE		W/R NEW POLE		CHANGES IN	
DAS REF. TIME	DAY	HR	MM	SEC	LAT	LON	LAT	LON	LAT	LON
8.475.744	48	22	51	19	-71.65	28.28	-72.06	27.79	-.41	-.49
8.475.814	48	22	52	43	-70.89	29.72	-71.31	29.27	-.42	-.45
8.475.849	48	22	53	25	-70.54	32.31	-70.96	31.92	-.42	-.39
8.475.884	48	22	54	7	-70.64	27.57	-71.05	27.08	-.41	-.49
8.476.164	48	22	59	43	-80.51	343.98	-80.70	341.53	-.19	-2.45
8.476.234	48	23	1	7	-80.48	337.29	-80.62	334.73	-.14	-2.56
8.476.794	48	23	12	19	-38.63	330.76	-39.76	330.30	-.08	-.46
8.476.864	48	23	13	43	-37.94	331.19	-38.02	330.74	-.08	-.45
8.476.934	48	23	15	7	-38.24	330.27	-38.32	329.82	-.08	-.45
8.477.004	48	23	16	31	-37.81	330.72	-37.89	330.27	-.08	-.45
8.477.249	48	23	21	25	-29.31	314.00	-29.25	313.64	.06	-.36
8.477.319	48	23	22	49	-24.96	311.08	-24.88	310.76	.08	-.32
8.477.354	48	23	23	31	-22.92	309.80	-22.83	309.50	.09	-.30
8.477.389	48	23	24	13	-20.46	308.41	-20.36	308.13	.10	-.28
8.477.459	48	23	25	37	-15.86	306.10	-15.74	305.86	.12	-.24
8.477.529	48	23	27	1	-11.15	303.96	-11.01	303.76	.14	-.20
8.477.599	48	23	28	25	-6.30	301.89	-6.14	301.73	.16	-.16
8.477.704	48	23	30	31	-6.26	303.84	-6.11	303.68	.15	-.16
8.478.859	48	23	53	37	29.54	285.29	29.84	285.35	.30	.06
8.478.894	48	23	54	19	31.13	283.88	31.44	283.94	.31	.06
8.478.999	48	23	56	25	36.96	280.67	37.29	280.76	.33	.09
8.479.034	48	23	57	7	38.19	279.10	38.53	279.19	.34	.09
8.479.139	48	23	59	13	43.23	275.42	43.58	275.53	.35	.11
8.479.174	48	23	59	55	44.34	273.62	44.70	273.73	.36	.11
8.479.349	49	0	3	25	63.36	313.54	63.49	314.24	.13	.70
8.479.384	49	0	4	7	65.01	312.10	65.14	312.86	.14	.76
8.479.419	49	0	4	49	67.34	20.92	67.01	21.47	-.33	.55
8.479.454	49	0	5	31	66.13	32.19	65.76	32.55	-.37	.36
8.479.629	49	0	9	1	78.99	3.49	78.76	5.24	-.22	1.75
8.479.664	49	0	9	43	79.83	11.99	79.56	13.70	-.27	1.71
rev 193										
8.512.144	49	10	59	19	-58.76	180.39	-59.08	179.80	-.32	-.59
8.512.214	49	11	0	43	-57.95	178.76	-58.26	178.16	-.31	-.60
8.512.914	49	11	14	43	-25.23	131.46	-25.20	131.14	.03	-.32
8.512.984	49	11	16	7	-24.57	131.74	-24.54	131.42	.03	-.32
8.513.229	49	11	21	1	-29.56	129.23	-29.50	128.87	.06	-.36
8.513.299	49	11	22	25	-25.14	126.55	-25.06	126.23	.08	-.32
8.513.334	49	11	23	7	-23.01	125.47	-22.92	125.17	.09	-.30
8.513.369	49	11	23	49	-20.51	124.09	-20.41	123.81	.10	-.28
8.513.439	49	11	25	13	-15.87	121.58	-15.75	121.34	.12	-.24
8.513.474	49	11	25	55	-13.74	120.50	-13.61	120.28	.13	-.22
8.513.509	49	11	26	37	-11.11	119.38	-10.97	119.18	.14	-.20
8.513.579	49	11	28	1	-6.16	117.43	-6.00	117.27	.16	-.16
8.513.859	49	11	33	37	1.14	122.36	1.27	122.25	.13	-.11
8.513.894	49	11	34	19	3.16	121.35	3.30	121.25	.14	-.10
8.514.839	49	11	53	13	29.41	100.76	29.71	100.82	.30	.06
8.514.874	49	11	53	55	30.91	99.45	31.22	99.51	.31	.06
8.514.979	49	11	56	1	36.81	96.29	37.14	96.38	.33	.09
8.515.014	49	11	56	43	38.29	94.73	38.62	94.83	.33	.10
8.515.119	49	11	58	49	43.64	91.03	43.99	91.15	.35	.12
8.515.154	49	11	59	31	44.85	89.21	45.21	89.33	.36	.12
8.515.329	49	12	3	1	52.87	95.15	53.21	95.38	.34	.23
8.515.364	49	12	3	43	54.17	93.16	54.52	93.39	.35	.23
8.515.399	49	12	4	25	58.35	96.92	58.68	97.25	.33	.33
8.515.434	49	12	5	7	59.64	94.68	59.98	95.01	.34	.33
8.515.609	49	12	8	37	47.53	87.67	47.91	87.78	.38	.11
8.515.644	49	12	9	19	48.33	85.66	48.71	85.76	.38	.10

rev 194		GMT			INTERCEPTING LAT AND LON W/R OLD POLE		W/R NEW POLE		CHANGES IN	
DAS REF. TIME	DAY	HR	MM	SEC	LAT	LON	LAT	LON	LAT	LON
8.547.879	49	22	54	1	-49.35	43.48	-49.78	43.43	-.43	-.05
8.547.914	49	22	54	43	-50.81	39.86	-51.24	39.78	-.43	-.08
8.548.194	49	23	0	19	-62.32	344.52	-62.58	343.74	-.26	-.78
8.548.264	49	23	1	43	-61.77	343.54	-62.02	342.76	-.25	-.78
8.548.824	49	23	12	55	-46.91	330.11	-47.05	329.55	-.14	-.56
8.548.894	49	23	14	19	-43.68	324.03	-43.78	323.51	-.10	-.52
8.548.964	49	23	15	43	-40.15	318.86	-40.21	318.38	-.06	-.48
8.549.034	49	23	17	7	-38.39	314.48	-38.41	314.02	-.02	-.44
8.549.279	49	23	22	1	-29.54	304.87	-29.48	304.51	.06	-.36
8.549.349	49	23	23	25	-26.03	301.96	-24.95	301.66	.08	-.32
8.549.384	49	23	24	7	-22.97	300.77	-22.88	300.47	.09	-.30
8.549.419	49	23	24	49	-20.46	299.48	-20.36	299.20	.10	-.28
8.549.489	49	23	26	13	-15.90	297.18	-15.78	296.94	.12	-.24
8.549.559	49	23	27	37	-11.31	295.03	-11.17	294.83	.14	-.20
8.549.629	49	23	29	1	-6.53	293.04	-6.37	292.87	.16	-.17
8.549.734	49	23	31	7	4.79	294.14	4.94	294.05	.15	-.09
8.550.889	49	23	54	13	29.54	276.09	29.84	276.14	.30	.06
8.550.924	49	23	54	55	31.02	274.60	31.33	274.66	.31	.06
8.551.029	49	23	57	1	36.48	271.37	36.81	271.46	.33	.09
8.551.064	49	23	57	43	37.83	269.99	38.17	270.08	.34	.09
8.551.169	49	23	59	49	43.15	266.63	43.50	266.74	.35	.11
8.551.204	50	0	0	31	44.38	264.93	44.74	265.04	.36	.11
8.551.379	50	0	4	1	53.51	270.11	53.85	270.35	.34	.24
8.551.414	50	0	4	43	54.71	268.22	55.06	268.46	.35	.24
8.551.449	50	0	5	25	58.93	272.41	59.26	272.75	.33	.34
8.551.484	50	0	6	7	60.20	270.31	60.54	270.65	.34	.34
8.551.659	50	0	9	37	78.42	356.12	78.19	357.75	-.23	1.63
8.551.694	50	0	10	19	79.31	5.20	79.02	6.76	-.29	1.56
rev 195										
8.583.859	50	10	53	37	-58.88	183.15	-59.26	182.69	-.38	-.46
8.583.894	50	10	54	19	-58.76	179.93	-59.13	179.44	-.37	-.49
8.584.174	50	10	59	55	-76.04	150.90	-76.24	149.23	-.20	-1.67
8.584.244	50	11	1	19	-76.74	146.05	-76.92	146.25	-.18	-1.80
8.584.944	50	11	15	19	-35.24	136.96	-35.32	136.54	-.08	-.42
8.585.014	50	11	16	43	-35.04	136.58	-35.11	136.16	-.07	-.42
8.585.259	50	11	21	37	-29.54	120.48	-29.48	120.12	.06	-.36
8.585.329	50	11	23	1	-25.03	117.77	-24.95	117.45	.08	-.32
8.585.364	50	11	23	43	-22.98	116.54	-22.89	116.24	.09	-.30
8.585.399	50	11	24	25	-20.50	115.20	-20.40	114.92	.10	-.28
8.585.469	50	11	25	49	-15.86	112.82	-15.74	112.58	.12	-.24
8.585.504	50	11	26	31	-13.74	111.76	-13.61	111.54	.13	-.22
8.585.539	50	11	27	13	-11.13	110.58	-10.99	110.38	.14	-.20
8.585.609	50	11	28	37	-6.31	108.52	-6.15	108.36	.16	-.16
8.585.889	50	11	34	13	.43	112.07	.57	111.95	.14	-.12
8.585.924	50	11	34	55	2.45	111.00	2.60	110.90	.15	-.10
8.586.869	50	11	53	49	29.51	91.88	29.81	91.94	.30	.06
8.586.904	50	11	54	31	30.96	90.41	31.27	90.47	.31	.06
8.587.009	50	11	56	37	36.66	87.00	36.99	87.09	.33	.09
8.587.044	50	11	57	19	38.00	85.44	38.34	85.53	.34	.09
8.587.149	50	11	59	25	43.40	81.67	43.75	81.78	.35	.11
8.587.184	50	12	0	7	44.68	79.90	45.02	80.01	.36	.11
8.587.359	50	12	3	37	*******	*******	*******	*******	*****	******
8.587.394	50	12	4	19	*******	*******	*******	*******	*****	******
8.587.464	50	12	5	43	*******	*******	*******	*******	*****	******

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 196										
8.619.734	50	22	51	6	-83.77	12.66	-84.19	11.57	-.42	-1.09
8.619.804	50	22	52	30	-83.70	29.16	-84.13	29.25	-.43	.09
8.619.839	50	22	53	12	-82.80	69.90	-83.11	72.23	-.31	2.33
8.619.874	50	22	53	54	-83.93	51.33	-84.32	53.02	-.39	1.69
8.620.154	50	22	58	30	-82.38	345.79	-82.67	343.42	-.31	-2.37
8.620.224	50	23	0	54	-82.12	355.84	-82.48	353.97	-.36	-1.87
8.620.784	50	23	12	6	-47.02	311.39	-47.10	310.81	-.08	-.58
8.620.854	50	23	13	30	-46.19	311.30	-46.26	310.74	-.07	-.56
8.620.924	50	23	14	54	-45.54	311.60	-45.61	311.05	-.07	-.55
8.620.994	50	23	16	18	-45.32	312.47	-45.40	311.92	-.08	-.55
8.621.239	50	23	21	12	-29.53	295.94	-29.47	295.58	.06	-.36
8.621.309	50	23	22	36	-25.19	293.22	-25.11	292.90	.08	-.32
8.621.344	50	23	23	18	-23.20	292.05	-23.11	291.75	.09	-.30
8.621.379	50	23	24	0	-20.78	290.75	-20.68	290.47	.10	-.28
8.621.449	50	23	25	24	-16.17	288.47	-16.05	288.23	.12	-.24
8.621.519	50	23	26	48	-11.52	286.19	-11.38	285.99	.14	-.20
8.621.589	50	23	28	12	-6.84	284.04	-6.69	283.87	.15	-.17
8.621.694	50	23	30	18	4.90	275.62	5.11	275.53	.21	-.09
8.622.849	50	23	52	24	29.44	266.97	29.74	267.03	.30	.06
8.622.884	50	23	54	6	30.99	265.58	31.30	265.64	.31	.06
8.622.989	50	23	56	12	36.85	262.14	37.18	262.23	.33	.09
8.623.024	50	23	56	54	38.18	260.53	38.52	260.62	.34	.09
8.623.129	50	23	59	0	43.43	256.72	43.79	256.83	.36	.11
8.623.164	50	23	59	42	44.62	254.87	44.98	254.98	.36	.11
8.623.339	51	0	3	12	*******	*******	*******	*******	*****	******
8.623.374	51	0	3	54	*******	*******	*******	*******	*****	******
rev 197										
8.647.664	51	8	9	42	*******	*******	*******	*******	*****	******
8.656.904	51	11	14	30	-39.10	119.74	-39.12	119.27	-.02	-.47
8.656.974	51	11	15	54	-38.63	119.58	-38.64	119.12	-.01	-.46
8.657.219	51	11	20	48	-29.53	111.74	-29.48	111.38	.05	-.36
8.657.289	51	11	22	12	-25.02	108.91	-24.94	108.59	.08	-.32
8.657.324	51	11	22	54	-23.03	107.64	-22.94	107.34	.09	-.30
8.657.359	51	11	23	36	-20.64	106.20	-20.54	105.92	.10	-.28
8.657.429	51	11	25	0	-16.09	103.95	-15.97	103.71	.12	-.24
8.657.464	51	11	25	42	-13.97	103.00	-13.84	102.78	.13	-.22
8.657.499	51	11	26	24	-11.37	101.87	-11.24	101.67	.13	-.20
8.657.569	51	11	27	48	-6.42	99.90	-6.27	99.74	.15	-.16
8.657.849	51	11	33	24	11.12	91.74	11.34	91.69	.22	-.05
8.657.884	51	11	34	6	13.58	90.73	13.78	90.70	.22	-.03
8.658.829	51	11	53	0	29.31	82.34	29.61	82.40	.30	.06
8.658.864	51	11	53	42	30.88	80.98	31.19	81.02	.31	.06
8.658.969	51	11	55	48	36.77	77.50	37.10	77.59	.33	.09
8.659.004	51	11	56	30	38.18	75.85	38.52	75.94	.34	.09
8.659.109	51	11	58	36	43.55	72.01	43.91	72.12	.36	.11
8.659.144	51	11	59	18	44.78	70.14	45.14	70.25	.36	.11
8.659.319	51	12	2	48	53.17	76.76	53.51	77.00	.34	.24
8.659.354	51	12	3	30	54.49	74.61	54.84	74.85	.35	.24
8.659.389	51	12	4	12	58.54	78.07	58.87	78.40	.33	.33
8.659.424	51	12	4	54	59.91	75.79	60.26	76.12	.35	.33

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 198										
8.691.904	51	22	54	30	-79.48	354.93	-79.88	353.88	-.40	-1.05
8.691.939	51	22	55	12	-79.50	341.80	-79.85	340.26	-.35	-1.54
8.692.184	51	23	0	6	-66.57	319.63	-66.79	318.65	-.22	-.98
8.692.254	51	23	1	30	-66.28	322.05	-66.51	321.10	-.23	-.95
8.692.814	51	23	12	42	-29.81	290.86	-29.80	290.49	.01	-.37
8.692.884	51	23	14	6	-29.29	290.95	-29.28	290.59	.01	-.36
8.692.954	51	23	15	30	-29.37	290.54	-29.35	290.18	.02	-.36
8.693.024	51	23	16	54	-29.89	290.32	-29.87	289.95	.02	-.37
8.693.269	51	23	21	48	-29.66	287.04	-29.60	286.68	.06	-.36
8.693.339	51	23	23	12	-25.09	284.26	-25.01	283.94	.08	-.32
8.693.374	51	23	23	54	-23.02	283.09	-22.93	282.79	.09	-.30
8.693.409	51	23	24	36	-20.56	281.88	-20.46	281.58	.10	-.28
8.693.479	51	23	26	0	-16.05	279.57	-15.93	279.33	.12	-.24
8.693.549	51	23	27	24	-11.48	277.37	-11.34	277.17	.14	-.20
8.693.619	51	23	28	48	-6.72	275.27	-6.57	275.10	.15	-.17
8.693.724	51	23	30	54	.48	269.94	.67	269.82	.19	-.12
8.694.879	51	23	54	0	29.62	257.94	29.92	258.00	.30	.06
8.694.914	51	23	54	42	30.99	256.40	31.30	256.46	.31	.06
8.695.019	51	23	56	48	36.48	252.94	36.81	253.03	.33	.09
8.695.054	51	23	57	30	37.84	251.43	38.18	251.52	.34	.09
8.695.159	51	23	59	36	43.17	247.84	43.53	247.95	.36	.11
8.695.194	52	0	0	18	44.31	246.03	44.67	246.14	.36	.11
8.695.369	52	0	3	48	52.93	251.96	53.27	252.19	.34	.23
8.695.404	52	0	4	30	54.10	249.88	54.45	250.11	.35	.23
8.695.439	52	0	5	12	58.42	253.04	58.76	253.36	.34	.32
8.695.474	52	0	5	54	59.65	250.64	60.00	250.95	.35	.31
rev 199										
8.727.849	52	10	53	24	-66.75	193.64	-67.18	193.53	-.43	-.11
8.727.884	52	10	54	6	-67.19	188.17	-67.62	187.96	-.43	-.21
8.728.164	52	10	59	42	-76.58	144.88	-76.86	143.36	-.28	-1.52
8.728.234	52	11	1	6	-77.88	143.25	-78.14	141.52	-.26	-1.73
8.728.934	52	11	15	6	-37.29	109.59	-37.30	109.14	-.01	-.45
8.729.004	52	11	16	30	-37.11	109.36	-37.12	108.91	-.01	-.45
8.729.249	52	11	21	24	-29.69	102.77	-29.64	102.41	.05	-.36
8.729.319	52	11	22	48	-25.32	99.78	-25.24	99.46	.08	-.32
8.729.354	52	11	23	30	-23.31	98.49	-23.22	98.19	.09	-.30
8.729.389	52	11	24	12	-20.82	97.08	-20.72	96.80	.10	-.28
8.729.459	52	11	25	36	-16.14	94.76	-16.02	94.52	.12	-.24
8.729.494	52	11	26	18	-13.97	93.73	-13.84	93.51	.13	-.22
8.729.529	52	11	27	0	-11.37	92.61	-11.23	92.41	.14	-.20
8.729.599	52	11	28	24	-6.51	90.55	-6.36	90.39	.15	-.16
8.729.879	52	11	34	0	8.75	105.19	8.81	105.14	.06	-.05
8.729.914	52	11	34	42	10.79	104.25	10.85	104.21	.06	-.04
8.730.859	52	11	53	36	29.25	73.33	29.55	73.38	.30	.05
8.730.894	52	11	54	18	30.76	71.93	31.07	71.99	.31	.06
8.730.999	52	11	56	24	36.54	68.49	36.87	68.58	.33	.09
8.731.034	52	11	57	6	37.91	66.86	38.25	66.95	.34	.09
8.731.139	52	11	59	12	43.19	63.06	43.55	63.17	.36	.11
8.731.174	52	11	59	54	44.31	61.20	44.67	61.31	.36	.11
8.731.349	52	12	3	24	*******	*******	*******	*******	*****	******

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
rev 200										
8.763.724	52	22	50	54	-70.26	358.84	-70.69	358.53	-.43	-.31
8.763.794	52	22	52	18	-71.67	4.64	-72.10	4.44	-.43	-.20
8.763.829	52	22	53	0	-70.67	3.51	-71.10	3.29	-.43	-.22
8.759.704	52	22	53	42	*******	*******	*******	*******	*****	******
8.760.048	52	22	59	18	*******	*******	*******	*******	*****	******
8.764.214	52	23	0	42	-65.43	324.56	-65.73	323.76	-.30	-.80
8.764.774	52	23	11	54	-32.95	283.01	-32.95	282.61	-.00	-.40
8.764.844	52	23	13	18	-32.25	282.95	-32.25	282.56	.00	-.39
8.764.914	52	23	14	42	-32.30	282.59	-32.29	282.20	.01	-.39
8.764.984	52	23	16	6	-32.80	282.49	-32.79	282.09	.01	-.40
8.765.229	52	23	21	0	-29.73	278.02	-29.68	277.66	.05	-.36
8.765.299	52	23	22	24	-25.27	275.36	-25.19	275.04	.08	-.32
8.765.334	52	23	23	6	-23.23	274.21	-23.14	273.91	.09	-.30
8.765.369	52	23	23	48	-20.80	272.91	-20.70	272.63	.10	-.28
8.765.439	52	23	25	12	-16.15	270.50	-16.03	270.26	.12	-.24
8.765.509	52	23	26	36	-11.38	268.26	-11.25	268.06	.13	-.20
8.765.579	52	23	28	0	-6.50	266.11	-6.35	265.95	.15	-.16
8.765.684	52	23	30	6	1.78	260.29	1.98	260.18	.20	-.11
8.766.839	52	23	53	12	29.34	248.52	29.64	248.58	.30	.06
8.766.874	52	23	53	54	30.87	247.04	31.18	247.10	.31	.06
8.766.979	52	23	56	0	36.55	243.70	36.88	243.79	.33	.09
8.767.014	52	23	56	42	37.90	242.25	38.24	242.34	.34	.09
8.767.119	52	23	58	48	43.00	238.64	43.36	238.75	.36	.11
8.767.154	52	23	59	30	44.16	236.84	44.52	236.95	.36	.11
8.767.329	53	0	3	0	*******	*******	*******	*******	*****	******
rev 201										
8.800.894	53	11	14	18	-21.96	101.00	-21.98	100.71	-.02	-.29
8.800.964	53	11	15	42	-23.00	100.31	-23.01	100.01	-.01	-.30
8.801.209	53	11	20	36	-29.69	93.28	-29.64	92.92	.05	-.36
8.801.279	53	11	22	0	-25.25	90.54	-25.17	90.22	.08	-.32
8.801.314	53	11	22	42	-23.14	89.43	-23.05	89.13	.09	-.30
8.801.349	53	11	23	24	-20.61	88.20	-20.51	87.92	.10	-.28
8.801.419	53	11	24	48	-16.01	85.85	-15.89	85.61	.12	-.24
8.801.454	53	11	25	30	-13.93	84.73	-13.80	84.51	.13	-.22
8.801.489	53	11	26	12	-11.38	83.51	-11.24	83.31	.14	-.20
8.801.559	53	11	27	36	-6.56	81.51	-6.41	81.34	.15	-.17
8.801.909	53	11	34	36	*******	*******	*******	*******	*****	******
8.801.944	53	11	35	18	*******	*******	*******	*******	*****	******
8.802.819	53	11	52	48	29.20	64.22	29.50	64.28	.30	.06
8.802.854	53	11	53	30	30.69	62.80	31.00	62.86	.31	.06
8.802.959	53	11	55	36	36.35	59.31	36.68	59.40	.33	.09
8.802.994	53	11	56	18	37.75	57.63	38.09	57.72	.34	.09
8.803.099	53	11	58	24	43.13	54.08	43.48	54.19	.35	.11
8.803.134	53	11	59	6	44.29	52.31	44.65	52.42	.36	.11
8.803.309	53	12	2	36	52.82	58.52	53.16	58.75	.34	.23
8.803.344	53	12	3	18	54.00	56.29	54.35	56.52	.35	.23
8.803.379	53	12	4	0	59.19	60.04	58.52	60.36	.33	.32
8.803.414	53	12	4	42	59.63	57.69	59.98	58.01	.35	.32
rev 202										
8.835.859	53	22	53	36	-76.21	326.79	-76.57	325.70	-.36	-1.09
8.835.894	53	22	54	18	-75.38	319.40	-75.71	318.19	-.33	-1.21
8.836.104	53	22	58	30	-58.40	336.61	-58.79	336.20	-.39	-.41
8.836.174	53	22	59	54	-58.50	335.15	-58.89	334.72	-.39	-.43
8.836.734	53	23	11	6	-35.29	275.35	-35.30	274.93	-.01	-.42
8.836.804	53	23	12	30	-34.57	275.40	-34.58	274.98	-.01	-.42
8.836.874	53	23	13	54	-34.33	274.85	-34.33	274.44	-.00	-.41
8.836.944	53	23	15	18	-34.83	274.61	-34.83	274.19	.00	-.42
8.837.189	53	23	20	12	-29.73	268.84	-29.68	268.48	.05	-.36
8.837.259	53	23	21	36	-25.25	266.00	-25.17	265.68	.08	-.32
8.837.294	53	23	22	18	-23.20	264.77	-23.11	264.47	.09	-.30
8.837.329	53	23	23	0	-20.76	263.46	-20.66	263.18	.10	-.28
8.837.399	53	23	24	24	-16.21	261.17	-16.09	260.93	.12	-.24
8.837.469	53	23	25	48	-11.56	259.04	-11.43	258.84	.13	-.20
8.837.539	53	23	27	12	-6.80	257.00	-6.65	256.83	.15	-.17
8.837.644	53	23	29	18	1.88	249.85	2.08	249.74	.20	-.11
8.838.799	53	23	52	24	29.48	239.67	29.78	239.73	.30	.06
8.838.834	53	23	53	6	30.91	238.27	31.22	238.33	.31	.06
8.838.939	53	23	55	12	36.41	234.62	36.74	234.71	.33	.09
8.838.974	53	23	55	54	37.65	233.01	37.99	233.10	.34	.09
8.839.079	53	23	58	0	42.74	229.21	43.10	229.32	.36	.11
8.839.114	53	23	58	42	43.97	227.47	44.33	227.58	.36	.11
8.839.289	54	0	2	12	52.91	223.62	53.25	233.85	.34	.23
8.839.324	54	0	2	54	54.13	231.59	54.48	231.82	.35	.23
8.839.359	54	0	3	36	58.52	235.73	58.85	236.06	.33	.33
8.839.394	54	0	4	18	59.75	233.44	60.09	233.77	.34	.33
rev 203										
8.871.769	54	10	51	47	*******	*******	*******	*******	*****	******
8.871.804	54	10	52	29	*******	*******	*******	*******	*****	******
8.872.084	54	10	58	5	-79.17	145.46	-79.54	144.16	-.37	-1.30
8.872.154	54	10	59	29	-78.40	138.95	-78.74	137.52	-.34	-1.43
8.872.854	54	11	13	29	-41.05	95.10	-41.09	94.61	-.04	-.49
8.872.924	54	11	14	53	-40.36	95.50	-40.40	95.02	-.04	-.48
8.873.169	54	11	19	47	-29.85	84.36	-29.80	84.00	.05	-.36
8.873.239	54	11	21	11	-25.33	81.69	-25.26	81.37	.07	-.32
8.873.274	54	11	21	53	-23.29	80.43	-23.21	80.13	.08	-.30
8.873.309	54	11	22	35	-20.86	79.05	-20.76	78.77	.10	-.28
8.873.379	54	11	23	59	-16.34	76.58	-16.22	76.34	.12	-.24
8.873.414	54	11	24	41	-14.22	75.53	-14.10	75.31	.12	-.22
8.873.449	54	11	25	23	-11.66	74.41	-11.53	74.21	.13	-.20
8.873.519	54	11	26	47	-6.88	72.43	-6.73	72.26	.15	-.17
8.873.799	54	11	32	23	18.61	71.61	18.77	71.63	.16	.02
8.873.834	54	11	33	5	21.35	70.97	21.52	71.01	.17	.04
8.874.779	54	11	51	59	29.27	54.94	29.57	55.00	.30	.06
8.874.814	54	11	52	41	30.76	53.50	31.07	53.56	.31	.06
8.874.919	54	11	54	47	36.45	49.99	36.78	50.08	.33	.09
8.874.954	54	11	55	29	37.78	48.47	38.12	48.56	.34	.09
8.875.059	54	11	57	35	42.99	45.03	43.34	45.14	.35	.11
8.875.094	54	11	58	17	44.12	43.29	44.48	43.40	.36	.11

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 204		GMT			INTERCEPTING LAT AND LON W/R OLD POLE		W/R NEW POLE		CHANGES IN	
DAS REF. TIME	DAY	HR	MM	SEC	LAT	LON	LAT	LON	LAT	LON
8.907.574	54	22	47	53	-62.98	322.13	-63.36	321.63	-.38	-.50
8.907.644	54	22	49	17	-63.62	323.49	-64.01	322.99	-.39	-.50
8.907.679	54	22	49	59	-64.36	325.17	-64.75	324.68	-.39	-.49
8.907.714	54	22	50	41	-64.12	321.10	-64.50	320.55	-.38	-.55
8.907.994	54	22	56	17	-84.19	350.13	-84.62	349.96	-.43	-.17
8.908.0E4	54	22	57	41	-83.16	335.78	-83.57	334.65	-.41	-1.13
8.908.624	54	23	8	53	-40.47	269.57	-40.51	269.08	-.04	-.49
8.908.694	54	23	10	17	-39.72	269.71	-39.76	269.23	-.04	-.48
8.908.764	54	23	11	41	-39.58	269.30	-39.61	268.83	-.03	-.47
8.908.834	54	23	13	5	-40.01	269.0E	-40.04	268.58	-.03	-.48
8.909.079	54	23	17	59	-29.74	259.80	-29.69	259.44	.05	-.36
8.909.149	54	23	19	23	-25.26	25E.9E	-25.19	256.64	.07	-.32
8.909.184	54	23	20	5	-23.19	255.78	-23.11	255.48	.08	-.30
8.909.219	54	23	20	47	-20.72	254.43	-20.63	254.15	.09	-.28
8.909.289	54	23	22	11	-16.09	252.11	-15.98	251.87	.11	-.24
8.909.359	54	23	23	35	-11.34	249.93	-11.21	249.73	.13	-.20
8.909.429	54	23	24	59	-6.46	247.84	-6.31	247.68	.15	-.16
8.909.604	54	23	28	29	-7.37	245.62	-7.20	245.45	.17	-.17
8.910.689	54	23	50	11	29.43	230.19	29.73	230.25	.30	.06
8.910.724	54	23	50	53	30.89	228.69	31.20	228.75	.31	.0E
8.910.829	54	23	52	59	36.65	225.34	36.98	225.43	.33	.09
8.910.864	54	23	53	41	38.05	223.81	38.38	223.90	.33	.09
8.910.969	54	23	55	47	43.32	220.07	43.67	220.18	.35	.11
8.911.004	54	23	5E	29	44.53	218.23	44.89	218.34	.36	.11
8.911.179	54	23	59	59	*******	*******	*******	*******	*****	******
8.911.214	55	0	0	41	*******	*******	*******	*******	*****	******
rev 205										
8.944.744	55	11	11	17	-24.59	83.80	-24.62	83.48	-.03	-.32
8.944.814	55	11	12	41	-24.56	83.23	-24.58	82.91	-.02	-.32
8.945.059	55	11	17	35	-29.83	75.02	-29.78	74.66	.05	-.36
8.945.129	55	11	18	59	-25.27	72.32	-25.20	72.00	.07	-.32
8.945.164	55	11	19	41	-23.14	71.20	-23.06	70.90	.08	-.30
8.945.199	55	11	20	23	-20.66	69.87	-20.57	69.59	.09	-.28
8.945.269	55	11	21	47	-16.07	67.45	-15.96	67.21	.11	-.24
8.945.304	55	11	22	29	-13.95	66.39	-13.83	66.17	.12	-.22
8.945.339	55	11	23	11	-11.41	65.19	-11.28	64.99	.13	-.20
8.945.409	55	11	24	35	-6.57	63.19	-6.42	63.02	.15	-.17
8.945.689	55	11	30	11	21.16	62.03	21.32	62.07	.16	.04
8.945.724	55	11	30	53	24.4E	61.51	24.63	61.57	.17	.06
8.946.669	55	11	49	47	29.36	45.69	29.66	45.75	.30	.06
8.946.704	55	11	50	29	30.88	44.2E	31.19	44.32	.31	.0E
8.946.809	55	11	52	35	36.67	40.82	37.00	40.91	.33	.09
8.946.844	55	11	53	17	38.15	39.15	38.48	39.25	.33	.10
8.946.949	55	11	55	23	43.30	35.43	43.65	35.54	.35	.11
8.946.984	55	11	56	5	44.45	33.61	44.81	33.72	.36	.11
8.947.159	55	11	59	35	52.76	40.23	53.10	40.47	.34	.24
8.947.194	55	12	0	17	53.99	38.02	54.34	38.25	.35	.23
8.947.229	55	12	0	59	58.29	41.48	58.62	41.81	.33	.33
8.947.264	55	12	1	41	59.81	39.18	60.15	39.51	.34	.33

rev 206		GMT			INTERCEPTING LAT AND LON W/R OLD POLE		W/R NEW POLE		CHANGES IN	
DAS REF. TIME	DAY	HR	MM	SEC	LAT	LON	LAT	LON	LAT	LON
8.979.534	55	22	47	5	-86.38	10.72	-8E.74	14.53	-.36	3.81
8.979.604	55	22	48	29	-85.27	335.90	-85.70	335.39	-.43	-.51
8.979.639	55	22	49	11	-86.72	321.39	-87.13	318.54	-.41	-2.85
8.979.674	55	22	49	53	-85.51	296.18	-85.81	291.97	-.30	-4.21
8.979.954	55	22	55	29	-87.53	316.92	-87.91	311.87	-.38	-5.05
8.980.024	55	22	56	53	-86.70	319.20	-87.09	315.81	-.39	-3.39
8.981.039	55	23	17	11	-29.81	250.57	-29.76	250.21	.05	-.36
8.981.109	55	23	18	35	-25.29	247.71	-25.22	247.39	.07	-.32
8.981.179	55	23	19	59	-20.64	245.28	-20.55	245.00	.09	-.28
8.981.249	55	23	21	23	-16.06	242.97	-15.95	242.73	.11	-.24
8.981.319	55	23	22	47	-11.42	240.80	-11.29	240.60	.13	-.20
8.981.389	55	23	24	11	-6.70	238.74	-6.55	238.57	.15	-.17
8.981.494	55	23	26	17	2.24	238.90	2.39	238.80	.15	-.10
8.982.649	55	23	49	23	29.43	221.09	29.73	221.15	.30	.06
8.982.684	55	23	50	5	30.87	219.67	31.18	219.73	.31	.0E
8.982.789	55	23	52	11	36.50	216.04	36.83	216.13	.33	.09
8.9R2.824	55	23	52	53	37.79	214.47	38.12	214.56	.33	.09
8.982.929	55	23	54	59	43.08	210.94	43.43	211.05	.35	.11
8.982.964	55	23	55	41	44.33	209.23	44.69	209.34	.36	.11
8.983.139	55	23	59	11	53.23	215.06	53.57	215.30	.34	.24
8.983.174	55	23	59	53	54.32	212.88	54.67	713.11	.35	.23
8.983.209	56	0	0	35	58.41	216.61	58.74	216.94	.33	.33
8.983.244	56	0	1	17	59.54	214.16	59.89	214.48	.35	.32
8.983.419	56	0	4	47	71.31	246.58	71.47	247.65	.16	1.07
8.983.454	56	0	5	29	72.85	244.81	73.02	245.98	.17	1.17
rev 207										
9.011.734	56	9	31	5	*******	*******	*******	*******	*****	******
9.013.274	56	10	1	53	*******	*******	*******	*******	*****	******
9.015.444	56	10	45	17	-85.66	130.85	-86.05	128.23	-.39	-2.62
9.015.514	56	10	46	41	-8E.89	12E.87	-87.2E	122.52	-.37	-4.35
9.015.549	56	10	47	23	-87.70	130.61	-88.08	125.17	-.38	-5.44
9.015.584	56	10	48	5	-86.2E	101.66	-86.52	95.83	-.2*	-5.83
9.016.634	56	11	9	5	-41.06	84.56	-41.17	84.08	-.11	-.48
9.016.704	56	11	10	29	-40.87	83.68	-40.97	83.20	-.10	-.48
9.016.949	56	11	15	23	-29.58	66.19	-29.54	65.83	.04	-.36
9.017.019	56	11	16	47	-25.19	63.32	-25.12	63.00	.07	-.32
9.017.089	56	11	18	11	-20.73	60.76	-20.64	60.48	.09	-.28
9.017.159	56	11	19	35	-16.19	58.40	-16.08	58.16	.11	-.24
9.017.229	56	11	20	59	-11.56	56.20	-11.43	56.00	.13	-.20
9.017.299	56	11	22	23	-6.86	54.07	-6.72	53.90	.14	-.17
9.017.614	56	11	28	41	-7.55	49.06	-7.36	48.89	.19	-.17
9.018.559	56	11	47	35	29.30	36.56	29.59	36.62	.29	.0E
9.018.594	56	11	48	17	30.87	35.14	31.17	35.21	.30	.07
9.018.699	56	11	50	23	36.6E	31.E5	36.98	31.74	.32	.09
9.018.734	56	11	51	5	38.04	30.08	38.37	30.18	.33	.10
9.018.839	56	11	53	11	43.4E	26.38	43.81	26.50	.35	.12
9.018.874	56	11	53	53	44.63	24.55	44.99	24.67	.36	.12
9.019.154	56	11	59	29	46.65	2E.31	47.01	26.45	.36	.14

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 208										
9.051.564	56	22	47	41	-84.47	308.77	-84.87	306.87	-.40	-1.90
9.051.634	56	22	49	5	-83.00	298.94	-83.36	296.86	-.36	-2.08
9.051.669	56	22	49	47	-82.80	308.55	-83.20	307.05	-.40	-1.50
9.051.704	56	22	50	29	-82.26	295.06	-82.60	292.98	-.34	-2.08
9.052.054	56	22	57	29	-41.06	257.65	-41.17	257.17	-.11	-.48
9.052.124	56	22	58	53	-40.80	256.66	-40.90	256.18	-.10	-.48
9.052.929	56	23	14	59	-29.79	241.29	-29.75	240.93	.04	-.36
9.052.999	56	23	16	23	-25.14	238.60	-25.07	238.28	.07	-.32
9.053.069	56	23	17	47	-20.59	235.99	-20.50	235.71	.09	-.28
9.053.139	56	23	19	11	-16.07	233.64	-15.96	233.40	.11	-.24
9.053.209	56	23	20	35	-11.44	231.39	-11.31	231.19	.13	-.20
9.053.279	56	23	21	59	-6.69	229.33	-6.55	229.16	.14	-.17
9.053.384	56	23	24	5	-2.94	231.41	-2.81	231.27	.13	-.14
9.054.539	56	23	47	11	29.50	211.67	29.80	211.73	.30	.06
9.054.574	56	23	47	53	31.02	210.19	31.32	210.26	.30	.07
9.054.679	56	23	49	59	36.66	206.78	36.98	206.87	.32	.09
9.054.714	56	23	50	41	38.01	205.38	38.34	205.46	.33	.10
9.054.819	56	23	52	47	43.37	201.94	43.72	202.06	.35	.12
9.054.854	56	23	53	29	44.49	200.13	44.85	200.25	.36	.12
9.055.029	56	23	56	59	52.62	205.52	52.96	205.75	.34	.23
9.055.064	56	23	57	41	53.86	203.62	54.21	203.86	.35	.23
9.055.099	56	23	58	23	58.41	207.72	58.74	208.06	.33	.34
9.055.134	56	23	59	5	59.83	205.72	60.17	206.06	.34	.34
rev 209										
9.087.089	57	10	38	11	*******	*******	*******	*******	*****	******
9.087.334	57	10	43	5	-79.66	141.55	-80.09	141.29	-.43	-.26
9.087.404	57	10	44	29	-79.28	135.97	-79.71	135.47	-.43	-.50
9.087.439	57	10	45	11	-80.06	143.21	-80.49	143.00	-.43	-.21
9.087.474	57	10	45	53	-79.93	131.76	-80.35	131.04	-.42	-.72
9.087.754	57	10	51	29	-28.89	124.35	-29.29	124.14	-.40	-.21
9.087.824	57	10	52	53	-31.78	123.24	-32.17	123.01	-.39	-.23
9.088.839	57	11	13	11	-29.87	56.65	-29.83	56.28	.04	-.37
9.088.909	57	11	14	35	-25.23	53.87	-25.16	53.55	.07	-.32
9.088.979	57	11	15	59	-20.59	51.35	-20.50	51.07	.09	-.28
9.089.049	57	11	17	23	-16.09	48.98	-15.98	48.74	.11	-.24
9.089.119	57	11	18	47	-11.49	46.76	-11.37	46.56	.12	-.20
9.089.189	57	11	20	11	-6.74	44.70	-6.60	44.53	.14	-.17
9.089.504	57	11	26	29	8.87	33.54	9.10	33.48	.23	-.06
9.089.784	57	11	32	5	10.90	43.04	11.07	43.00	.17	-.04
9.089.819	57	11	32	47	13.33	42.33	13.51	42.30	.18	-.03
9.090.449	57	11	45	23	29.48	27.12	29.77	27.18	.29	.06
9.090.484	57	11	46	5	31.06	25.90	31.36	25.97	.30	.07
9.090.589	57	11	48	11	36.87	22.58	37.19	22.68	.32	.10
9.090.624	57	11	48	53	38.27	21.05	38.60	21.15	.33	.10
9.090.729	57	11	50	59	43.65	17.35	44.00	17.47	.35	.12

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 210										
9.123.034	57	22	37	4	-45.37	318.15	-45.80	318.03	-.43	-.12
9.123.069	57	22	37	46	-47.02	315.50	-47.45	315.35	-.43	-.15
9.123.314	57	22	42	40	-81.08	293.61	-81.46	292.21	-.38	-1.40
9.123.384	57	22	44	4	-80.71	284.68	-81.06	282.96	-.35	-1.72
9.123.419	57	22	44	46	-82.79	296.15	-83.18	294.54	-.39	-1.61
9.123.454	57	22	45	28	-82.00	284.51	-82.34	282.49	-.34	-2.02
9.124.504	57	23	6	28	-35.92	248.75	-36.01	248.33	-.09	-.42
9.124.574	57	23	7	52	-35.89	248.18	-35.98	247.75	-.09	-.43
9.124.819	57	23	12	46	-29.84	232.23	-29.80	231.86	.04	-.37
9.124.889	57	23	14	10	-25.29	229.36	-25.23	229.04	.06	-.32
9.124.959	57	23	15	34	-20.69	226.75	-20.60	226.47	.09	-.28
9.125.029	57	23	16	58	-16.12	224.32	-16.01	224.08	.11	-.24
9.125.099	57	23	18	22	-11.50	222.09	-11.38	221.89	.12	-.20
9.125.169	57	23	19	46	-6.78	220.10	-6.62	219.93	.16	-.17
9.125.274	57	23	21	52	-5.21	214.91	-5.03	214.76	.18	-.15
9.126.429	57	23	44	58	29.70	202.46	29.99	202.52	.29	.06
9.126.464	57	23	45	40	31.10	200.94	31.40	201.01	.30	.07
9.126.569	57	23	47	46	36.61	197.44	36.93	197.53	.32	.09
9.126.604	57	23	48	28	37.96	195.87	38.29	195.97	.33	.10
9.126.709	57	23	50	34	43.45	192.27	43.80	192.39	.35	.12
9.126.744	57	23	51	16	44.64	190.39	45.00	190.51	.36	.12
9.126.919	57	23	54	46	53.14	197.28	53.47	197.53	.33	.25
9.126.954	57	23	55	28	54.41	194.95	54.75	195.20	.34	.25
9.126.989	57	23	56	10	58.73	197.95	59.06	198.29	.33	.34
rev 211										
9.159.224	58	10	40	52	-84.66	115.22	-85.06	113.40	-.40	-1.82
9.159.294	58	10	42	16	-83.81	100.66	-84.16	98.13	-.35	-2.53
9.159.329	58	10	42	58	-85.96	108.35	-86.34	105.14	-.38	-3.21
9.159.364	58	10	43	40	-84.68	89.46	-84.97	85.79	-.29	-3.67
9.159.644	58	10	49	16	-50.98	80.66	-51.22	80.09	-.24	-.57
9.159.714	58	10	50	40	-51.66	79.78	-51.89	79.20	-.23	-.58
9.160.729	58	11	10	58	-29.76	47.39	-29.72	47.03	.04	-.36
9.160.799	58	11	12	22	-25.13	44.76	-25.07	44.44	.06	-.32
9.160.869	58	11	13	46	-20.57	42.19	-20.49	41.91	.08	-.28
9.160.939	58	11	15	10	-16.03	39.79	-15.93	39.55	.10	-.24
9.161.009	58	11	16	34	-11.35	37.50	-11.23	37.30	.12	-.20
9.161.079	58	11	17	58	-6.51	35.47	-6.37	35.30	.14	-.17
9.161.394	58	11	24	16	4.53	30.01	4.72	29.92	.19	-.09
9.162.339	58	11	43	10	29.38	17.84	29.67	17.90	.29	.06
9.162.374	58	11	43	52	30.74	16.50	31.08	16.57	.30	.07
9.162.479	58	11	45	58	36.63	13.05	36.95	13.15	.32	.10
9.162.514	58	11	46	40	38.08	11.43	38.41	11.53	.33	.10
9.162.619	58	11	48	46	43.49	7.75	43.84	7.87	.35	.12
9.162.654	58	11	49	28	44.70	5.91	45.06	6.03	.36	.12
9.162.829	58	11	52	58	55.11	11.66	55.44	11.93	.33	.27
9.162.864	58	11	53	40	56.33	9.40	56.68	9.67	.35	.27

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 212										
9.194.924	58	22	34	52	-46.01	308.78	-46.44	308.66	-.43	-.12
9.194.959	58	22	35	34	-47.54	306.20	-47.97	306.05	-.43	-.15
9.195.204	58	22	40	28	-83.85	290.28	-84.25	288.68	-.40	-1.60
9.195.274	58	22	41	52	-84.35	290.70	-84.75	288.96	-.40	-1.74
9.195.309	58	22	42	34	-82.98	293.22	-83.39	291.96	-.41	-1.26
9.195.344	58	22	43	16	-82.26	278.99	-82.62	277.10	-.36	-1.89
9.195.484	58	22	46	4	-84.25	261.98	-84.52	258.42	-.27	-3.56
9.195.554	58	22	47	28	-85.50	257.97	-85.74	253.15	-.24	-4.82
9.196.709	58	23	10	34	-29.83	222.86	-29.79	222.49	.04	-.37
9.196.779	58	23	11	58	-25.20	219.94	-25.14	219.62	.06	-.32
9.196.849	58	23	13	22	-20.62	217.45	-20.54	217.17	.08	-.28
9.196.919	58	23	14	46	-16.01	215.19	-15.91	214.95	.10	-.24
9.196.989	58	23	16	10	-11.33	213.12	-11.21	212.92	.12	-.20
9.197.059	58	23	17	34	-6.75	210.97	-6.61	210.80	.14	-.17
9.197.234	58	23	21	4	-8.42	208.37	-8.26	208.19	.16	-.18
9.198.319	58	23	42	46	29.40	193.40	29.69	193.46	.29	.06
9.198.354	58	23	43	28	30.96	191.96	31.26	192.03	.30	.07
9.198.459	58	23	45	34	36.72	188.60	37.04	188.70	.32	.10
9.198.494	58	23	46	16	38.09	187.11	38.42	187.21	.33	.10
9.198.599	58	23	48	22	43.31	183.70	43.66	183.83	.35	.13
9.198.634	58	23	49	4	44.49	181.96	44.84	182.08	.35	.12
9.198.809	58	23	52	34	41.05	185.77	41.39	185.88	.34	.11
9.198.844	58	23	53	16	42.14	184.00	42.49	184.11	.35	.11
9.198.879	58	23	53	58	49.92	186.56	50.26	186.76	.34	.20
9.198.914	58	23	54	40	51.04	184.50	51.39	184.70	.35	.20
rev 213										
9.231.114	59	10	38	40	-82.66	90.14	-83.01	87.99	-.35	-2.15
9.231.184	59	10	40	4	-81.72	84.86	-82.04	82.72	-.32	-2.14
9.231.219	59	10	40	46	-83.35	90.05	-83.69	87.64	-.34	-2.41
9.231.254	59	10	41	28	-82.00	79.46	-82.29	77.02	-.29	-2.44
9.232.304	59	11	2	28	-27.77	42.82	-27.78	42.47	-.01	-.35
9.232.374	59	11	3	52	-27.25	42.45	-27.26	42.11	-.01	-.34
9.232.619	59	11	8	46	-29.78	38.14	-29.74	37.78	.04	-.36
9.232.689	59	11	10	10	-25.24	35.46	-25.18	35.14	.06	-.32
9.232.759	59	11	11	34	-20.62	32.92	-20.54	32.64	.08	-.28
9.232.829	59	11	12	58	-16.13	30.45	-16.03	30.21	.10	-.24
9.232.899	59	11	14	22	-11.50	28.23	-11.38	28.03	.12	-.20
9.232.969	59	11	15	46	-6.68	26.23	-6.54	26.06	.14	-.17
9.233.284	59	11	22	4	2.53	17.55	2.74	17.45	.21	-.10
9.234.229	59	11	40	58	29.42	8.52	29.71	8.58	.29	.06
9.234.264	59	11	41	40	30.73	7.50	31.03	7.57	.30	.07
9.234.369	59	11	43	46	36.67	4.21	36.99	4.31	.32	.10
9.234.404	59	11	44	28	38.16	2.55	38.48	2.65	.32	.10
9.234.509	59	11	46	34	43.46	358.83	43.80	358.96	.34	.13
9.234.544	59	11	47	16	44.67	356.97	45.02	357.10	.35	.13
9.234.719	59	11	50	46	62.20	351.77	62.58	352.05	.38	.28
rev 214										
9.266.814	59	22	32	40	-46.02	300.09	-46.45	299.98	-.43	-.11
9.266.849	59	22	33	22	-47.69	297.46	-48.12	297.32	-.43	-.14
9.267.094	59	22	38	16	-87.18	273.40	-87.55	268.62	-.37	-4.78
9.267.164	59	22	39	40	-85.12	275.23	-85.50	272.71	-.38	-2.52
9.267.199	59	22	40	22	-84.38	295.25	-84.81	294.62	-.43	-.63
9.267.234	59	22	41	4	-83.90	275.54	-84.28	273.53	-.38	-2.01
9.268.284	59	23	2	4	-34.90	216.24	-34.90	215.82	.00	-.42
9.268.354	59	23	3	28	-34.98	215.89	-34.97	215.47	.01	-.42
9.268.599	59	23	8	22	-29.73	213.77	-29.70	213.41	.03	-.36
9.268.669	59	23	9	46	-25.27	210.77	-25.21	210.45	.06	-.32
9.268.739	59	23	11	10	-20.68	208.10	-20.60	207.82	.08	-.28
9.268.809	59	23	12	34	-16.07	205.71	-15.97	205.47	.10	-.24
9.268.879	59	23	13	58	-11.38	203.46	-11.26	203.26	.12	-.20
9.268.949	59	23	15	22	-6.67	201.48	-6.53	201.31	.14	-.17
9.269.124	59	23	18	52	7.69	192.07	7.90	192.00	.21	-.07
9.270.209	59	23	40	34	29.70	184.41	29.99	184.48	.29	.07
9.270.244	59	23	41	16	31.17	183.00	31.46	183.07	.29	.07
9.270.349	59	23	43	22	36.67	179.53	36.99	179.63	.32	.10
9.270.384	59	23	44	4	37.95	177.98	38.27	178.08	.32	.10
9.270.489	59	23	46	10	42.97	174.29	43.31	174.41	.34	.12
9.270.524	59	23	46	52	44.17	172.53	44.52	172.65	.35	.12
9.270.699	59	23	50	22	53.11	178.68	53.44	178.94	.33	.26
9.270.734	59	23	51	4	54.31	176.62	54.65	176.87	.34	.25
9.270.769	59	23	51	46	58.40	180.21	58.72	180.66	.32	.35
9.270.804	59	23	52	28	59.65	178.02	59.98	178.37	.33	.35
rev 215										
9.303.004	60	10	36	28	-81.53	150.31	-81.88	151.90	-.35	1.59
9.303.074	60	10	37	52	-83.66	119.27	-84.09	119.37	-.43	.10
9.303.109	60	10	38	34	-84.36	98.08	-84.77	96.48	-.41	-1.60
9.303.144	60	10	39	16	-83.31	81.03	-83.66	78.66	-.35	-2.37
9.304.194	60	11	0	16	-30.17	38.04	-30.22	37.67	-.05	-.37
9.304.264	60	11	1	40	-29.84	37.50	-29.88	37.13	-.04	-.37
9.304.509	60	11	6	34	-29.77	28.93	-29.74	28.57	.03	-.36
9.304.579	60	11	7	58	-25.20	26.28	-25.14	25.96	.06	-.32
9.304.649	60	11	9	22	-20.73	23.66	-20.65	23.38	.08	-.28
9.304.719	60	11	10	46	-16.19	21.20	-16.09	21.04	.10	-.24
9.304.789	60	11	12	10	-11.52	19.03	-11.40	18.83	.12	-.20
9.304.859	60	11	13	34	-6.67	16.94	-6.54	16.77	.13	-.17
9.305.174	60	11	19	52	11.00	4.45	11.23	4.40	.23	-.05
9.306.119	60	11	38	46	29.49	359.49	29.78	359.55	.29	.06
9.306.154	60	11	39	28	31.09	358.12	31.38	358.19	.29	.07
9.306.259	60	11	41	34	36.93	354.82	37.24	354.92	.31	.10
9.306.294	60	11	42	16	38.35	353.33	38.67	353.44	.32	.11
9.306.399	60	11	44	22	43.66	349.65	44.00	349.78	.34	.13
9.306.434	60	11	45	4	44.84	347.82	45.19	347.95	.35	.13
rev 216										
9.338.984	60	22	36	4	-83.17	266.53	-83.56	264.82	-.39	-1.71
9.339.054	60	22	37	28	-80.07	275.25	-80.48	274.41	-.41	-.84
9.339.089	60	22	38	10	-81.62	288.79	-82.05	288.51	-.43	-.28
9.339.124	60	22	38	52	-81.41	277.70	-81.83	276.84	-.42	-.86
9.340.174	60	22	59	52	-27.40	215.68	-27.46	215.34	-.06	-.34
9.340.244	60	23	1	16	-27.63	214.85	-27.69	214.51	-.06	-.34
9.340.489	60	23	6	10	-29.93	204.45	-29.90	204.08	.03	-.37
9.340.559	60	23	7	34	-25.25	201.69	-25.20	201.37	.05	-.32
9.340.629	60	23	8	58	-20.68	199.02	-20.60	198.74	.08	-.28
9.340.699	60	23	10	22	-16.16	196.62	-16.06	196.38	.10	-.24
9.340.769	60	23	11	46	-11.59	194.40	-11.47	194.20	.12	-.20
9.340.839	60	23	13	10	-6.89	192.34	-6.76	192.17	.13	-.17
9.341.014	60	23	16	40	-1.33	186.02	-1.15	185.89	.18	-.13
9.342.099	60	23	38	22	29.57	174.63	29.86	174.69	.29	.06
9.342.134	60	23	39	4	31.04	173.12	31.34	173.19	.30	.07
9.342.239	60	23	41	10	36.41	169.72	36.73	169.82	.32	.10
9.342.274	60	23	41	52	37.69	168.27	38.01	168.37	.32	.10
9.342.379	60	23	43	58	43.02	165.02	43.36	165.15	.34	.13
9.342.414	60	23	44	40	44.28	163.32	44.63	163.45	.35	.13
9.342.589	60	23	48	10	52.97	178.99	53.24	179.31	.27	.32
9.342.624	60	23	48	52	54.31	177.37	54.59	177.70	.28	.33
9.342.659	60	23	49	34	56.48	176.82	56.77	177.19	.29	.37

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 217

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
9.374.614	61	10	28	39	-44.11	109.10	-44.54	109.01	-.43	-.09
9.374.649	61	10	29	21	-45.92	106.68	-46.35	106.57	-.43	-.11
9.374.894	61	10	34	15	-78.32	84.56	-78.72	83.64	-.40	-.92
9.374.964	61	10	35	39	-78.92	79.41	-79.30	78.25	-.38	-1.16
9.374.999	61	10	36	21	-79.99	86.68	-80.39	85.69	-.40	-.99
9.375.034	61	10	37	3	-79.29	76.85	-79.66	75.55	-.37	-1.30
9.376.434	61	11	5	3	-23.08	28.93	-23.12	28.63	-.04	-.30
9.376.504	61	11	6	27	-22.54	28.57	-22.57	28.27	-.03	-.30
9.377.064	61	11	17	39	-5.28	10.30	-5.16	10.14	.12	-.16
9.378.009	61	11	36	33	28.29	350.14	28.57	350.20	.28	.06
9.378.044	61	11	37	15	29.97	348.82	30.26	348.88	.29	.06
9.378.149	61	11	39	21	35.64	345.69	35.95	345.79	.31	.10
9.378.184	61	11	40	3	37.05	344.25	37.37	344.35	.32	.10
9.378.289	61	11	42	9	42.18	340.68	42.52	340.80	.34	.12
9.378.324	61	11	42	51	43.41	338.95	43.76	339.07	.35	.12
9.378.499	61	11	46	21	49.85	330.37	50.24	330.48	.39	.11
9.378.534	61	11	47	3	50.81	327.97	51.20	328.07	.39	.10
9.378.569	61	11	47	45	52.68	326.06	53.06	326.15	.40	.09
9.378.779	61	11	51	57	68.95	339.81	69.30	340.34	.35	.53

rev 218

9.411.224	61	22	40	51	-80.83	261.41	-81.23	260.25	-.40	-1.16
9.411.294	61	22	42	15	-80.29	251.94	-80.65	250.45	-.36	-1.49
9.411.364	61	22	43	39	-80.82	250.28	-81.18	248.62	-.36	-1.66
9.411.749	61	22	51	21	-85.22	96.17	-84.99	50.30	.23	4.13
9.412.064	61	22	57	39	-29.73	192.78	-29.69	192.42	.04	-.36
9.412.134	61	22	59	3	-29.11	192.78	-29.07	192.42	.04	-.36
9.412.204	61	23	0	27	-29.45	192.15	-29.40	191.79	.05	-.36
9.412.764	61	23	11	39	-26.38	182.29	-26.24	181.97	.14	-.32
9.412.799	61	23	12	21	-26.03	184.08	-25.90	183.76	.13	-.32
9.412.834	61	23	13	3	-23.78	182.92	-23.64	182.62	.14	-.30
9.413.114	61	23	18	39	-2.26	165.07	-2.00	164.94	.26	-.13
9.413.149	61	23	19	21	.07	164.31	.34	164.19	.27	-.12
9.413.674	61	23	29	51	14.26	180.71	14.44	180.69	.18	-.02
9.413.744	61	23	31	15	14.99	178.95	15.18	178.93	.19	-.02
9.413.814	61	23	32	39	15.62	177.87	15.82	177.86	.20	-.01
9.414.024	61	23	36	51	35.61	155.23	35.95	155.30	.34	.07
9.414.129	61	23	38	57	34.92	157.00	35.25	157.07	.33	.07
9.414.164	61	23	39	39	36.01	155.51	36.35	155.59	.34	.08
9.414.374	61	23	43	51	*******	*******	*******	*******	*****	******
9.414.409	61	23	44	33	*******	*******	*******	*******	*****	******

rev 219

9.446.854	62	10	33	27	-81.22	89.77	-81.65	89.29	-.43	-.48
9.446.924	62	10	34	51	-81.01	79.42	-81.42	78.43	-.41	-.99
9.446.994	62	10	36	15	-80.09	75.75	-80.49	74.67	-.40	-1.08
9.448.184	62	11	0	3	-11.57	346.23	-11.37	346.03	.20	-.20
9.448.254	62	11	1	27	-11.62	345.35	-11.41	345.15	.21	-.20
9.448.324	62	11	2	51	-10.33	345.26	-10.12	345.07	.21	-.19
9.448.674	62	11	9	51	-7.57	338.78	-7.31	338.62	.26	-.16
9.448.709	62	11	10	33	-7.25	338.13	-6.99	337.97	.26	-.16
9.448.744	62	11	11	15	-4.90	337.03	-4.63	336.88	.27	-.15
9.449.444	62	11	25	15	10.06	347.03	10.29	346.98	.23	-.05
9.449.514	62	11	26	39	10.76	346.28	11.00	346.23	.24	-.05
9.449.584	62	11	28	3	10.63	347.08	10.87	347.03	.24	-.05
9.450.284	62	11	42	3	39.80	329.04	40.15	329.13	.35	.09
9.450.389	62	11	44	9	38.31	332.25	38.65	332.34	.34	.09
9.450.424	62	11	44	51	39.44	330.79	39.79	330.88	.35	.09
9.451.124	62	11	58	51	79.70	359.95	79.89	1.97	.19	******
9.451.159	62	11	59	33	82.12	9.67	82.24	12.56	.12	2.89

rev 220

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
9.482.764	62	22	31	39	-79.47	256.37	-79.88	255.60	-.41	-.77
9.482.834	62	22	33	3	-77.65	252.82	-78.06	252.02	-.41	-.80
9.482.904	62	22	34	27	-78.42	248.54	-78.81	247.53	-.39	-1.01
9.483.044	62	22	37	15	-69.83	255.20	-70.24	254.71	-.41	-.49
9.483.114	62	22	38	39	-69.63	252.86	-70.03	252.32	-.40	-.54
9.483.184	62	22	40	3	-70.57	253.60	-70.97	253.05	-.40	-.55
9.483.394	62	22	44	15	-70.36	260.42	-70.78	259.99	-.42	-.43
9.483.429	62	22	44	57	-70.65	249.13	-71.04	248.46	-.39	-.67
9.484.164	62	22	59	39	-25.76	190.29	-25.77	189.96	-.01	-.33
9.484.199	62	23	0	21	-25.06	190.36	-25.07	190.04	-.01	-.32
9.484.234	62	23	1	3	-23.24	188.99	-23.24	188.69	.00	-.30
9.484.654	62	23	9	27	-4.28	161.68	-4.07	161.53	.21	-.15
9.484.724	62	23	10	51	-3.12	160.99	-2.90	160.85	.22	-.14
9.484.794	62	23	12	15	1.37	157.18	1.62	157.07	.25	-.11
9.484.934	62	23	15	3	16.37	139.48	16.71	139.44	.34	-.04
9.485.039	62	23	17	9	25.96	126.56	26.36	126.53	.40	-.03
9.485.074	62	23	17	51	*******	*******	*******	*******	*****	******
9.486.019	62	23	36	45	38.29	162.95	38.54	163.11	.25	.16
9.486.229	62	23	40	57	43.56	158.26	43.84	158.45	.28	.19
9.486.439	62	23	45	9	48.68	153.64	48.99	153.86	.31	.22
9.486.649	62	23	49	21	55.57	146.77	55.92	147.02	.35	.25

rev 221

9.518.254	63	10	21	27	*******	*******	*******	*******	*****	******
9.518.289	63	10	22	9	*******	*******	*******	*******	*****	******
9.518.464	63	10	25	39	*******	*******	*******	*******	*****	******
9.518.499	63	10	26	21	*******	*******	*******	*******	*****	******
9.518.744	63	10	31	15	-77.60	68.86	-78.01	68.10	-.41	-.76
9.518.814	63	10	32	39	-78.74	67.23	-79.14	66.33	-.40	-.90
9.518.884	63	10	34	3	-79.35	65.67	-79.75	64.65	-.40	-1.02
9.519.024	63	10	36	51	-79.65	70.04	-80.06	69.14	-.41	-.90
9.519.094	63	10	38	15	-78.74	68.51	-79.14	67.61	-.40	-.90
9.519.164	63	10	39	39	-79.67	66.13	-80.06	65.04	-.39	-1.09
9.519.304	63	10	42	27	-56.49	49.60	-56.82	49.05	-.33	-.55
9.519.339	63	10	43	9	-52.53	40.54	-52.81	39.99	-.28	-.55
9.519.374	63	10	43	51	-51.48	37.24	-51.74	36.68	-.26	-.56
9.519.409	63	10	44	33	-50.49	34.41	-50.73	33.85	-.24	-.56
9.520.634	63	11	9	3	-3.89	356.01	-3.81	355.86	.08	-.15
9.520.669	63	11	9	45	-3.37	355.71	-3.29	355.57	.08	-.14
9.520.704	63	11	10	27	-1.13	354.90	-1.04	354.77	.09	-.13
9.522.034	63	11	37	3	39.36	312.64	39.74	312.70	.38	.06
9.522.104	63	11	38	27	40.31	312.21	40.69	312.27	.38	.06
9.522.174	63	11	39	51	40.83	313.11	41.21	313.17	.38	.06
9.522.349	63	11	43	21	47.39	334.43	47.67	334.67	.28	.24

rev 222

9.554.724	63	22	30	51	-82.33	259.75	-82.76	259.46	-.43	-.29
9.554.794	63	22	32	15	-84.08	253.52	-84.50	252.67	-.42	-.85
9.554.864	63	22	33	39	-82.80	246.64	-83.21	245.48	-.41	-1.16
9.556.264	63	23	1	39	-4.45	149.50	-4.23	149.35	.22	-.15
9.556.334	63	23	3	3	-4.41	150.00	-4.19	149.85	.22	-.15
9.556.404	63	23	4	27	-5.30	150.18	-5.08	150.03	.22	-.15
9.556.544	63	23	7	15	-4.65	150.60	-4.43	150.45	.22	-.15
9.556.579	63	23	7	57	-3.91	150.26	-3.69	150.12	.22	-.14
9.556.614	63	23	8	39	-1.30	149.18	-1.07	149.05	.23	-.13
9.557.314	63	23	22	39	16.03	133.57	16.37	133.53	.34	-.04
9.557.384	63	23	24	3	15.73	134.26	16.07	134.22	.34	-.04
9.557.454	63	23	25	27	16.52	136.15	16.85	136.11	.33	-.04
9.557.684	63	23	29	39	37.90	140.46	38.21	140.57	.31	.11
9.557.769	63	23	31	45	36.70	140.70	37.01	140.80	.31	.10
9.557.804	63	23	32	27	38.34	139.41	38.66	139.52	.32	.11
9.557.979	63	23	35	57	66.77	134.30	67.12	134.78	.35	.48
9.558.189	63	23	40	9	58.06	144.00	58.37	144.37	.31	.37
9.559.099	63	23	58	21	85.65	279.03	85.22	279.35	-.43	.32

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 223	GMT				INTERCEPTING LAT AND LON W/R OLD POLE		W/R NEW POLE		CHANGES IN	
DAS REF. TIME	DAY	HR	MM	SEC	LAT	LON	LAT	LON	LAT	LON
9,590,739	64	10	31	9	-85.64	21.85	-85.86	16.77	-.22	-5.08
9,590,984	64	10	36	3	-78.00	66.39	-78.42	65.80	-.42	-.59
9,591,054	64	10	37	27	-77.15	64.56	-77.57	63.93	-.42	-.63
9,591,124	64	10	38	51	-76.70	67.89	-77.12	67.38	-.42	-.51
9,592,244	64	11	1	15	-23.52	343.05	-23.43	342.75	.09	-.30
9,592,279	64	11	1	57	-21.00	341.56	-20.89	341.28	.11	-.28
9,592,454	64	11	5	27	-15.21	340.14	-15.09	339.91	.12	-.23
9,592,524	64	11	6	51	-13.71	340.23	-13.59	340.01	.12	-.22
9,592,594	64	11	8	15	-12.59	339.58	-12.46	339.37	.13	-.21
9,592,804	64	11	12	27	-4.21	348.50	-4.14	348.35	.07	-.15
9,592,839	64	11	13	9	-4.89	347.33	-4.81	347.18	.08	-.15
9,592,874	64	11	13	51	-2.95	346.12	-2.86	345.98	.09	-.14
9,593,994	64	11	36	15	41.07	312.61	41.41	312.73	.34	.12
rev 224										
9,626,684	64	22	30	2	-87.36	259.12	-87.79	260.13	-.43	1.01
9,626,754	64	22	31	26	-88.69	246.34	-89.12	242.66	-.43	-3.68
9,626,824	64	22	32	50	-89.28	317.45	-89.35	353.52	-.07	36.07
9,628,084	64	22	58	2	-26.31	182.92	-26.40	182.59	-.09	-.33
9,628,154	64	22	59	26	-25.39	183.37	-25.49	183.05	-.10	-.32
9,628,224	64	23	0	50	-24.66	184.54	-24.76	184.23	-.10	-.31
9,628,574	64	23	7	50	-9.02	153.14	-8.88	152.96	.14	-.18
9,628,609	64	23	8	32	-7.71	151.47	-7.55	151.30	.16	-.17
9,628,644	64	23	9	14	-5.55	150.42	-5.39	150.26	.16	-.16
9,628,924	64	23	14	50	-5.87	150.93	-5.70	150.77	.17	-.16
9,628,994	64	23	16	14	-5.52	150.92	-5.35	150.76	.17	-.16
rev 225										
9,666,514	65	11	46	38	65.13	301.30	65.49	301.71	.36	.41
9,666,549	65	11	47	20	67.53	299.61	67.89	300.05	.36	.44
9,666,584	65	11	48	2	64.95	300.98	65.31	301.37	.36	.39
9,666,619	65	11	48	44	67.24	299.46	67.61	299.89	.37	.43
9,666,654	65	11	49	26	68.32	295.87	68.70	296.27	.38	.40
9,666,689	65	11	50	8	67.35	299.54	67.72	299.97	.37	.43
9,666,724	65	11	50	50	65.19	300.79	65.55	301.18	.36	.39
9,666,759	65	11	51	32	67.29	299.41	67.66	299.83	.37	.42
9,666,794	65	11	52	14	68.28	295.88	68.66	296.26	.38	.38
9,666,829	65	11	52	56	67.05	299.29	67.42	299.69	.37	.40
9,666,864	65	11	53	38	65.66	298.96	66.03	299.32	.37	.36
9,666,899	65	11	54	20	67.25	300.00	67.62	300.42	.37	.42
9,666,934	65	11	55	2	65.15	301.45	65.51	301.83	.36	.38
9,666,969	65	11	55	44	67.12	300.24	67.49	300.65	.37	.41
rev 226										
9,698,644	65	22	29	14	-89.41	91.55	-89.01	79.84	.40	-11.71
9,698,714	65	22	30	38	-89.12	199.33	-89.35	171.28	-.23	-28.05
9,698,784	65	22	32	2	-87.29	224.69	-87.69	220.91	-.40	-3.78
9,698,924	65	22	34	50	-86.08	240.04	-86.51	239.26	-.43	-.78
9,698,994	65	22	36	14	-85.18	237.49	-85.61	236.57	-.43	-.92
9,699,064	65	22	37	38	-84.46	250.07	-84.89	250.29	-.43	.22
9,699,694	65	22	50	14	-32.20	150.79	-32.14	150.40	.06	-.39
9,699,729	65	22	50	56	-33.79	151.46	-33.73	151.06	.06	-.40
9,699,764	65	22	51	38	-31.88	150.26	-31.81	149.88	.07	-.38
9,700,394	65	23	4	14	-10.25	121.90	-9.97	121.72	.28	-.18
9,700,464	65	23	5	38	-9.50	121.54	-9.22	121.37	.28	-.17
9,700,534	65	23	7	2	-8.79	121.11	-8.50	120.94	.29	-.17
9,701,234	65	23	21	2	22.04	132.17	22.28	132.20	.24	.03
9,701,339	65	23	23	8	23.15	131.05	23.40	131.08	.25	.03
9,701,374	65	23	23	50	24.99	130.13	25.25	130.17	.26	.04
9,702,109	65	23	38	32	40.91	110.45	41.28	110.52	.37	.07
9,702,319	65	23	42	44	52.71	111.71	53.08	111.88	.37	.17
9,702,529	65	23	46	56	66.23	118.15	66.58	118.60	.35	.45

rev 227	GMT				INTERCEPTING LAT AND LON W/R OLD POLE		W/R NEW POLE		CHANGES IN	
DAS REF. TIME	DAY	HR	MM	SEC	LAT	LON	LAT	LON	LAT	LON
9,734,554	66	10	27	26	-82.96	70.30	-83.38	70.91	-.42	.61
9,734,624	66	10	28	50	-83.34	37.31	-83.74	35.72	-.40	-1.59
9,734,764	66	10	31	38	-81.04	60.00	-81.47	59.88	-.43	-.12
9,734,834	66	10	33	2	-82.07	56.12	-82.50	55.76	-.43	-.36
9,734,904	66	10	34	26	-82.92	52.71	-83.35	52.08	-.43	-.63
9,735,114	66	10	38	38	-60.41	345.52	-60.51	344.66	-.10	-.86
9,735,149	66	10	39	20	-59.03	341.76	-59.10	340.93	-.07	-.83
9,736,514	66	11	6	38	-9.49	330.08	-9.43	329.89	.06	-.19
9,736,549	66	11	7	20	-8.92	330.05	-8.85	329.86	.07	-.19
9,736,584	66	11	8	2	-8.77	329.16	-8.70	328.99	.07	-.17
9,736,794	66	11	12	14	-9.74	329.41	-9.66	329.22	.08	-.19
9,736,864	66	11	13	38	-9.49	330.01	-9.41	329.82	.08	-.19
9,736,934	66	11	15	2	-8.83	329.95	-8.75	329.77	.08	-.18
rev 228										
9,770,674	66	22	29	50	-73.92	233.16	-74.35	232.99	-.43	-.17
9,770,744	66	22	31	14	-74.88	232.14	-75.31	231.93	-.43	-.21
9,770,814	66	22	32	38	-76.05	233.88	-76.48	233.70	-.43	-.18
9,771,094	66	22	38	14	-58.84	180.11	-59.07	179.39	-.23	-.72
9,771,129	66	22	38	56	-58.00	176.07	-58.21	175.34	-.21	-.73
9,772,004	66	22	56	26	-25.86	139.94	-25.77	139.62	.09	-.32
9,772,074	66	22	57	50	-25.95	140.25	-25.86	139.93	.09	-.32
9,772,144	66	22	59	14	-25.40	140.29	-25.31	139.97	.09	-.32
9,772,424	66	23	4	50	-9.67	121.60	-9.44	121.42	.23	-.18
9,772,459	66	23	5	32	-9.59	121.47	-9.36	121.29	.23	-.18
9,772,494	66	23	6	14	-6.97	120.39	-6.73	120.23	.24	-.16
rev 229										
9,806,654	67	10	29	26	-84.05	334.11	-84.14	329.91	-.09	-4.20
9,806,724	67	10	30	50	-85.67	11.63	-86.00	7.62	-.33	-4.01
9,806,794	67	10	32	14	-83.60	353.33	-83.82	349.84	-.22	-3.49
9,807,354	67	10	43	26	-47.44	328.93	-47.48	328.34	-.04	-.59
9,807,424	67	10	44	50	-47.55	329.84	-47.59	329.25	-.04	-.59
9,807,494	67	10	46	14	-47.97	330.53	-48.01	329.93	-.04	-.60
9,807,984	67	10	56	2	-9.42	305.08	-9.26	304.90	.16	-.18
9,808,019	67	10	56	44	-11.78	306.22	-11.63	306.02	.15	-.20
9,808,054	67	10	57	26	-8.47	304.94	-8.31	304.76	.16	-.18
rev 230										
9,842,774	67	22	31	50	-75.41	162.33	-75.59	160.70	-.18	-1.63
9,842,809	67	22	32	32	-74.21	154.26	-74.34	152.68	-.13	-1.58
9,843,054	67	22	37	26	-58.82	180.95	-59.11	180.31	-.29	-.64
9,843,124	67	22	38	50	-58.34	179.74	-58.62	179.09	-.28	-.65
9,843,194	67	22	40	14	-59.21	179.50	-59.49	178.83	-.28	-.67
9,844,034	67	22	57	2	-11.14	120.55	-10.98	120.35	.16	-.20
9,844,104	67	22	58	26	-11.54	121.18	-11.38	120.98	.16	-.20
9,844,174	67	22	59	50	-10.90	121.86	-10.74	121.66	.16	-.20
9,844,594	67	23	8	14	14.79	129.95	14.90	129.94	.11	-.01
9,844,629	67	23	8	56	15.06	130.72	15.17	130.71	.11	-.01
9,844,664	67	23	9	38	14.60	130.29	14.71	130.31	.11	.02
9,845,294	67	23	22	14	15.11	129.83	15.25	129.82	.14	-.01
9,845,364	67	23	23	38	15.15	130.14	15.29	130.13	.14	-.01
9,845,434	67	23	25	2	18.21	133.52	18.33	133.54	.12	.02
9,845,574	67	23	27	50	18.05	125.39	18.23	125.40	.18	.01
rev 231										
9,878,684	68	10	30	1	-85.93	355.86	-86.22	351.08	-.29	-4.78
9,878,719	68	10	30	43	-85.25	327.41	-85.35	322.18	-.10	-5.23
9,880,014	68	10	56	37	-20.27	305.48	-20.18	305.21	.09	-.27
9,880,084	68	10	58	1	-19.70	305.38	-19.60	305.11	.10	-.27
9,880,154	68	10	59	25	-18.93	305.45	-18.83	305.19	.10	-.26
9,880,574	68	11	7	49	-13.77	303.48	-13.64	303.26	.13	-.22
9,880,609	68	11	8	31	-11.19	302.54	-11.05	302.34	.14	-.20
9,881,274	68	11	21	49	9.35	292.55	9.58	292.49	.23	-.06
9,881,344	68	11	23	13	9.07	293.18	9.29	293.12	.22	-.06
9,881,414	68	11	24	37	8.03	293.91	8.25	293.84	.22	-.07
9,882,184	68	11	40	1	60.33	270.07	60.70	270.35	.37	.28
9,882,219	68	11	40	43	61.61	270.12	61.98	270.42	.37	.30
9,882,254	68	11	41	25	62.97	266.31	63.35	266.59	.38	.28

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 232										
9.914.664	68	22	29	37	-74.38	212.54	-74.81	212.30	-.43	-.24
9.914.734	68	22	31	1	-73.02	213.71	-73.45	213.51	-.43	-.20
9.914.804	68	22	32	25	-72.04	214.61	-72.47	214.42	-.43	-.19
9.915.154	68	22	39	25	-72.86	153.42	-73.03	152.01	-.17	-1.41
9.915.224	68	22	40	49	-72.42	151.64	-72.58	150.25	-.16	-1.39
9.915.294	68	22	42	13	-73.17	150.73	-73.32	149.27	-.15	-1.46
9.916.554	68	23	7	25	.21	112.81	.38	112.69	.17	-.12
9.916.589	68	23	8	7	1.52	112.38	1.69	112.27	.17	-.11
9.916.624	68	23	8	49	4.01	111.50	4.19	111.41	.18	-.09
9.917.254	68	23	21	25	.48	112.97	.67	112.86	.19	-.11
9.917.324	68	23	22	49	.56	112.64	.76	112.53	.20	-.11
9.917.394	68	23	24	13	.62	112.65	.82	112.54	.20	-.11
9.917.604	68	23	28	25	12.30	104.38	12.56	104.34	.26	-.04
rev 233										
9.950.719	69	10	30	37	-80.81	349.83	-81.12	347.84	-.31	-1.99
9.950.789	69	10	32	1	-81.67	340.92	-81.93	338.41	-.26	-2.51
9.950.859	69	10	33	25	-81.09	358.16	-81.44	356.40	-.35	-1.76
9.953.234	69	11	21	1	3.96	294.13	4.11	294.04	.15	-.09
9.953.304	69	11	22	25	4.54	293.64	4.70	293.55	.16	-.09
9.953.374	69	11	23	49	6.46	292.77	6.63	292.70	.17	-.07
9.953.514	69	11	26	37	11.23	283.61	11.46	283.56	.23	-.05
9.953.549	69	11	27	19	11.73	284.15	11.96	284.11	.23	-.04
9.953.584	69	11	28	1	13.45	282.93	13.69	282.90	.24	-.03
9.953.794	69	11	32	13	28.32	289.84	28.52	289.93	.20	.09
9.953.829	69	11	32	55	30.47	289.42	30.67	289.53	.20	.11
rev 234										
9.986.484	69	22	26	1	-84.75	324.08	-84.54	327.97	.21	3.89
9.986.519	69	22	26	43	-85.18	354.24	-84.81	356.69	.37	2.45
9.986.694	69	22	30	13	-75.19	174.60	-75.55	173.57	-.36	-1.03
9.986.764	69	22	31	37	-74.64	169.30	-74.97	168.17	-.33	-1.13
9.986.834	69	22	33	1	-74.14	166.22	-74.46	165.06	-.32	-1.16
9.988.024	69	22	56	49	-14.68	109.00	-14.57	108.77	.11	-.23
9.988.094	69	22	58	13	-14.72	108.42	-14.60	108.19	.12	-.23
9.988.164	69	22	59	37	-13.94	107.98	-13.81	107.76	.13	-.22
9.988.584	69	23	8	1	-12.73	110.01	-12.60	109.80	.13	-.21
9.988.619	69	23	8	43	-11.57	109.27	-11.44	109.07	.13	-.20
9.988.654	69	23	9	25	-9.46	108.41	-9.32	108.22	.14	-.19
9.989.914	69	23	34	37	48.56	83.27	48.89	83.47	.33	.20
9.989.949	69	23	35	19	50.81	81.30	51.15	81.51	.34	.21
9.989.984	69	23	36	1	48.23	86.61	48.55	86.82	.32	.21
rev 235										
10.022.674	70	10	29	49	-70.89	17.14	-71.31	16.89	-.43	-.25
10.022.744	70	10	31	13	-70.37	13.23	-70.79	12.89	-.42	-.34
10.022.814	70	10	32	37	-69.32	13.93	-69.74	13.61	-.42	-.32
10.023.164	70	10	39	37	-72.41	6.47	-72.82	5.90	-.41	-.57
10.023.199	70	10	40	19	-73.90	17.36	-74.33	17.02	-.43	-.34
10.023.234	70	10	41	1	-73.68	7.02	-74.09	6.41	-.41	-.61
10.024.564	70	11	7	37	-15.28	301.06	-15.27	300.82	.01	-.24
10.024.634	70	11	9	1	-15.85	300.15	-15.83	299.91	.02	-.24
10.024.704	70	11	10	25	-15.95	300.25	-15.93	300.01	.02	-.24
10.026.104	70	11	38	25	49.19	309.47	49.19	309.85	.00	.38
10.026.139	70	11	39	7	50.35	315.41	50.31	315.81	-.04	.40
rev 236										
10.058.654	70	22	29	25	-86.64	197.62	-87.07	197.37	-.43	-.25
10.058.724	70	22	30	49	-88.29	193.48	-88.72	191.55	-.43	-1.93
10.058.794	70	22	32	13	-86.16	183.04	-86.57	180.92	-.41	-2.12
10.059.144	70	22	39	13	-88.64	151.22	-88.87	134.19	-.23	-17.03
10.059.214	70	22	40	37	-86.86	178.84	-87.25	175.29	-.39	-3.55
10.059.284	70	22	42	1	-86.76	148.21	-87.00	141.48	-.24	-6.73
10.060.544	70	23	7	13	-11.07	105.47	-10.98	105.27	.09	-.20
10.060.579	70	23	7	55	-10.20	104.98	-10.10	104.79	.10	-.19
10.060.614	70	23	8	37	-8.03	104.15	-7.93	103.97	.10	-.18
10.061.034	70	23	17	1	-1.93	98.15	-1.77	98.02	.16	-.13
10.061.069	70	23	17	43	-.62	99.49	-.47	99.37	.15	-.12
10.061.454	70	23	25	25	24.20	97.59	24.38	97.65	.18	.06
10.061.524	70	23	26	49	24.37	96.92	24.56	96.98	.19	.06
rev 237										
10.094.844	71	10	33	13	-82.91	223.41	-82.53	221.72	.38	-1.69
10.095.544	71	10	47	13	-45.69	305.08	-45.81	304.54	-.12	-.54
10.095.579	71	10	47	55	-43.91	302.26	-44.01	301.74	-.10	-.52
10.096.594	71	11	8	13	-6.08	290.81	-6.06	290.65	.02	-.16
10.096.629	71	11	8	55	-5.66	291.52	-5.64	291.36	.02	-.16
10.096.664	71	11	9	37	-3.67	290.53	-3.65	290.38	.02	-.15
10.097.294	71	11	22	13	14.94	281.55	15.05	281.54	.11	-.01
10.097.364	71	11	23	37	15.56	281.51	15.68	281.51	.12	-.00
10.097.434	71	11	25	1	16.10	281.00	16.22	281.00	.12	.00
10.098.169	71	11	39	43	50.65	271.42	50.86	271.76	.21	.34
rev 238										
10.131.244	71	22	41	12	-72.27	157.46	-72.62	156.56	-.35	-.90
10.131.314	71	22	42	36	-71.27	155.33	-71.61	154.43	-.34	-.90
10.132.924	71	23	14	48	-7.27	87.04	-7.10	86.87	.17	-.17
10.132.994	71	23	16	12	-6.65	86.90	-6.48	86.74	.17	-.16
10.133.064	71	23	17	36	-6.23	86.13	-6.05	85.97	.18	-.16
10.133.484	71	23	26	0	21.42	66.19	21.74	66.19	.32	-.00
10.133.519	71	23	26	42	22.03	63.80	22.36	63.80	.33	-.00
10.133.554	71	23	27	24	23.58	62.06	23.92	62.06	.34	-.00
rev 239										
10.166.664	72	10	29	36	-80.22	329.90	-80.57	328.29	-.35	-1.61
10.166.734	72	10	31	0	-81.48	327.39	-81.82	325.43	-.34	-1.96
10.166.804	72	10	32	24	-82.50	329.47	-82.84	327.33	-.34	-2.14
10.167.154	72	10	39	24	-82.91	315.85	-83.17	312.92	-.26	-2.93
10.167.189	72	10	40	6	-82.04	310.69	-82.27	307.91	-.23	-2.78
10.167.224	72	10	40	48	-80.38	299.92	-80.54	297.41	-.16	-2.51
10.169.254	72	11	21	24	11.84	270.98	11.98	270.95	.12	-.03
10.169.324	72	11	22	48	11.94	271.19	12.06	271.16	.12	-.03
10.169.394	72	11	24	12	12.77	270.25	12.90	270.23	.13	-.02
10.171.004	72	11	56	24	84.35	338.57	84.05	341.50	-.30	2.93
10.171.109	72	11	58	30	84.55	307.20	84.45	311.45	-.10	4.25
10.171.144	72	11	59	12	86.38	311.34	86.25	317.60	-.13	6.26
rev 240										
10.203.974	72	22	55	48	-6.96	85.36	-6.87	85.19	.09	-.17
10.204.044	72	22	57	12	-6.92	86.53	-6.84	86.36	.08	-.17
10.204.114	72	22	58	36	-7.71	87.17	-7.63	86.99	.08	-.18
10.204.534	72	23	7	0	-7.41	85.64	-7.31	85.47	.10	-.17
10.204.604	72	23	8	24	-6.98	85.46	-6.87	85.29	.11	-.17
10.204.674	72	23	9	48	-6.59	85.23	-6.48	85.06	.11	-.17
10.204.884	72	23	14	0	-7.08	85.97	-6.97	85.80	.11	-.17
10.204.919	72	23	14	42	-7.28	86.11	-7.17	85.94	.11	-.17
10.204.954	72	23	15	24	-5.14	84.78	-5.02	84.62	.12	-.16
10.205.899	72	23	34	18	50.87	63.90	51.16	64.18	.29	.28
rev 241										
10.239.114	73	10	38	36	-64.33	327.56	-64.70	326.98	-.37	-.58
10.239.149	73	10	39	18	-64.34	328.90	-64.72	328.34	-.38	-.56
10.239.184	73	10	40	0	-63.70	323.41	-64.05	322.79	-.35	-.62
10.239.534	73	10	47	0	*******	*******	*******	*******	*****	******
10.239.569	73	10	47	42	-88.00	192.63	-87.58	190.32	.42	-2.31
10.241.214	73	11	20	36	18.10	234.32	18.40	234.30	.30	-.02
10.241.284	73	11	22	0	18.32	235.07	18.62	235.06	.30	-.01
10.241.354	73	11	23	24	18.76	235.43	19.06	235.42	.30	-.01
rev 242										
10.275.934	73	22	55	0	-41.71	96.76	-41.78	96.26	-.07	-.50
10.276.004	73	22	56	24	-41.08	95.34	-41.12	95.85	-.06	-.49
10.276.074	73	22	57	48	-40.42	95.61	-40.47	95.13	-.05	-.48
10.276.494	73	23	6	12	-7.32	84.89	-7.28	84.72	.04	-.17
10.276.564	73	23	7	36	-6.96	84.48	-6.91	84.31	.05	-.17
10.276.634	73	23	9	0	-6.47	84.26	-6.42	84.09	.05	-.17
10.277.404	73	23	24	24	23.70	62.08	23.93	62.12	.23	.04
10.277.439	73	23	25	6	23.23	62.41	23.46	62.45	.23	.04
10.277.474	73	23	25	48	24.86	61.24	25.10	61.29	.24	.05
10.277.824	73	23	32	48	48.62	33.80	49.00	33.91	.38	.11

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	GMT DAY	HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 243										
10.310.584	74	10	28	0	-80.88	322.63	-81.27	321.38	-.39	-1.25
10.310.654	74	10	29	24	-80.06	300.71	-80.36	298.77	-.30	-1.94
10.310.724	74	10	30	48	-79.68	302.18	-79.98	300.34	-.30	-1.84
10.311.844	74	10	53	12	-21.21	240.78	-21.05	240.51	.16	-.27
10.311.879	74	10	53	54	-22.38	241.52	-22.22	241.24	.16	-.28
10.311.914	74	10	54	36	-19.76	240.55	-19.60	240.29	.16	-.26
10.313.804	74	11	32	24	29.32	227.12	29.62	227.17	.30	.05
10.313.874	74	11	33	48	29.49	227.51	29.79	227.57	.30	.06
10.346.634	74	22	29	0	-79.94	99.15	-80.13	96.83	-.19	-2.32
rev 244										
10.386.534	75	11	46	59	63.14	237.32	63.35	237.95	.21	.63
10.386.569	75	11	47	41	65.20	238.71	65.40	239.42	.20	.71
10.386.674	75	11	49	47	69.96	236.18	70.18	237.09	.22	.91
10.386.709	75	11	50	29	72.11	238.45	72.31	239.52	.20	1.07
10.386.744	75	11	51	11	73.46	235.80	73.68	236.93	.22	1.13
10.386.779	75	11	51	53	75.70	238.80	75.90	240.19	.20	1.39
10.386.814	75	11	52	35	77.03	235.29	77.26	236.78	.23	1.49
10.386.849	75	11	53	17	79.34	239.75	79.54	241.69	.20	1.94
10.386.884	75	11	53	59	80.69	235.46	80.92	237.61	.23	2.15
10.386.919	75	11	54	41	83.00	243.30	83.17	246.45	.17	3.15
10.386.954	75	11	55	23	84.36	237.30	84.57	241.07	.21	3.77
10.386.989	75	11	56	5	86.61	257.35	86.67	264.51	.06	7.16
10.387.024	75	11	56	47	88.18	252.38	88.25	265.93	.07	13.57
rev 245										
10.492.514	76	23	6	35	-12.45	50.87	-12.36	50.66	.09	-.21
10.492.549	76	23	7	17	-9.72	49.82	-9.62	49.63	.10	-.19
10.492.584	76	23	7	59	-7.57	48.53	-7.46	48.36	.11	-.17
10.492.619	76	23	8	41	-4.97	47.66	-4.85	47.51	.12	-.15
10.492.654	76	23	9	23	-2.92	46.49	-2.79	46.35	.13	-.14
10.492.689	76	23	10	5	-.43	45.72	-.30	45.60	.13	-.12
10.492.724	76	23	10	47	1.54	44.63	1.68	44.52	.14	-.11
10.492.759	76	23	11	29	3.96	43.94	4.11	43.85	.15	-.09
10.492.794	76	23	12	11	5.89	42.88	6.05	42.80	.16	-.08
10.492.829	76	23	12	53	8.25	42.24	8.41	42.18	.16	-.06
10.492.864	76	23	13	35	10.14	41.21	10.31	41.16	.17	-.05
10.492.899	76	23	14	17	12.46	40.59	12.64	40.56	.18	-.03
10.493.074	76	23	17	47	22.11	36.61	22.32	36.65	.21	.04
10.493.109	76	23	18	29	24.41	36.03	24.62	36.08	.21	.05
10.494.474	76	23	45	47	67.93	39.61	68.16	40.39	.23	.78
rev 258										
10.563.119	81	17	48	58	*******	*******	*******	*******	*****	******
10.563.154	81	17	49	40	*******	*******	*******	*******	*****	******
10.563.329	81	17	53	10	*******	*******	*******	*******	*****	******
10.563.364	81	17	53	52	*******	*******	*******	*******	*****	******
rev 259										
10.615.409	82	11	14	45	38.18	162.21	38.41	162.38	.23	.17
10.615.444	82	11	15	27	40.41	161.91	40.64	162.10	.23	.19
10.616.529	82	11	37	9	76.64	169.55	76.86	171.02	.22	1.47
10.616.564	82	11	37	51	78.91	173.19	79.10	175.06	.19	1.87
10.616.599	82	11	38	33	80.30	168.46	80.52	170.53	.22	2.07
10.616.634	82	11	39	15	82.65	175.35	82.82	178.33	.17	2.98
10.616.669	82	11	39	57	84.09	168.60	84.31	172.14	.22	3.54
10.616.704	82	11	40	39	86.44	183.93	86.54	190.65	.10	6.72
rev 260										
10.648.519	82	22	16	57	-82.16	49.43	-82.50	47.35	-.34	-2.08
10.648.554	82	22	17	39	-81.15	33.79	-81.41	31.41	-.26	-2.38
10.648.869	82	22	23	57	-60.77	344.72	-60.67	343.85	.10	-.87
10.648.939	82	22	25	21	-60.05	347.22	-59.96	346.37	.09	-.85
10.649.569	82	22	37	57	-25.56	345.40	-25.44	345.08	.12	-.32
10.649.604	82	22	38	39	-23.06	343.82	-22.93	343.53	.13	-.29
10.649.989	82	22	46	21	-10.88	358.37	-10.84	358.17	.04	-.20
10.650.059	82	22	47	45	-10.39	358.81	-10.35	358.61	.04	-.20
10.650.129	82	22	49	9	-10.63	358.78	-10.59	358.58	.04	-.20
10.650.479	82	22	56	9	-5.52	342.95	-5.35	342.79	.17	-.16
10.650.549	82	22	57	33	-5.87	342.64	-5.70	342.48	.17	-.16
10.650.899	82	23	4	33	36.32	344.91	36.49	345.09	.17	.18
10.650.969	82	23	5	57	35.74	345.16	35.91	345.33	.17	.17
10.651.039	82	23	7	21	34.86	345.23	35.03	345.39	.17	.16
10.652.334	82	23	33	15	*******	*******	*******	*******	*****	******
10.652.369	82	23	33	57	*******	*******	*******	*******	*****	******
rev 261										
10.684.499	83	10	16	33	-71.31	217.03	-71.62	216.00	-.31	-1.03
10.684.534	83	10	17	15	-70.71	210.87	-70.98	209.78	-.27	-1.09
10.686.039	83	10	47	21	-4.91	150.48	-4.70	150.33	.21	-.15
10.686.109	83	10	48	45	-4.39	150.28	-4.18	150.13	.21	-.15
10.686.389	83	10	54	21	18.18	133.33	18.50	133.31	.32	-.02
10.686.424	83	10	55	3	21.47	128.98	21.81	128.97	.34	-.01
rev 262										
10.720.479	83	22	16	9	-77.25	158.04	-77.31	159.81	-.06	1.77
10.720.514	83	22	16	51	-80.73	156.71	-80.80	159.21	-.07	2.50
10.720.549	83	22	17	33	-83.95	143.96	-84.11	147.68	-.16	3.72
10.720.584	83	22	18	15	-86.89	132.73	-87.11	139.66	-.22	6.93
10.720.619	83	22	18	57	-87.77	62.15	-88.18	58.42	-.41	-3.73
10.720.654	83	22	19	39	-86.45	9.47	-86.59	2.62	-.14	-6.85
10.720.689	83	22	20	21	-83.67	.88	-83.75	356.92	-.08	-3.96
10.720.724	83	22	21	3	-81.57	1.55	-81.66	358.57	-.09	-2.98
10.720.759	83	22	21	45	-78.96	357.61	-79.02	355.30	-.06	-2.31
10.720.794	83	22	22	27	-76.67	351.33	-76.69	349.39	-.02	-1.94
10.720.829	83	22	23	9	-74.12	349.81	-74.12	348.18	-.00	-1.63
10.720.864	83	22	23	51	-71.83	345.92	-71.80	344.49	.03	-1.43
10.720.899	83	22	24	33	-69.37	345.16	-69.34	343.90	.03	-1.26
10.720.934	83	22	25	15	-67.07	342.35	-67.02	341.22	.05	-1.13
10.720.969	83	22	25	57	-64.67	341.77	-64.61	340.75	.06	-1.02
10.721.004	83	22	26	39	-62.38	339.45	-62.30	338.52	.08	-.93
rev 416										
11.442.909	160	21	9	24	-59.26	342.83	-59.21	342.00	.05	-.83
11.442.944	160	21	10	6	-56.15	343.27	-56.10	342.52	.05	-.75
11.443.364	160	21	18	30	-17.08	350.74	-17.07	350.49	.01	-.25
11.443.434	160	21	19	54	-15.96	350.11	-15.95	349.87	.01	-.24
11.443.574	160	21	22	42	-18.27	351.10	-18.26	350.84	.01	-.26
11.443.609	160	21	23	24	-16.13	349.96	-16.11	349.72	.02	-.24
11.445.079	160	21	52	48	38.80	330.04	39.01	330.23	.21	.19
11.445.114	160	21	53	30	40.71	328.40	40.94	328.60	.23	.20
11.445.639	160	22	4	0	49.01	324.63	49.27	324.91	.26	.28
11.445.674	160	22	4	42	50.30	322.30	50.58	322.58	.28	.28
11.445.779	160	22	6	48	48.65	306.83	49.01	306.99	.36	.16
11.445.814	160	22	7	30	49.53	304.02	49.90	304.17	.37	.15
11.445.989	160	22	11	0	78.27	257.24	78.68	256.49	.41	-.75
11.446.129	160	22	13	48	57.85	302.03	58.23	302.23	.38	.20
11.446.164	160	22	14	30	58.87	298.49	59.27	298.66	.40	.17

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

rev 417

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	W/R OLD POLE LON	W/R NEW POLE LAT	W/R NEW POLE LON	CHANGES IN LAT	CHANGES IN LON
11•479•764	161	9	26	30	6.84	163.58	6.88	163.52	.04	-.06
11•479•834	161	9	27	54	5.81	164.55	5.85	164.48	.04	-.07
11•479•974	161	9	30	42	4.69	165.46	4.72	165.38	.03	-.08
11•480•009	161	9	31	24	6.79	164.42	6.83	164.36	.04	-.06
11•480•604	161	9	43	18	22.46	153.59	22.60	153.65	.14	.06
11•480•674	161	9	44	42	23.48	151.58	23.64	151.64	.16	.06
11•480•744	161	9	46	6	22.96	152.48	23.12	152.54	.16	.06
11•480•779	161	9	46	48	24.53	151.97	24.69	152.04	.16	.07
11•481•619	161	10	3	36	49.02	140.05	49.28	140.33	.26	.28
11•481•654	161	10	4	18	50.42	137.79	50.70	138.08	.28	.29
11•481•759	161	10	6	24	48.63	122.36	48.99	122.52	.36	.16
11•481•794	161	10	7	6	49.59	119.46	49.96	119.61	.37	.15
11•481•969	161	10	10	36	78.10	76.50	78.52	75.90	.42	-.60
11•482•109	161	10	13	24	58.79	117.29	59.17	117.50	.38	.21
11•482•144	161	10	14	6	59.45	113.48	59.85	113.66	.40	.18

rev 422

11•619•965	163	21	12	33	-30.66	333.92	-30.74	333.56	-.08	-.36
11•620•000	163	21	13	15	-30.11	335.15	-30.20	334.79	-.09	-.36
11•620•140	163	21	16	3	-16.12	332.02	-16.18	331.78	-.06	-.24
11•620•210	163	21	17	27	-14.97	331.45	-15.03	331.22	-.06	-.23
11•620•350	163	21	20	15	-17.34	332.56	-17.40	332.31	-.06	-.25
11•620•385	163	21	20	57	-15.14	331.08	-15.19	330.85	-.05	-.23
11•620•525	163	21	23	45	-10.43	330.07	-10.46	329.88	-.03	-.19
11•620•560	163	21	24	27	-7.94	329.24	-7.97	329.07	-.03	-.17
11•622•415	163	22	1	33	48.03	296.48	48.30	296.75	.27	.27
11•622•450	163	22	2	15	49.48	294.24	49.74	294.51	.28	.27
11•622•555	163	22	4	21	48.24	278.69	48.60	278.84	.36	.15
11•622•590	163	22	5	3	49.22	275.75	49.59	275.89	.37	.14
11•622•765	163	22	8	33	78.30	255.69	78.73	255.93	.43	.24
11•622•905	163	22	11	21	61.08	277.37	61.45	277.66	.37	.29
11•622•940	163	22	12	3	61.88	273.34	62.27	273.59	.39	.25

rev 423

11•656•050	164	9	14	15	-20.59	142.67	-20.62	142.39	-.03	-.28
11•656•120	164	9	15	39	-19.65	142.19	-19.67	141.92	-.02	-.27
11•656•260	164	9	18	27	-21.65	143.18	-21.68	142.90	-.03	-.28
11•656•295	164	9	19	9	-19.51	141.82	-19.52	141.55	-.01	-.27
11•656•890	164	9	31	3	19.03	134.39	19.09	134.42	.06	.03
11•656•960	164	9	32	27	18.52	133.93	18.59	133.96	.07	.03
11•657•030	164	9	33	51	18.01	133.63	18.08	133.66	.07	.03
11•657•065	164	9	34	33	20.11	132.61	20.19	132.65	.08	.04
11•658•395	164	10	1	9	47.18	113.07	47.44	113.33	.26	.26
11•658•430	164	10	1	51	48.63	110.90	48.90	111.17	.27	.27
11•658•535	164	10	3	57	47.70	95.63	48.05	95.79	.35	.16
11•658•570	164	10	4	39	48.73	92.77	49.10	92.92	.37	.15
11•658•745	164	10	8	9	77.78	78.11	78.19	78.58	.41	.47
11•658•885	164	10	10	57	60.52	94.85	60.88	95.15	.36	.30
11•658•920	164	10	11	39	61.38	90.97	61.76	91.24	.38	.27

rev 430

11•796•786	167	21	7	59	-46.71	305.13	-46.86	304.58	-.15	-.55
11•796•996	167	21	12	11	-37.42	304.71	-37.56	304.28	-.14	-.43
11•797•031	167	21	12	53	-35.11	302.95	-35.23	302.55	-.12	-.40
11•797•241	167	21	17	5	-17.49	288.26	-17.50	288.01	-.01	-.25
11•797•311	167	21	18	29	-16.51	287.68	-16.51	287.44	.00	-.24
11•797•451	167	21	21	17	-18.69	288.67	-18.69	288.41	-.00	-.26
11•797•486	167	21	21	59	-16.68	287.51	-16.67	287.27	.01	-.24
11•797•941	167	21	31	5	11.07	283.58	11.12	283.55	.05	-.03
11•798•011	167	21	32	29	13.52	282.89	13.58	282.88	.06	-.01
11•798•151	167	21	35	17	15.05	281.66	15.13	281.66	.08	.00
11•798•186	167	21	35	59	16.89	280.72	16.97	280.74	.08	.02
11•799•586	167	22	3	59	49.10	265.52	49.34	265.83	.24	.31
11•799•621	167	22	4	41	50.56	263.39	50.81	263.71	.25	.32
11•799•726	167	22	6	47	48.99	250.44	49.32	250.65	.33	.21
11•799•761	167	22	7	29	50.10	247.80	50.44	248.01	.34	.21
11•800•006	167	22	12	23	58.18	246.22	58.52	248.54	.34	.31
11•800•041	167	22	13	5	59.13	244.84	59.49	245.13	.36	.29
11•800•146	167	22	15	11	67.52	232.05	67.92	232.31	.40	.26
11•801•371	167	22	39	41	*******	*******	*******	*******	*****	******

rev 431

11•833•431	168	9	20	53	-11.16	105.38	-11.17	105.18	-.01	-.20
11•833•501	168	9	22	17	-10.28	105.01	-10.29	104.82	-.01	-.19
11•833•536	168	9	22	59	-8.10	103.82	-8.10	103.65	.00	-.17
11•833•711	168	9	26	29	-1.02	102.48	-1.00	102.36	.02	-.12
11•835•566	168	10	3	35	47.52	82.19	47.75	82.48	.23	.29
11•835•601	168	10	4	17	49.00	80.16	49.24	80.46	.24	.30
11•835•706	168	10	6	23	48.28	67.38	48.60	67.60	.32	.22
11•835•741	168	10	7	5	49.44	64.82	49.77	65.03	.33	.21
11•835•986	168	10	11	59	57.50	65.56	57.83	65.88	.33	.32
11•836•021	168	10	12	41	58.49	62.30	58.84	62.60	.35	.30
11•836•126	168	10	14	47	72.80	39.61	73.22	39.81	.42	.20

rev 436

11•973•784	170	21	6	57	-58.34	260.24	-58.36	259.43	-.02	-.81
11•974•064	170	21	12	33	-29.66	264.05	-29.70	263.69	-.04	-.36
11•974•099	170	21	13	15	-27.28	262.94	-27.31	262.60	-.03	-.34
11•974•659	170	21	24	27	1.74	253.43	1.80	253.33	.06	-.10
11•974•729	170	21	25	51	2.25	252.66	2.32	252.56	.07	-.10
11•974•869	170	21	28	39	1.25	253.82	1.32	253.72	.07	-.10
11•974•904	170	21	29	21	3.22	253.01	3.30	252.92	.08	-.09
11•975•079	170	21	32	51	20.45	251.65	20.54	251.69	.09	.04
11•975•149	170	21	34	15	21.25	250.24	21.35	250.29	.10	.05
11•975•289	170	21	37	3	20.86	250.94	20.96	250.99	.10	.05
11•975•324	170	21	37	45	22.52	250.29	22.63	250.35	.11	.06
11•976•584	170	22	2	57	50.05	237.61	50.29	237.93	.24	.32
11•976•619	170	22	3	39	51.53	235.30	51.78	235.63	.25	.33
11•976•724	170	22	5	45	49.73	220.65	50.07	220.86	.34	.21
11•976•759	170	22	6	27	50.71	217.84	51.06	218.04	.35	.20
11•977•004	170	22	11	21	59.07	218.98	59.42	219.29	.35	.31
11•977•039	170	22	12	3	59.99	215.40	60.36	215.69	.37	.29
11•977•144	170	22	14	9	74.07	199.21	74.49	199.50	.42	.28

rev 437

11•994•749	171	4	6	15	*******	*******	*******	*******	*****	******
12•010•219	171	9	15	39	-18.38	76.31	-18.39	76.05	-.01	-.26
12•010•289	171	9	17	3	-18.75	76.85	-18.76	76.59	-.01	-.26
12•010•324	171	9	17	45	-16.57	75.58	-16.57	75.34	.00	-.24
12•011•339	171	9	38	3	23.58	61.04	23.72	61.10	.14	.06
12•012•564	171	10	2	33	50.27	53.30	50.51	53.62	.24	.32
12•012•599	171	10	3	15	51.76	51.12	52.01	51.45	.25	.33
12•012•704	171	10	5	21	49.67	36.24	50.00	36.45	.33	.21
12•012•739	171	10	6	3	50.76	33.47	51.11	33.67	.35	.20
12•012•984	171	10	10	57	59.20	34.70	59.55	35.02	.35	.32
12•013•019	171	10	11	39	60.14	31.12	60.50	31.41	.36	.29
12•013•124	171	10	13	45	74.29	15.19	74.70	15.51	.41	.32

rev 444

12•150•187	174	21	10	1	-14.33	230.09	-14.39	229.87	-.06	-.22
12•150•257	174	21	11	25	-13.60	229.60	-13.65	229.38	-.05	-.22
12•150•397	174	21	14	13	-15.00	230.56	-15.06	230.33	-.06	-.23
12•150•432	174	21	14	55	-12.87	229.08	-12.91	228.87	-.04	-.21
12•150•747	174	21	21	13	7.85	214.96	7.92	214.91	.07	-.05
12•150•817	174	21	22	37	8.15	214.36	8.23	214.31	.08	-.05
12•150•957	174	21	25	25	7.32	215.58	7.40	215.52	.08	-.06
12•150•992	174	21	26	7	9.09	214.98	9.17	214.94	.08	-.04
12•152•462	174	21	55	31	48.94	207.69	49.12	208.03	.18	.34
12•152•497	174	21	56	13	50.56	205.80	50.76	206.16	.20	.36
12•152•602	174	21	58	19	48.56	193.43	48.84	193.69	.28	.26
12•152•637	174	21	59	1	49.79	191.40	50.08	191.67	.29	.27
12•152•882	174	22	3	55	59.73	192.27	60.02	192.70	.29	.43
12•152•917	174	22	4	37	60.93	189.17	61.24	189.60	.31	.43
12•153•092	174	22	8	7	75.47	172.04	75.86	172.68	.39	.64
12•159•217	175	0	10	37	*******	*******	*******	*******	*****	******

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 445										
12•185•957	175	9	5	25	-26.16	47.03	-26.24	46.71	-.08	-.32
12•186•027	175	9	6	49	-21.66	44.45	-21.72	44.17	-.06	-.28
12•186•062	175	9	7	31	-19.51	43.06	-19.56	42.80	-.05	-.26
12•186•797	175	9	22	13	17.85	34.88	17.89	34.91	.04	.03
12•186•867	175	9	23	37	18.84	33.28	18.90	33.31	.06	.03
12•187•007	175	9	26	25	18.38	34.00	18.43	34.03	.05	.03
12•187•042	175	9	27	7	20.33	33.08	20.39	33.11	.06	.05
12•188•372	175	9	53	43	46.50	24.78	46.67	25.09	.17	.31
12•188•407	175	9	54	25	48.16	23.01	48.34	23.34	.18	.33
12•188•512	175	9	56	31	47.35	10.95	47.61	11.21	.26	.26
12•188•547	175	9	57	13	48.73	8.73	49.01	9.00	.28	.27
12•188•792	175	10	2	7	57.57	11.09	57.84	11.51	.27	.42
12•188•827	175	10	2	49	58.86	8.22	59.15	8.64	.29	.42
12•188•932	175	10	4	55	71.80	359.40	72.13	.12	.33	.72
rev 450										
12•326•056	177	21	10	25	-2.14	193.17	-2.13	193.04	.01	-.13
12•326•126	177	21	11	49	-1.45	192.69	-1.43	192.57	.02	-.12
12•326•266	177	21	14	37	-2.63	193.43	-2.61	193.30	.02	-.13
12•326•301	177	21	15	19	-.70	192.68	-.68	192.56	.02	-.12
12•326•476	177	21	18	49	7.15	192.10	7.18	192.04	.03	-.06
12•326•546	177	21	20	13	7.47	191.56	7.51	191.50	.04	-.06
12•326•686	177	21	23	1	8.27	190.79	8.32	190.74	.05	-.05
12•326•721	177	21	23	43	9.99	190.05	10.05	190.01	.06	-.04
12•327•981	177	21	48	55	48.76	180.24	48.93	180.58	.17	.34
12•328•016	177	21	49	37	50.52	178.30	50.71	178.66	.19	.36
12•328•121	177	21	51	43	49.13	163.02	49.42	163.28	.29	.26
12•328•156	177	21	52	25	49.91	160.65	50.21	160.91	.30	.26
12•328•401	177	21	57	19	59.39	156.01	59.72	156.37	.33	.36
12•328•436	177	21	58	1	60.44	152.86	60.79	153.21	.35	.35
rev 451										
12•360•881	178	8	46	55	-80.87	41.72	-81.12	39.41	-.25	-2.31
12•361•686	178	9	3	1	-14.57	5.79	-14.55	5.57	.02	-.22
12•361•826	178	9	5	49	-15.05	5.99	-15.03	5.76	.02	-.23
12•361•896	178	9	7	13	-15.63	6.35	-15.61	6.12	.02	-.23
12•361•931	178	9	7	55	-13.52	5.20	-13.49	4.98	.03	-.22
12•362•176	178	9	12	49	2.57	18.44	2.51	18.35	-.06	-.09
12•362•246	178	9	14	13	3.14	17.54	3.09	17.45	-.05	-.09
12•362•876	178	9	26	49	57.53	356.18	57.66	356.71	.13	.53
12•362•911	178	9	27	31	61.25	353.95	61.40	354.58	.15	.63
12•363•891	178	9	47	7	46.90	356.35	47.07	356.66	.17	.31
12•363•926	178	9	47	49	48.58	354.58	48.76	354.91	.18	.33
12•364•031	178	9	49	55	47.29	340.32	47.56	340.57	.27	.25
12•364•066	178	9	50	37	48.66	338.05	48.95	338.31	.29	.26
12•364•311	178	9	55	31	58.30	341.63	58.57	342.06	.27	.43
12•364•346	178	9	56	13	59.61	338.66	59.90	339.09	.29	.43
12•364•451	178	9	58	19	70.70	338.40	70.99	339.20	.29	.80
rev 458										
12•499•155	181	20	50	25	-44.91	160.45	-44.96	159.91	-.05	-.54
12•499•225	181	20	51	49	-44.47	160.78	-44.52	160.25	-.05	-.53
12•499•645	181	21	0	13	-7.90	151.26	-7.87	151.09	.03	-.17
12•499•715	181	21	1	37	-7.22	150.96	-7.18	150.79	.04	-.17
12•499•785	181	21	3	1	-6.58	150.68	-6.54	150.52	.04	-.16
12•499•995	181	21	7	13	3.97	152.08	4.01	152.00	.04	-.08
12•500•065	181	21	8	37	4.59	151.51	4.64	151.43	.05	-.08
12•500•205	181	21	11	25	3.45	152.37	3.50	152.28	.05	-.09
12•500•485	181	21	17	1	19.83	134.83	20.01	134.86	.18	.03
12•500•835	181	21	24	1	21.57	155.74	21.61	155.80	.04	.06
12•500•905	181	21	25	25	22.23	154.05	22.29	154.11	.06	.06
12•502•270	181	21	52	43	67.22	136.60	67.45	137.37	.23	.77
12•502•515	181	21	57	37	83.82	77.98	84.25	77.73	.43	-.25
12•502•585	181	21	59	1	81.83	77.85	82.26	77.61	.43	-.24
12•502•655	181	22	0	25	79.93	78.37	80.36	78.17	.43	-.20

DAS REF. TIME	DAY	GMT HR	MM	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 459										
12•535•030	182	8	47	54	********	********	********	********	*****	******
12•535•065	182	8	48	36	********	********	********	********	*****	******
12•535•100	182	8	49	18	-68.04	289.43	-67.77	289.50	.27	-.93
12•535•170	182	8	50	42	-54.89	324.50	-54.85	323.78	.04	-.72
12•535•240	182	8	52	6	-49.78	316.96	-49.69	316.35	.09	-.61
12•535•485	182	8	57	0	-23.37	343.67	-23.43	343.38	-.10	-.29
12•535•555	182	8	58	24	-23.54	343.16	-23.63	342.86	-.09	-.30
12•535•590	182	8	59	6	-23.23	341.92	-23.31	341.63	-.08	-.29
12•537•165	182	9	30	36	40.41	317.52	40.56	317.75	.15	.23
12•537•515	182	9	37	36	49.45	327.97	49.54	328.35	.09	.38
12•538•250	182	9	52	18	66.91	313.04	67.13	313.80	.22	.76
12•538•425	182	9	55	48	84.07	274.20	84.47	275.57	.40	1.37
12•538•495	182	9	57	12	82.09	274.01	82.50	274.96	.41	.95
12•538•565	182	9	58	36	80.20	273.03	80.61	273.70	.41	.67
12•538•635	182	10	0	0	77.96	274.51	78.37	275.07	.41	.56
12•538•705	182	10	1	24	79.33	259.40	79.76	259.42	.43	.02
rev 473										
12•685•638	189	8	59	4	-14.06	274.92	-14.12	274.70	-.06	-.22
12•685•953	189	9	5	22	6.23	268.77	6.23	268.71	-.00	-.06
12•686•023	189	9	6	46	5.77	269.33	5.77	269.26	-.00	-.07
12•686•058	189	9	7	28	7.98	268.31	7.99	269.26	.01	-.05
12•686•223	189	9	10	58	22.01	263.91	22.06	263.97	.05	.06
12•686•303	189	9	12	22	22.49	263.14	22.54	263.21	.05	.07
12•686•373	189	9	13	46	21.58	264.83	21.62	264.89	.04	.06
12•686•408	189	9	14	28	23.70	263.84	23.75	263.92	.05	.08
rev 478										
12•865•573	191	20	57	45	-11.62	69.10	-11.66	68.90	-.04	-.20
12•866•028	191	21	6	51	21.83	65.33	21.84	65.39	.01	.06
12•866•063	191	21	7	33	22.31	64.95	22.32	65.02	.01	.07
12•866•133	191	21	8	57	23.91	61.00	23.95	61.08	.04	.08
12•866•203	191	21	10	21	24.38	61.19	24.42	61.27	.04	.08
12•870•543	191	22	37	9	75.76	76.86	75.84	78.42	.08	1.56
12•870•613	191	22	38	33	78.87	5.69	79.30	5.86	.43	.17
12•870•683	191	22	39	57	73.82	18.66	74.23	19.06	.41	.40
12•874•498	191	23	56	15	27.42	345.55	27.79	345.32	.37	-.23
12•874•568	191	23	57	39	71.27	351.24	71.65	350.54	.38	-.70
rev 479										
12•900•643	192	8	39	9	-44.95	290.33	-45.30	289.97	-.35	-.36
12•901•203	192	8	50	21	-22.06	254.07	-22.18	253.79	-.12	-.28
12•901•343	192	8	53	9	-23.20	244.47	-23.24	244.17	-.04	-.30
12•901•378	192	8	53	51	-23.00	242.09	-23.03	241.80	-.03	-.29
12•902•043	192	9	7	9	21.47	232.54	21.54	232.60	.07	.06
12•902•113	192	9	8	33	21.08	233.37	21.15	233.42	.07	.05
12•902•148	192	9	9	15	23.35	232.22	23.43	232.29	.08	.07
12•906•593	192	10	38	9	84.75	169.01	85.18	168.45	.43	-.56
12•906•663	192	10	39	33	79.03	202.50	79.41	203.48	.38	.98
12•906•733	192	10	40	57	71.92	193.15	72.33	193.47	.41	.32
12•906•803	192	10	42	21	75.65	170.39	76.08	170.14	.43	-.25
12•909•988	192	11	46	3	31.36	155.83	31.71	155.57	.35	-.26
12•910•058	192	11	47	27	49.02	188.56	49.45	188.43	.43	-.13

Table 6-9. Mariner 9 TV Pictures Referred to New Pole, Prime Meridian and Rotation Rate (contd)

DAS REF. TIME	GMT DAY	HR	MN	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 528										
12•985•387	216	20	25	2	-2.25	203.23	-2.36	203.10	-.11	-.13
12•985•457	216	20	26	26	-1.52	202.61	-1.62	202.49	-.10	-.12
12•985•597	216	20	29	14	-3.57	204.53	-3.68	204.39	-.11	-.14
12•985•632	216	20	29	56	-1.53	203.33	-1.63	203.21	-.10	-.12
12•985•842	216	20	34	8	12.69	198.63	12.63	198.62	-.06	-.01
12•985•877	216	20	34	50	15.34	198.38	15.28	198.39	-.06	.01
12•991•197	216	22	21	14	77.61	1.29	77.36	359.61	-.25	-1.68
12•991•267	216	22	22	38	84.53	18.38	84.38	14.12	-.15	-4.26
12•991•337	216	22	24	2	77.75	104.12	78.14	103.20	.39	-.92
12•991•407	216	22	25	26	84.58	72.21	84.81	68.18	.23	-4.03
12•993•017	216	22	57	38	49.38	70.25	49.56	69.68	.18	-.57
12•994•242	216	23	22	8	84.95	177.19	85.29	180.13	.34	2.94
12•994•312	216	23	23	32	53.03	131.02	53.45	130.80	.42	-.22
12•994•382	216	23	24	56	25.07	107.72	25.42	107.49	.35	-.23
12•995•117	216	23	39	38	17.24	133.86	17.66	133.72	.42	-.14
12•995•257	216	23	42	26	9.62	103.89	9.94	103.73	.32	-.16
12•996•097	216	23	59	14	-10.00	105.58	-9.70	105.52	.30	-.06
rev 529										
13•021•297	217	8	23	14	-8.58	15.14	-8.67	14.97	-.09	-.17
13•021•402	217	8	25	20	9.39	14.54	9.31	14.50	-.08	-.04
13•021•507	217	8	27	26	13.11	9.54	13.07	9.53	-.04	-.01
13•021•577	217	8	28	50	16.38	6.45	16.37	6.47	-.01	.02
13•021•647	217	8	30	14	17.86	5.15	17.86	5.18	-.00	.03
13•021•682	217	8	30	56	20.82	3.97	20.83	4.02	.01	.05
13•021•717	217	8	31	38	24.76	3.21	24.78	3.30	.02	.09
13•027•317	217	10	23	38	77.49	279.17	77.88	278.26	.39	-.91
13•028•122	217	10	39	44	88.30	331.43	88.68	339.17	.38	7.74
13•032•077	217	11	58	50	11.23	284.29	11.55	284.12	.32	-.17
rev 533										
13•165•251	219	8	22	19	-6.13	.07	-6.24	359.91	-.11	-.16
13•165•286	219	8	23	1	-5.92	.07	-6.03	359.92	-.11	-.15
13•165•356	219	8	24	25	-5.11	.14	-5.22	359.99	-.11	-.15
13•165•391	219	8	25	7	-3.04	359.00	-3.14	358.87	-.10	-.13
rev 667										
13•313•240	286	7	31	22	8.55	89.64	8.50	89.60	-.05	-.04
13•313•450	286	7	35	34	20.51	84.65	20.50	84.70	-.01	.05
13•313•730	286	7	41	10	18.37	75.02	18.44	75.05	.07	.03
13•313•800	286	7	42	34	21.64	72.95	21.73	73.01	.09	.06
13•313•905	286	7	44	40	22.00	65.29	22.15	65.35	.15	.06
13•314•430	286	7	55	10	49.15	70.20	49.28	70.57	.13	.37
13•316•810	286	8	42	46	75.66	168.86	75.26	169.34	-.40	.48
13•316•880	286	8	44	10	85.38	15.15	85.81	15.56	.43	.41
13•316•950	286	8	45	34	74.19	14.21	74.62	14.21	.43	-.00
13•317•020	286	8	46	58	76.41	36.39	76.80	37.08	.39	.69
13•317•090	286	8	48	22	77.22	83.27	77.35	84.99	.13	1.72
13•317•545	286	8	57	28	89.63	200.53	89.20	196.55	-.43	-3.98
13•328•745	286	12	41	28	-4.29	4.22	-4.10	4.14	.19	-.08

DAS REF. TIME	GMT DAY	HR	MN	SEC	INTERCEPTING LAT AND LON W/R OLD POLE LAT	LON	W/R NEW POLE LAT	LON	CHANGES IN LAT	LON
rev 668										
13•349•780	286	19	42	9	29.16	257.65	29.18	257.78	.02	.13
13•350•025	286	19	47	3	22.93	249.84	23.02	249.91	.09	.07
13•351•950	286	20	25	33	26.66	139.21	26.98	138.96	.32	-.25
13•352•510	286	20	36	45	40.97	184.59	41.40	184.49	.43	-.10
13•352•790	286	20	42	21	79.46	341.45	79.06	342.24	-.40	.79
13•352•850	286	20	43	45	82.33	180.61	82.76	180.22	.43	-.39
13•352•930	286	20	45	9	79.58	185.29	80.01	185.16	.43	-.13
13•353•000	286	20	46	33	78.55	197.08	78.97	197.39	.42	.31
13•353•070	286	20	47	57	73.03	194.79	73.46	194.89	.43	.10
13•353•315	286	20	52	51	89.72	157.04	89.76	44.39	.04	112.65
13•353•560	286	20	57	45	25.01	213.18	25.40	213.16	.39	-.02
13•353•595	286	20	58	27	33.04	212.78	33.43	212.79	.39	.01
13•354•260	286	21	11	45	19.03	133.72	19.25	133.49	.22	-.23
13•354•295	286	21	12	27	35.06	134.73	35.29	134.37	.23	-.36
13•357•270	286	22	11	57	16.93	132.55	17.05	132.32	.12	-.23
13•360•280	286	23	12	9	18.06	133.60	18.07	133.35	.01	-.25
13•360•385	286	23	14	15	37.89	145.48	37.99	145.05	.10	-.43
rev 675										
13•460•068	290	7	37	56	15.79	31.82	15.91	31.83	.12	.01
13•460•103	290	7	38	38	17.80	30.95	17.92	30.98	.12	.03
13•460•418	290	7	44	56	40.05	29.78	40.19	30.02	.14	.24
13•460•593	290	7	48	28	46.51	26.61	46.68	26.92	.17	.31
13•463•043	290	8	37	26	77.06	267.92	77.24	266.10	.18	-1.82
13•463•113	290	8	38	50	79.05	269.41	79.24	267.28	.19	-2.13
13•463•183	290	8	40	14	81.06	265.58	81.22	262.90	.16	-2.68
13•463•253	290	8	41	38	79.62	343.34	80.04	343.67	.42	.33
13•469•623	290	10	49	2	*******	*******	*******	*******	*****	******
13•471•198	290	11	20	32	6.86	311.10	7.07	310.95	.21	-.15
13•471•443	290	11	25	26	40.22	328.26	40.53	327.90	.31	-.36
rev 676										
13•496•013	290	19	36	50	24.18	213.06	24.25	213.14	.07	.08
13•496•083	290	19	38	14	24.97	213.19	25.04	213.28	.07	.09
13•496•118	290	19	38	56	24.53	213.02	24.61	213.11	.08	.09
13•496•293	290	19	42	26	31.61	209.84	31.71	209.99	.10	.15
13•496•363	290	19	43	50	31.89	211.04	31.99	211.20	.10	.16
13•499•023	290	20	37	2	73.12	47.82	73.04	46.32	-.08	-1.50
13•499•093	290	20	38	26	81.90	81.41	82.06	78.47	.16	-2.94
13•499•163	290	20	39	50	89.57	182.16	89.75	255.26	.18	73.10