NASA TMX- 72519

707-1

TIROS VII RADIATION DATA CATALOG AND USERS' MANUAL

Volume 2

(October 1, 1963 - February 29, 1964)

SEP 1964
RECEIVED
NASA STI FACILITY
INPUT BRANCH

GODDARD SPACE FLIGHT CENTER
GREENBELT, MARYLAND

TIROS VII
RADIATION DATA CATALOG
AND
USERS' MANUAL

VOLUME 2
OCTOBER 1, 1963 – FEBRUARY 29, 1964

(NASA-TM-X-72519) TIROS 7 RADIATION DATA CATALOG AND USERS' MANUAL. VOLUME 2: 1 OCTOBER 1963 - 29 FEBRUARY 1964 (NASA)

N74-76512

Unclas

00/99 50456

By

Staff Members

of the

Aeronomy and Meteorology Division

Goddard Space Flight Center

National Aeronautics and Space Administration

December 31, 1964

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

FOREWORD

The quantity of radiation data already acquired from TIROS VII exceeds several times over the total quantity acquired from any of the previous TIROS radiation experiments, and as of this writing data are still being acquired. As a result, the TIROS VII Catalog-Manual is being published in several volumes. Each volume of this series contains time-dependent information for the specific time period covered by the volume concerning radiometer response patterns, possible corrections for instrumental degradation, the Index of Final Meteorological Tapes, and Subpoint Track Summaries. This, the second volume, covers the time period October 1, 1963 to February 29, 1964. Subsequent information covering time periods after February 29, 1964 will be covered in succeeding volumes. The first volume of this Catalog-Manual contains general discussions about the nature of the experiment, the calibration, and the processing, coverage, and documentation of the data, in addition to specific information concerning the period from launch on June 19, 1963 to September 30, 1963.

Many members of the staff of the Aeronomy and Meteorology Division contributed to the success of the TIROS VII medium resolution radiometer experiment. Valuable contributions in the area of computer programming for data processing came from the National Weather Satellite Center, U.S. Weather Bureau, whose efforts are gratefully acknowledged.

The task of assembling the information contained in this manual into written form suitable for publication was largely accomplished by the following members of the Aeronomy and Meteorology Division:

Mrs. Musa Halev Pasternak, Editor
Mr. W. R. Bandeen
Mr. Robert Hite
Mr. George Nicholas
Mr. Harold Thompson
Mr. Frederick Woolfall

The efforts of these individuals are hereby acknowledged.

The preparation of the material presented in Appendix B was accomplished mainly through the efforts of Mr. William Fizell and Mr. David Rasmussen.

TABLE OF CONTENTS

	Page
Foreword	i
List of Figures	ii
List of Tables	(See Volume 1)
List of Common Symbols	(See Volume 1)
I. INTRODUCTION	1
II. DESCRIPTION OF THE MEDIUM RESOLUTION RADIOMETER EXPERIMENT	(See Volume 1)
III. CALIBRATION	(See Volume 1)
IV. RADIATION DATA PROCESSING	(See Volume 1)
V. RADIATION DATA COVERAGE AND DOCUMENTATION	(See Volume 1)
VI. PRE-LAUNCH AND POST-LAUNCH PERFORMANCE OF THE RADIATION EXPERIMENT	1
6.1 Pre-launch Behavior of the Experiment	(See Volume 1)
6.2 Post-Launch Behavior of the Experiment	1
6.3 Estimate of the Accuracy of the Data	2
6.4 Comments on Significant Engineering Aspects of the Experiment	(See Volume 1)
VII. CONCLUSIONS	2
VIII. REFERENCES	(See Volume 1)
APPENDIX A Index of Final Meteorological Radiation Tapes	20
APPENDIX B Subpoint Track Summary of Available Radiation Data for the Period October 1, 1963-February 29, 1964	54

LIST OF FIGURES

(Figures 1-81 are found in Volume 1. Of these only the figures containing time-dependent information are listed below and continued in this volume.)

16.(a)	Percent of Time the Satellite Spends in Sunlight	4
16.(b)	T_V and T_C vs. Orbit Number	4
18.	Portions of the Orbital Period When the Satellite is in Sunlight or the Earth's Shadow vs. Orbit Number	5
66.	Heliocentric Views of the Earth	6
67.	Solar Illuminated Latitudes for TIROS VII	7
68.	Frequency Difference between Flight and Calibrated Space-Viewed Levels vs. Orbit Number: (a) Channels 1, 2, and 4; (b) Channels 3 and 5	8
70.	$\overline{W}^i_{ave}$ for Channel 1 vs. Days After Launch	9
71.	$\overline{W}^i_{ave}$ for Channel 2 vs. Days After Launch	10
72.	$\overline{W}^i_{ave}$ for Channel 4 vs. Days After Launch	11

73.	A^i for Channel 3 vs. Days After Launch	12
74.	A^i for Channel 5 vs. Days After Launch	13
77.	δT_{BB} vs. Orbit Number, Channel 1	14
78.	δT_{BB} vs. Orbit Number, Channel 2	15
79.	δT_{BB} vs. Orbit Number, Channel 4	16
80.	κ^i and ρ^i vs. Orbit Number, Channel 3	17
81.	κ^i and ρ^i vs. Orbit Number, Channel 5	18
82.	Scatter Diagram, Orbit 1926, 27 October 1963	19
A-1	Observed Motion of the TIROS VII Spin Vector on the Celestial Sphere	21
A-2	Time History of the TIROS VII Spin Rate	22

I. INTRODUCTION

This volume contains only time-dependent information for the period October 1, 1963-February 29, 1964 concerning radiometer response patterns, possible corrections for instrumental degradation, the Index of Final Meteorological Radiation Tapes, and Subpoint Track Summaries. General discussions of the experiment, the calibration of the radiometer, and the processing, coverage, and documentation of the data are found in Volume 1.

VI. PRE-LAUNCH AND POST-LAUNCH PERFORMANCE OF THE RADIATION EXPERIMENT

6.2 *Post-Launch Behavior of the Experiment*

An unfavorable satellite-sun geometry may exist for several days at a time, permitting the direct rays of the sun to impinge upon the sensors from the wall direction momentarily once during each satellite rotation. (See Section 6.2 of Volume 1 for a discussion of this phenomenon.) There were six periods during the time interval covered by this Volume when such an unfavorable satellite-sun geometry occurred, viz., the periods including the orbits numbered 1707-1739 (TIROS VII days 115-118), 1824-1860 (days 123-126), 2698-2748 (days 182-186), 3098-3173 (days 210-215), 3297-3582 (days 223-242), and 3727-3845 (days 252-260). When solar interference was severe, the data were not reduced. However, in several orbits where there was no interference with the long-wave channels and only marginal interference with the short-wave channels the data were reduced.

6.2.1 *Channel 1:* The absolute values of most channel 1 values of ΔF during the period of Volume 2 continued to be less than 1 c.p.s. (Figure 68). Therefore the symmetrical optical degradation model was continued. As a result of the degradation curve's leveling off, the temperature corrections δT_{BB} for a given T_{BB} are nearly constant as shown in Figure 77. The correction nomograms are used in the same way as in Volume 1. As before, in addition to the temperature correction from the nomogram, a 2.5°K correction is to be added to the wall measurements, and the same amount is to be subtracted from the floor measurements.

6.2.2 *Channel 2:* All channel 2 values of ΔF continued to have an absolute magnitude less than 1 c.p.s., as shown in Figure 68. Therefore, the symmetrical optical degradation model was continued. The resulting correction nomogram is shown in Figure 78, and it is used in the same way as in Volume 1.

6.2.3 *Channel 4:* Only a few values of ΔF had an absolute magnitude greater than 1 c.p.s., as shown in Figure 68. Thus, the symmetrical optical degradation model was continued, resulting in the correction nomogram in Figure 79.

Beginning about day 140 (~ orbit 2073) a slight difference between the equivalent blackbody temperature measurements made in the floor and the wall directions over the same region was observed, with the floor measurements being the higher. This difference increased thereafter, reaching a magnitude of about 7.0°K by day 180 (~ orbit 2656). The floor-wall difference remained at this level beyond day 249 (at which time another aberration was observed, discussed below). This difference was observed from analog records by noting the increase of the difference between the channel 2 and 4 measurements on the wall side over those of the floor side. It was also observed in computer-produced grid-print maps of the floor and wall separately.

The mechanism for this behavior is not fully understood in view of the near-zero values of ΔF during the period between days 140-180 (cf. Figure 68). Therefore, pending further study of this effect, it is suggested that, *in addition to the nomogram corrections, after day 180 (~ orbit 2656) 3.5°K be subtracted from measurements made through the floor and added to measurements made through the wall of channel 4. During the onset period between orbits 2073 and*

2656, it is suggested that the magnitude of this additional correction be varied linearly from 0° to 3.5°K. For example, from Figure 79, a measurement T'_{BB} of 260°K during orbit 2900 should be increased by 11.7°K and further modified by 3.5°K, wielding a corrected wall measurement of 260° + 11.7° + 3.5° = 275.2°K or a floor measurement of 260° + 11.7° − 3.5° = 268.2°K.

Beginning at day 249 and continuing afterwards, the space-viewed levels became erratic, seemingly randomly changing in magnitude within one or two seconds during the space-viewed portion of a swath. Similar erratic behavior may also have occurred during the Earth-scan portion of a swath, but it was not possible definitely to separate such spurious effects from the true signal. This behavior was apparently still another manifestation of the unstable transistor in the oscillator circuit, discussed in Volume 1. This aberrant behavior increased when the housing temperature increased, and decreased when the housing temperature decreased. Also, beginning on day 299, negative-going pulses appeared in the space-viewed level. Because of these fluctuations, corrections to channel 4 data are considered reasonably valid only to day 249.

6.2.4 *Channel 3:* The average channel 3 value of ΔF continued to be approximately −1.25 c.p.s.,indicating a small amount of electronic degradation. The compound degradation model was continued, and the correction nomogram in Figure 80 was constructed using the method described in Section 6.2.4, Volume 1. It is used in the same way as in Volume 1.

Further evidence of a shift in the oscillator transfer function of −1.25 c.p.s. is found in Figure 82. The dashed line drawn through this scatter diagram of $\overline{W}$ measurements from channel 3 (ordinate) and 5 (abscissa) of TIROS VII, intersects the ordinate at approximately −8.5 watts/m², the negative of the value of ρ^i in the channel 3 correction nomogram.

6.2.5 *Channel 5:* The absolute magnitude of channel 5 values of ΔF in Figure 68 remained less than 1 c.p.s. Thus, the correction nomogram in Figure 81 was constructed from the compound degradation model with a value $\rho^i = 0$. It is used in the same way as in Volume 1.

6.3 *Estimate of the Accuracy of the Data*

The relative and absolute accuracies of channels 1, 2, 3, and 5 have not changed from Volume 1.

Until day 249 (February 23, 1964) the short-term relative accuracy of channel 4 measurements for a given side remains at ± 2°K. The absolute accuracy after applying the correction nomogram and the suggested wall-floor corrections remains at ± 8° until day 140 (Nov 6, 1963), and increases to ± 10° from day 140 to day 249 (Feb 23, 1964). After day 249 the space-viewed level fluctuates, and no valid estimate can be made regarding either the relative or absolute accuracies of channel 4 measurements.

CONCLUSIONS

The major limitation of the TIROS VII medium resolution radiometer experiment is the uncertainty in the absolute values of the measurements, resulting from the degradation of the radiometer response and, also, from electronic degradation which, for the first time, was conclusively detected in TIROS VII. The degradation corrections given in Section VI can serve as a guide for interpreting the data in terms of absolute values. However, it must be emphasized that these corrections are only our best estimates, based upon certain simplifying assumptions, of the effects of a complicated degradation mechanism which we do not yet fully understand, and that the measurements thus corrected may still contain appreciable uncertainties.

Because of the extended lifetime of the radiometer, which as of this writing exceeds eighteen months, the potential of the TIROS VII radiometric data for climatological studies is significantly greater than it was for previous TIROS satellites. In utilizing the

measurements over extended periods, however, channel 2 and 5 data should be used in lieu of channel 4 and 3 data respectively wherever possible because of the superior stability characteristics of the former two channels. Channel 4 data are considered reasonably valid only to day 249.

The data from channels 1, 2, 3, and 5 throughout the period covered by this volume and from channel 4 until February 23, 1964 (TIROS VII day 249) are of value for studies involving relative measurements over a short period of time, for example, the contrast mapping of cloud systems.

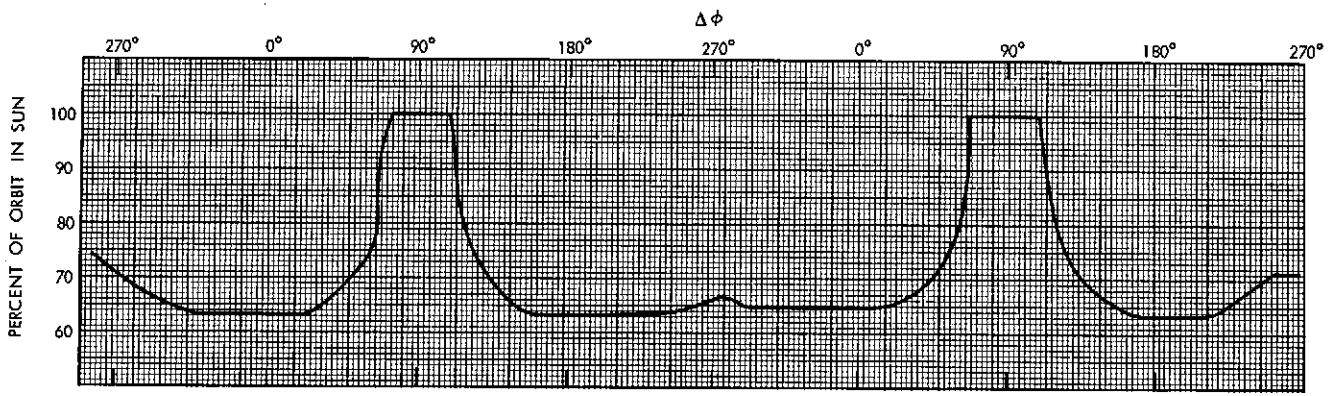


Figure 16—(a) Percent of the orbital period which the satellite spends in sunlight versus orbit number. Also shown on the upper abscissa is $\Delta\phi$, the right ascension of the sun minus the right ascension of the orbital ascending node.

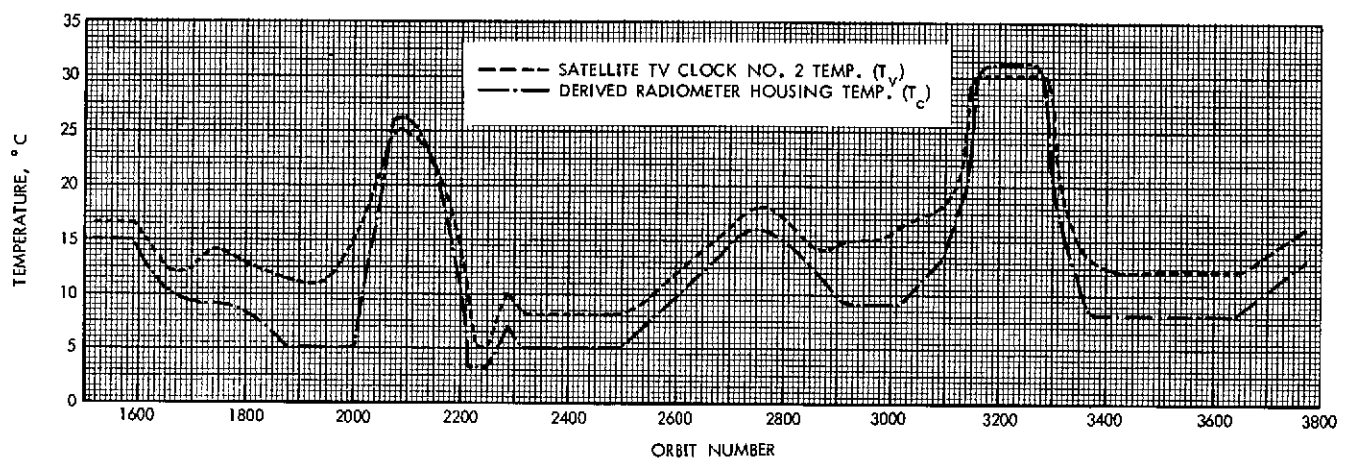


Figure 16—(b) Television clock number 2 temperature (T_V), and derived radiometer housing temperatures (T_C) versus orbit number. Telemetry of the "housekeeping information" for the radiometer ceased at orbit 1276, after which T_C was derived from T_V.

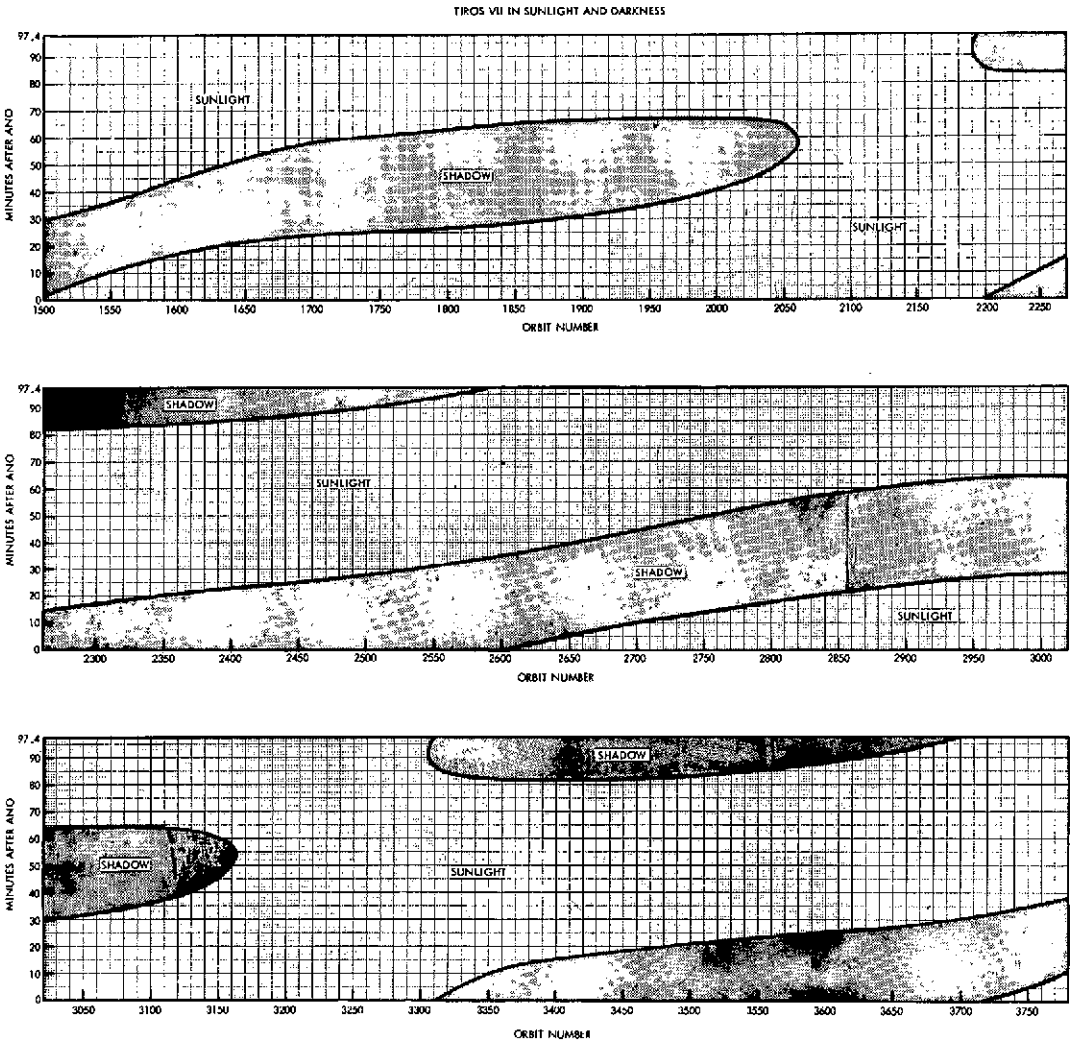


Figure 18—Portions of the 97.4-minute orbital period when the satellite is in sunlight and in the Earth's shadow, expressed in minutes after the ascending node, versus orbit number.

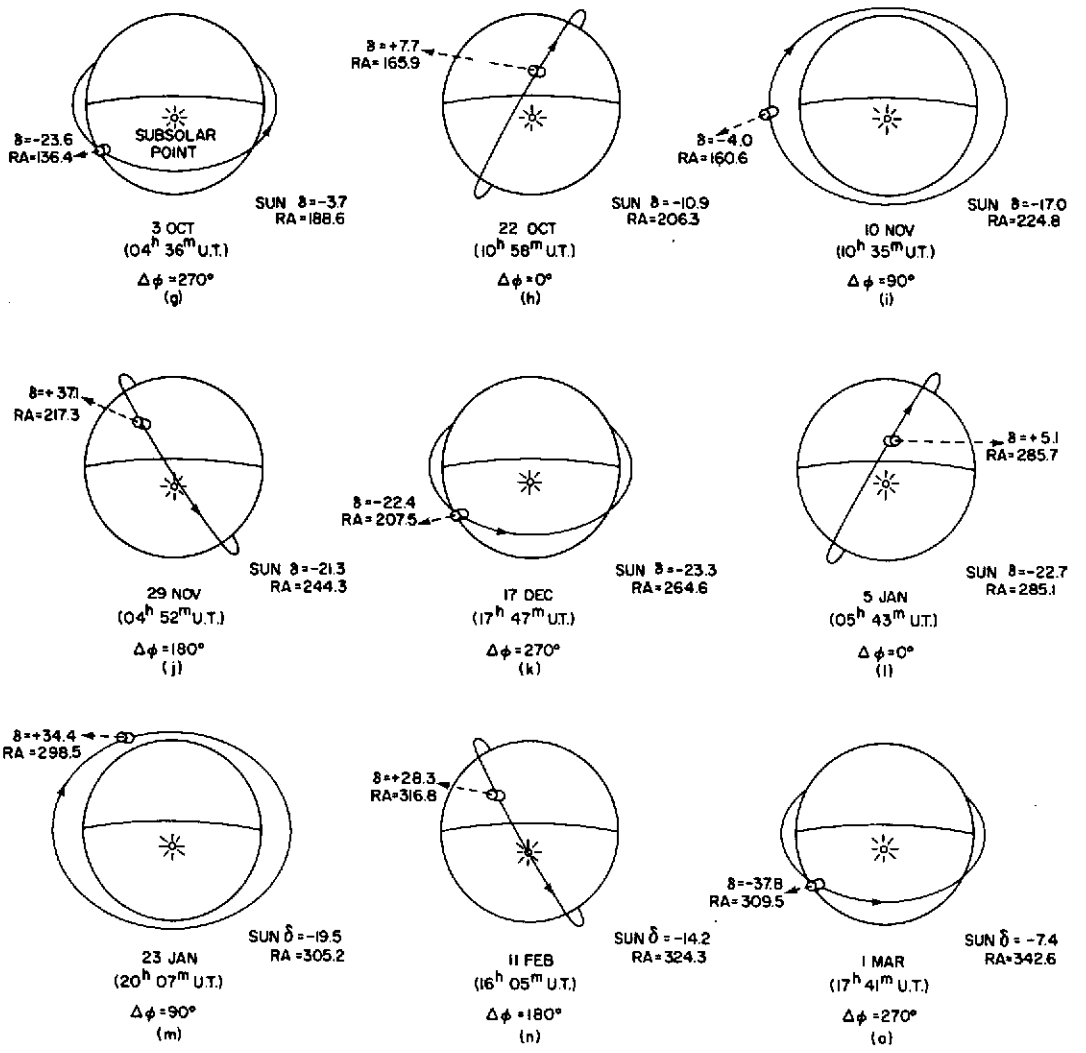


Figure 66—(g, h, i, j, k, l, m, n, and o) Heliocentric views of the Earth and the precessing TIROS VII orbital plane. The celestial coordinates of the sun and the satellite spin vector are shown for each selected day. The time is given to the nearest minute and corresponds to the given value of $\Delta\phi$.

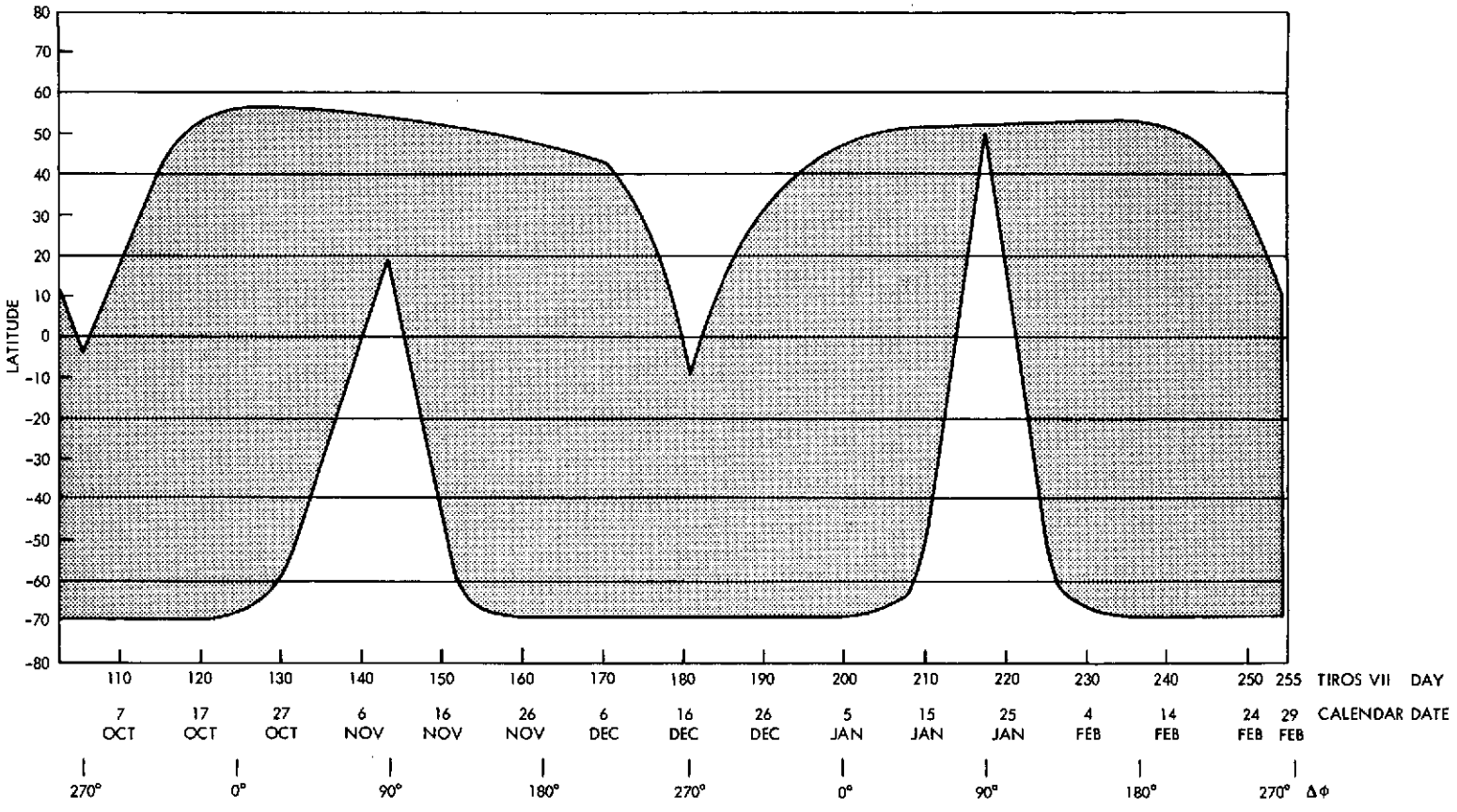


Figure 67—Solar illuminated latitudes for TIROS VII.

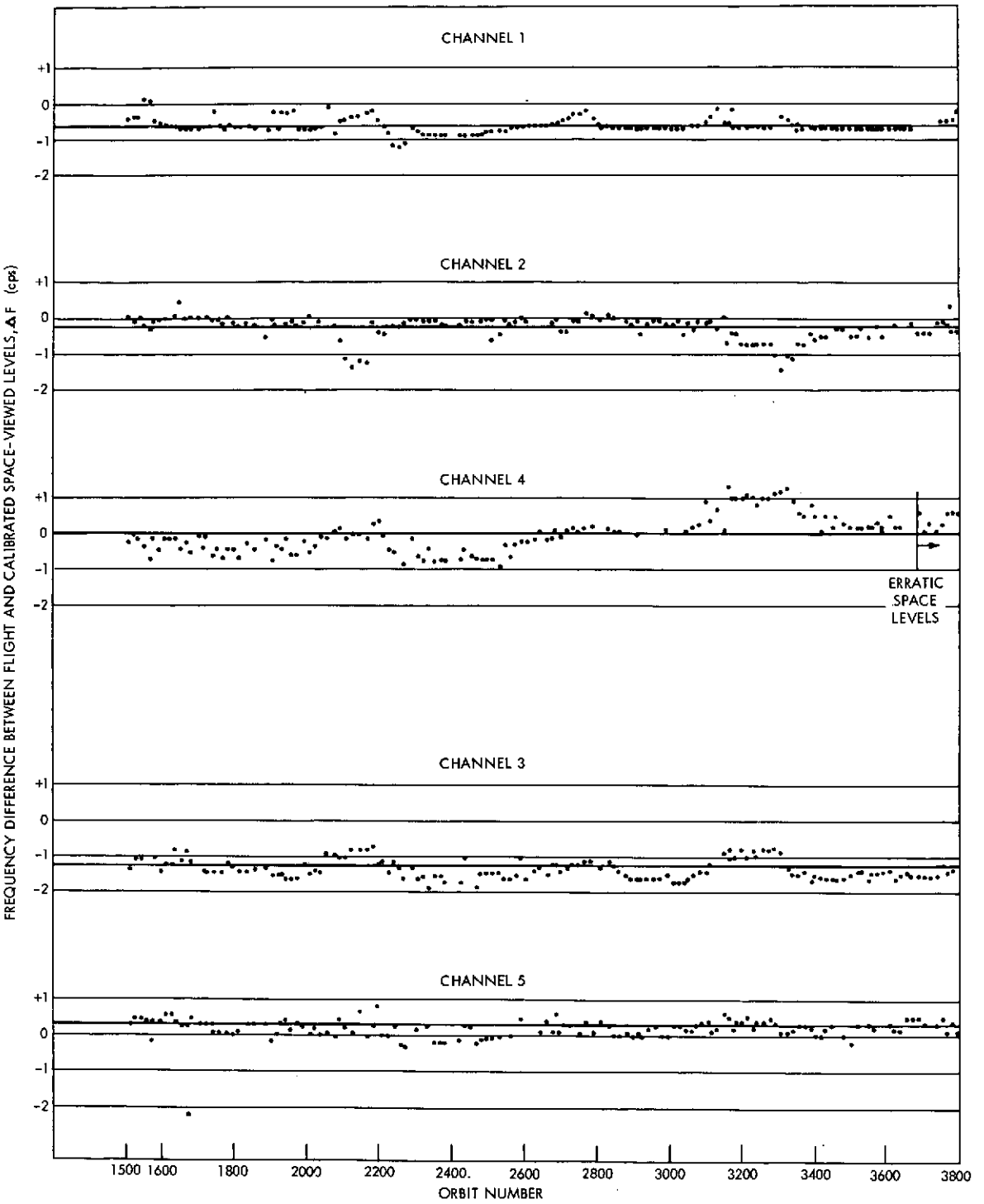


Figure 68—Frequency difference between flight and calibrated space-viewed levels vs. orbit number for channels 1 to 5.

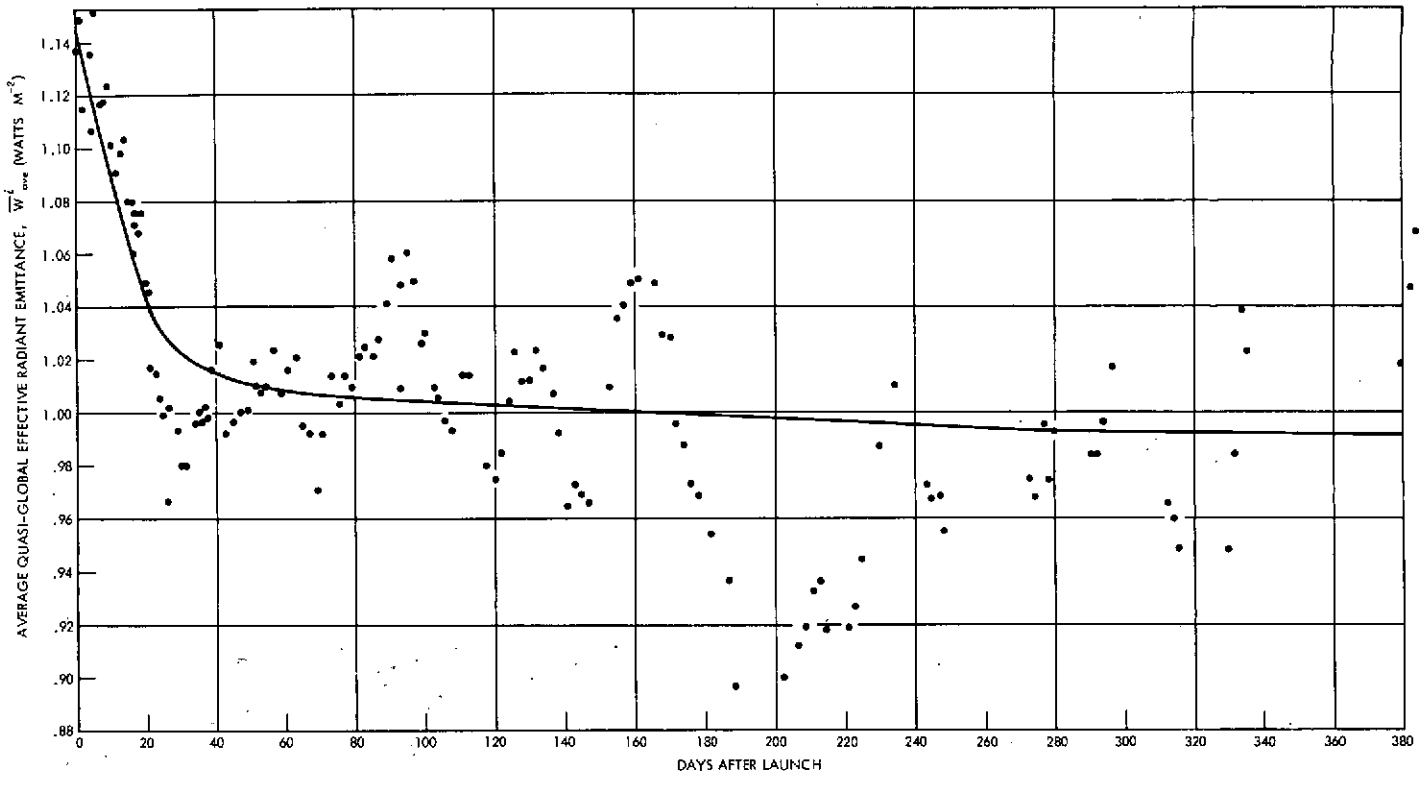


Figure 70—The average quasi-global effective radiant emittance, $\overline{W}^{i}_{ave}$ for channel 1 vs. days after launch.

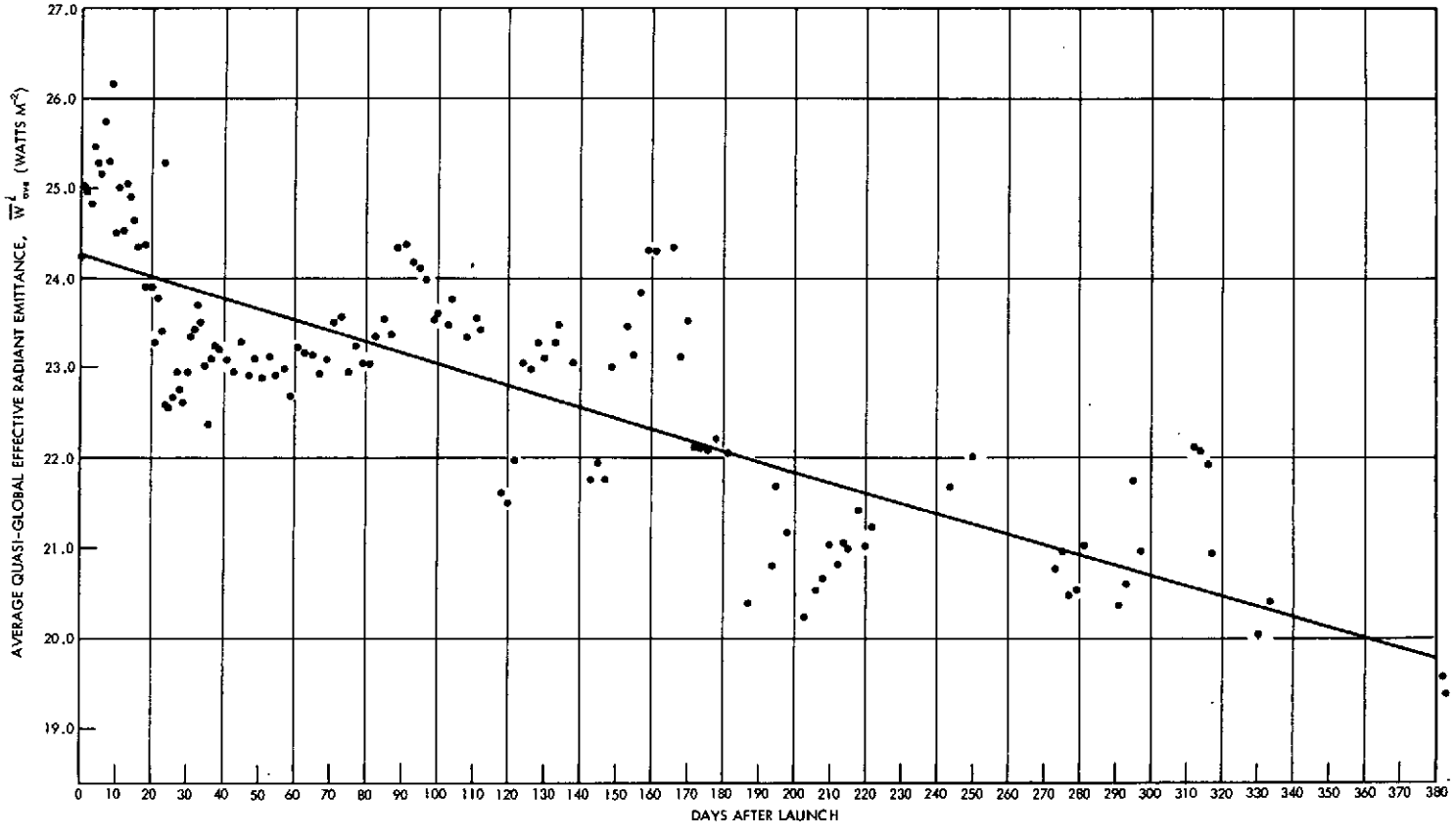


Figure 71—The average quasi-global effective radiant emittance, $\overline{W}'_{ave}$ for channel 2 vs. days after launch.

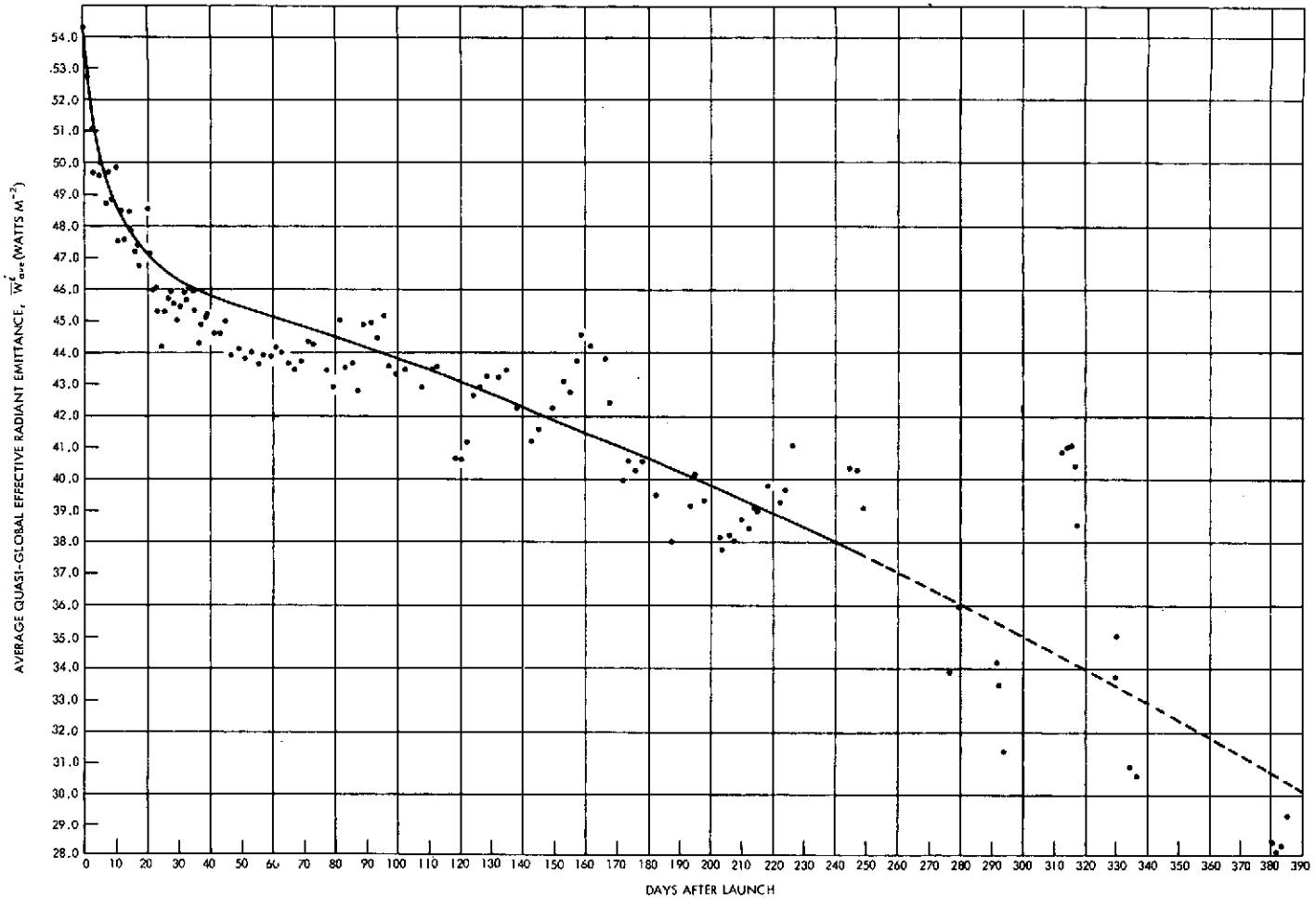


Figure 72—The average quasi-global effective radiant emittance, $\overline{W}'_{ave}$ for channel 4 vs. days after launch. A dashed line follows day 249 when an erratic "stepped" characteristic was first noticed in the space-viewed portions of the analog presentations of the data.

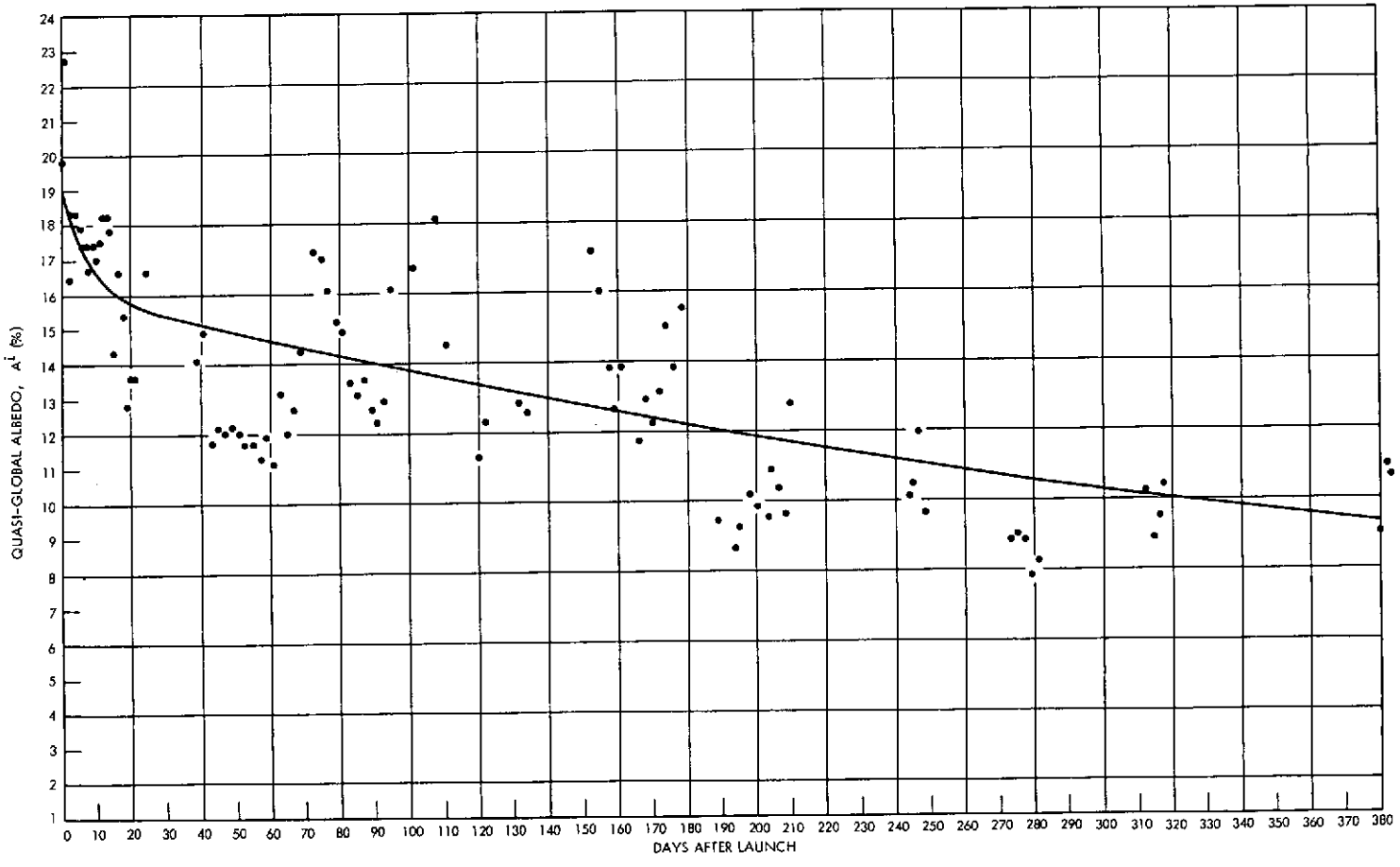


Figure 73—The quasi-global albedo, A' for channel 3 vs. days after launch.

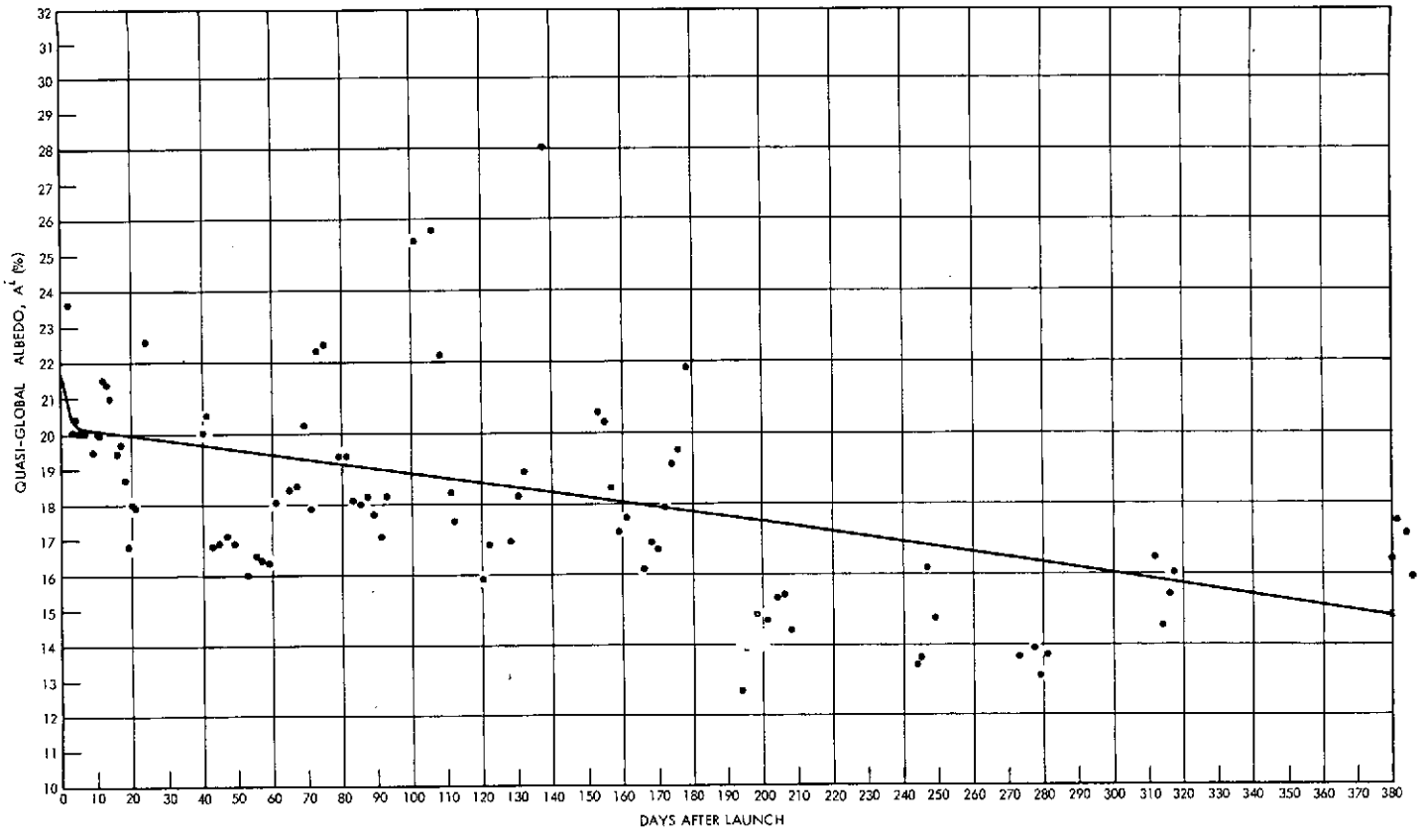


Figure 74—The quasi-global albedo A' for channel 5 vs. days after launch.

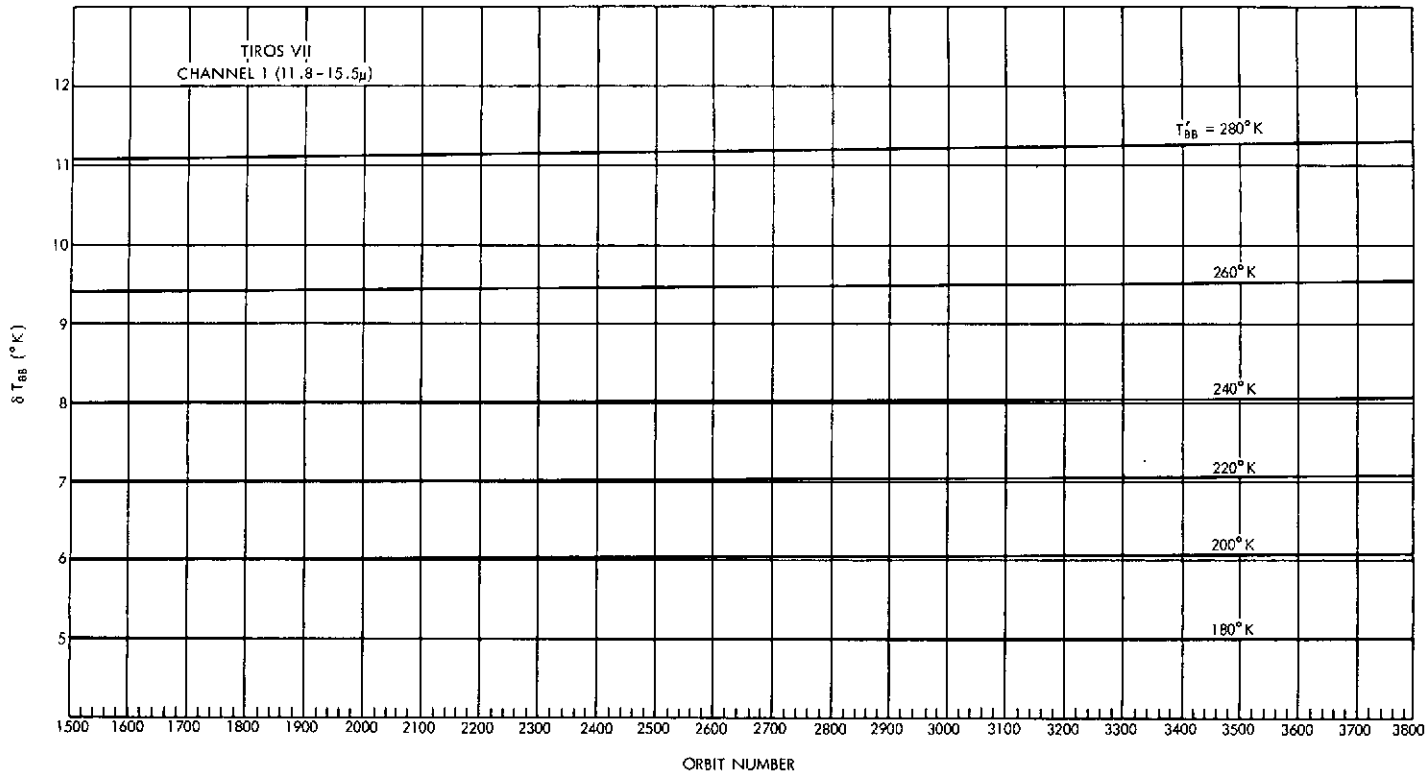


Figure 77—Temperature corrections δT_{BB}, vs. orbit number, channel 1, both sides. An equivalent blackbody temperature measurement, T'_{BB}, should be corrected by adding the δT_{BB} value corresponding to the appropriate orbit number (There is some evidence that, *in addition to the nomogram corrections, approximately 2.5°K should be subtracted from measurements made through the floor and added to measurements made through the wall of channel 1.*)

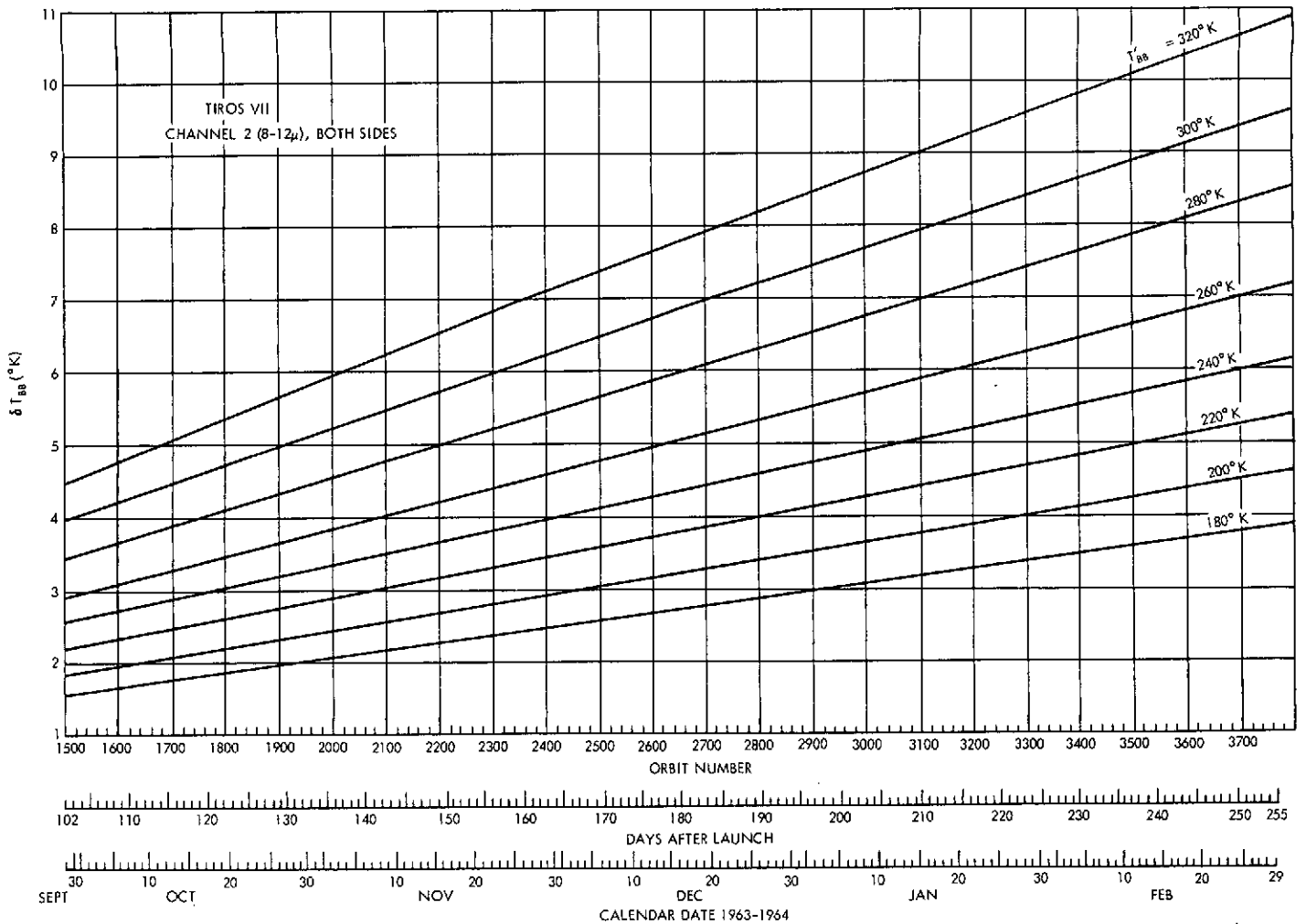


Figure 78—Temperature corrections δT_{BB}, vs. orbit number, channel 2, both sides. An equivalent blackbody temperature measurement T'_{BB} should be corrected by adding the δT_{BB} value corresponding to the appropriate orbit number.

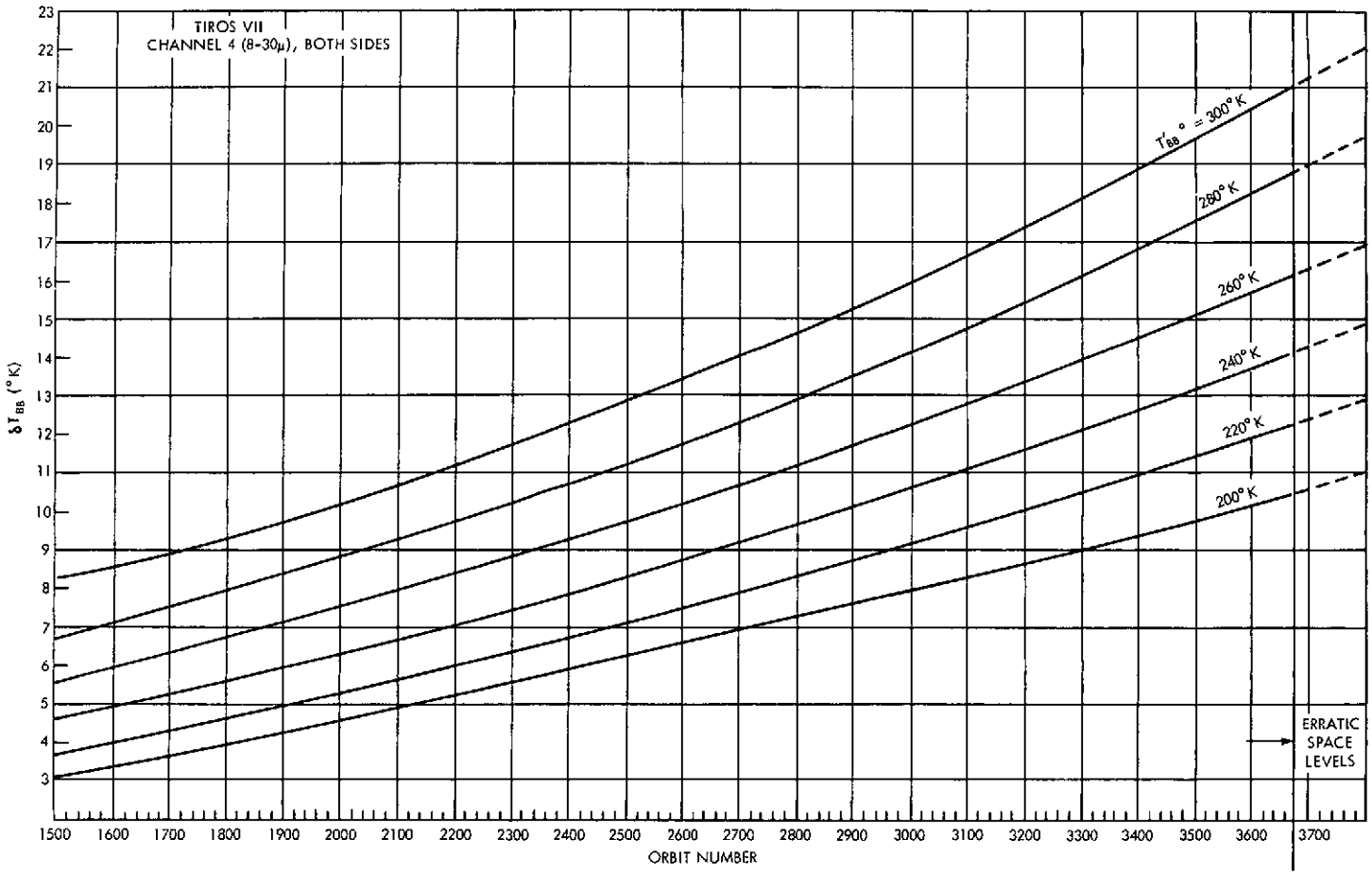


Figure 79—Temperature corrections δT_{BB} vs. orbit number, channel 4, both sides. An equivalent blackbody temperature measurement T'_{BB}, should be corrected by adding the δT_{BB} value corresponding to the appropriate orbit number.

(There is some evidence that, in addition to the nomogram corrections, after day 180, or orbit 2656, approximately 3.5°K should be substracted from measurements made through the floor and added to measurements made through the wall of channel 4. During the onset period between orbits 2073 and 2656, this additional correction should be varied linearly from 0° to 3.5°K. After day 249, or orbit 3677, corrections are not considered valid because of erratic behavior.)

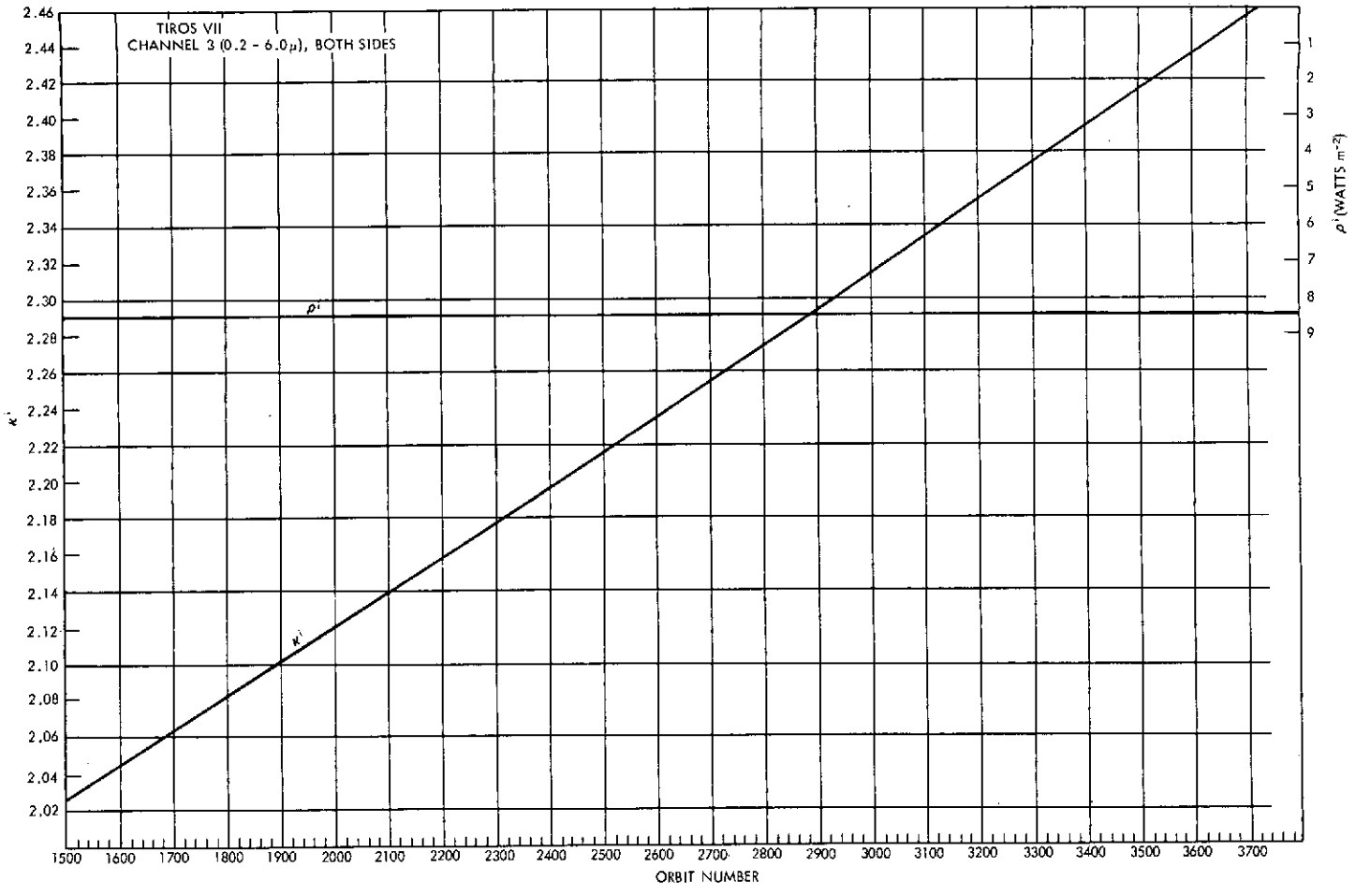


Figure 80—Normalizing parameters κ' and ρ' for channel 3. A measurement $\overline{W}'$ should be corrected to yield $\overline{W}$ by means of the equation $\overline{W} = \kappa' (\overline{W}' + \rho')$.

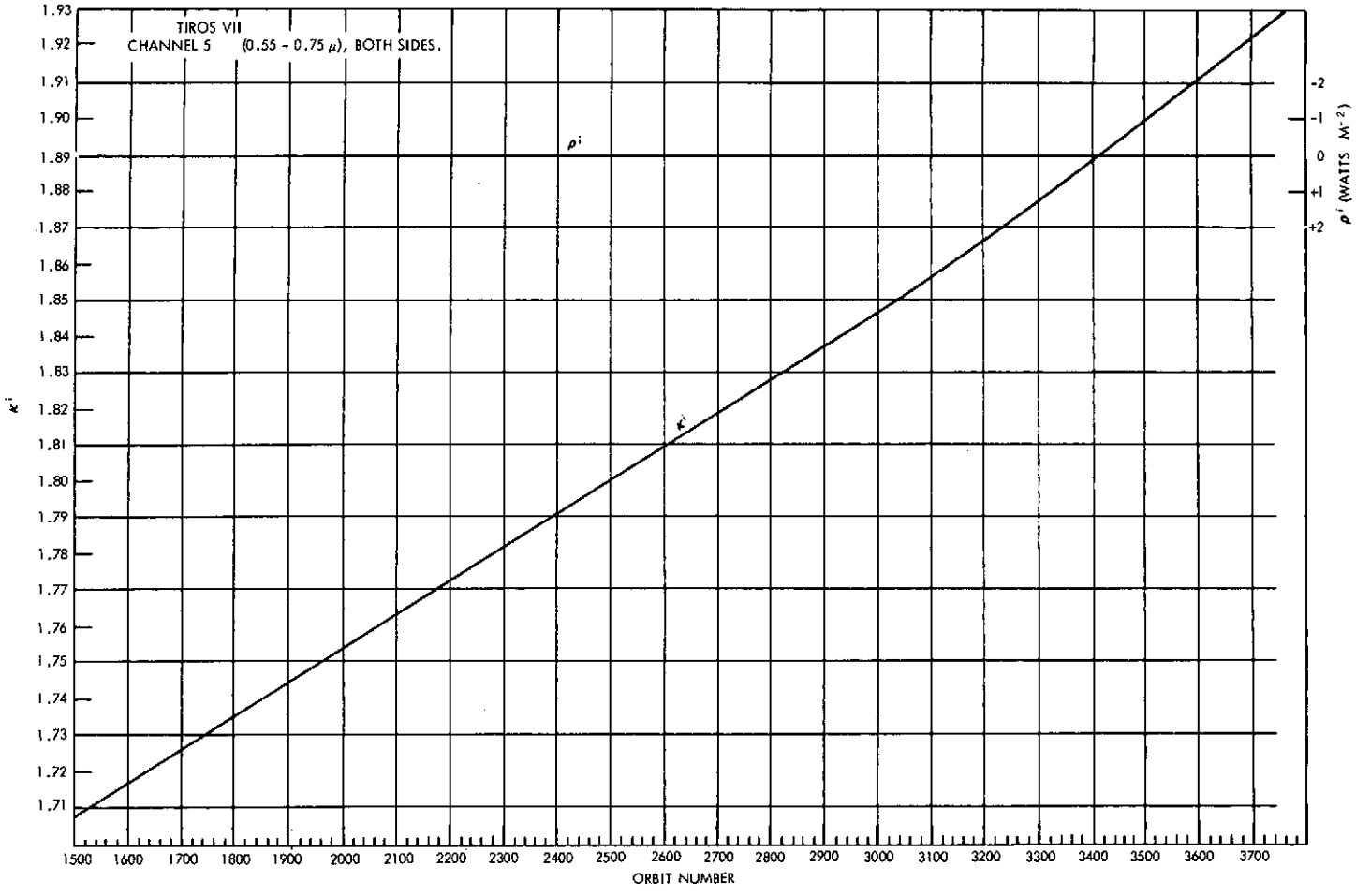


Figure 81—Normalizing parameters κ' and ρ' for channel 5. A measurement $\overline{W}'$ should be corrected to yield $\overline{W}$ by means of the equation $\overline{W} = \kappa' (\overline{W}' + \rho')$.

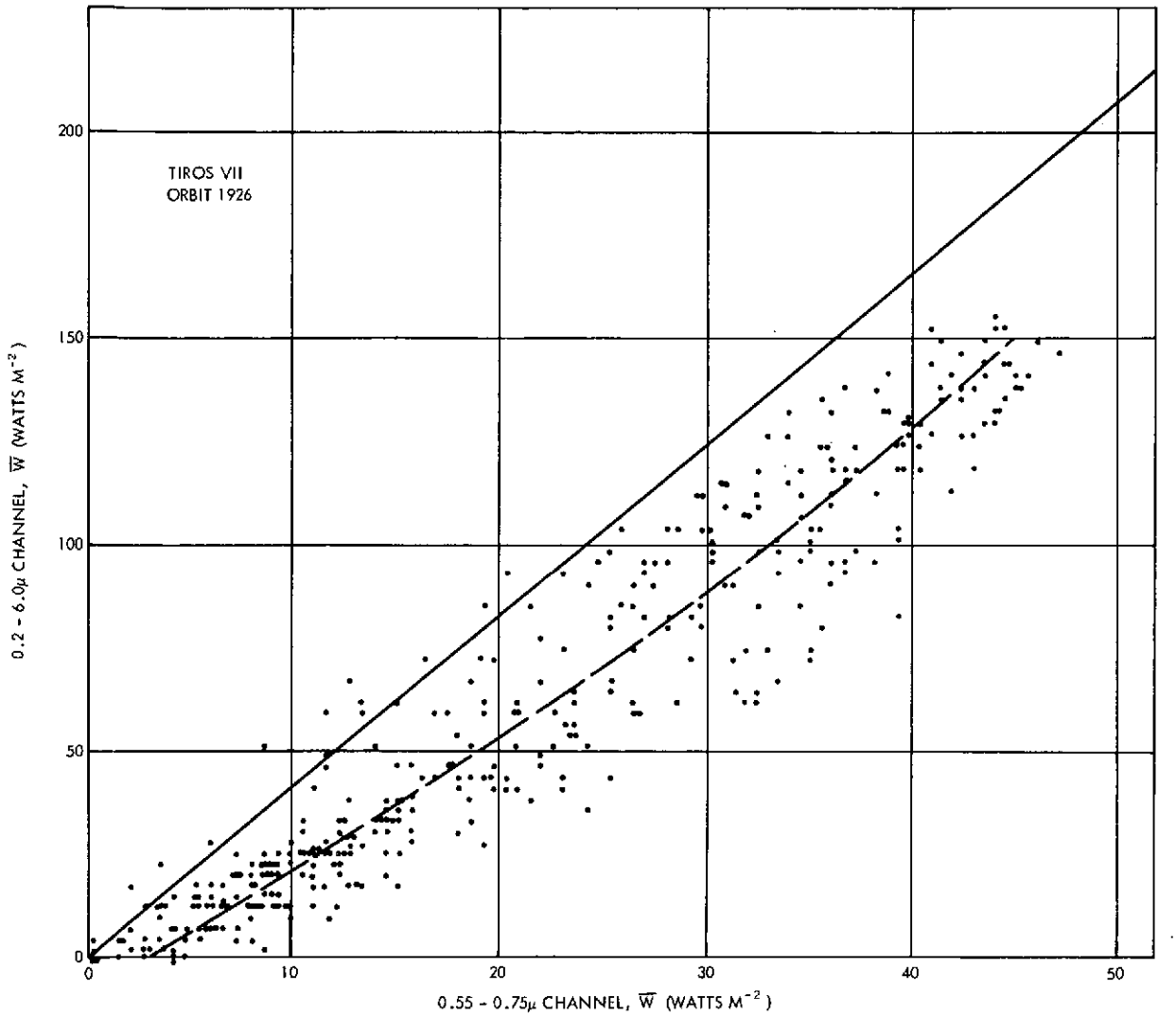


Figure 82—Scatter diagram of effective radiant emittance measurements from channels 3 (ordinate) and 5 (abscissa) of TIROS VII, illustrating the effects of a shift in the oscillator transfer function. The data shown are not normalized and are from 16 swaths over hurricane Ginny and adjacent ocean areas, orbit 1926, 27 October 1963. The solid line is the locus of equal fractional parts of the effective solar constant, $\overline{W}^*$ for each channel. The dashed line intersects the ordinate at approximately $(-\rho^i) \sim (-8.5)$ watts/m^2. There is also slight evidence of a rotation of the oscillator transfer function and/or relatively greater symmetrical optical degradation in channel 3 than in channel 5.

APPENDIX A

INDEX OF FINAL METEOROLOGICAL RADIATION TAPES

One hundred forty-seven tapes, containing data from 762 individual orbits of TIROS VII from October 1, 1963 to February 29, 1964 are tabulated on the following pages. The FMR tapes from this period are numbered from 438 to 584. The nomenclature used in the Index and an example illustrating the use of the Index is given in Appendix A, Volume 1.

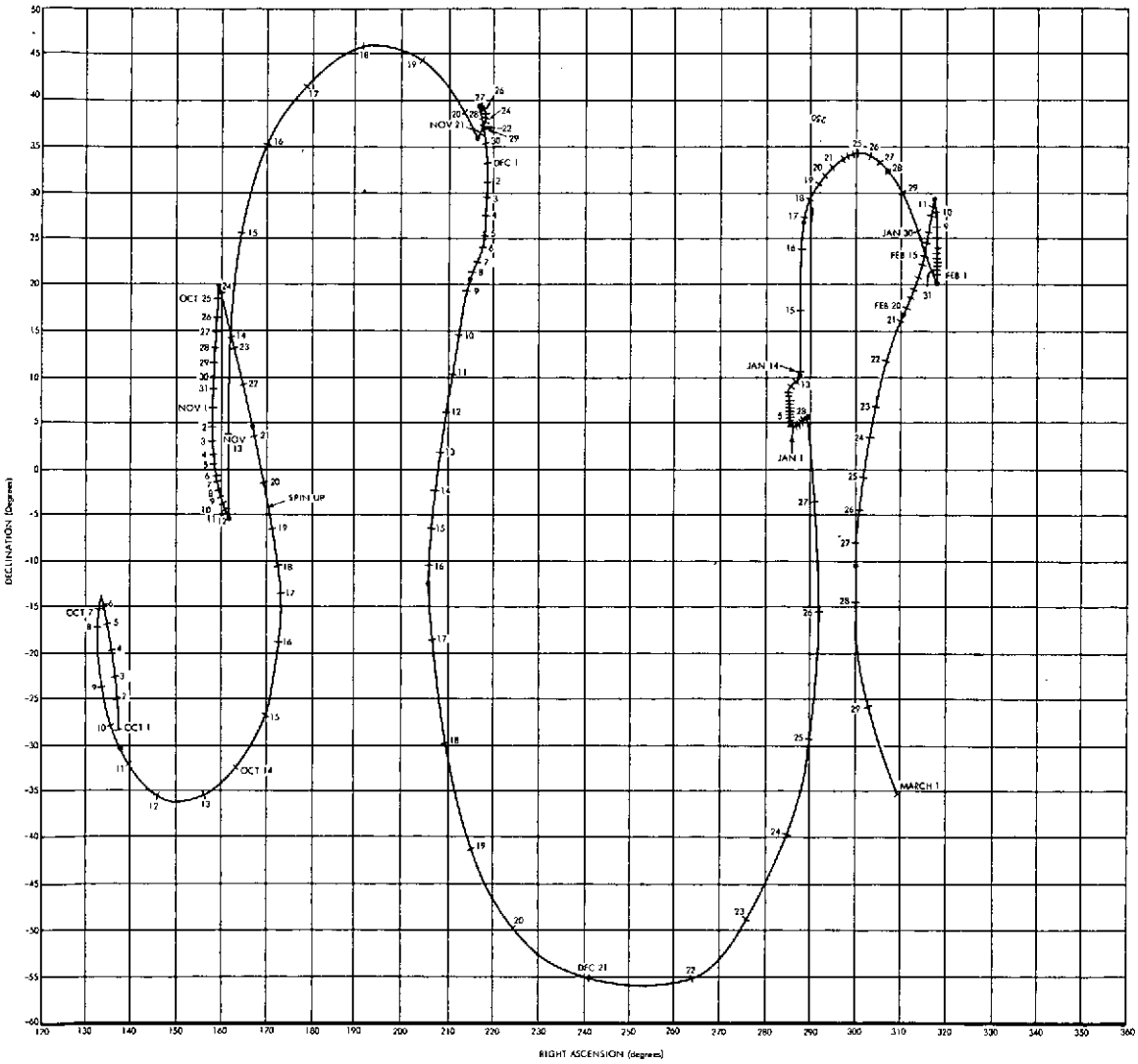


Figure A1—Observed motion of the TIROS VII spin vector on the celestial sphere. Each subdivision represents one day. Positions at 12 GMT each day are indicated.

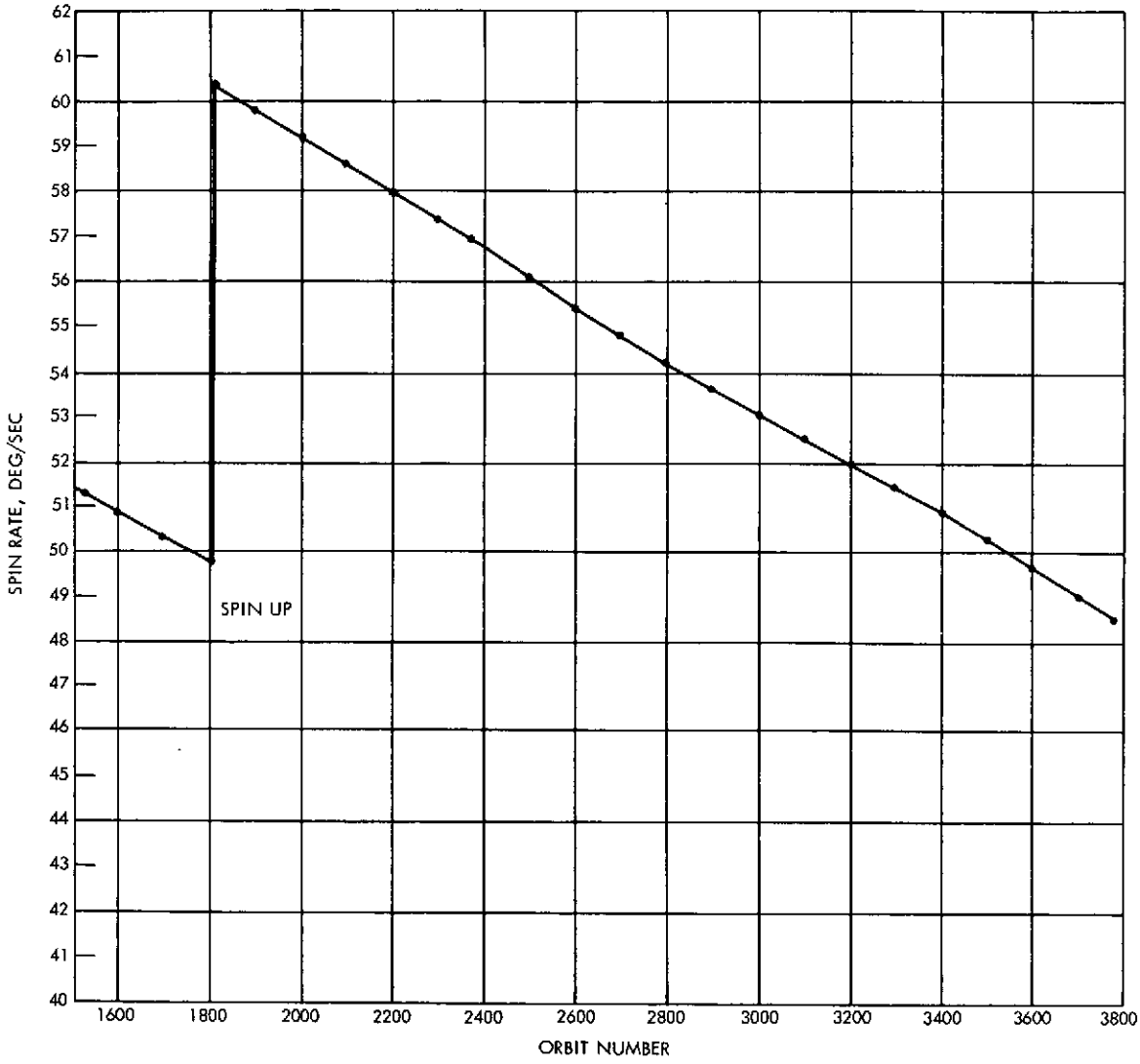


Figure A2—Time history of the TIROS VII spin rate.

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL EQUATOR CROSSING AT ASCENDING NODE (AND)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T AND		
ORBIT NO.	COA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
1532	1	-96.64	0*57*51	10/ 1/63	104	-29.7	137.2	-6.3	59.6	51.305	-84.0	1* 9*12	11.4			438
1533	1	-121.31	2*35*16	10/ 1/63	104	-29.5	137.2	-6.6	59.6	51.300	-75.3	2*49* 3	13.8			438
1534	2	-145.98	4*12*40	10/ 1/63	104	-29.3	137.2	-6.9	59.6	51.294	-72.7	4*22* 3	9.4			438
1536	3	164.66	7*27*30	10/ 1/63	104	-29.0	137.3	-7.5	59.7	51.283	-63.5	7*46* 3	18.6			438
1537	3	139.99	9* 4*54	10/ 1/63	104	-28.8	137.3	-7.7	59.7	51.278	-21.5	9*26* 3	21.2			438
1538	3	115.31	10*42*19	10/ 1/63	104	-28.7	137.3	-8.0	59.7	51.272	19.7	11* 7* 3	24.7			438
1539	2	90.64	12*19*43	10/ 1/63	104	-28.4	137.2	-8.3	59.7	51.266	-57.2	12*55* 3	35.3			438
1546	1	-82.06	23*41*35	10/ 1/63	104	-27.0	136.8	-10.2	59.6	51.228	-87.2	23*51* 3	9.5			439
1547	1	-106.73	1*19* 0	10/ 2/63	105	-26.8	136.8	-10.5	59.6	51.222	-76.5	1*31* 3	12.1			439
1548	2	-131.40	2*56*24	10/ 2/63	105	-26.6	136.8	-10.8	59.7	51.217	-74.3	3* 4* 3	7.7			439
1549	2	-156.08	4*33*49	10/ 2/63	105	-26.4	136.8	-11.1	59.7	51.211	-77.1	4*45* 3	11.2			439
1551	3	154.57	7*48*38	10/ 2/63	105	-26.1	136.9	-11.7	59.7	51.201	-62.2	8* 8* 3	19.4			439
1552	3	129.89	9*26* 2	10/ 2/63	105	-25.9	136.9	-12.0	59.8	51.195	-66.7	9*48* 3	22.0			439
1553	2	105.22	11* 3*27	10/ 2/63	105	-25.7	136.9	-12.3	59.8	51.190	-64.8	11*38* 3	34.6			439
1554	2	80.54	12*40*51	10/ 2/63	105	-25.4	136.8	-12.6	59.7	51.184	-51.3	13*18* 3	37.2			439
1561	1	-92.16	0* 2*43	10/ 3/63	106	-23.9	136.4	-14.5	59.7	51.146	-85.3	0*12* 3	9.3			440
1562	1	-116.83	1*40* 8	10/ 3/63	106	-23.7	136.4	-14.8	59.7	51.151	-76.7	1*53* 3	12.9			440
1563	2	-141.50	3*17*32	10/ 3/63	106	-23.6	136.5	-15.1	59.7	51.145	-71.2	3*26* 3	8.5			440
1567	3	119.79	9*47*11	10/ 3/63	106	-22.8	136.5	-16.3	59.7	51.121	-53.5	10*11* 3	23.9			440
1568	2	95.12	11*24*35	10/ 3/63	106	-22.6	136.5	-16.6	59.7	51.115	-62.1	12* 3* 3	38.5			440
1576	1	-102.25	0*23*51	10/ 4/63	107	-20.9	136.0	-18.9	59.7	51.069	-69.5	0*34* 3	10.2			441
1578	2	-151.60	3*38*40	10/ 4/63	107	-20.5	136.1	-19.5	59.7	51.057	-60.6	3*52*28	13.8			441
1580	1	159.04	6*53*30	10/ 4/63	107	-20.1	136.1	-20.1	59.8	51.045	-59.9	7*25* 3	31.6			441
1581	1	134.37	8*30*54	10/ 4/63	107	-19.9	136.1	-20.5	59.8	51.040	-53.8	9* 6* 3	35.2			441
1582	2	109.70	10* 8*19	10/ 4/63	107	-19.7	136.1	-20.8	59.8	51.034	-51.4	10*43* 3	34.7			441
1591	1	-112.35	0*44*59	10/ 5/63	108	-17.7	135.7	-23.5	59.8	50.982	-78.4	0*57* 3	12.1			442

REACOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (ANO)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
1592	2	-137.02	2*22*24	10/ 5/63	108	-17.6	135.6	-23.8	59.8	50.976	-74.8	2*31* 3	8.7			442
1593	2	-161.70	3*59*49	10/ 5/63	108	-17.4	135.6	-24.0	59.8	50.971	-77.9	4*13* 3	13.2			442
1595	1	148.95	7*14*38	10/ 5/63	108	-17.2	135.6	-24.5	59.9	50.959	-66.5	7*48* 3	33.4			442
1596	1	124.27	8*52* 2	10/ 5/63	108	-17.0	135.6	-24.7	59.9	50.953	-53.0	9*29*33	37.5			442
1597	2	99.60	10*29*27	10/ 5/63	108	-16.8	135.5	-25.0	59.9	50.948	-49.2	11* 4* 3	34.6			442
1605	1	-97.78	23*28*43	10/ 5/63	108	-15.6	134.9	-26.9	60.0	50.902	-75.6	23*39* 3	10.3			443
1606	1	-122.45	1* 6* 8	10/ 6/63	109	-15.4	134.9	-27.1	60.0	50.897	-74.7	1*21* 3	14.9			443
1607	2	-147.12	2*43*32	10/ 6/63	109	-15.3	134.8	-27.4	60.0	50.891	-70.9	2*53* 3	9.5			443
1609	1	163.52	5*58*21	10/ 6/63	109	-15.0	134.8	-27.9	60.0	50.880	-63.3	6*29* 3	30.7			443
1610	1	138.85	7*35*46	10/ 6/63	109	-14.9	134.8	-28.1	60.0	50.874	-54.4	8*10* 3	34.3			443
1621	2	-132.54	1*27*16	10/ 7/63	110	-13.7	133.8	-30.7	60.2	50.813	-78.9	1*35* 3	7.8			444
1622	2	-157.21	3* 4*40	10/ 7/63	110	-13.9	133.6	-30.4	60.2	50.807	-78.3	3*16* 3	11.4			444
1624	3	153.43	6*19*29	10/ 7/63	110	-14.5	133.3	-30.1	60.4	50.796	-63.2	6*39* 3	19.6			444
1625	1	128.75	7*56*54	10/ 7/63	110	-14.8	133.2	-30.0	60.5	50.790	-69.2	8*33* 3	36.2			444
1626	2	104.08	9*34*18	10/ 7/63	110	-15.2	133.2	-29.8	60.6	50.785	-51.8	10* 9* 3	34.8			444
1627	2	79.41	11*11*43	10/ 7/63	110	-15.6	133.3	-29.6	60.7	50.779	-50.6	11*49* 3	37.3			444
1634	1	-93.29	22*33*35	10/ 7/63	110	-18.0	133.8	-29.1	61.8	50.740	-29.5	22*43* 3	9.5			445
1635	1	-117.98	0*10*59	10/ 8/63	111	-18.2	133.8	-29.0	61.9	50.735	-76.9	0*24* 3	13.1			445
1636	2	-142.65	1*48*24	10/ 8/63	111	-18.5	133.6	-28.9	62.0	50.729	-73.7	1*58* 3	9.7			445
1638	3	167.99	5* 3*13	10/ 8/63	111	-18.9	133.3	-28.6	62.1	50.718	-65.5	5*21* 3	17.8			445
1639	1	143.32	6*40*37	10/ 8/63	111	-19.2	133.2	-28.5	62.2	50.713	3.9	7*15* 3	34.4			445
1649	1	-103.40	22*54*42	10/ 8/63	111	-22.4	134.3	-27.5	63.6	50.658	-4.0	23* 5* 3	10.4			446
1650	2	-128.07	0*32* 7	10/ 9/63	112	-22.6	134.2	-27.5	63.7	50.653	-74.2	0*39* 3	6.9			446
1651	2	-152.75	2* 9*32	10/ 9/63	112	-22.8	134.1	-27.4	63.8	50.647	-79.9	2*20* 3	10.5			446
1653	1	157.89	5*24*21	10/ 9/63	112	-23.3	133.9	-27.2	63.9	50.636	-63.9	5*56* 3	31.7			446
1654	1	133.22	7* 1*45	10/ 9/63	112	-23.6	133.9	-27.1	63.9	50.631	-54.7	7*37* 3	35.3			446

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL	ECUATOR ASCENDING	CROSSING AT NODE (ANO)		SPIN	VECTOR	ATTITUDE			BEGIN	END		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
1655	2	108.55	8*39*10	10/ 9/63	112	-23.9	133.9	-26.9	64.0	50.626	-51.5	9*13* 3	33.9			446
1664	1	-113.50	23*15*50	10/ 9/63	112	-26.3	135.5	-26.3	65.4	50.576	-78.2	23*28* 3	12.2			447
1665	2	-156.17	0*53*15	10/10/63	113	-26.5	135.5	-26.2	65.4	50.571	-54.8	1* 2* 3	8.8			447
1667	3	172.47	4* 8* 4	10/10/63	113	-26.8	135.3	-26.1	65.6	50.560	-60.0	4*26* 3	18.0			447
1668	1	147.80	5*45*28	10/10/63	113	-27.1	135.3	-26.0	65.7	50.549	-69.4	6*19* 3	33.6			447
1669	1	123.13	7*22*53	10/10/63	113	-27.4	135.3	-25.9	65.7	50.549	-53.4	8* 0* 3	37.2			447
1670	2	98.45	9* 0*18	10/10/63	113	-27.7	135.4	-25.7	65.9	50.544	-50.0	9*35* 3	34.8			447
1678	1	-98.92	21*59*34	10/10/63	113	-29.5	137.4	-25.3	67.0	50.501	-87.2	22* 9*33	10.0			448
1679	1	-123.59	23*36*58	10/10/63	113	-29.6	137.4	-25.3	67.2	50.495	-73.9	23*51* 3	14.1			448
1680	2	-148.27	1*14*23	10/11/63	114	-29.7	137.4	-25.2	67.2	50.490	-13.7	1*24* 3	9.7			448
1682	1	162.38	4*29*12	10/11/63	114	-30.0	137.4	-25.1	67.4	50.479	-64.8	5* 0* 3	30.9			448
1684	2	113.03	7*44* 1	10/11/63	114	-30.8	137.6	-24.9	67.6	50.469	-55.8	8*17* 3	33.0			448
1693	1	-109.01	22*20*42	10/11/63	114	-33.8	143.4	-23.4	69.8	50.420	-76.1	22*31* 3	10.4			449
1694	2	-133.69	23*58* 6	10/11/63	114	-33.9	143.7	-23.4	70.0	50.415	-75.5	0* 8* 3	10.0			449
1695	2	-158.36	1*35*31	10/12/63	115	-34.1	143.8	-23.4	70.1	50.410	-77.2	1*47* 3	11.5			449
1698	1	127.61	6*27*44	10/12/63	115	-34.9	144.4	-22.9	70.4	50.394	0.2	7* 4* 3	36.3			449
1699	2	102.93	8* 5* 9	10/12/63	115	-35.4	144.9	-22.6	70.6	50.388	-50.0	8*40* 3	34.9			449
1700	2	78.26	9*42*33	10/12/63	115	-35.7	145.8	-22.3	70.7	50.383	-50.5	10*20* 3	37.5			449
1707	1	-94.44	21* 4*25	10/12/63	115	-36.2	151.5	-21.9	72.6	50.345	-86.1	21*14* 3	9.6			450
1708	1	-119.11	22*41*49	10/12/63	115	-36.1	151.9	-22.0	72.8	50.340	-77.4	22*55* 3	13.2			450
1709	2	-143.78	0*19*14	10/13/63	116	-36.0	152.1	-22.1	73.0	50.335	-73.3	0*29* 3	9.8			450
1711	3	166.86	3*34* 3	10/13/63	116	-36.0	152.5	-22.2	73.2	50.324	-65.5	3*52* 3	18.0			450
1712	1	142.19	5*11*27	10/13/63	116	-36.2	152.7	-22.2	73.2	50.319	-18.4	5*46* 3	34.6			450
1714	2	92.84	8*26*16	10/13/63	116	-36.6	154.0	-21.8	73.6	50.308	-55.0	9* 2* 3	35.8			450
1728	3	107.42	7*10* 0	10/14/63	117	-34.2	162.0	-22.6	76.4	50.234	-52.1	7*36* 3	26.1			451
1729	2	82.75	8*47*24	10/14/63	117	-34.1	162.8	-22.4	76.6	50.228	25.7	9*25* 3	37.7			451

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (ANO)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
1736	1	-89.95	20* 9*16	10/14/63	117	-31.1	167.6	-23.2	78.5	50.191	-85.6	20*19* 3	9.8			452
1737	1	-114.63	21*46*40	10/14/63	117	-30.5	167.7	-23.5	78.7	50.186	-77.3	21*59* 3	12.4			452
1738	2	-139.30	23*24* 5	10/14/63	117	-30.1	167.8	-23.9	78.9	50.181	-72.5	23*33* 3	9.0			452
1739	2	-164.00	1* 1*29	10/15/63	118	-29.7	167.8	-24.2	79.0	50.175	-75.3	1*15* 3	13.6			452
1740	3	171.31	2*38*54	10/15/63	118	-29.4	167.8	-24.5	79.1	50.170	-73.2	2*57* 3	18.2			452
1741	1	146.64	4*16*18	10/15/63	118	-29.2	167.9	-24.7	79.2	50.165	-69.1	4*50* 3	33.8			452
1742	3	121.97	5*53*43	10/15/63	118	-29.0	168.1	-24.8	79.3	50.159	-53.9	6*17* 3	23.3			452
1743	3	97.29	7*31* 7	10/15/63	118	-28.8	168.6	-24.8	79.5	50.154	-59.7	7*57* 3	25.9			452
1751	1	-100.08	20*30*24	10/15/63	118	-24.2	171.9	-26.2	81.4	50.112	-77.7	20*40* 3	9.7			453
1752	1	-124.75	22* 7*48	10/15/63	118	-23.6	171.9	-26.7	81.6	50.106	-74.5	22*23* 3	15.3			453
1753	2	-149.42	23*45*13	10/15/63	118	-23.1	171.7	-27.1	81.7	50.101	-72.2	23*55* 3	9.8			453
1755	1	161.22	3* 0* 2	10/16/63	119	-22.3	171.4	-27.8	81.9	50.090	-65.1	3*31* 3	31.0			453
1756	1	136.55	4*37*26	10/16/63	119	-22.0	171.4	-28.1	82.0	50.085	-56.3	5*12* 3	34.6			453
1757	3	111.87	6*14*51	10/16/63	119	-21.7	171.6	-28.2	82.1	50.080	-53.2	6*40* 3	25.2			453
1767	2	-134.85	22*28*56	10/16/63	119	-15.4	173.4	-30.9	84.3	50.026	-79.2	22*37* 3	8.1			454
1768	2	-159.52	0* 6*20	10/17/63	120	-15.2	173.3	-31.2	84.5	50.021	-78.8	0*18* 3	11.7			454
1769	3	175.80	1*43*45	10/17/63	120	-15.1	173.2	-31.3	84.5	50.016	-75.0	2* 2* 3	18.3			454
1771	3	126.45	4*58*34	10/17/63	120	-14.8	173.0	-31.4	84.6	50.005	-57.4	5*21* 3	22.5			454
1780	1	-95.60	19*35*14	10/17/63	120	-12.5	173.1	-31.6	85.7	49.957	-76.7	19*45* 3	9.8			455
1781	1	-120.27	21*12*39	10/17/63	120	-12.3	173.0	-31.7	85.8	49.952	-76.2	21*26* 3	13.4			455
1782	2	-144.94	22*50* 3	10/17/63	120	-12.1	172.8	-31.8	85.8	49.946	-73.9	23* 0* 3	10.0			455
1784	3	165.70	2* 4*52	10/18/63	121	-11.7	172.5	-32.0	85.9	49.936	-65.4	2*23* 3	18.2			455
1785	3	141.02	3*42*17	10/18/63	121	-11.6	172.4	-32.1	86.0	49.930	-68.6	4* 4* 3	21.8			455
1786	3	116.35	5*19*41	10/18/63	121	-11.4	172.3	-32.1	86.0	49.925	-64.3	5*43* 3	23.4			455
1794	1	-81.02	18*18*57	10/18/63	121	-9.2	172.3	-32.3	86.9	49.882	-69.5	18*30*34	11.6			456
1795	1	-105.70	19*56*22	10/18/63	121	-8.9	172.2	-32.4	87.0	49.877	-75.7	20* 8* 3	11.7			456

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL EQUATOR CROSSING AT ASCENDING NODE (ANO)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
1796	2	-130.37	21*33*46	10/18/63	121	-8.7	172.0	-32.5	87.1	49.871	-74.7	21*42* 3	8.3			456
1797	2	-155.04	23*11*11	10/18/63	121	-8.5	171.9	-32.6	87.2	49.866	-79.0	23*22* 3	10.9			456
1799	3	155.60	2*26* 0	10/19/63	122	-8.1	171.5	-32.8	87.4	49.855	-64.5	2*45* 3	19.1			456
1800	3	130.93	4* 3*24	10/19/63	122	-8.0	171.4	-32.9	87.4	49.850	-27.2	4*26* 3	22.7			456
1801	2	106.26	5*40*49	10/19/63	122	-7.8	171.3	-32.9	87.5	49.845	-64.2	6*15* 3	34.2			456
1810	1	-115.79	20*17*29	10/19/63	122	-5.2	171.0	-33.2	88.5	60.395	-20.5	20*31* 3	13.6			457
1811	2	-140.46	21*54*54	10/19/63	122	-5.0	170.9	-33.3	88.6	60.396	-70.8	22* 4* 3	9.2			457
1814	3	145.51	2*47* 7	10/20/63	123	-4.5	170.3	-33.5	88.8	60.396	-65.5	3* 8* 3	20.9			457
1815	3	120.83	4*24*32	10/20/63	123	-4.3	170.2	-33.6	88.9	60.395	-66.5	4*48* 3	23.5			457
1816	2	96.16	6* 1*56	10/20/63	123	-4.1	170.2	-33.6	89.0	60.394	-55.5	6*38* 3	36.1			457
1824	1	-101.21	19* 1*12	10/20/63	123	-1.6	169.8	-33.9	89.9	60.371	-73.4	19*11* 3	9.9			458
1825	2	-125.89	20*38*37	10/20/63	123	-1.3	169.6	-34.0	90.0	60.367	-73.8	20*46*33	7.9			458
1826	2	-150.56	22*16* 1	10/20/63	123	-1.0	169.4	-34.2	90.1	60.362	-79.9	22*26* 3	10.0			458
1828	3	160.09	1*30*50	10/21/63	124	-0.6	169.0	-34.4	90.3	60.352	-65.1	1*50* 3	19.2			458
1829	1	135.41	3* 8*15	10/21/63	124	-0.4	168.9	-34.5	90.3	60.347	-68.0	3*43* 3	34.8			458
1830	2	110.74	4*45*39	10/21/63	124	-0.3	168.8	-34.5	90.3	60.341	-52.5	5*19* 3	33.4			458
1831	2	86.06	6*23* 4	10/21/63	124	0.	168.7	-34.5	90.4	60.335	-53.7	7* 0* 3	37.0			458
1843	3	149.99	1*51*57	10/22/63	125	3.9	167.1	-35.7	91.7	60.254	-62.6	2*12* 3	20.1			459
1855	2	-146.08	21*20*51	10/22/63	125	8.7	165.4	-37.3	93.3	60.166	-72.7	21*30* 3	9.2			460
1857	3	164.57	0*35*40	10/23/63	126	9.3	164.8	-37.8	93.5	60.153	-66.0	0*54* 3	18.4			460
1858	3	139.89	2*13* 5	10/23/63	126	9.6	164.5	-37.9	93.6	60.146	-68.8	2*34* 3	21.0			460
1859	3	115.22	3*50*29	10/23/63	126	9.9	164.3	-38.1	93.7	60.140	-66.0	4*15*27	25.0			460
1860	2	90.55	5*27*54	10/23/63	126	10.2	164.2	-38.2	93.8	60.133	-61.5	6* 3* 3	35.2			460
1867	1	-82.15	16*49*45	10/23/63	126	13.4	163.3	-39.0	94.8	60.095	-88.1	16*58* 3	8.3			461
1868	1	-106.83	18*27* 9	10/23/63	126	13.8	163.0	-39.2	95.0	60.090	-77.7	18*39* 3	11.9			461
1869	2	-131.50	20* 4*34	10/23/63	126	14.2	162.7	-39.4	95.1	60.086	-74.9	20*12* 3	7.5			461

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (ANO)				SPIN VECTOR ATTITUDE					BEGIN	E N D		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
1872	3	154.47	0*56*47	10/24/63	127	15.1	161.8	-40.1	95.4	60.075	-17.1	1*16* 3	19.3			461
1873	3	129.80	2*34*12	10/24/63	127	15.4	161.5	-40.3	95.5	60.072	-67.7	2*57* 3	22.9			461
1874	2	105.12	4*11*36	10/24/63	127	15.7	161.3	-40.4	95.6	60.032	-49.8	4*46* 3	34.5			461
1875	2	80.45	5*49* 1	10/24/63	127	16.1	161.1	-40.5	95.7	60.026	-52.9	6*26* 3	37.0			461
1883	1	-116.92	18*48*17	10/24/63	127	19.4	159.9	-41.6	96.9	59.977	-81.1	19* 1* 3	12.8			462
1884	2	-141.59	20*25*41	10/24/63	127	19.3	159.9	-41.4	97.0	59.971	-74.5	20*36* 3	10.4			462
1887	3	144.38	1*17*54	10/25/63	128	19.1	159.8	-40.8	97.1	59.952	-52.4	1*38* 3	20.2			462
1888	3	119.71	2*55*19	10/25/63	128	19.0	159.8	-40.6	97.1	59.946	-66.8	3*19*27	24.1			462
1889	2	95.03	4*32*43	10/25/63	128	18.9	159.8	-40.3	97.1	59.940	-61.4	5* 8* 3	35.3			462
1897	1	-102.34	17*31*59	10/25/63	128	17.8	159.6	-38.2	97.0	59.890	-73.4	17*42*33	10.6			463
1898	2	-127.01	19* 9*24	10/25/63	128	17.6	159.6	-37.9	97.0	59.883	-73.5	19*16* 3	6.7			463
1899	2	-151.68	20*46*48	10/25/63	128	17.5	159.6	-37.7	97.0	59.877	-79.6	20*59* 3	12.3			463
1901	3	158.96	0* 1*37	10/26/63	129	17.3	159.6	-37.1	97.0	59.864	-62.7	0*20* 3	18.4			463
1902	3	134.29	1*39* 1	10/26/63	129	17.2	159.6	-36.8	97.0	59.858	-68.3	2* 1* 3	22.0			463
1903	3	109.61	3*16*26	10/26/63	129	17.1	159.6	-36.6	97.0	59.851	-65.3	3*41* 3	24.6			463
1904	2	84.94	4*53*50	10/26/63	129	16.9	159.6	-36.3	97.0	59.845	-61.1	5*31* 3	37.2			463
1911	1	-87.76	16*15*42	10/26/63	129	15.9	159.4	-34.5	96.9	59.800	-87.1	16*25*33	9.9			464
1912	1	-112.44	17*53* 6	10/26/63	129	15.8	159.4	-34.2	96.9	59.793	-77.5	18* 6*33	13.5			464
1913	2	-137.11	19*30*31	10/26/63	129	15.7	159.4	-33.9	96.9	59.787	-73.4	19*39* 3	8.5			464
1914	2	-161.78	21* 7*55	10/26/63	129	15.5	159.4	-33.7	97.0	59.781	-78.1	21*21* 3	13.1			464
1916	3	148.87	0*22*44	10/27/63	130	15.3	159.4	-33.1	97.0	59.768	-62.4	0*43* 3	20.3			464
1917	3	124.19	2* 0* 9	10/27/63	130	15.2	159.4	-32.9	97.0	59.761	-66.6	2*23* 3	22.9			464
1918	2	99.52	3*37*33	10/27/63	130	15.1	159.4	-32.6	96.9	59.755	-62.2	4*14* 3	36.5			464
1926	1	-97.85	16*36*49	10/27/63	130	13.9	159.2	-30.5	96.9	59.703	-75.3	16*49*33	12.7			465
1927	1	-122.53	18*14*13	10/27/63	130	13.8	159.2	-30.2	96.9	59.696	-73.8	18*28* 3	13.8			465
1928	2	-147.20	19*51*38	10/27/63	130	13.7	159.2	-29.9	96.9	59.690	-8.2	20* 3* 3	11.4			465

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (AND)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T AND		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
1930	3	163.44	23* 6*27	10/27/63	130	13.4	159.2	-29.4	97.0	59.677	-63.8	23*26*13	19.8			465
1931	3	138.77	0*43*51	10/28/63	131	13.3	159.2	-29.1	96.9	59.670	-67.2	1* 5* 3	21.2			465
1932	3	114.10	2*21*16	10/28/63	131	13.2	159.2	-28.8	96.9	59.664	-65.8	2*45*[illegible]	24.1			465
1933	2	89.42	3*58*40	10/28/63	131	13.1	159.2	-28.6	96.9	59.657	-61.2	4*35* 3	36.4			465
1940	1	-83.28	15*20*31	10/28/63	131	12.1	159.0	-26.8	96.9	59.612	-87.6	15*30*27	9.9			466
1941	1	-107.95	16*57*56	10/28/63	131	11.9	159.0	-26.5	96.9	59.605	-78.0	17*10* 3	12.1			466
1942	2	-132.62	18*35*20	10/28/63	131	11.8	159.0	-26.2	96.9	59.599	-73.5	18*44*27	9.1			466
1943	2	-157.30	20*12*45	10/28/63	131	11.7	159.0	-25.9	96.8	59.592	-77.8	20*25* 3	12.3			466
1945	3	153.35	23*27*34	10/28/63	131	11.5	159.0	-25.4	96.9	59.579	-20.2	23*47* 3	19.5			466
1946	3	128.65	1* 4*58	10/29/63	132	11.4	159.0	-25.1	96.9	59.573	-67.6	1*27* 3	22.1			466
1947	2	103.98	2*42*23	10/29/63	132	11.3	158.9	-24.8	96.9	59.567	-62.7	3*17* 3	34.7			466
1955	1	-93.39	15*41*38	10/29/63	132	10.2	158.7	-22.8	97.0	59.515	-75.3	15*52* 3	10.4			467
1956	1	-118.06	17*19* 3	10/29/63	132	10.0	158.7	-22.5	96.9	59.509	-75.9	17*34* 3	15.0			467
1957	2	-142.74	18*56*27	10/29/63	132	9.9	158.7	-22.[illegible]	96.9	59.503	-71.6	19* 7* 3	10.6			467
1959	3	167.91	22*11*16	10/29/63	132	9.7	158.7	-21.7	96.9	59.490	-61.8	22*29* 3	17.8			467
1960	3	143.24	23*48*41	10/29/63	132	9.6	158.7	-21.4	96.9	59.484	13.5	0* 9* 3	20.4			467
1961	3	118.56	1*26* 5	10/30/63	133	9.5	158.7	-21.1	96.9	59.477	-66.9	1*50* 3	24.0			467
1962	2	93.89	3* 3*30	10/30/63	133	9.4	158.7	-20.9	97.0	59.471	-57.3	3*38*58	35.5			467
1970	1	-103.48	16* 2*45	10/30/63	133	8.3	158.5	-18.8	96.9	59.421	-74.0	16*15* 3	12.3			468
1971	2	-128.16	17*40*10	10/30/63	133	8.2	158.5	-18.5	96.9	59.415	-74.0	17*49* 3	8.9			468
1972	2	-152.83	19*17*34	10/30/63	133	8.1	158.5	-18.3	97.0	59.409	-77.4	19*29* 3	11.5			468
1974	3	157.82	22*32*23	10/30/63	133	7.9	158.5	-17.7	97.0	59.397	-61.9	22*51* 3	18.7			468
1975	3	133.14	0* 9*48	10/31/63	134	7.8	158.5	-17.5	97.0	59.390	6.7	0*32* 3	22.3			468
1976	2	108.47	1*47*12	10/31/63	134	7.7	158.5	-17.2	97.0	59.384	-64.3	2*21* 3	33.9			468
1977	2	83.80	3*24*37	10/31/63	134	7.6	158.4	-16.9	97.0	59.378	-52.0	4* 2* 3	37.4			468
1991	2	98.38	2* 8*19	11/ 1/63	135	6.0	158.2	-13.2	97.1	59.295	-69.8	2*44* 3	35.7			469

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL	EQUATOR ASCENDING	CROSSING NODE (AND)	AT	SPIN	VECTOR	ATTITUDE			BEGIN	END		DROPOUTS, MINUTES W/R/T AND		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
2006	2	88.29	2*29*26	11/ 2/63	136	4.3	158.1	-9.3	97.3	59.213	-67.1	3* 7* 3	37.6			470
2013	1	-84.41	13*51*17	11/ 2/63	136	3.5	157.9	-7.5	97.3	59.175	-87.4	14* 0*33	9.3			471
2014	1	-109.09	15*28*41	11/ 2/63	136	3.4	157.9	-7.2	97.3	59.170	-76.0	15*41* 3	12.4			471
2015	2	-133.76	17* 6* 6	11/ 2/63	136	3.3	157.9	-7.0	97.3	59.164	-72.4	17*15* 3	9.0			471
2018	3	152.21	21*58*19	11/ 2/63	136	3.1	158.0	-6.1	97.4	59.147	-54.1	22*19* 3	20.7			471
2019	3	127.54	23*35*44	11/ 2/63	136	3.0	158.0	-5.9	97.4	59.141	-64.7	23*59* 3	23.3			471
2020	2	102.87	1*13* 8	11/ 3/63	137	2.9	158.0	-5.8	97.4	59.135	-61.5	1*48* 3	34.9			471
2021	2	78.20	2*50*33	11/ 3/63	137	2.8	157.9	-5.6	97.4	59.129	-50.2	3*29* 3	38.5			471
2028	1	-94.51	14*12*24	11/ 3/63	137	2.1	157.9	-3.8	0.1	59.088	2.0	14*22*33	10.2			472
2029	1	-119.18	15*49*48	11/ 3/63	137	2.0	157.9	-3.5	0.1	59.082	-74.7	16* 4*33	14.8			472
2030	2	-143.85	17*27*13	11/ 3/63	137	1.9	157.9	-3.2	0.1	59.076	-71.2	17*37* 3	9.8			472
2032	3	166.79	20*42* 1	11/ 3/63	137	1.8	157.9	-2.7	0.2	59.063	-63.5	21* 1* 3	19.0			472
2033	3	142.12	22*19*26	11/ 3/63	137	1.7	157.9	-2.4	0.2	59.057	-66.1	22*40*33	21.1			472
2034	3	117.45	23*56*50	11/ 3/63	137	1.7	157.9	-2.2	0.2	59.051	-12.8	0*21* 3	24.2			472
2035	2	92.77	1*34*15	11/ 4/63	138	1.6	157.9	-1.9	0.2	59.045	-58.7	2*10* 3	35.8			472
2043	1	-104.60	14*33*31	11/ 4/63	138	0.8	157.9	0.2	0.3	58.995	-72.8	14*45* 3	11.5			473
2044	2	-129.27	16*10*55	11/ 4/63	138	0.7	157.9	0.5	0.4	58.988	-73.4	16*19*33	8.6			473
2045	2	-153.94	17*48*20	11/ 4/63	138	0.7	157.9	0.7	0.4	58.982	-76.1	18* 0*33	12.2			473
2047	3	156.70	21* 3* 8	11/ 4/63	138	0.6	158.0	1.3	0.5	58.969	-61.1	21*22*33	19.4			473
2048	3	132.03	22*40*33	11/ 4/63	138	0.5	158.0	1.5	0.4	58.963	-65.7	23* 3* 3	22.5			473
2049	2	107.35	0*17*57	11/ 5/63	139	0.4	158.0	1.8	0.4	58.956	-62.5	0*52* 3	34.1			473
2050	2	82.68	1*55*22	11/ 5/63	139	0.4	158.0	2.0	0.5	58.950	-50.8	2*33* 3	37.7			473
2073	2	-124.78	15*15*44	11/ 6/63	140	-1.2	158.3	8.1	1.0	58.801	-77.2	15*24*33	8.8			474
2074	2	-149 45	16*53* 9	11/ 6/63	140	-1.3	158.3	8.4	1.1	58.795	-83.1	17* 5* 3	11.9			474
2076	3	161.19	20* 7*57	11/ 6/63	140	-1.4	158.4	8.9	1.0	58.782	-84.8	20*28* 3	20.1			474
2077	3	136.52	21*45*22	11/ 6/63	140	-1.4	158.5	9.2	1.1	58.775	-72.6	22* 8* 3	22.7			474

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (ANO)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
2078	2	111.85	23*22*46	11/ 6/63	140	-1.4	158.5	9.4	1.1	58.769	-69.5	23*57* 3	34.3			474
2079	2	87.17	1* 0*11	11/ 7/63	141	-1.5	158.5	9.7	1.2	58.763	-58.0	1*38* 3	37.9			474
2086	1	-85.53	12*22* 2	11/ 7/63	141	-1.9	158.6	11.5	1.4	58.719	-95.2	12*32* 3	10.0			475
2089	2	-159.54	17*14*15	11/ 7/63	141	-2.0	158.7	12.3	1.4	58.700	-92.6	17*27* 3	12.8			475
2090	3	175.77	18*51*40	11/ 7/63	141	-2.1	158.8	12.6	1.4	58.694	-78.4	19*10* 3	18.4			475
2091	3	151.10	20*29* 4	11/ 7/63	141	-2.1	158.8	12.9	1.5	58.688	-73.1	20*49* 3	20.0			475
2092	3	126.43	22* 6*29	11/ 7/63	141	-2.2	158.8	13.1	1.5	58.682	-72.4	22*29* 3	22.6			475
2093	2	101.76	23*43*53	11/ 7/63	141	-2.2	158.9	13.4	1.6	58.675	-68.9	0*19*58	36.1			475
2094	2	77.08	1*21*17	11/ 8/63	142	-2.3	158.9	13.7	1.6	58.669	-56.5	2* 0*33	39.3			475
2103	2	-144.96	15*57*57	11/ 8/63	142	-2.7	159.1	16.0	1.9	58.616	-91.7	16*11* 3	13.1			476
2105	3	165.68	19*12*46	11/ 8/63	142	-2.7	159.2	16.5	1.9	58.605	-85.6	19*32* 3	19.3			476
2106	3	141.01	20*50*11	11/ 8/63	142	-2.7	159.3	16.8	2.0	58.599	-72.9	21*12* 3	21.9			476
2107	3	116.34	22*27*35	11/ 8/63	142	-2.8	159.3	17.1	2.0	58.593	-70.5	22*52* 3	24.5			476
2108	2	91.67	0* 5* 0	11/ 9/63	143	-2.8	159.3	17.3	2.1	58.588	-51.5	0*41* 3	36.1			476
2116	1	-105.71	13* 4*15	11/ 9/63	143	-3.3	159.5	19.5	2.3	58.544	-92.3	13*17* 3	12.8			477
2118	2	-155.05	16*19* 4	11/ 9/63	143	-3.3	159.7	20.0	2.4	58.534	-76.2	16*31* 3	12.0			477
2120	3	155.59	19*33*53	11/ 9/63	143	-3.4	159.8	20.6	2.5	58.523	-85.1	19*53*33	19.7			477
2121	3	130.92	21*11*17	11/ 9/63	143	-3.4	159.8	20.9	2.5	58.518	-72.6	21*33*33	22.3			477
2132	2	-140.47	15* 2*46	11/10/63	144	-3.9	160.2	23.8	2.9	58.428	-77.9	15*13* 3	10.3			478
2134	3	170.18	18*17*35	11/10/63	144	-4.0	160.4	24.4	3.0	58.417	-87.0	18*35*33	18.0			478
2136	3	120.83	21*32*24	11/10/63	144	-4.0	160.5	24.9	3.1	58.406	-81.2	21*55*33	23.2			478
2147	2	-150.56	15*23*53	11/11/63	145	-4.4	160.9	27.8	3.5	58.346	-93.9	15*35* 3	11.2			479
2149	3	160.09	18*38*42	11/11/63	145	-4.5	161.1	28.4	3.6	58.335	-86.1	18*57* 3	18.4			479
2151	3	110.74	21*53*31	11/11/63	145	-4.5	161.2	28.9	3.7	58.324	-79.8	22*18*33	25.0			479
2163	3	174.65	17*22*24	11/12/63	146	-4.8	161.8	32.1	4.3	58.260	-87.1	17*40* 3	17.7			480
2164	3	149.97	18*59*48	11/12/63	146	-4.8	161.9	32.4	4.4	58.254	-74.1	19*19*58	20.2			480

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL	EQUATOR ASCENDING	CROSSING NODE (AND)	AT	SPIN	VECTOR	ATTITUDE			BEGIN	END		DROPOUTS, MINUTES W/R/T AND		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
2166	3	100.63	22*14*37	11/12/63	146	-3.2	161.7	32.4	4.6	58.243	-79.2	22*40*33	25.9			480
2176	2	-146.09	14*28*42	11/13/63	147	4.7	161.3	29.2	7.1	58.190	-94.3	14*39* 3	10.4			481
2178	3	164.55	17*43*31	11/13/63	147	5.9	160.8	28.4	7.4	58.179	-85.6	18* 2*33	19.0			481
2180	3	115.21	20*58*19	11/13/63	147	7.4	160.5	27.6	7.7	58.168	-79.7	21*23* 3	24.7			481
2181	3	90.54	22*35*44	11/13/63	147	8.3	160.6	27.2	8.0	58.163	-67.0	23* 2*58	27.2			481
2190	2	-131.51	13*12*24	11/14/63	148	15.1	161.5	24.7	10.2	58.115	-97.1	13*20* 3	7.7			482
2193	3	154.46	18* 4*37	11/14/63	148	16.8	161.1	23.7	10.6	58.099	-84.9	18*24*33	19.9			482
2194	3	129.79	19*42* 1	11/14/63	148	17.5	161.0	23.3	10.8	58.093	-71.6	20* 5*33	23.5			482
2195	3	105.12	21*19*26	11/14/63	148	18.3	161.1	23.0	11.0	58.088	-53.2	21*44*33	25.1			482
2196	2	80.45	22*56*50	11/14/63	148	19.2	161.4	22.6	11.2	58.083	-65.9	23*34*33	37.7			482
2205	2	-141.60	13*33*30	11/15/63	149	25.3	163.6	20.5	13.4	58.034	-8.9	13*42* 3	8.6			483
2207	3	169.05	16*48*19	11/15/63	149	26.5	163.6	19.9	13.7	58.023	-86.8	17* 6*33	18.2			483
2208	3	144.37	18*25*43	11/15/63	149	27.2	163.6	19.5	13.9	58.018	-23.4	18*47* 3	21.3			483
2209	3	119.70	20* 3* 8	11/15/63	149	28.0	163.7	19.1	14.0	58.013	-70.4	20*25*33	22.4			483
2218	1	-102.34	10*39*48	11/16/63	150	34.8	168.9	16.5	16.6	57.964	-94.3	10*50* 3	10.3			484
2219	2	-127.01	12*17*12	11/16/63	150	35.3	169.3	16.4	16.8	57.959	-81.6	12*25* 3	7.9			484
2220	2	-151.69	13*54*37	11/16/63	150	35.9	169.5	16.2	17.0	57.953	0.8	14*10* 8	15.5			484
2225	2	84.94	22* 1*39	11/16/63	150	39.6	171.5	14.1	17.9	57.926	-66.8	22*38*33	36.9			484
2234	2	-137.10	12*38*19	11/17/63	151	43.2	178.9	13.0	20.4	57.877	-76.0	12*47*33	9.2			485
2235	2	-161.77	14*15*43	11/17/63	151	43.5	179.3	12.9	20.5	57.871	-82.8	14*28*33	12.8			485
2239	2	99.53	20*45*21	11/17/63	151	44.9	181.5	12.3	21.1	57.849	-54.3	21*21*33	36.2			485
2247	1	-97.85	9*44*36	11/18/63	152	46.1	190.3	11.9	23.3	57.805	-94.0	9*55*33	11.0			486
2251	3	163.45	16*14*14	11/18/63	152	46.0	192.5	12.2	24.0	57.783	-85.7	16*33*33	19.3			486
2253	3	114.11	19*29* 3	11/18/63	152	46.3	193.8	12.1	24.2	57.772	-64.3	19*53*33	24.5			486
2254	2	89.44	21* 6*27	11/18/63	152	46.5	194.9	11.9	24.4	57.766	-67.5	21*44* 3	37.6			486
2261	1	-83.29	8*28*18	11/19/63	153	45.3	202.9	12.0	26.4	57.727	-96.6	8*36*33	8.3			487

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (AND)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T AND		
ORBIT NO.	CDA STA	EARTH LONGI-TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI-NA-TION (DEG)	RIGHT ASCEN-SION (DEG)	MINI-MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU-TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU-TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
2262	1	-107.96	10* 5*43	11/19/63	153	44.9	203.6	12.2	26.6	57.721	-82.9	10*17*33	11.8			487
2263	2	-132.63	11*43* 7	11/19/63	153	44.6	204.1	12.5	26.8	57.715	-80.7	11*51*33	8.4			487
2264	2	-157.30	13*20*31	11/19/63	153	44.3	204.5	12.7	27.0	57.710	-83.1	13*32*57	12.4			487
2266	1	153.34	16*35*20	11/19/63	153	44.0	205.3	13.0	27.3	57.698	-70.9	17* 6*33	31.2			487
2267	1	128.67	18*12*45	11/19/63	153	43.9	205.9	13.0	27.3	57.692	-61.0	18*48*57	36.2			487
2268	2	103.99	19*50* 9	11/19/63	153	43.8	206.7	12.9	27.5	57.687	-56.3	20*24*33	34.4			487
2269	2	79.32	21*27*34	11/19/63	153	43.5	207.8	12.8	27.8	57.681	-57.2	22* 6* 3	38.5			487
2278	2	-142.72	12* 4*13	11/20/63	154	39.1	214.6	14.4	30.1	57.629	-78.6	12*12*33	8.3			488
2280	1	167.93	15*19* 2	11/20/63	154	38.2	215.0	14.9	30.5	57.618	-61.5	15*49*57	30.9			488
2281	1	143.25	16*56*27	11/20/63	154	37.9	215.3	15.1	30.6	57.612	-60.1	17*29*33	33.1			488
2283	2	93.90	20*11*15	11/20/63	154	37.3	216.5	15.2	30.8	57.600	-40.4	20*50* 3	38.8			488
2291	1	-103.46	9*10*31	11/21/63	155	37.1	216.9	14.6	31.6	57.553	-93.4	9*21*58	11.5			489
2292	2	-128.14	10*47*55	11/21/63	155	37.1	216.9	14.5	31.6	57.547	-81.0	10*55*58	8.1			489
2293	2	-152.81	12*25*20	11/21/63	155	37.1	217.0	14.3	31.7	57.541	-84.8	12*36*33	11.2			489
2295	3	157.83	15*40* 9	11/21/63	155	37.2	217.1	14.1	31.8	57.529	-85.7	15*59*33	19.4			489
2296	1	133.16	17*17*33	11/21/63	155	37.2	217.1	13.9	31.8	57.523	-65.4	17*53*23	35.8			489
2297	3	108.49	18*54*57	11/21/63	155	37.2	217.2	13.8	31.9	57.517	-56.2	19*19*33	24.6			489
2298	2	83.82	20*32*22	11/21/63	155	37.2	217.2	13.7	31.9	57.511	-65.3	21*10* 3	37.7			489
2305	1	-88.88	7*54*13	11/22/63	156	37.5	217.2	12.7	32.3	57.469	-95.3	8* 3*33	9.3			490
2306	1	-113.55	9*31*37	11/22/63	156	37.5	217.3	12.6	32.3	57.464	-80.5	9*44*57	13.3			490
2307	2	-138.22	11* 9* 1	11/22/63	156	37.5	217.3	12.4	32.4	57.457	-27.0	11*17*33	8.5			490
2308	2	-162.90	12*46*26	11/22/63	156	37.5	217.4	12.3	32.5	57.451	-83.4	12*59*33	13.1			490
2309	3	172.42	14*23*50	11/22/63	156	37.6	217.4	12.1	32.5	57.445	-78.8	14*42*33	18.7			490
2311	3	123.07	17*38*39	11/22/63	156	37.6	217.5	11.8	32.5	57.433	-54.4	18* 1*33	22.9			490
2312	2	98.40	19*16* 4	11/22/63	156	37.6	217.5	11.7	32.6	57.426	-68.8	19*52* 3	36.0			490
2320	1	-98.97	8*15*19	11/23/63	157	37.9	217.6	10.5	33.0	57.377	-76.1	8*25*58	10.7			491

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (AND)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T AND		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
2321	1	-123.65	9*52*43	11/23/63	157	38.0	217.6	10.4	33.0	57.371	-30.1	10* 7*33	14.8			491
2322	2	-148.32	11*30* 8	11/23/63	157	38.0	217.7	10.2	33.1	57.364	-59.6	11*40*33	10.4			491
2324	3	162.33	14*44*57	11/23/63	157	38.1	217.8	9.9	33.2	57.352	-63.2	15* 3*33	18.6			491
2325	3	137.66	16*22*21	11/23/63	157	38.1	217.8	9.7	33.2	57.345	-66.4	16*43*33	21.2			491
2326	3	112.98	17*59*45	11/23/63	157	38.1	217.8	9.6	33.2	57.339	5.2	18*23*33	23.8			491
2327	2	88.31	19*37*10	11/23/63	157	38.1	217.8	9.4	33.3	57.333	-61.9	20*15* 3	37.9			491
2336	2	-133.73	10*13*50	11/24/63	158	38.4	217.9	8.1	33.7	57.275	-72.9	10*21*33	7.7			492
2337	2	-158.41	11*51*14	11/24/63	158	38.4	217.9	8.0	33.7	57.269	-78.4	12* 3*33	12.3			492
2339	3	152.24	15* 6* 3	11/24/63	158	38.5	218.0	7.7	33.7	57.256	-61.4	15*26*33	20.5			492
2342	2	78.22	19*58*16	11/24/63	158	38.6	218.0	7.2	33.9	57.236	-64.8	20*37*33	39.3			492
2350	1	-119.15	8*57*31	11/25/63	159	38.9	218.0	6.0	34.2	57.183	-74.6	9*11*33	14.0			493
2351	2	-143.82	10*34*56	11/25/63	159	38.9	218.0	5.8	34.2	57.176	-71.0	10*44*33	9.6			493
2364	1	-104.58	7*41*13	11/26/63	160	39.4	218.0	3.7	34.7	57.088	-64.5	7*52*33	11.3			494
2365	2	-129.26	9*18*37	11/26/63	160	39.5	218.0	3.5	34.7	57.081	-74.0	9*27*33	8.9			494
2366	2	-153.93	10*56* 2	11/26/63	160	39.5	218.0	3.4	34.7	57.074	-76.2	11* 7*33	11.5			494
2368	3	156.72	14*10*51	11/26/63	160	39.6	218.1	3.0	34.7	57.060	-61.5	14*30*33	19.7			494
2369	3	132.04	15*48*15	11/26/63	160	39.6	218.1	2.8	34.8	57.053	-66.8	16*10*33	22.3			494
2370	3	107.37	17*25*40	11/26/63	160	39.7	218.1	2.7	34.8	57.046	-63.4	17*50*33	24.9			494
2371	2	82.70	19* 3* 4	11/26/63	160	39.7	218.1	2.5	34.9	57.039	-60.2	19*42*58	39.9			494
2378	1	-90.00	6*24*55	11/27/63	161	40.1	218.0	1.4	35.1	56.999	-1.4	6*34* 3	9.1			495
2379	1	-114.67	8* 2*19	11/27/63	161	40.0	218.0	1.2	35.1	56.993	-58.0	8*14* 3	11.7			495
2437	1	-105.68	6*11*55	12/ 1/63	165	33.0	219.2	-4.2	38.8	56.608	-78.2	6*23*33	11.6			496
2439	2	-155.03	9*26*43	12/ 1/63	165	32.8	219.1	-4.4	38.9	56.594	-62.1	9*39*33	12.8			496
2453	2	-140.44	8*10*25	12/ 2/63	166	31.1	219.0	-5.8	39.7	56.500	-60.3	8*19* 3	8.6			497
2456	3	145.53	13* 2*38	12/ 2/63	166	30.8	218.9	-6.1	39.9	56.479	-57.0	13*22*33	19.9			497
2457	3	120.85	14*40* 3	12/ 2/63	166	30.7	218.9	-6.2	39.9	56.472	-67.3	15* 3* 3	23.0			497

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL EQUATOR CROSSING AT ASCENDING NODE (ANO)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
2458	2	96.18	16*17*27	12/ 2/63	166	30.6	218.9	-6.4	39.9	56.466	-61.5	16*52*33	35.1			497
2466	1	-101.20	5*16*42	12/ 3/63	167	29.6	218.9	-7.3	40.5	56.411	-75.2	5*26*58	10.3			498
2468	2	-150.54	8*31*31	12/ 3/63	167	29.3	218.8	-7.4	40.6	56.397	-64.5	8*42* 3	10.5			498
2471	3	135.43	13*23*44	12/ 3/63	167	29.1	218.6	-7.7	40.7	56.377	-66.2	13*45* 3	21.3			498
2473	3	86.09	16*38*33	12/ 3/63	167	28.8	218.6	-8.0	40.8	56.363	-56.2	17*15*33	37.0			498
2482	2	-135.96	7*15*13	12/ 4/63	168	27.7	218.4	-9.0	41.4	56.302	-65.4	7*22*33	7.3			499
2485	3	150.02	12* 7*26	12/ 4/63	168	27.4	218.3	-9.3	41.5	56.281	-66.6	12*27* 3	19.6			499
2486	3	125.35	13*44*50	12/ 4/63	168	27.3	218.2	-9.4	41.6	56.274	-67.3	14* 7* 3	22.2			499
2487	2	100.67	15*22*14	12/ 4/63	168	27.2	218.2	-9.5	41.5	56.267	-62.8	15*56* 3	33.8			499
2497	2	-146.04	7*36*18	12/ 5/63	169	25.9	218.0	-10.6	42.2	56.199	-63.4	7*45*33	9.3			500
2499	3	164.60	10*51* 7	12/ 5/63	169	25.7	217.8	-10.8	42.3	56.185	-64.9	11*10*33	19.4			500
2500	3	139.93	12*28*32	12/ 5/63	169	25.7	217.8	-10.9	42.3	56.178	-67.0	12*49*33	21.0			500
2502	2	90.58	15*43*20	12/ 5/63	169	25.4	217.7	-11.2	42.5	56.164	-52.9	16*19* 3	35.7			500
2512	2	-156.13	7*57*24	12/ 6/63	170	24.2	217.4	-12.3	43.0	56.088	-61.9	8* 8*33	11.2			501
2515	3	129.85	12*49*38	12/ 6/63	170	24.0	217.2	-12.6	43.1	56.067	-64.9	13*11*33	21.9			501
2516	2	105.17	14*27* 2	12/ 6/63	170	23.9	217.2	-12.8	43.2	56.061	-61.5	15* 0*33	33.5			501
2517	2	80.50	16* 4*26	12/ 6/63	170	23.8	217.2	-12.9	43.3	56.054	-51.2	16*42* 3	37.6			501
2526	2	-141.54	6*41* 6	12/ 7/63	171	22.7	216.8	-14.0	43.7	55.991	-41.0	6*49* 3	8.0			502
2530	3	119.76	13*10*43	12/ 7/63	171	22.4	216.5	-14.4	43.9	55.963	-52.2	13*33*33	22.8			502
2531	2	95.08	14*48* 8	12/ 7/63	171	22.3	216.5	-14.5	44.0	55.956	-4.7	15*23* 3	34.9			502
2539	1	-102.28	3*47*23	12/ 8/63	172	21.4	216.2	-15.5	44.4	55.901	-83.9	3*57*33	10.2			503
2541	2	-151.63	7* 2*12	12/ 8/63	172	21.2	216.0	-15.7	44.5	55.887	-63.5	7*12*33	10.4			503
2543	1	159.01	10*17* 1	12/ 8/63	172	21.0	215.9	-15.9	44.6	55.873	-71.1	10*48* 3	31.0			503
2546	2	85.00	15* 9*14	12/ 8/63	172	20.8	215.8	-16.3	44.7	55.852	-52.3	15*46* 3	36.8			503
2555	2	-137.04	5*45*53	12/ 9/63	173	19.7	215.2	-17.4	45.2	55.790	-79.1	5*53*33	7.7			504
2559	3	124.25	12*15*31	12/ 9/63	173	18.7	214.6	-17.3	45.5	55.762	-49.3	12*38* 3	22.5			504

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (AND)				SPIN VECTOR ATTITUDE					BEGIN	E N D		DROPOUTS, MINUTES W/R/T AND		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
2560	2	99.58	13*52*55	12/ 9/63	173	18.4	214.6	-17.3	45.6	55.755	-62.4	14*27*33	34.6			504
2568	1	-97.80	2*52*11	12/10/63	174	15.8	214.0	-17.4	46.4	55.700	-89.0	3* 2*53	10.7			505
2570	2	-147.15	6* 6*59	12/10/63	174	15.3	213.7	-17.3	46.5	55.687	-63.5	6*15*33	8.6			505
2573	1	138.83	10*59*12	12/10/63	174	14.7	213.2	-17.2	46.8	55.666	-58.0	11*33* 3	33.9			505
2574	3	114.15	12*36*37	12/10/63	174	14.4	213.2	-17.2	46.8	55.659	-50.5	13* 0* 3	23.4			505
2575	2	89.48	14*14* 1	12/10/63	174	14.1	213.1	-17.2	46.9	55.652	-57.7	14*49*33	35.5			505
2582	1	-83.22	1*35*52	12/11/63	175	11.8	212.7	-17.3	47.6	55.604	-89.5	1*44* 3	8.2			506
2583	1	-107.89	3*13*16	12/11/63	175	11.5	212.6	-17.3	47.7	55.597	-79.4	3*24* 3	10.8			506
2587	1	153.41	9*42*54	12/11/63	175	10.6	211.9	-17.1	48.1	55.570	-62.5	10*14*33	31.7			506
2588	1	128.74	11*20*18	12/11/63	175	10.4	211.8	-17.0	48.1	55.563	-54.6	11*55*33	35.3			506
2589	2	104.07	12*57*43	12/11/63	175	10.1	211.8	-17.0	48.2	55.556	-49.7	13*31*58	34.3			506
2590	2	79.39	14*35* 7	12/11/63	175	9.8	211.7	-17.1	48.3	55.549	-50.5	15*12*58	37.9			506
2597	1	-93.30	1*56*58	12/12/63	176	7.5	211.3	-17.2	49.0	55.501	-85.3	2* 5*33	8.6			507
2599	2	-142.65	5*11*47	12/12/63	176	7.0	211.0	-17.1	49.2	55.488	-65.4	5*19*33	7.8			507
2602	1	143.33	10* 4* 0	12/12/63	176	6.3	210.5	-16.9	49.4	55.467	-71.8	10*37* 3	33.1			507
2603	3	118.66	11*41*24	12/12/63	176	6.1	210.4	-16.9	49.5	55.461	10.9	12* 4*33	23.2			507
2604	2	93.98	13*18*48	12/12/63	176	5.7	210.4	-16.9	49.6	55.454	-51.1	13*54* 3	35.3			507
2612	1	-103.39	2*18* 4	12/13/63	177	3.2	209.9	-16.9	50.4	55.399	-77.1	2*27*33	9.5			508
2614	2	-152.73	5*32*52	12/13/63	177	2.7	209.6	-16.8	50.6	55.386	-64.6	5*42*33	9.7			508
2616	3	157.91	8*47*41	12/13/63	177	2.3	209.3	-16.7	50.8	55.372	-65.4	9* 6*33	18.9			508
2617	1	133.24	10*25* 6	12/13/63	177	2.0	209.2	-16.7	50.8	55.365	-68.1	10*59*33	34.5			508
2618	2	108.57	12* 2*30	12/13/63	177	1.7	209.1	-16.7	50.9	55.359	-50.8	12*35*33	33.1			508
2619	2	83.89	13*39*54	12/13/63	177	1.4	209.1	-16.7	51.0	55.352	-51.7	14*16*33	36.7			508
2626	1	-88.80	1* 1*45	12/14/63	178	-0.8	208.7	-16.8	51.7	55.305	-86.9	1*10* 3	8.3			509
2628	2	-138.14	4*16*34	12/14/63	178	-1.3	208.5	-16.7	51.9	55.291	-48.8	4*24* 3	7.5			509
2632	3	123.16	10*46*11	12/14/63	178	-2.2	207.9	-16.5	52.2	55.264	-55.7	11* 8*33	22.4			509

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL	EQUATOR ASCENDING	CROSSING AT NODE (ANO)		SPIN	VECTOR	ATTITUDE			BEGIN	END		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
2643	2	-148.23	4*37*40	12/15/63	179	-5.5	207.2	-16.4	53.3	55.190	-60.4	4*47* 3	9.4			510
2645	3	162.42	7*52*28	12/15/63	179	-5.9	206.9	-16.3	53.4	55.177	-63.4	8*11*33	19.1			510
2646	1	137.74	9*29*53	12/15/63	179	-6.2	206.8	-16.3	53.5	55.170	-65.6	10* 3*58	34.1			510
2647	3	113.07	11* 7*17	12/15/63	179	-6.5	206.7	-16.2	53.6	55.164	-59.4	11*30*33	23.3			510
2656	1	-108.97	1*43*57	12/16/63	180	-9.2	206.4	-16.2	54.5	55.103	-81.4	1*55* 3	11.1			511
2658	2	-158.31	4*58*45	12/16/63	180	-9.7	206.1	-16.1	54.7	55.090	-62.2	5*10* 3	11.3			511
2660	3	152.33	8*13*34	12/16/63	180	-10.1	205.9	-16.0	54.8	55.077	-61.9	8*32*33	19.0			511
2661	1	127.66	9*50*59	12/16/63	180	-10.4	205.8	-16.0	54.9	55.070	-66.0	10*26*33	35.6			511
2662	2	102.99	11*28*23	12/16/63	180	-10.7	205.7	-16.0	55.0	55.064	-49.9	12* 2* 3	33.7			511
2663	2	78.32	13* 5*48	12/16/63	180	-11.0	205.7	-15.9	55.1	55.057	-51.4	13*43* 3	37.3			511
2672	2	-143.77	3*42*27	12/17/63	181	-14.5	205.1	-15.4	56.1	54.997	-69.6	3*50*33	8.1			512
2675	3	142.20	8*34*40	12/17/63	181	-16.6	204.4	-14.2	56.6	54.978	-54.5	8*55*33	20.9			512
2676	3	117.53	10*12* 5	12/17/63	181	-17.4	204.4	-13.8	56.8	54.971	-64.1	10*35*33	23.5			512
2677	2	92.86	11*49*29	12/17/63	181	-18.4	204.5	-13.4	57.0	54.964	-53.1	12*25*33	36.1			512
2687	2	-153.86	4* 3*33	12/18/63	182	-26.8	206.5	-10.9	59.5	54.899	-69.9	4*14*33	11.0			513
2690	3	132.11	8*55*46	12/18/63	182	-28.8	206.3	-9.9	60.0	54.879	-53.9	9*18* 3	22.3			513
2691	3	107.44	10*33*10	12/18/63	182	-29.7	206.5	-9.5	60.2	54.873	-63.2	10*57*33	24.4			513
2692	2	82.77	12*10*35	12/18/63	182	-30.6	206.8	-9.1	60.5	54.866	-59.9	12*48* 3	37.5			513
2699	1	-89.93	23*32*25	12/18/63	182	-36.4	210.5	-7.8	62.5	54.821	-85.4	23*40*33	8.1			514
2701	2	-139.27	2*47*14	12/19/63	183	-37.6	211.0	-7.5	63.0	54.808	-65.7	2*55*33	8.3			514
2704	3	146.70	7*39*27	12/19/63	183	-39.3	211.3	-6.8	63.4	54.788	-70.9	7*59*33	20.1			514
2705	3	122.03	9*16*52	12/19/63	183	-40.1	211.5	-6.5	63.6	54.782	-65.0	9*39*33	22.7			514
2706	2	97.35	10*54*16	12/19/63	183	-40.9	212.0	-6.1	63.8	54.775	-38.8	11*29*33	35.3			514
2743	1	-95.52	22*58*18	12/21/63	185	-56.9	250.3	-1.2	73.1	54.539	-54.5	23* 7*33	9.3			515
2745	2	-144.86	2*13* 7	12/22/63	186	-56.7	252.4	-1.4	73.5	54.526	-63.3	2*22*33	9.4			515
2747	1	165.78	5*27*56	12/22/63	186	-56.6	254.1	-1.5	73.9	54.514	-63.6	5*58* 3	30.1			515

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (ANO)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TDT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
2748	1	141.11	7* 5*20	12/22/63	186	-56.6	255.0	-1.5	74.0	54.507	-11.6	7*38*33	33.2			515
2749	2	116.44	8*42*44	12/22/63	186	-56.7	256.2	-1.4	74.2	54.501	-53.7	9*16*33	33.8			515
2750	2	91.76	10*20* 9	12/22/63	186	-56.7	257.8	-1.2	74.4	54.495	-52.4	10*55*33	35.4			515
2758	1	-105.61	23*19*24	12/22/63	186	-53.8	269.6	-1.5	76.7	54.445	-59.7	23*30*28	11.1			516
2760	2	-154.95	2*34*12	12/23/63	187	-52.9	271.1	-2.0	77.1	54.432	-61.6	2*45* 3	10.9			516
2762	1	155.70	5*49* 1	12/23/63	187	-52.3	272.3	-2.3	77.5	54.420	-61.9	6*20*33	31.5			516
2764	2	106.35	9* 3*50	12/23/63	187	-51.8	274.2	-2.3	77.9	54.407	-41.8	9*37*33	33.7			516
2772	1	-91.02	22* 3* 5	12/23/63	187	-46.5	282.4	-3.1	80.1	54.358	-35.5	22*11*33	8.5			517
2774	2	-140.38	1*17*54	12/24/63	188	-45.1	283.2	-3.7	80.6	54.346	-49.7	1*26*33	8.7			517
2777	1	145.60	6*10* 7	12/24/63	188	-43.6	283.9	-4.5	81.1	54.327	-59.9	6*42*33	32.4			517
2787	1	-101.11	22*24*11	12/24/63	188	-35.7	289.5	-6.3	83.7	54.266	-81.1	22*34*33	10.4			518
2788	2	-125.79	0* 1*35	12/25/63	189	-34.9	289.5	-6.7	83.9	54.260	-74.2	0* 8* 3	6.5			518
2789	2	-150.46	1*39* 0	12/25/63	189	-34.2	289.5	-7.2	84.1	54.254	-78.9	1*48*33	9.6			518
2806	1	150.10	5*14*54	12/26/63	190	-20.9	291.4	-12.6	87.8	54.152	5.0	5*47*33	32.7			519
2807	1	125.42	6*52*18	12/26/63	190	-20.3	291.4	-13.0	88.0	54.146	-51.7	7*28*33	36.3			519
2808	2	100.75	8*29*43	12/26/63	190	-19.6	291.5	-13.2	88.1	54.140	-48.6	9* 4*33	34.8			519
2816	1	-96.62	21*28*58	12/26/63	190	-11.9	292.3	-15.7	90.2	54.092	-75.7	21*38*33	9.6			520
2817	1	-121.29	23* 6*22	12/26/63	190	-11.0	292.1	-16.2	90.4	54.086	-75.0	23*20*33	14.2			520
2818	2	-145.96	0*43*46	12/27/63	191	-10.2	291.8	-16.8	90.6	54.080	-69.5	0*53* 3	9.3			520
2821	1	140.01	5*35*59	12/27/63	191	-8.3	290.9	-18.2	91.1	54.063	-38.9	6* 9*33	33.6			520
2823	2	90.66	8*50*48	12/27/63	191	-6.8	290.8	-18.9	91.4	54.051	-54.9	9*26*33	35.8			520
2831	1	-106.71	21*50* 3	12/27/63	191	1.0	290.5	-21.7	93.5	54.004	-80.8	22* 1* 3	11.0			521
2832	2	-131.38	23*27*28	12/27/63	191	1.8	290.2	-22.2	93.8	53.998	-72.6	23*35* 3	7.6			521
2833	2	-156.05	1* 4*52	12/28/63	192	2.6	289.7	-22.8	93.9	53.993	-16.2	1*15*33	10.7			521
2836	1	129.92	5*57* 5	12/28/63	192	4.3	288.8	-24.2	94.4	53.975	-28.2	6*32*33	35.5			521
2838	2	80.58	9*11*54	12/28/63	192	4.2	288.8	-24.2	94.6	53.964	-38.7	9*49*33	37.7			521

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE				
		SATELLITE ORBITAL	EQUATOR CROSSING AT ASCENDING NODE (AND)			SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T AND	
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
2845	1	-92.12	20*33*44	12/28/63	192	4.2	288.6	-22.8	94.8	53.923	-84.5	20*43* 3	9.3			522
2846	1	-116.79	22*11* 9	12/28/63	192	4.2	288.5	-22.7	94.9	53.918	-73.8	22*24* 3	12.9			522
2847	2	-141.47	23*48*33	12/28/63	192	4.2	288.5	-22.5	94.8	53.912	-70.5	23*57* 3	8.5			522
2850	1	144.51	4*40*46	12/29/63	193	4.1	288.4	-21.9	94.9	53.895	-6.7	5*13*33	32.8			522
2852	2	95.16	7*55*35	12/29/63	193	4.1	288.3	-21.5	95.0	53.883	-40.9	8*30*33	35.0			522
2861	2	-126.88	22*32*14	12/29/63	193	4.0	288.0	-19.8	95.3	53.832	-74.8	22*39* 3	6.8			523
2862	2	-151.55	0* 9*38	12/30/63	194	4.0	288.0	-19.6	95.4	53.827	-77.4	0*19*33	9.9			523
2867	2	85.08	8*16*39	12/30/63	194	4.0	288.0	-18.5	95.5	53.799	-39.7	8*54*33	37.9			523
2874	1	-87.62	19*38*30	12/30/63	194	3.9	287.8	-17.1	95.8	53.760	-21.4	19*47*28	9.0			524
2876	2	-136.97	22*53*19	12/30/63	194	3.9	287.7	-16.8	95.8	53.749	-73.2	23* 2* 3	8.7			524
2877	2	-161.65	0*30*43	12/31/63	195	3.9	287.7	-16.6	95.9	53.746	-77.9	0*44* 3	13.3			524
2881	2	99.64	7* 0*21	12/31/63	195	3.9	287.6	-15.8	95.9	53.725	-42.5	7*34*33	34.2			524
2890	1	-122.39	21*37* 0	12/31/63	195	3.9	287.3	-14.1	96.3	53.672	-75.2	21*50*33	13.6			525
2891	2	-147.07	23*14*24	12/31/63	195	3.9	287.3	-13.9	96.3	53.666	-72.2	23*24* 3	9.7			525
2909	1	128.82	4*27*43	1/ 2/ 4	197	4.0	286.7	-10.5	96.9	53.561	16.0	5* 2*33	34.8			526
2910	2	104.15	6* 5* 7	1/ 2/ 4	197	4.0	286.7	-10.4	97.0	53.555	-49.7	6*38*33	33.4			526
2911	2	79.48	7*42*31	1/ 2/ 4	197	4.0	286.7	-10.2	97.0	53.549	-52.5	8*19*33	37.0			526
2920	2	-142.57	22*19*11	1/ 2/ 4	197	4.2	286.5	-8.5	97.3	53.497	-74.1	22*28* 3	8.9			527
2923	1	143.41	3*11*24	1/ 3/ 4	198	4.2	286.3	-8.0	97.4	53.480	-57.4	3*44*33	33.2			527
2933	1	-103.31	19*25*28	1/ 3/ 4	198	4.5	286.0	-6.4	0.3	53.422	-77.0	19*36*33	11.1			528
2935	2	-152.65	22*40*16	1/ 3/ 4	198	4.5	285.9	-6.0	0.4	53.410	-72.7	22*51* 3	10.8			528
2937	1	157.99	1*55* 5	1/ 4/ 4	199	4.6	285.9	-5.7	0.5	53.399	-61.9	2*27* 3	32.0			528
2938	1	133.33	3*32*29	1/ 4/ 4	199	4.6	285.8	-5.5	0.5	53.393	-53.6	4* 7*57	35.5			528
2940	2	83.98	6*47*18	1/ 4/ 4	199	4.6	285.8	-5.2	0.6	53.382	-38.2	7*25* 3	37.8			528
2947	1	-88.72	18* 9* 9	1/ 4/ 4	199	4.8	285.6	-3.9	0.8	53.342	-85.1	18*18* 3	8.9			529
2948	1	-113.39	19*46*33	1/ 4/ 4	199	4.8	285.7	-3.6	0.9	53.336	-60.9	19*59* 3	12.5			529

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE				
		SATELLITE ORBITAL ASCENDING NODE (AND)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T AND	
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL ND.
2949	2	-138.06	21*23*57	1/ 4/ 4	199	4.9	285.6	-3.5	0.9	53.330	-71.7	21*32*33	8.6			529
2952	1	147.91	2*16*10	1/ 5/ 4	200	4.9	285.7	-2.9	1.1	53.313	-65.9	2*48*33	32.4			529
2953	1	123.24	3*53*34	1/ 5/ 4	200	5.0	285.7	-2.6	1.1	53.308	-52.7	4*30*33	37.0			529
2954	2	98.57	5*30*59	1/ 5/ 4	200	5.0	285.7	-2.5	1.1	53.302	-44.0	6* 4*33	33.6			529
2962	1	-98.80	18*30*14	1/ 5/ 4	200	5.1	285.6	-0.8	1.5	53.257	-77.8	18*41* 3	10.8			530
2963	1	-123.48	20* 7*38	1/ 5/ 4	200	5.1	285.6	-0.7	1.5	53.251	-60.4	20*21*33	13.9			530
2964	2	-148.14	21*45* 2	1/ 5/ 4	200	5.1	285.5	-0.5	1.6	53.246	-71.5	21*55* 3	10.0			530
2966	1	162.50	0*59*51	1/ 6/ 4	201	5.1	285.5	-0.1	1.6	53.235	-62.7	1*30*57	31.1			530
2967	1	137.82	2*37*16	1/ 6/ 4	201	5.1	285.5	0.1	1.6	53.229	-54.4	3*11*27	34.2			530
2969	2	88.48	5*52* 4	1/ 6/ 4	201	5.2	285.5	0.5	1.7	53.218	-40.1	6*28*33	36.5			530
2977	1	-108.89	18*51*19	1/ 6/ 4	201	5.3	285.4	2.1	2.1	53.174	-80.7	19* 3* 3	11.7			531
2978	2	-133.56	20*28*44	1/ 6/ 4	201	5.4	285.4	2.3	2.1	53.169	-73.2	20*37* 3	8.3			531
2979	2	-158.23	22* 6* 8	1/ 6/ 4	201	5.4	285.4	2.5	2.2	53.163	-76.8	22*19*33	13.4			531
2981	1	152.40	1*20*57	1/ 7/ 4	202	5.4	285.4	2.9	2.3	53.152	-43.0	1*52*57	32.0			531
2983	2	103.06	4*35*45	1/ 7/ 4	202	5.5	285.5	3.4	2.3	53.141	-40.1	5* 9* 3	33.3			531
2991	1	-94.31	17*35* 0	1/ 7/ 4	202	5.7	285.4	4.9	2.7	53.098	-78.3	17*45* 3	10.1			532
2992	1	-118.98	19*12*25	1/ 7/ 4	202	5.8	285.4	5.1	2.7	53.093	-75.7	19*25*33	13.1			532
2993	2	-143.66	20*49*49	1/ 7/ 4	202	5.8	285.4	5.3	2.8	53.088	-72.1	20*59* 3	9.2			532
2995	1	166.99	0* 4*38	1/ 8/ 4	203	5.9	285.4	5.7	2.9	53.077	-64.6	0*34*33	29.9			532
2996	1	142.32	1*42* 2	1/ 8/ 4	203	5.9	285.4	5.8	2.9	53.072	5.4	2*15* 3	33.0			532
2998	2	92.97	4*56*51	1/ 8/ 4	203	6.0	285.4	6.2	2.9	53.061	-41.4	5*32* 3	35.2			532
3006	1	-104.40	17*56* 6	1/ 8/ 4	203	6.3	285.4	7.7	3.3	53.019	-76.4	18* 7* 3	11.0			533
3007	2	-129.07	19*33*30	1/ 8/ 4	203	6.3	285.3	7.9	3.4	53.014	-74.5	19*41* 3	7.6			533
3008	2	-153.74	21*10*54	1/ 8/ 4	203	6.3	285.3	8.1	3.4	53.009	-77.1	21*22* 3	11.2			533
3010	1	156.91	0*25*43	1/ 9/ 4	204	6.4	285.4	8.6	3.5	52.999	-52.1	0*56*33	30.8			533
3011	1	132.24	2* 3* 8	1/ 9/ 4	204	6.5	285.4	8.7	3.6	52.994	-55.0	2*37*33	34.4			533

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE				
		SATELLITE ORBITAL EQUATOR CROSSING AT ASCENDING NODE (AND)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T AND	
ORBIT NO.	CDA STA	EARTH LONGI-TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI-NA-TION (DEG)	RIGHT ASCEN-SION (DEG)	MINI-MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU-TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU-TES W/R/T AND	FROM- TO-	FMR TAPE REEL NO.
3013	2	82.89	5*17*56	1/ 9/ 4	204	6.5	285.4	9.1	3.7	52.983	-19.8	5*54*33	36.6		533
3021	1	-114.48	18*17*11	1/ 9/ 4	204	6.8	285.4	10.6	4.0	52.941	-76.0	18*29*33	12.4		534
3022	2	-139.15	19*54*36	1/ 9/ 4	204	6.9	285.4	10.8	4.1	52.935	-72.2	20* 3* 3	8.5		534
3025	1	146.82	0*46*49	1/10/ 4	205	7.0	285.4	11.4	4.2	52.929	-21.4	1*19*33	32.7		534
3027	2	97.48	4* 1*37	1/10/ 4	205	7.1	285.4	11.7	4.4	52.923	-40.9	4*36*33	34.9		534
3035	1	-99.89	17* 0*52	1/10/ 4	205	7.5	285.5	13.2	4.7	52.860	-76.7	17*11* 3	10.2		535
3037	2	-149.23	20*15*41	1/10/ 4	205	7.6	285.5	13.6	4.8	52.850	-79.1	20*26* 3	10.4		535
3039	1	161.41	23*30*30	1/10/ 4	205	7.7	285.6	14.0	5.0	52.839	-63.1	0* 1*33	31.1		535
3040	1	136.74	1* 7*54	1/11/ 4	206	7.7	285.6	14.2	5.0	52.834	-55.0	1*42*33	34.7		535
3042	2	87.40	4*22*43	1/11/ 4	206	7.8	285.7	14.6	5.1	52.824	-39.7	4*58*33	35.8		535
3050	1	-109.97	17*21*58	1/11/ 4	206	8.2	285.7	16.1	5.5	52.782	-79.8	17*34* 3	12.1		536
3052	2	-159.32	20*36*46	1/11/ 4	206	8.3	285.8	16.4	5.6	52.772	-61.8	20*48*33	11.8		536
3054	1	151.33	23*51*35	1/11/ 4	206	8.4	285.8	16.8	5.8	52.761	-61.7	0*23*33	32.0		536
3055	1	126.66	1*28*59	1/12/ 4	207	8.5	285.8	16.9	5.8	52.756	-53.6	2* 4*33	35.6		536
3064	1	-95.38	16* 5*39	1/12/ 4	207	9.0	285.9	18.5	6.4	52.709	-88.8	16*15* 3	9.4		537
3065	1	-120.06	17*43* 3	1/12/ 4	207	9.0	285.9	18.7	6.4	52.704	-74.8	17*56*33	13.5		537
3066	2	-144.72	19*20*27	1/12/ 4	207	9.1	286.0	19.0	6.5	52.699	-71.7	19*30* 3	9.6		537
3069	1	141.25	0*12*40	1/13/ 4	208	9.3	286.1	19.5	6.7	52.683	-59.7	0*45*33	32.9		537
3071	2	91.90	3*27*29	1/13/ 4	208	9.4	286.1	19.8	6.8	52.673	-41.4	4* 2* 3	34.6		537
3079	1	-105.46	16*26*44	1/13/ 4	208	9.9	286.2	21.1	7.3	52.631	-77.4	16*38* 3	11.3		538
3080	2	-130.13	18* 4* 8	1/13/ 4	208	10.0	286.2	21.3	7.4	52.625	-73.9	18*11*33	7.4		538
3081	2	-154.81	19*41*33	1/13/ 4	208	10.1	286.3	21.4	7.5	52.620	-70.0	19*52*33	11.0		538
3083	3	155.84	22*56*21	1/13/ 4	208	10.2	286.3	21.7	7.5	52.610	-64.1	23*15*33	19.2		538
3084	3	131.13	0*33*46	1/14/ 4	209	10.3	286.3	21.9	7.6	52.604	-58.4	0*56*33	22.8		538
3085	3	106.45	2*11*10	1/14/ 4	209	10.3	286.3	22.1	7.7	52.599	-63.2	2*35*33	24.4		538
3094	1	-115.59	16*47*49	1/14/ 4	209	11.3	286.5	23.6	8.3	52.552	-76.6	17* 0* 3	12.2		539

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL EQUATOR CROSSING AT ASCENDING NODE (AND)				SPIN VECTOR ATTITUDE					BEGIN	END		DROPOUTS, MINUTES W/R/T AND		
ORBIT NO.	COA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
3095	2	-140.26	18*25*14	1/14/ 4	209	11.7	286.4	23.4	8.5	52.547	-34.5	18*34* 3	8.8			539
3098	3	145.72	23*17*27	1/14/ 4	209	13.0	286.0	22.9	8.8	52.531	-70.1	23*38*33	21.1			539
3099	3	121.04	0*54*51	1/15/ 4	210	13.4	286.0	22.7	8.9	52.525	-56.0	1*18* 3	23.2			539
3108	1	-101.00	15*31*30	1/15/ 4	210	17.9	287.0	21.7	10.5	52.478	-84.5	15*42* 3	10.6			540
3109	1	-125.67	17* 8*55	1/15/ 4	210	18.3	286.9	21.6	10.6	52.473	-74.4	17*25*33	16.6			540
3110	2	-150.34	18*46*19	1/15/ 4	210	18.7	286.8	21.4	10.8	52.467	-69.3	18*56*33	10.2			540
3126	3	174.89	20*44*48	1/16/ 4	211	25.6	288.0	19.3	13.1	52.383	-70.9	21* 3*33	18.8			541
3127	3	150.22	22*22*13	1/16/ 4	211	26.0	288.0	19.2	13.2	52.378	-24.3	22*42* 3	19.8			541
3128	3	125.55	23*59*37	1/16/ 4	211	26.1	288.1	19.0	13.4	52.372	-57.6	0*21*33	21.9			541
3129	3	100.88	1*37* 2	1/17/ 4	212	26.2	288.1	19.1	13.5	52.367	-71.0	2* 2*33	25.5			541
3137	1	-96.49	14*36*16	1/17/ 4	212	27.2	288.8	19.8	14.1	52.325	-95.3	14*46* 3	9.8			542
3139	2	-145.84	17*51* 5	1/17/ 4	212	27.4	288.8	19.9	14.3	52.314	-95.4	18* 1* 3	10.0			542
3141	3	164.81	21* 5*54	1/17/ 4	212	27.6	288.9	20.0	14.5	52.304	-84.7	21*26*33	20.7			542
3142	3	140.13	22*43*18	1/17/ 4	212	27.8	288.9	20.0	14.5	52.298	-43.2	23* 3*33	20.3			542
3143	3	115.46	0*20*42	1/18/ 4	213	27.9	288.9	20.1	14.6	52.293	-71.8	0*44*33	23.9			542
3144	2	90.79	1*58* 7	1/18/ 4	213	28.0	289.0	20.1	14.7	52.288	-62.1	2*36* 8	38.0			542
3153	2	-131.25	16*34*46	1/18/ 4	213	29.0	289.7	20.7	15.5	52.240	-82.1	16*42*33	7.8			543
3156	3	154.72	21*26*59	1/18/ 4	213	29.3	289.9	20.9	15.7	52.225	-71.7	21*46*33	19.6			543
3157	3	130.05	23* 4*23	1/18/ 4	213	29.4	289.9	20.9	15.8	52.219	-73.2	23*26*33	22.2			543
3158	3	105.38	0*41*48	1/19/ 4	214	29.5	290.1	21.0	15.9	52.214	-59.3	1* 6*33	24.8			543
3159	2	80.71	2*19*12	1/19/ 4	214	29.6	290.3	21.1	16.0	52.209	-66.4	2*56*33	37.4			543
3166	1	-91.99	13*41* 2	1/19/ 4	214	30.3	291.1	21.6	16.8	52.172	-95.8	13*50*28	9.4			544
3171	3	144.64	21*48* 4	1/19/ 4	214	30.7	291.4	21.9	17.1	52.146	-60.5	22* 8*33	20.5			544
3172	3	119.97	23*25*29	1/19/ 4	214	30.8	291.5	21.9	17.2	52.140	-57.9	23*47*33	22.1			544
3173	3	95.29	1* 2*53	1/20/ 4	215	30.9	291.6	22.0	17.3	52.135	-47.2	1*28*33	25.7			544
3181	1	-102.08	14* 2* 8	1/20/ 4	215	31.5	292.7	22.4	18.1	52.093	-94.0	14*13* 3	10.9			545

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE				
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (ANO)				SPIN VECTOR ATTITUDE					BEGIN	E N D		DROPOUTS, MINUTES W/R/T ANO	
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM- TO-	FMR TAPE REEL NO.
3182	2	-126.75	15*39*32	1/20/ 4	215	31.6	292.8	22.5	18.2	52.088	-15.0	15*46*33	7.0		545
3183	2	-151.42	17*16*56	1/20/ 4	215	31.7	292.9	22.5	18.3	52.082	-83.5	17*27*33	10.6		545
3185	3	159.23	20*31*45	1/20/ 4	215	31.8	293.0	22.6	18.4	52.072	-57.3	20*53* 3	21.3		545
3187	3	109.88	23*46*34	1/20/ 4	215	32.0	293.3	22.7	18.6	52.061	-47.4	0*10* 3	23.5		545
3195	1	-87.51	12*45*49	1/21/ 4	216	32.5	294.5	23.1	19.4	52.019	-67.1	12*56* 3	10.2		546
3196	1	-112.18	14*23*13	1/21/ 4	216	32.6	294.6	23.1	19.5	52.014	-80.3	14*36* 3	12.8		546
3197	2	-136.86	16* 0*37	1/21/ 4	216	32.6	294.6	23.2	19.6	52.009	-79.0	16*10* 3	9.4		546
3198	2	-161.53	17*38* 2	1/21/ 4	216	32.6	294.7	23.2	19.7	52.004	-82.1	17*50*33	12.5		546
3199	3	173.78	19*15*26	1/21/ 4	216	32.7	294.8	23.3	19.8	51.998	-52.2	19*35*33	20.1		546
3200	1	149.11	20*52*50	1/21/ 4	216	32.8	294.9	23.3	19.9	51.993	-70.8	21*27* 3	34.2		546
3201	1	124.44	22*30*15	1/21/ 4	216	32.8	295.0	23.3	20.0	51.988	-56.0	23* 7* 3	36.8		546
3202	3	99.77	0* 7*39	1/22/ 4	217	32.9	295.1	23.3	20.0	51.983	-48.0	0*33* 3	25.4		546
3203	2	75.10	1*45* 3	1/22/ 4	217	33.0	295.3	23.3	20.1	51.978	-66.2	2*24* 3	39.0		546
3210	1	-97.60	13* 6*54	1/22/ 4	217	33.3	296.3	23.6	20.8	51.941	-94.9	13*17* 3	10.2		547
3211	1	-122.27	14*44*18	1/22/ 4	217	33.3	296.4	23.6	20.9	51.936	-81.8	14*58* 3	13.8		547
3212	2	-146.94	16*21*42	1/22/ 4	217	33.4	296.5	23.7	21.0	51.930	-78.7	16*31*33	9.9		547
3214	1	163.70	19*36*31	1/22/ 4	217	33.4	296.8	23.8	21.2	51.920	-69.3	20* 7* 3	30.5		547
3215	1	139.03	21*13*56	1/22/ 4	217	33.5	296.9	23.8	21.3	51.915	-43.6	21*47*33	33.6		547
3216	2	114.36	22*51*20	1/22/ 4	217	33.5	297.0	23.8	21.4	51.910	-32.2	23*23*33	32.2		547
3217	2	89.68	0*28*44	1/23/ 4	218	33.6	297.2	23.8	21.5	51.904	-59.6	1* 4*33	35.8		547
3225	1	-107.69	13*27*59	1/23/ 4	218	33.8	298.4	24.0	22.3	51.863	-31.8	13*39*33	11.6		548
3226	2	-132.35	15* 5*23	1/23/ 4	218	33.8	298.5	24.0	22.4	51.858	-80.5	15*13* 3	7.7		548
3227	2	-157.03	16*42*48	1/23/ 4	218	33.9	298.6	24.0	22.5	51.852	-84.4	16*55* 3	12.3		548
3229	1	153.62	19*57*36	1/23/ 4	218	33.9	298.8	24.0	22.7	51.842	-72.0	20*30*33	33.0		548
3230	3	128.94	21*35* 1	1/23/ 4	218	33.9	298.9	24.0	22.8	51.837	-22.0	21*56*33	21.5		548
3231	2	104.27	23*12*25	1/23/ 4	218	34.0	299.1	24.0	22.9	51.832	-70.4	23*47* 3	34.6		548

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL	EQUATOR ASCENDING	CROSSING NODE	AT (ANO)	SPIN	VECTOR	ATTITUDE			BEGIN	E N C		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
3239	1	-93.10	12*11*40	1/24/ 4	219	34.1	300.2	24.1	23.6	51.790	-94.2	12*21* 3	9.4			549
3240	1	-117.77	13*49* 4	1/24/ 4	219	34.1	300.3	24.1	23.7	51.785	-80.1	14* 2* 3	13.0			549
3241	2	-142.44	15*26*29	1/24/ 4	219	34.1	300.4	24.1	23.8	51.780	-79.1	15*36* 3	9.6			549
3243	1	168.20	18*41*17	1/24/ 4	219	34.1	300.6	24.1	24.0	51.770	-74.9	19*11*33	30.3			549
3244	1	143.53	20*18*42	1/24/ 4	219	34.1	300.7	24.1	24.0	51.765	-44.0	20*52*33	33.9			549
3245	3	118.86	21*56* 6	1/24/ 4	219	34.1	300.8	24.1	24.1	51.759	-52.2	22*19* 3	23.0			549
3246	2	94.19	23*33*30	1/24/ 4	219	34.1	300.9	24.1	24.2	51.754	18.6	0* 8*33	35.1			549
3253	1	-78.51	10*55*21	1/25/ 4	220	34.1	301.8	24.1	24.9	51.718	-82.6	11* 5* 3	9.7			550
3254	1	-103.18	12*32*45	1/25/ 4	220	34.1	301.9	24.1	24.9	51.713	-80.0	12*43* 3	10.3			550
3255	1	-127.85	14*10* 9	1/25/ 4	220	34.1	302.0	24.1	25.0	51.708	-81.6	14*26* 3	15.9			550
3256	2	-152.52	15*47*34	1/25/ 4	220	34.1	302.1	24.1	25.1	51.703	-76.0	15*58* 3	10.5			550
3258	1	158.12	19* 2*22	1/25/ 4	220	34.1	302.2	24.1	25.3	51.693	-73.8	19*33*33	31.2			550
3259	1	133.45	20*39*47	1/25/ 4	220	34.1	302.3	24.0	25.4	51.688	-60.0	21*14*33	34.8			550
3260	3	108.78	22*17*11	1/25/ 4	220	34.1	302.4	24.0	25.5	51.682	-49.3	22*40*33	23.4			550
3261	2	84.11	23*54*35	1/25/ 4	220	34.1	302.6	24.0	25.6	51.677	-68.1	0*31*33	37.0			550
3268	1	-88.59	11*16*26	1/26/ 4	221	33.9	303.5	23.8	26.3	51.642	-96.1	11*25*28	9.0			551
3269	1	-113.26	12*53*50	1/26/ 4	221	33.9	303.6	23.8	26.4	51.636	-83.0	13* 6* 3	12.2			551
3270	2	-137.94	14*31*15	1/26/ 4	221	33.9	303.7	23.8	26.5	51.631	-78.7	14*40* 3	8.8			551
3271	2	-162.61	16* 8*39	1/26/ 4	221	33.9	303.8	23.8	26.5	51.626	-82.4	16*22*33	13.9			551
3272	1	172.71	17*46* 3	1/26/ 4	221	33.8	303.9	23.8	26.5	51.621	-74.3	18*16*33	30.5			551
3273	1	148.04	19*23*28	1/26/ 4	221	33.8	304.0	23.7	26.6	51.616	-61.2	19*57*33	34.1			551
3275	2	98.69	22*38*16	1/26/ 4	221	33.8	304.2	23.7	26.8	51.606	-69.6	23*13*33	35.3			551
3283	1	-98.68	11*37*31	1/27/ 4	222	33.6	305.1	23.4	27.6	51.566	-94.7	11*47*33	10.0			552
3284	1	-123.35	13*14*55	1/27/ 4	222	33.5	305.2	23.4	27.7	51.561	-82.3	13*28*33	13.6			552
3285	2	-148.02	14*52*19	1/27/ 4	222	33.5	305.3	23.4	27.8	51.555	-72.8	15* 2* 3	9.7			552
3287	1	162.62	18* 7* 8	1/27/ 4	222	33.5	305.5	23.3	28.0	51.548	-73.9	18*37*33	30.4			552

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL	EQUATOR ASCENDING	CROSSING NODE (ANO)		SPIN	VECTOR	ATTITUDE			BEGIN	END		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
3288	1	137.96	19*44*32	1/27/ 4	222	33.4	305.6	23.2	28.0	51.543	-61.2	20*17*33	33.0			552
3289	2	113.28	21*21*57	1/27/ 4	222	33.4	305.7	23.2	28.0	51.537	-58.4	21*54*33	32.6			552
3290	2	88.61	22*59*21	1/27/ 4	222	33.4	305.8	23.1	28.1	51.532	-58.9	23*36*33	37.2			552
3298	1	-108.77	11*58*36	1/28/ 4	223	32.8	307.2	22.8	29.0	51.489	-68.0	12* 9* 3	10.5			553
3299	2	-133.45	13*36* 0	1/28/ 4	223	32.7	307.4	22.8	29.1	51.484	-81.3	13*43*33	7.6			553
3300	2	-158.12	15*13*25	1/28/ 4	223	32.5	307.5	22.8	29.2	51.478	-84.3	15*24*33	11.1			553
3302	1	152.53	18*28*13	1/28/ 4	223	32.3	307.7	22.9	29.5	51.468	-73.2	18*59*33	31.3			553
3303	1	127.86	20* 5*38	1/28/ 4	223	32.2	307.9	22.9	29.6	51.462	-59.2	20*42* 3	36.4			553
3304	2	103.18	21*43* 2	1/28/ 4	223	32.1	308.2	22.8	29.7	51.457	-55.5	22*18* 3	35.0			553
3305	2	78.51	23*20*26	1/28/ 4	223	32.0	308.6	22.7	29.8	51.451	-57.0	0* 1* 3	40.6			553
3312	1	-94.19	10*42*17	1/29/ 4	224	30.3	310.9	22.8	30.9	51.413	-95.7	10*51*33	9.3			554
3313	1	-118.86	12*19*41	1/29/ 4	224	30.1	311.0	22.9	31.1	51.408	-83.0	12*33*33	13.9			554
3314	2	-143.53	13*57* 5	1/29/ 4	224	29.9	311.1	23.0	31.2	51.402	-78.6	14* 6*33	9.5			554
3341	1	-89.68	9*47* 3	1/31/ 4	226	22.7	316.9	23.[illegible]	35.1	51.254	-41.9	9*55*33	8.5			555
3342	1	-114.35	11*24*27	1/31/ 4	226	22.4	316.9	23.3	35.2	51.249	-83.5	11*36*33	12.1			555
3343	2	-139.03	13* 1*51	1/31/ 4	226	22.0	317.0	23.4	35.3	51.243	-80.2	13*10*33	8.7			555
3344	2	-163.70	14*39*16	1/31/ 4	226	21.8	317.0	23.5	35.4	51.238	-84.4	14*53*33	14.3			555
3345	1	171.62	16*16*40	1/31/ 4	226	21.5	317.0	23.6	35.6	51.232	-34.3	16*47*33	30.9			555
3346	1	146.95	17*54* 4	1/31/ 4	226	21.3	317.1	23.6	35.7	51.227	-61.5	18*27* 3	33.0			555
3347	3	122.28	19*31*29	1/31/ 4	226	21.1	317.1	23.6	35.8	51.221	-43.3	19*57*33	26.1			555
3356	1	-99.76	10* 8* 8	2/ 1/ 4	227	20.7	317.7	22.3	36.6	51.171	-15.4	10*18*33	10.4			556
3357	1	-124.44	11*45*32	2/ 1/ 4	227	20.7	317.7	22.2	36.6	51.166	-81.6	12* 1*33	16.0			556
3358	2	-149.11	13*22*56	2/ 1/ 4	227	20.7	317.8	22.0	36.7	51.160	-76.6	13*33*33	10.6			556
3360	1	161.54	16*37*45	2/ 1/ 4	227	20.7	317.8	21.7	36.7	51.149	10.8	17*10*33	32.8			556
3361	1	136.87	18*15* 9	2/ 1/ 4	227	20.7	317.8	21.5	36.8	51.144	-58.6	18*52* 3	36.9			556
3370	1	-85.18	8*51*48	2/ 2/ 4	228	20.7	317.7	20.1	37.3	51.094	-96.9	9* 0* 3	8.3			557

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL	EQUATOR ASCENDING	CROSSING NODE (ANO)		SPIN	VECTOR	ATTITUDE			BEGIN	END		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	COA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
3372	2	-134.52	12* 6*37	2/ 2/ 4	228	20.8	317.7	19.8	37.4	51.083	-80.2	12*15* 3	8.4			557
3373	2	-159.19	13*44* 1	2/ 2/ 4	228	20.8	317.8	19.6	37.4	51.077	-84.0	13*56* 3	12.0			557
3375	1	151.45	16*58*50	2/ 2/ 4	228	20.7	317.8	19.3	37.6	51.066	20.4	17*32* 3	33.2			557
3376	1	126.78	18*36*14	2/ 2/ 4	228	20.7	317.8	19.1	37.6	51.061	-58.5	19*15* 3	38.8			557
3377	3	102.11	20*13*39	2/ 2/ 4	228	20.7	317.8	19.0	37.6	51.055	-53.4	20*39*33	25.9			557
3378	2	77.44	21*51* 3	2/ 2/ 4	228	20.7	317.7	18.8	37.6	51.050	-64.4	22*31*33	40.5			557
3385	1	-95.26	9*12*53	2/ 3/ 4	229	21.0	317.8	17.5	38.0	51.011	-95.0	9*23* 3	10.2			558
3386	1	-119.93	10*50*18	2/ 3/ 4	229	21.0	317.8	17.3	38.0	51.006	-81.5	11* 4* 3	13.8			558
3387	2	-144.60	12*27*42	2/ 3/ 4	229	21.0	317.8	17.1	38.1	51.000	-78.9	12*37* 3	9.4			558
3389	1	166.04	15*42*31	2/ 3/ 4	229	21.1	317.9	16.7	38.2	50.989	-72.2	16*15* 3	32.5			558
3390	1	141.37	17*19*55	2/ 3/ 4	229	21.1	317.9	16.5	38.2	50.984	-52.0	17*56* 3	36.1			558
3392	2	92.03	20*34*44	2/ 3/ 4	229	21.1	317.8	16.2	38.3	50.958	-65.8	21*14* 3	39.3			558
3399	1	-80.70	7*56*34	2/ 4/ 4	230	21.4	317.7	14.9	38.5	50.918	-94.7	8* 6*33	10.0			559
3400	1	-105.37	9*33*58	2/ 4/ 4	230	21.5	317.7	14.7	38.5	50.912	-81.4	9*46*33	12.6			559
3401	2	-130.05	11*11*23	2/ 4/ 4	230	21.5	317.7	14.4	38.6	50.906	-78.5	11*19*33	8.2			559
3402	2	-154.72	12*48*47	2/ 4/ 4	230	21.5	317.7	14.2	38.6	50.900	-83.8	12*59*33	10.8			559
3405	3	131.26	17*41* 0	2/ 4/ 4	230	21.5	317.7	13.7	38.8	50.883	-71.6	18* 5* 3	24.1			559
3406	3	106.58	19*18*24	2/ 4/ 4	230	21.6	317.7	13.5	38.8	50.877	-68.5	19*45* 3	26.7			559
3407	2	81.91	20*55*49	2/ 4/ 4	230	21.6	317.7	13.3	38.9	50.871	-64.9	21*35* 3	39.2			559
3414	1	-90.79	8*17*39	2/ 5/ 4	231	22.0	317.7	11.9	39.0	50.830	-96.1	8*26*33	8.9			560
3415	1	-115.46	9*55* 3	2/ 5/ 4	231	22.0	317.7	11.7	39.1	50.824	-81.9	10* 7*33	12.5			560
3417	2	-164.80	13* 9*52	2/ 5/ 4	231	22.1	317.7	11.3	39.1	50.813	-83.6	13*24*33	14.7			560
3419	3	145.84	16*24*41	2/ 5/ 4	231	22.1	317.7	10.9	39.2	50.801	-83.8	16*45*33	20.9			560
3420	3	121.17	18* 2* 5	2/ 5/ 4	231	22.2	317.7	10.7	39.3	50.795	-71.2	18*28* 3	26.0			560
3421	2	96.50	19*39*30	2/ 5/ 4	231	22.2	317.6	10.5	39.3	50.789	9.9	20*17* 3	37.6			560
3429	1	-100.87	8*38*44	2/ 6/ 4	232	22.7	317.5	8.9	39.6	50.741	-17.4	8*49*28	10.7			561

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (AND)				SPIN VECTOR ATTITUDE					BEGIN	E N D		DROPOUTS, MINUTES W/R/T AND		
ORBIT NO.	COA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
3430	1	-125.54	10*16* 9	2/ 6/ 4	232	22.7	317.5	8.7	39.5	50.735	-81.4	10*32*58	16.8			561
3431	2	-150.21	11*53*33	2/ 6/ 4	232	22.7	317.5	8.5	39.5	50.729	-76.1	12* 4* 3	10.5			561
3433	1	160.43	15* 8*22	2/ 6/ 4	232	22.8	317.5	8.1	39.6	50.717	-73.4	15*39*33	31.2			561
3434	3	135.76	16*45*46	2/ 6/ 4	232	22.8	317.4	7.9	39.7	50.711	-60.0	17* 7*33	21.8			561
3435	3	111.09	18*23*10	2/ 6/ 4	232	22.9	317.4	7.7	39.7	50.705	-70.2	18*48* 3	24.9			561
3436	2	86.41	20* 0*35	2/ 6/ 4	232	22.9	317.4	7.5	39.7	50.699	-64.9	20*40* 3	39.5			561
3443	1	-86.28	7*22*25	2/ 7/ 4	233	23.5	317.3	6.0	39.9	50.657	-97.0	7*30*33	8.1			562
3445	2	-135.63	10*37*14	2/ 7/ 4	233	23.6	317.3	5.5	40.0	50.644	-79.5	10*44*33	7.3			562
3446	2	-160.30	12*14*38	2/ 7/ 4	233	23.7	317.3	5.3	40.0	50.638	-84.3	12*27*33	12.9			562
3448	1	150.35	15*29*27	2/ 7/ 4	233	23.8	317.3	4.9	40.0	50.626	-72.2	15*50*33	21.1			562
3449	3	125.67	17* 6*51	2/ 7/ 4	233	23.8	317.3	4.7	40.0	50.620	-57.9	17*29*33	22.7			562
3450	3	101.00	18*44*15	2/ 7/ 4	233	23.9	317.3	4.4	40.0	50.614	-68.8	19*11* 3	26.8			562
3451	2	76.33	20*21*40	2/ 7/ 4	233	24.0	317.2	4.2	40.1	50.608	-64.2	21* 2* 3	40.4			562
3458	1	-96.36	7*43*30	2/ 8/ 4	234	24.6	317.1	2.7	40.2	50.565	-94.7	7*53*33	10.1			563
3459	1	-121.04	9*20*54	2/ 8/ 4	234	24.7	317.1	2.5	40.2	50.559	-80.9	9*34*58	14.1			563
3460	2	-145.71	10*58*19	2/ 8/ 4	234	24.8	317.1	2.2	40.3	50.552	-78.3	11* 7*33	9.2			563
3461	2	-170.38	12*35*43	2/ 8/ 4	234	24.8	317.1	2.0	40.3	50.546	-83.1	12*51* 3	15.3			563
3462	3	164.94	14*13* 7	2/ 8/ 4	234	24.9	317.1	1.8	40.3	50.540	-75.8	14*33* 3	19.9			563
3464	3	115.59	17*27*56	2/ 8/ 4	234	25.0	317.1	1.3	40.4	50.528	-69.8	17*52* 3	24.1			563
3465	2	90.92	19* 5*20	2/ 8/ 4	234	25.1	317.1	1.0	40.4	50.521	-67.0	19*43* 3	37.7			563
3472	1	-81.78	6*27*11	2/ 9/ 4	235	25.8	316.9	-0.5	40.4	50.483	-95.7	6*36*33	9.4			564
3473	1	-106.45	8* 4*35	2/ 9/ 4	235	25.9	316.9	-0.7	40.4	50.477	-82.0	8*15*33	11.0			564
3474	2	-131.12	9*41*59	2/ 9/ 4	235	26.0	316.9	-1.0	40.5	50.465	-12.3	9*48*33	6.6			564
3475	2	-155.79	11*19*24	2/ 9/ 4	235	26.1	316.9	-1.2	40.5	50.459	-14.0	11*30* 3	10.7			564
3487	1	-91.86	6*48*16	2/10/ 4	236	27.2	316.6	-3.9	40.6	50.393	-13.8	6*57*33	9.3			565
3488	1	-116.53	8*25*40	2/10/ 4	236	27.3	316.6	-4.1	40.6	50.387	-22.2	8*38*33	12.9			565

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL	EQUATOR ASCENDING	CROSSING NODE	AT (ANO)	SPIN	VECTOR	ATTITUDE			BEGIN	E N D		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
3489	2	-141.21	10* 3* 4	2/10/ 4	236	27.4	316.6	-4.3	40.6	50.371	-12.8	10*11*33	8.5			565
3490	2	-165.88	11*40*29	2/10/ 4	236	27.5	316.6	-4.6	40.6	50.364	-13.4	11*55* 3	14.6			565
3492	3	144.77	14*55*17	2/10/ 4	236	27.6	316.6	-5.0	40.7	50.352	-13.2	15*15*33	20.3			565
3501	1	-77.29	5*31*56	2/11/ 4	237	28.7	316.5	-7.2	40.8	50.309	-22.3	5*40*33	8.6			566
3502	1	-101.97	7* 9*21	2/11/ 4	237	28.8	316.5	-7.4	40.8	50.303	-13.0	7*19* 3	9.7			566
3503	1	-126.64	8*46*45	2/11/ 4	237	28.7	316.4	-7.7	40.7	50.298	-13.0	9* 3*33	16.8			566
3504	2	-151.31	10*24* 9	2/11/ 4	237	28.6	316.4	-7.8	40.7	50.275	-13.1	10*35*33	11.4			566
3516	1	-87.38	5*53* 1	2/12/ 4	238	27.4	316.1	-9.2	41.4	50.198	-12.3	6* 2* 3	9.0			567
3517	1	-112.05	7*30*26	2/12/ 4	238	27.3	316.0	-9.3	41.5	50.192	-13.0	7*42*33	12.1			567
3518	2	-136.72	9* 7*50	2/12/ 4	238	27.2	316.0	-9.4	41.5	50.185	-12.2	9*16*33	8.7			567
3519	2	-161.39	10*45*14	2/12/ 4	238	27.1	315.9	-9.5	41.6	50.179	-11.7	10*58*33	13.3			567
3521	3	149.25	14* 0* 3	2/12/ 4	238	27.0	315.8	-9.8	41.6	50.166	-12.3	14*21*33	21.5			567
3531	1	-97.46	6*14* 6	2/13/ 4	239	26.0	315.7	-11.1	42.2	50.101	-94.5	6*24*33	10.5			568
3532	1	-122.13	7*51*31	2/13/ 4	239	25.9	315.6	-11.2	42.2	50.094	-81.6	8* 7*33	16.0			568
3533	2	-146.81	9*28*55	2/13/ 4	239	25.8	315.5	-11.3	42.3	50.088	-76.5	9*38*33	9.6			568
3534	2	-171.48	11* 6*19	2/13/ 4	239	25.8	315.5	-11.4	42.3	50.081	-82.0	11*21*33	15.2			568
3535	3	163.84	12*43*44	2/13/ 4	239	25.7	315.4	-11.6	42.4	50.075	-76.3	13* 4*33	20.8			568
3536	3	139.17	14*21* 8	2/13/ 4	239	25.6	315.3	-11.7	42.4	50.068	-71.2	14*41*33	20.4			568
3537	3	114.49	15*58*32	2/13/ 4	239	25.6	315.3	-11.8	42.5	50.062	-71.5	16*24* 3	25.5			568
3538	2	89.82	17*35*57	2/13/ 4	239	25.5	315.3	-11.9	42.5	50.055	-21.0	18*13* 3	37.1			568
3545	1	-82.87	4*57*47	2/14/ 4	240	24.8	315.2	-13.0	42.8	50.010	-95.4	5* 6*33	8.8			569
3546	1	-107.54	6*35*11	2/14/ 4	240	24.7	315.2	-13.1	42.9	50.003	-41.8	6*46*33	11.4			569
3547	2	-132.22	8*12*35	2/14/ 4	240	24.6	315.1	-13.2	42.9	49.997	-80.0	8*20*33	8.0			569
3548	2	-156.89	9*50* 0	2/14/ 4	240	24.5	315.0	-13.3	43.0	49.990	-83.9	10* 1*33	11.6			569
3549	3	178.43	11*27*24	2/14/ 4	240	24.4	314.9	-13.4	43.0	49.983	-79.6	11*46* 3	18.7			569
3550	3	153.75	13* 4*48	2/14/ 4	240	24.4	314.9	-13.5	43.1	49.977	-73.7	13*23*33	18.8			569

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL	EQUATOR ASCENDING	CROSSING NODE (AND)	AT	SPIN	VECTOR	ATTITUDE			BEGIN	E N D		DROPOUTS, MINUTES W/R/T AND		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
3551	3	129.08	14*42*13	2/14/ 4	240	24.3	314.8	-13.6	43.1	49.970	-73.4	15* 3*33	21.3			569
3552	3	104.41	16*19*37	2/14/ 4	240	24.2	314.8	-13.8	43.2	49.964	-70.0	16*43*33	23.9			569
3553	2	79.74	17*57* 1	2/14/ 4	240	24.1	314.8	-13.9	43.2	49.957	-65.8	18*36* 3	39.0			569
3560	1	-92.96	5*18*52	2/15/ 4	241	23.5	314.6	-14.9	43.5	49.911	-95.1	5*28*33	9.7			570
3561	1	-117.63	6*56*16	2/15/ 4	241	23.4	314.5	-15.0	43.6	49.905	-82.5	7* 8*33	12.3			570
3562	2	-142.30	8*33*40	2/15/ 4	241	23.3	314.4	-15.1	43.6	49.898	-79.5	8*42*33	8.9			570
3563	2	-166.98	10*11* 5	2/15/ 4	241	23.2	314.3	-15.2	43.7	49.892	-83.1	10*25*33	14.5			570
3564	1	168.34	11*48*29	2/15/ 4	241	23.2	314.3	-15.3	43.7	49.885	-74.5	12*18*33	30.1			570
3565	3	143.67	13*25*53	2/15/ 4	241	23.1	314.2	-15.4	43.7	49.878	-61.7	13*45*33	19.7			570
3566	3	119.00	15* 3*18	2/15/ 4	241	23.1	314.2	-15.6	43.8	49.872	-72.5	15*26*33	23.3			570
3567	2	94.33	16*40*42	2/15/ 4	241	23.0	314.1	-15.7	43.8	49.865	-66.4	17*19* 3	38.4			570
3574	1	-78.37	4* 2*32	2/16/ 4	242	22.3	314.0	-16.8	44.2	49.819	-94.5	4*12*33	10.0			571
3575	1	-103.04	5*39*57	2/16/ 4	242	22.3	314.0	-16.9	44.2	49.812	-82.3	5*50*33	10.6			571
3576	2	-127.72	7*17*21	2/16/ 4	242	22.2	313.9	-17.0	44.2	49.806	-81.7	7*24*33	7.2			571
3577	2	-152.39	8*54*45	2/16/ 4	242	22.1	313.8	-17.1	44.3	49.799	-84.1	9* 5*33	10.8			571
3578	3	-177.06	10*32*10	2/16/ 4	242	22.1	313.7	-17.2	44.3	49.793	-40.4	10*50* 3	17.9			571
3579	3	158.26	12* 9*34	2/16/ 4	242	22.0	313.6	-17.3	44.4	49.786	-73.4	12*28*33	19.0			571
3580	3	133.59	13*46*58	2/16/ 4	242	22.0	313.6	-17.5	44.4	49.779	-73.4	14* 7*33	20.6			571
3581	3	108.91	15*24*23	2/16/ 4	242	21.9	313.5	-17.6	44.5	49.773	-70.5	15*48*33	24.2			571
3582	2	84.24	17* 1*47	2/16/ 4	242	21.8	313.5	-17.7	44.5	49.766	-66.2	17*40*33	38.8			571
3589	1	-88.46	4*23*37	2/17/ 4	243	21.2	313.2	-18.7	44.9	49.720	-4.3	4*32*33	8.9			572
3590	1	-113.13	6* 1* 2	2/17/ 4	243	21.1	313.2	-18.9	44.9	49.713	-82.3	6*12*33	11.5			572
3591	2	-137.80	7*38*26	2/17/ 4	243	21.1	313.1	-19.0	45.0	49.707	-80.2	7*46*33	8.1			572
3592	2	-162.47	9*15*50	2/17/ 4	243	21.0	313.0	-19.1	45.0	49.700	-84.3	9*30*33	14.7			572
3593	3	172.85	10*53*15	2/17/ 4	243	21.0	312.9	-19.2	45.1	49.693	-73.4	11*12*33	19.3			572
3594	3	148.18	12*30*39	2/17/ 4	243	20.9	312.8	-19.3	45.0	49.687	-72.2	12*50*33	19.9			572

READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE EQUATOR CROSSING AT ORBITAL ASCENDING NODE (AND)				SPIN	VECTOR ATTITUDE				BEGIN	END		DROPOUTS, MINUTES W/R/T AND		
ORBIT NO.	CDA STA	EARTH LONGI-TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI-NA-TION (DEG)	RIGHT ASCEN-SION (DEG)	MINI-MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU-TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU-TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
3595	3	123.50	14* 8* 3	2/17/ 4	243	20.9	312.8	-19.5	45.0	49.680	-71.8	14*30*33	22.5			572
3596	3	98.83	15*45*27	2/17/ 4	243	20.8	312.8	-19.6	45.1	49.673	-68.5	16*10* 3	24.6			572
3597	2	74.15	17*22*52	2/17/ 4	243	20.7	312.7	-19.7	45.1	49.667	-65.4	18* 2*33	39.7			572
3604	1	-98.55	4*44*42	2/18/ 4	244	20.1	312.5	-20.8	45.5	49.620	-35.8	4*56*33	11.9			573
3605	2	-123.22	6*22* 6	2/18/ 4	244	20.1	312.4	-20.9	45.6	49.614	-80.1	6*30*33	8.5			573
3606	2	-147.89	7*59*31	2/18/ 4	244	20.0	312.4	-21.1	45.6	49.607	-83.5	8* 9*33	10.0			573
3608	3	162.75	11*14*19	2/18/ 4	244	19.9	312.2	-21.3	45.7	49.594	-82.2	11*35*33	21.2			573
3609	3	138.08	12*51*44	2/18/ 4	244	19.9	312.1	-21.4	45.7	49.587	-70.8	13*12*33	20.8			573
3611	2	88.74	16* 6*32	2/18/ 4	244	19.7	312.0	-21.7	45.8	49.574	-63.3	16*44* 3	37.5			573
3620	2	-133.31	6*43*11	2/19/ 4	245	18.9	311.6	-22.9	46.2	49.514	-81.5	6*50*33	7.4			574
3621	2	-157.98	8*20*36	2/19/ 4	245	18.9	311.5	-23.0	46.3	49.508	-83.5	8*32*33	12.0			574
3623	3	152.67	11*35*24	2/19/ 4	245	18.8	311.3	-23.2	46.4	49.494	-73.2	11*54*33	19.2			574
3624	3	128.00	13*12*49	2/19/ 4	245	18.7	311.3	-23.4	46.4	49.488	-72.0	13*35* 3	22.2			574
3626	2	78.65	16*27*37	2/19/ 4	245	18.5	311.2	-23.6	46.5	49.475	-61.6	17* 7* 3	39.4			574
3636	2	-168.06	8*41*41	2/20/ 4	246	17.7	310.5	-24.8	46.9	49.408	-83.8	8*56*33	14.9			575
3637	3	167.26	10*19* 5	2/20/ 4	246	17.6	310.4	-24.9	47.0	49.402	2.1	10*39*33	20.5			575
3638	3	142.59	11*56*29	2/20/ 4	246	17.6	310.3	-25.1	47.0	49.395	-71.0	12*16*33	20.1			575
3639	3	117.91	13*33*54	2/20/ 4	246	17.5	310.3	-25.2	47.1	49.388	-70.7	13*57* 3	23.2			575
3640	2	93.24	15*11*18	2/20/ 4	246	17.4	310.2	-25.3	47.1	49.382	-64.8	15*48* 3	36.8			575
3649	2	-128.80	5*47*57	2/21/ 4	247	16.5	309.7	-26.5	47.5	49.322	-81.5	5*55* 3	7.1			576
3654	2	107.83	13*54*59	2/21/ 4	247	15.3	308.8	-26.3	47.9	49.289	-48.4	14*31* 3	36.1			576
3655	2	83.16	15*32*23	2/21/ 4	247	15.0	308.8	-26.3	48.0	49.283	-51.1	16* 9*33	37.2			576
3663	1	-114.21	4*31*37	2/22/ 4	248	12.5	308.0	-26.3	48.9	49.230	-81.9	4*43*33	11.9			577
3664	2	-138.89	6* 9* 2	2/22/ 4	248	12.3	307.8	-26.2	49.0	49.223	-72.8	6*18* 3	9.0			577
3667	3	147.09	11* 1*15	2/22/ 4	248	11.6	307.2	-26.0	49.1	49.203	-71.5	11*20*33	19.3			577
3669	2	97.75	14*16* 3	2/22/ 4	248	11.0	307.0	-25.9	49.3	49.190	-53.6	14*51* 3	35.0			577

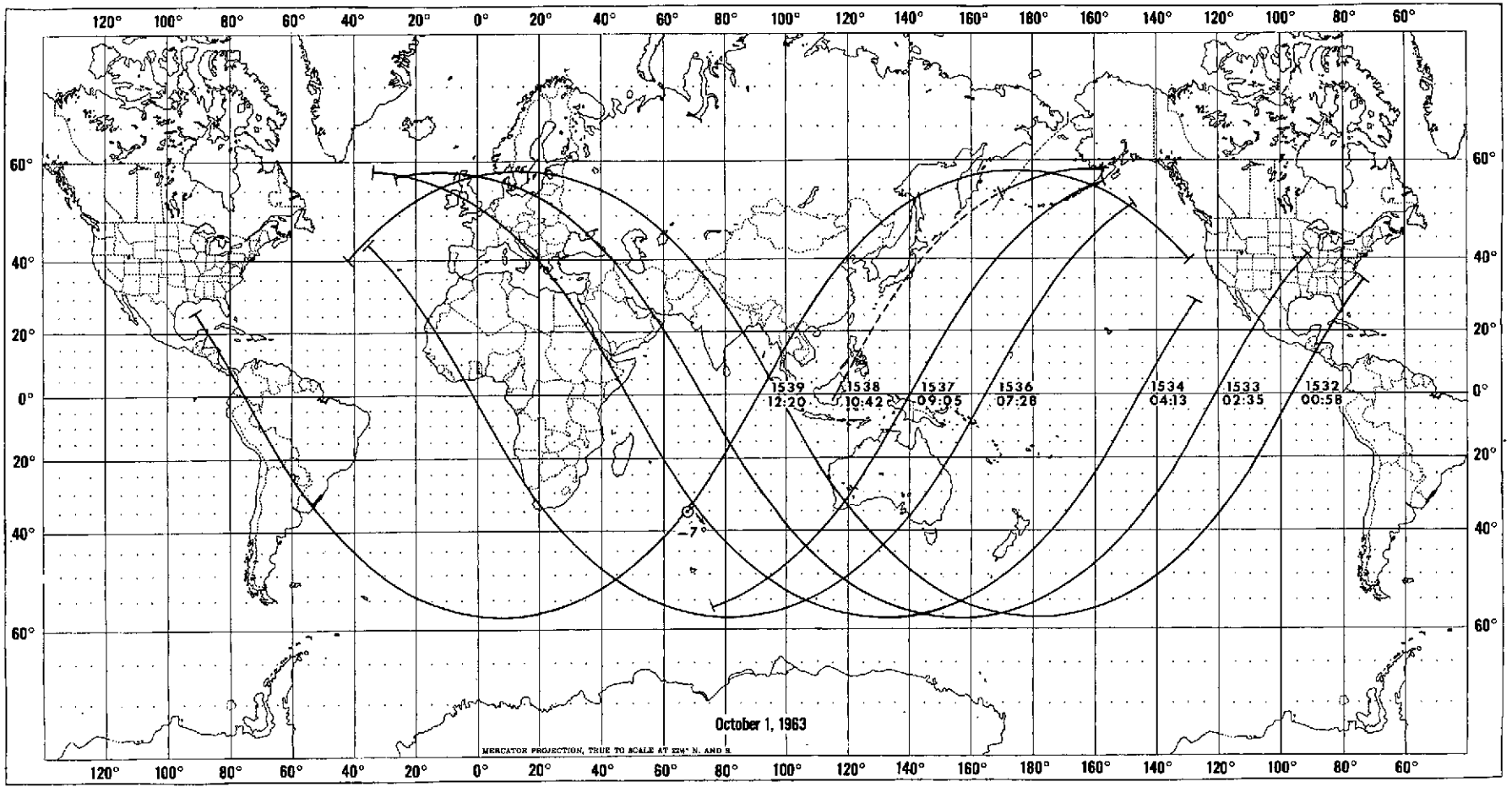
READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE				
		SATELLITE ORBITAL	EQUATOR ASCENDING	CROSSING AT NODE (AND)		SPIN	VECTOR	ATTITUDE			BEGIN	END		DROPOUTS, MINUTES W/R/T AND	
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER AND)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T AND	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T AND	FROM-	TO-	FMR TAPE REEL NO.
3677	1	-99.63	3*15*18	2/23/ 4	249	8.5	306.5	-26.0	50.2	49.138	-88.8	3*24*33	9.3			578
3678	1	-124.30	4*52*42	2/23/ 4	249	8.3	306.3	-25.9	50.3	49.131	-76.1	5* 6*33	13.9			578
3679	2	-148.97	6*30* 7	2/23/ 4	249	8.1	306.1	-25.8	50.4	49.125	-72.4	6*40* 3	9.9			578
3683	2	112.33	12*59*44	2/23/ 4	249	7.1	305.4	-25.6	50.7	49.098	-60.3	13*32*33	32.8			578
3684	2	87.66	14*37* 8	2/23/ 4	249	6.8	305.4	-25.6	50.8	49.092	-52.2	15*13*33	36.4			578
3691	1	-85.04	1*58*59	2/24/ 4	250	4.6	304.9	-25.5	51.5	49.048	-87.6	2* 6*33	7.6			579
3692	1	-109.71	3*36*23	2/24/ 4	250	4.4	304.7	-25.5	51.6	49.042	-78.1	3*46*53	10.5			579
3693	2	-134.38	5*13*47	2/24/ 4	250	4.2	304.5	-25.4	51.7	49.035	-74.9	5*21*33	7.8			579
3694	2	-159.05	6*51*12	2/24/ 4	250	3.9	304.3	-25.3	51.7	49.029	-77.1	7* 2*33	11.4			579
3696	3	151.59	10* 6* 0	2/24/ 4	250	3.5	303.9	-25.2	51.9	49.016	-71.9	10*24*33	18.6			579
3698	2	102.25	13*20*49	2/24/ 4	250	3.0	303.7	-25.1	52.0	49.003	-55.0	13*55*33	34.7			579
3706	1	-95.13	2*20* 3	2/25/ 4	251	0.5	303.4	-25.2	52.9	48.951	-67.8	2*28*33	8.5			580
3707	1	-119.80	3*57*28	2/25/ 4	251	0.3	303.2	-25.1	53.0	48.945	-72.8	4*10*33	13.1			580
3708	2	-144.48	5*34*52	2/25/ 4	251	0.1	303.0	-25.0	53.0	48.938	-73.0	5*43*33	8.7			580
3711	1	141.59	10*27* 5	2/25/ 4	251	-0.5	302.5	-24.9	53.3	48.919	-59.9	11* 0*33	33.5			580
3721	1	-105.21	2*41* 8	2/26/ 4	252	-3.4	301.9	-24.7	54.3	48.856	-80.8	2*51*33	10.4			581
3722	2	-129.88	4*18*32	2/26/ 4	252	-3.7	301.7	-24.6	54.4	48.850	-75.7	4*25* 3	6.5			581
3723	2	-154.56	5*55*57	2/26/ 4	252	-3.9	301.5	-24.6	54.4	48.844	-79.3	6* 6*33	10.6			581
3725	1	156.09	9*10*45	2/26/ 4	252	-4.3	301.2	-24.4	54.5	48.832	-62.7	9*42*33	31.8			581
3727	2	106.74	12*25*34	2/26/ 4	252	-4.8	301.0	-24.3	54.7	48.819	-41.6	12*59* 3	33.5			581
3735	1	-90.62	1*24*49	2/27/ 4	253	-7.1	300.9	-24.4	55.6	48.770	-89.9	1*32*33	7.7			582
3736	1	-115.30	3* 2*13	2/27/ 4	253	-7.3	300.7	-24.3	55.7	48.764	-78.4	3*14*33	12.3			582
3737	2	-139.97	4*39*37	2/27/ 4	253	-7.5	300.6	-24.3	55.8	48.758	-73.9	4*47*33	7.9			582
3740	1	146.01	9*31*50	2/27/ 4	253	-8.1	300.1	-24.1	56.0	48.740	5.1	10* 3*33	31.7			582
3742	2	96.66	12*46*39	2/27/ 4	253	-8.7	299.9	-24.0	56.1	48.728	-42.1	13*21*33	34.9			582
3750	1	-100.71	1*45*53	2/28/ 4	254	-10.9	299.7	-23.9	57.0	48.680	-90.0	1*55* 3	9.2			583

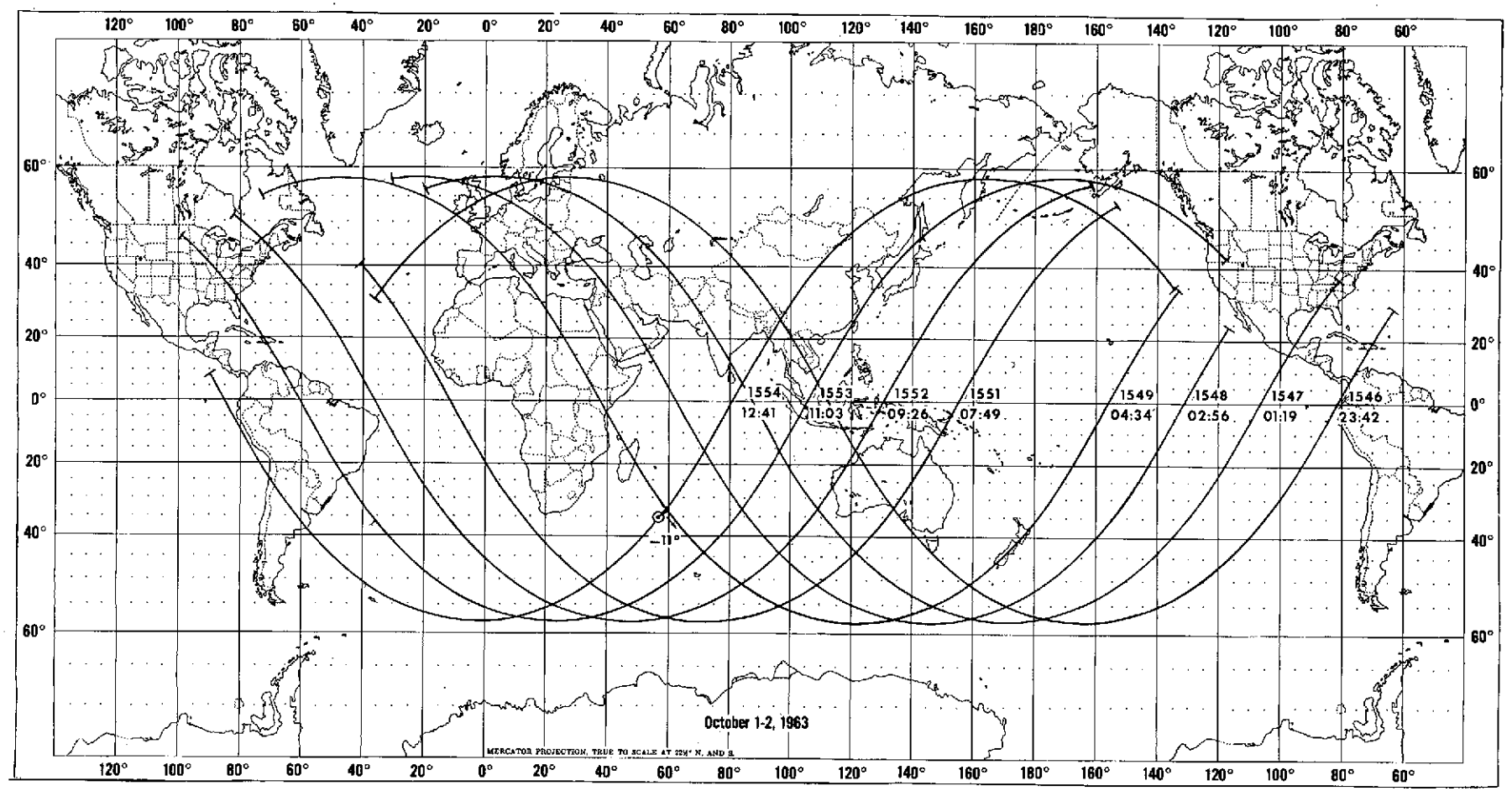
READOUT						ORBIT					TIME INTERVAL OF FILE ON FMR TAPE					
		SATELLITE ORBITAL EQUATOR CROSSING AT ASCENDING NODE (ANO)				SPIN VECTOR ATTITUDE					BEGIN	E N D		DROPOUTS, MINUTES W/R/T ANO		
ORBIT NO.	CDA STA	EARTH LONGI -TUDE (DEG)	HOURS MINUTES SECONDS (GMT)	CALENDAR DATE.	TIROS DAY	DECLI -NA -TION (DEG)	RIGHT ASCEN -SION (DEG)	MINI -MUM NADIR (DEG)	TOT (MIN. AFTER ANO)	SPIN RATE (DEG /SEC)	MINU -TES W/R/T ANO	HOURS MINUTES SECONDS (GMT)	MINU -TES W/R/T ANO	FROM-	TO-	FMR TAPE REEL NO.
3751	2	-125.38	3*23*18	2/28/ 4	254	-11.7	299.4	-23.8	57.1	48.674	-73.5	3*29*33	6.3			583
3752	2	-150.05	5* 0*42	2/28/ 4	254	-12.4	299.0	-23.2	57.2	48.668	-79.9	5*10*33	9.9			583
3754	1	160.59	8*15*30	2/28/ 4	254	-13.8	298.3	-22.1	57.6	48.657	-62.5	8*46*33	31.1			583
3755	1	135.92	9*52*55	2/28/ 4	254	-14.6	298.2	-21.6	57.7	48.651	-54.4	10*27*33	34.6			583
3756	2	111.25	11*30*19	2/28/ 4	254	-15.5	298.1	-21.2	57.8	48.645	-50.9	12* 2*33	32.2			583
3757	2	86.58	13* 7*44	2/28/ 4	254	-16.4	298.3	-20.7	58.1	48.639	-52.9	13*46* 3	38.3			583
3764	1	-86.12	0*29*34	2/29/ 4	255	-22.5	299.9	-18.6	60.0	48.598	-85.7	0*37*33	8.0			584
3771	2	101.17	11*51*24	2/29/ 4	255	-27.3	299.5	-15.8	61.1	48.558	10.4	12*25*33	34.2			584

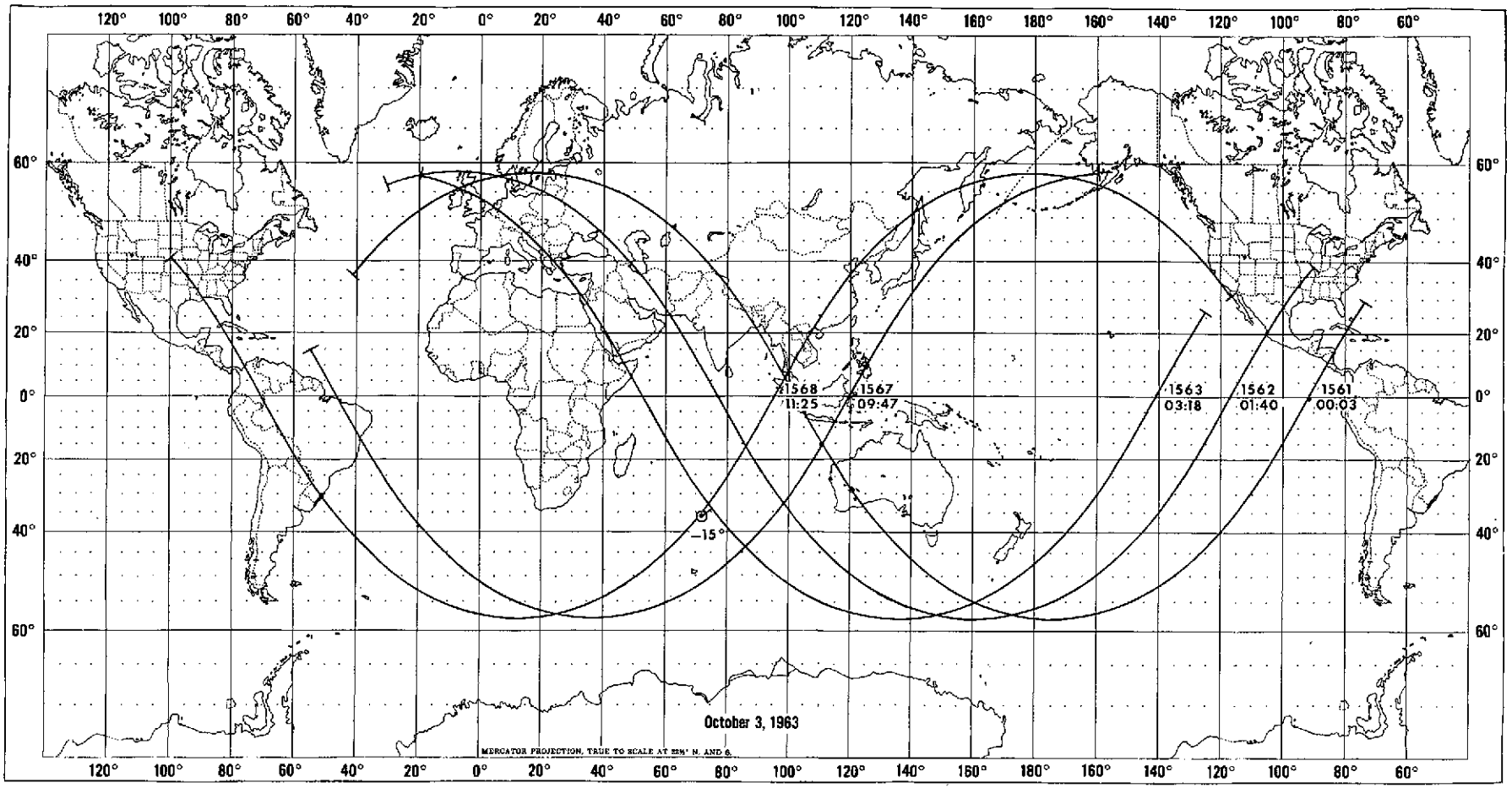
APPENDIX B

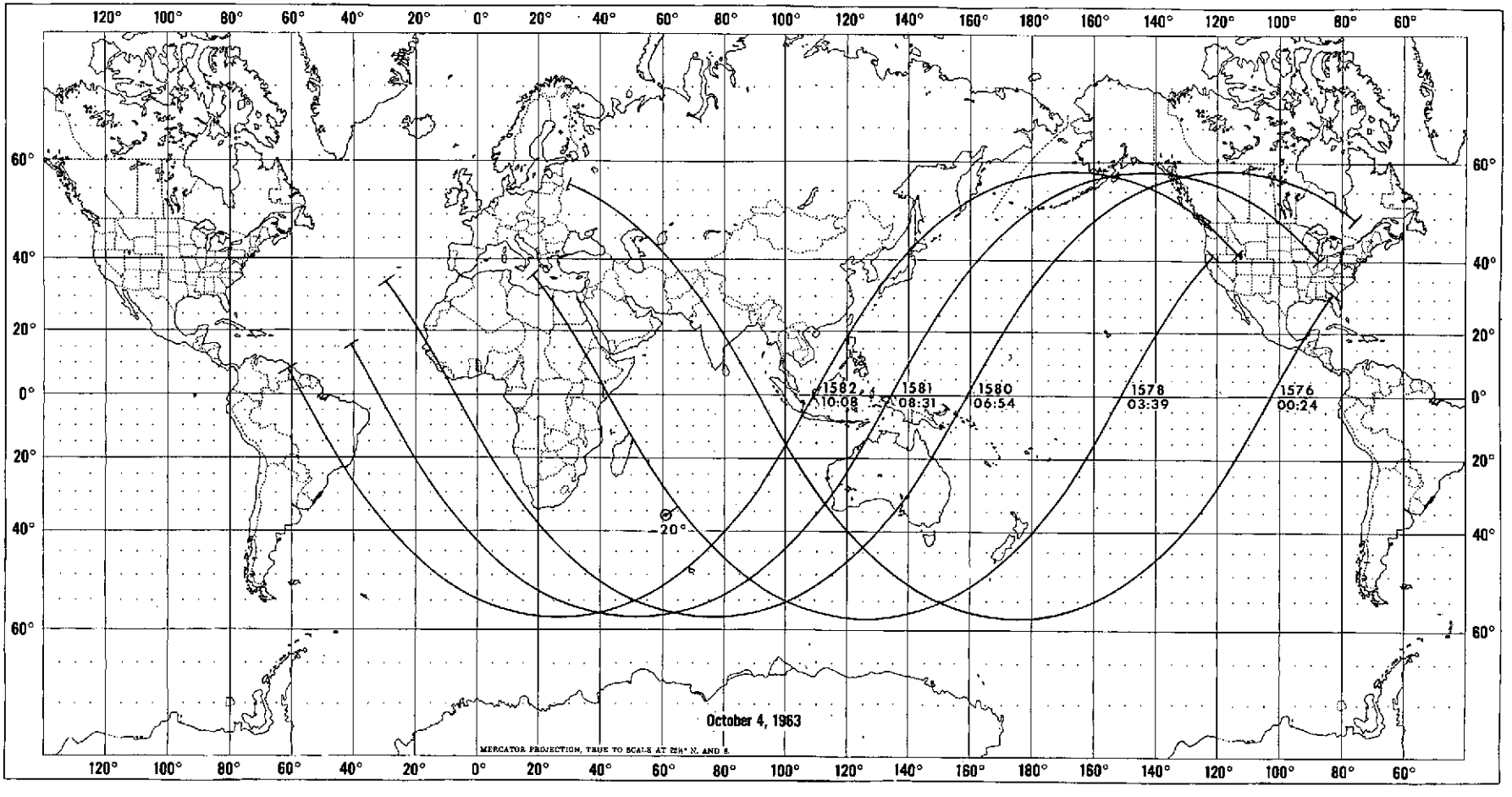
SUBPOINT TRACK SUMMARY OF AVAILABLE RADIATION DATA

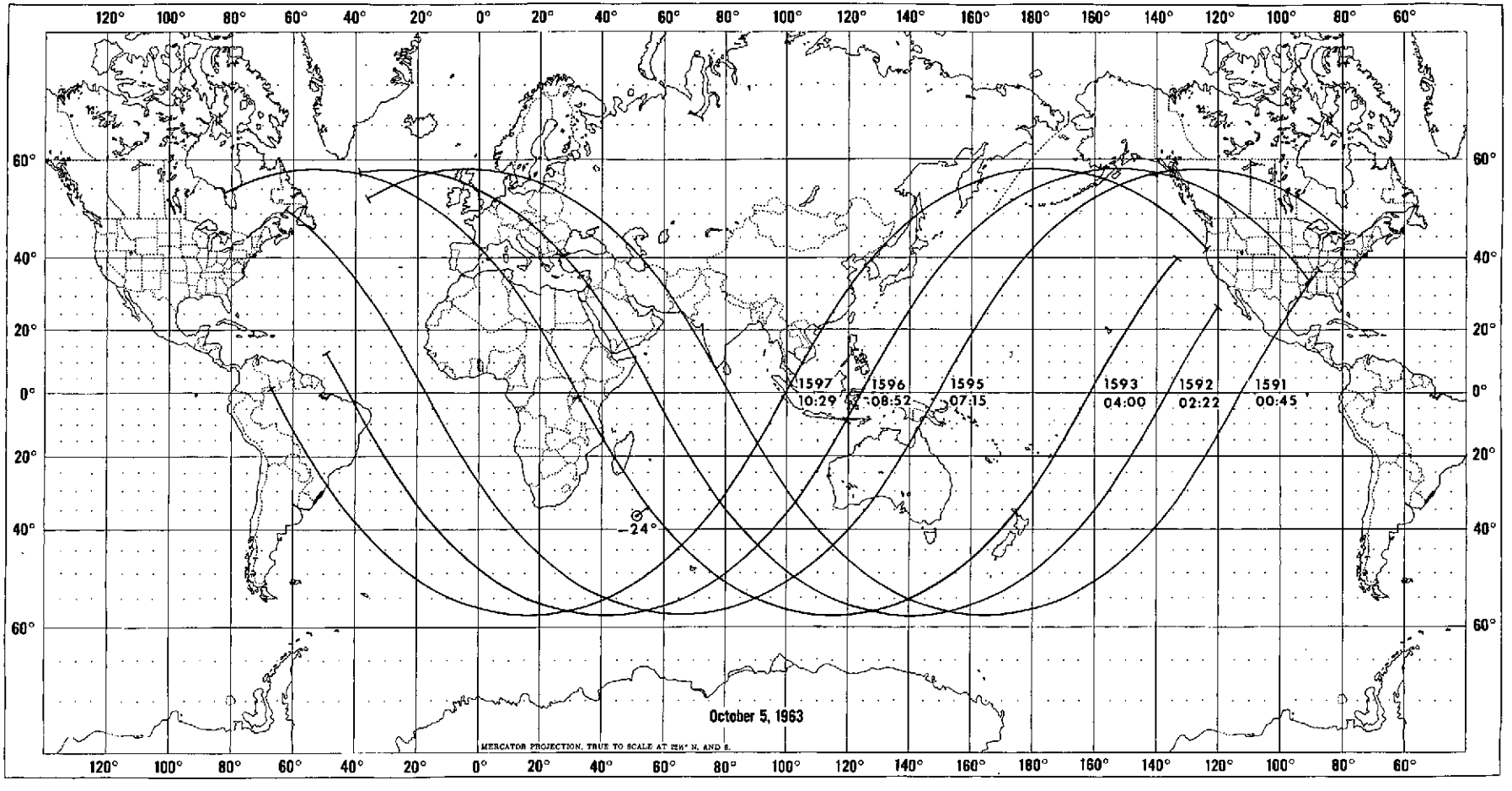
In this section, the time interval for which radiation data are available on the FMR tapes for TIROS VII from October 1, 1963, to February 29, 1964, is summarized diagrammatically by means of subpoint tracks for each interrogation day. As discussed previously, an interrogation day may be contained within the calendar day, or it may consist of 2 calendar days. This method of presentation enables the data user to quickly appraise the orbits containing data in an area of interest. Additional information illustrating the use of the Subpoint Track Summaries is explained in Appendix B, Volume 1.

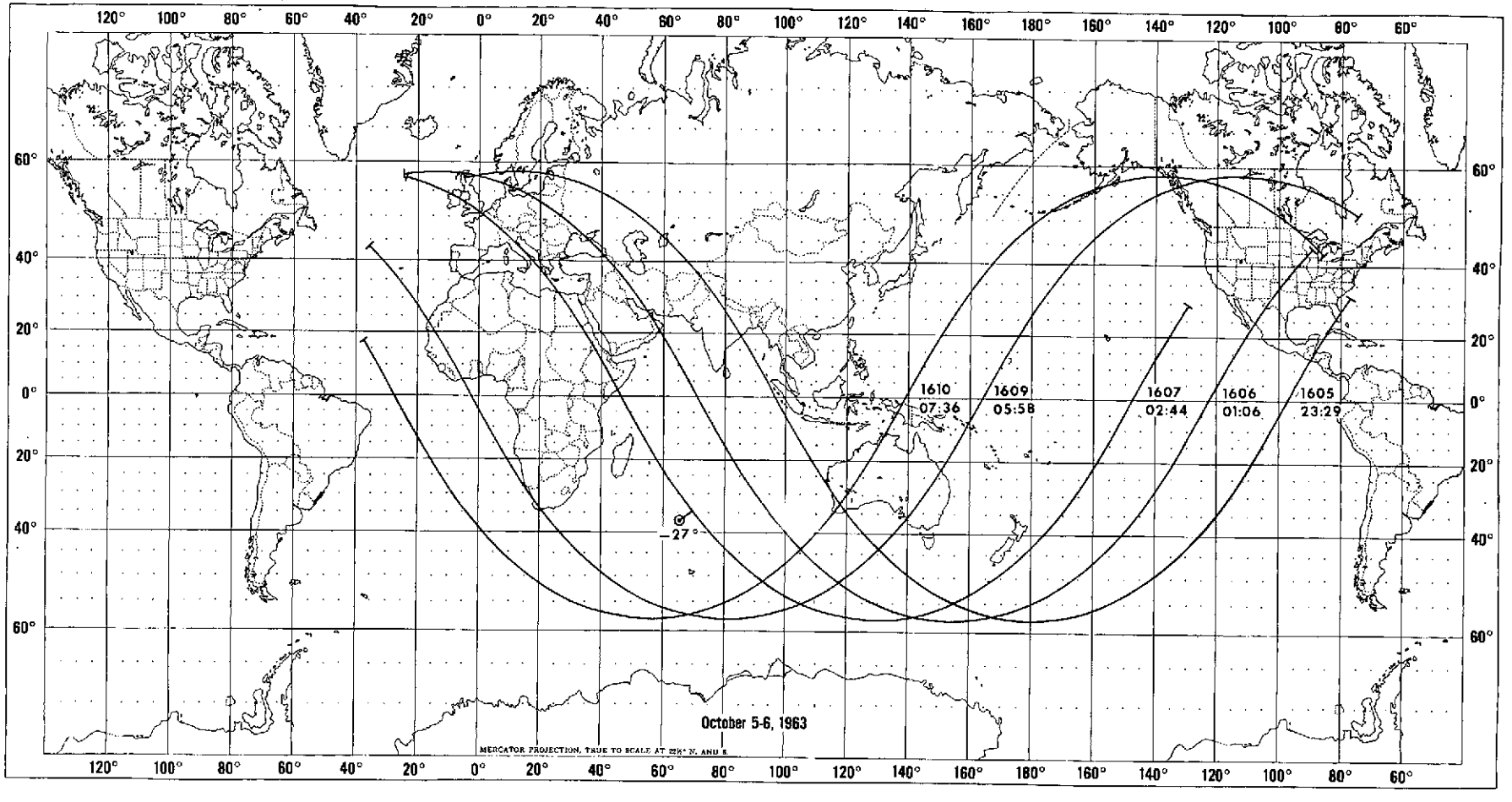

1539
12:20
1538
10:42
1537
09:05
1536
07:28
1534
04:13
1533
02:35
1532
00:58
-7°
October 1, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

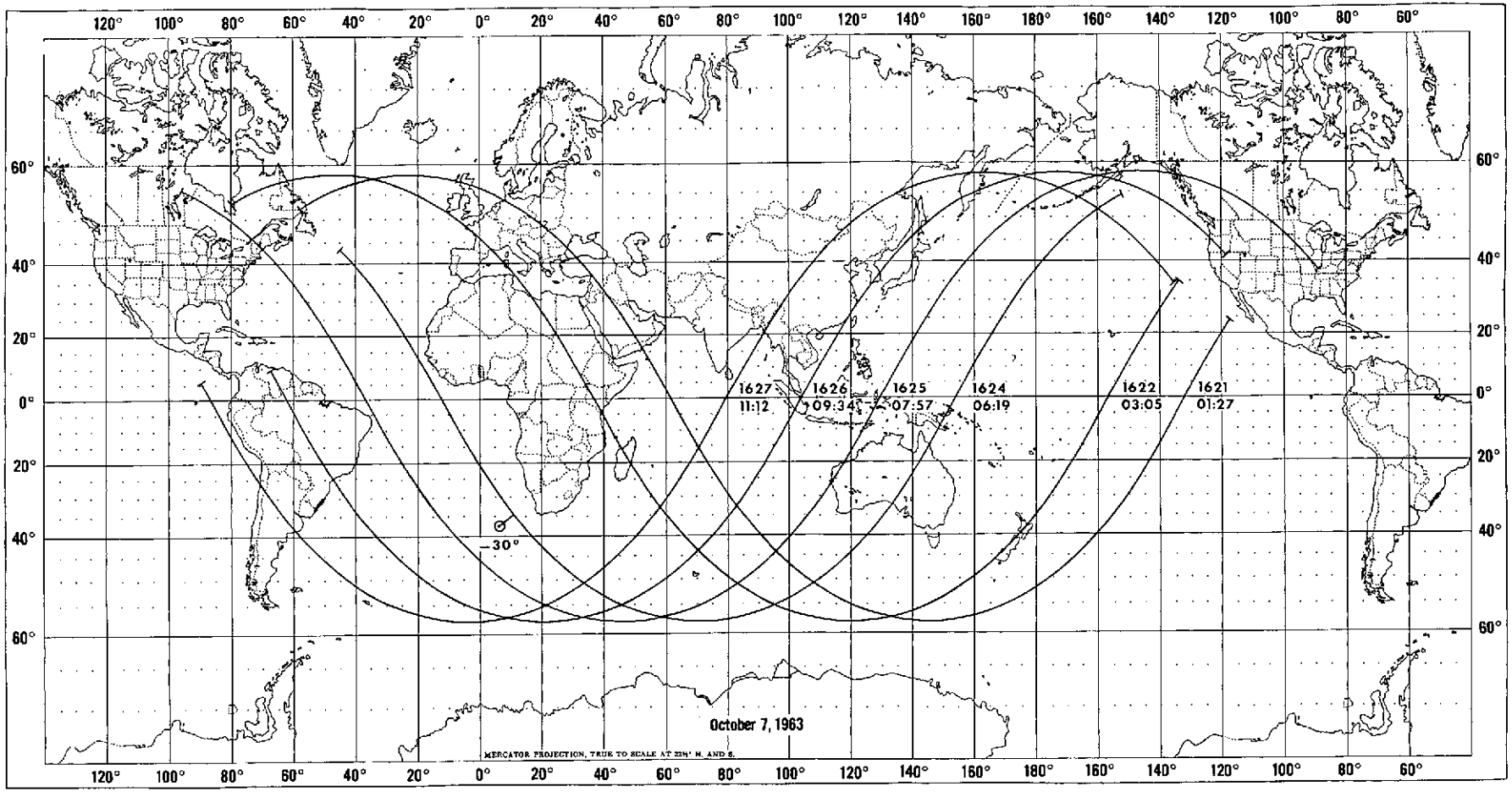

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
1554
12:41
1553
11:03
1552
09:26
1551
07:49
1549
04:34
1548
02:56
1547
01:19
1546
23:42
-11°
October 1-2, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

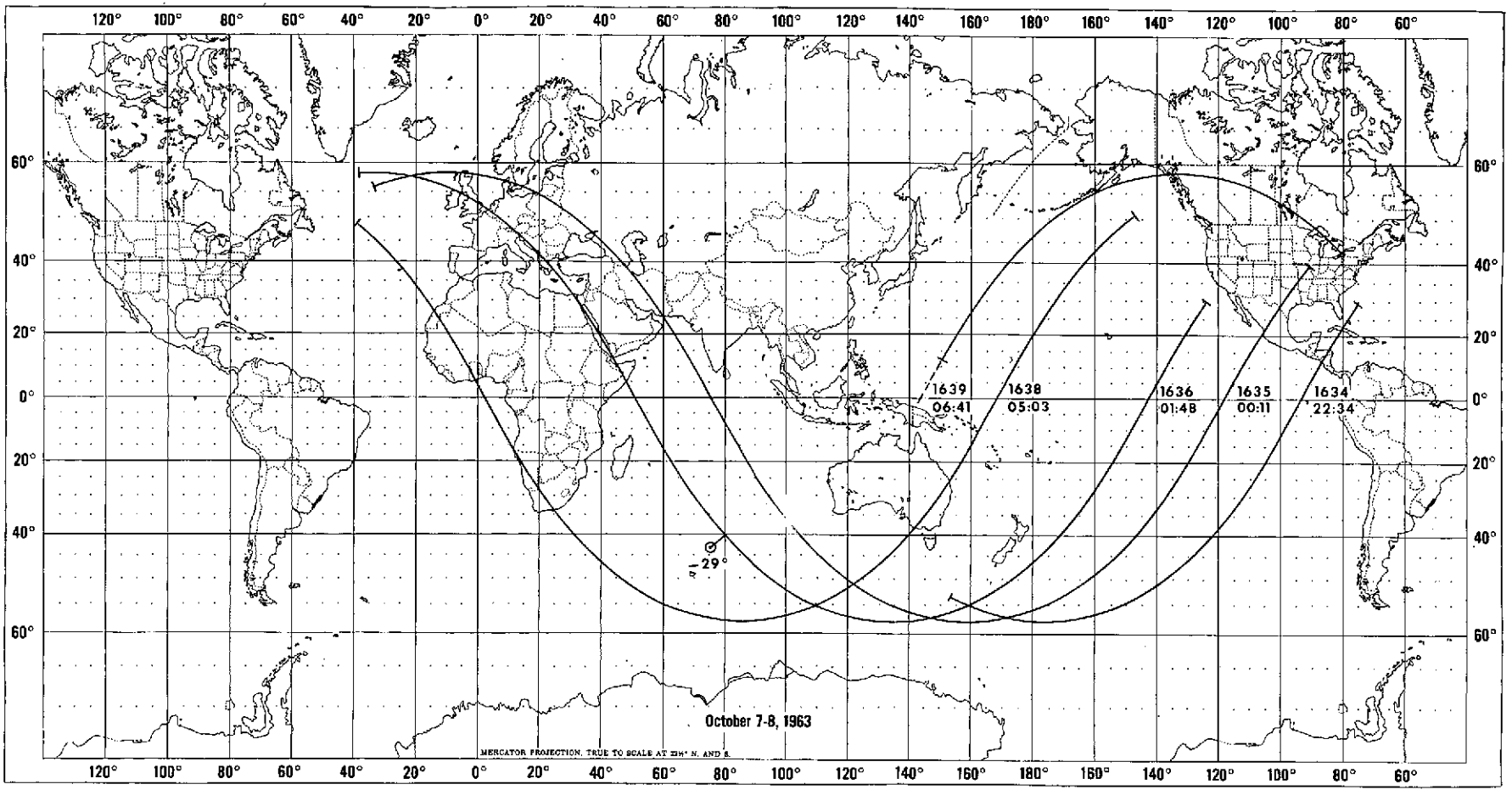

1568
11:25
1567
09:47
1563
03:18
1562
01:40
1561
00:03
−15°
October 3, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

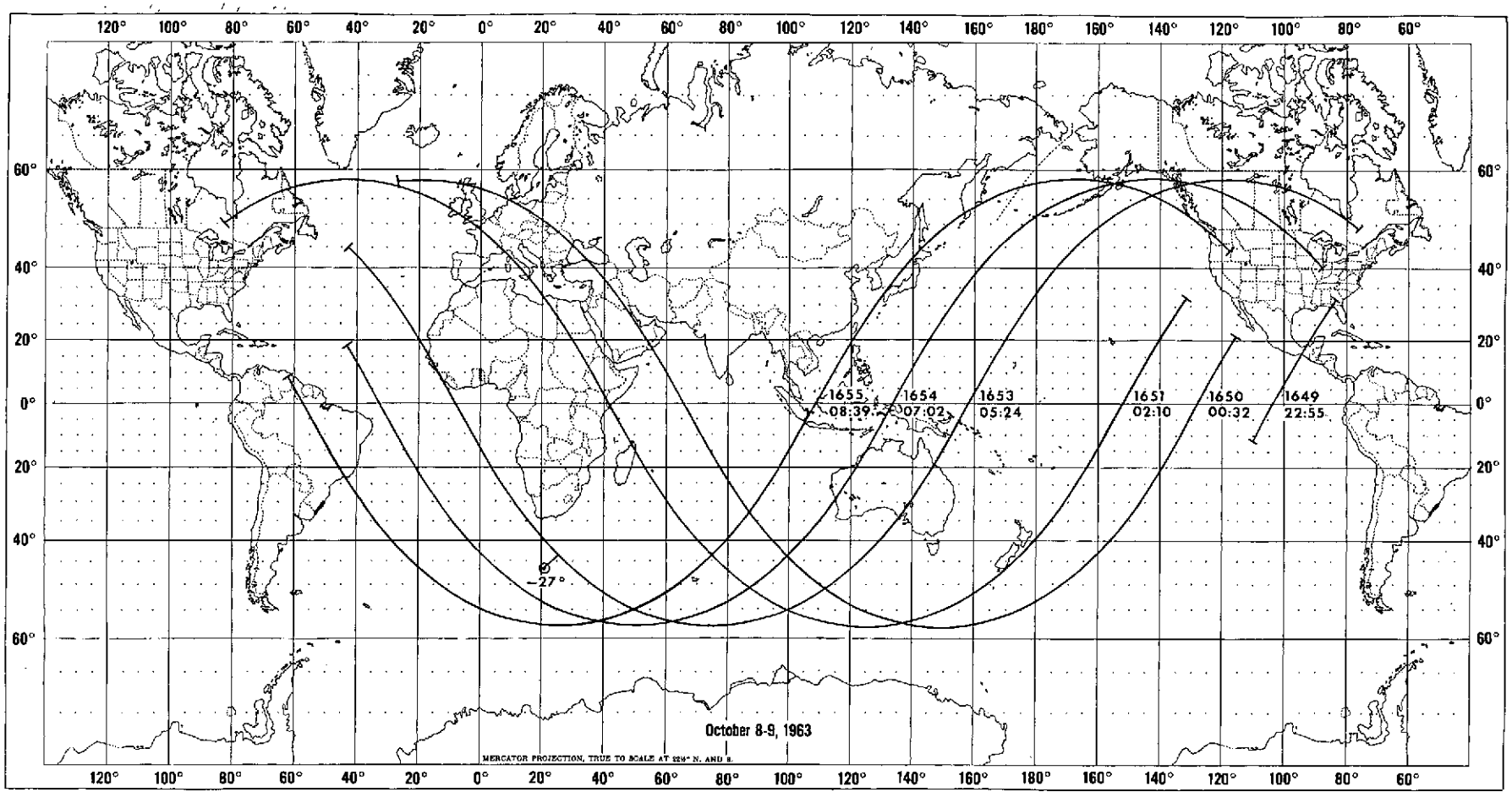

1582
10:08
1581
08:31
1580
06:54
1578
03:39
1576
00:24
20°
October 4, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

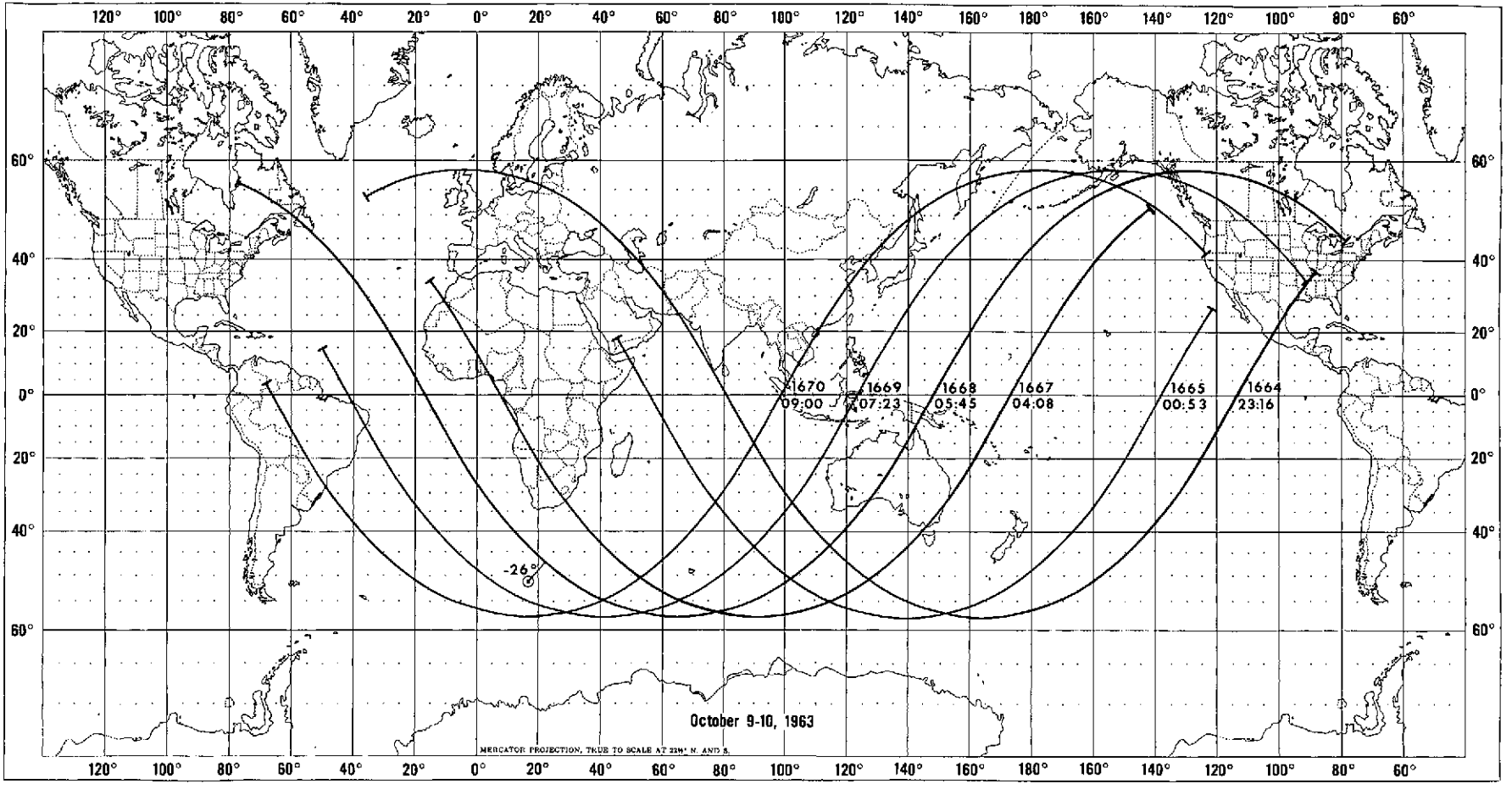

1597
10:29
1596
08:52
1595
07:15
1593
04:00
1592
02:22
1591
00:45
-24°
October 5, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 28½° N. AND S.

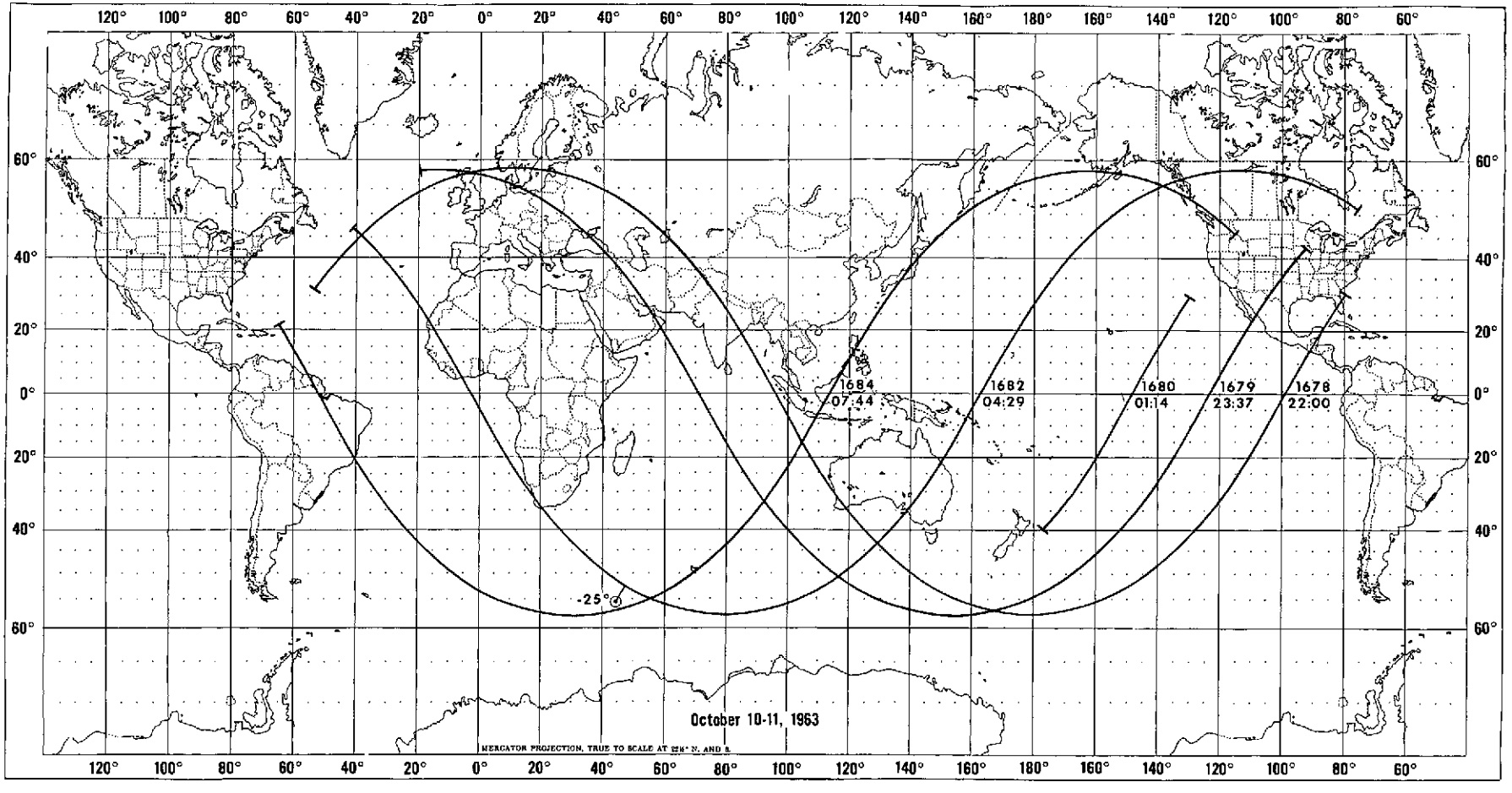

1610
07:36
1609
05:58
1607
02:44
1606
01:06
1605
23:29
-27°
October 5-6, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

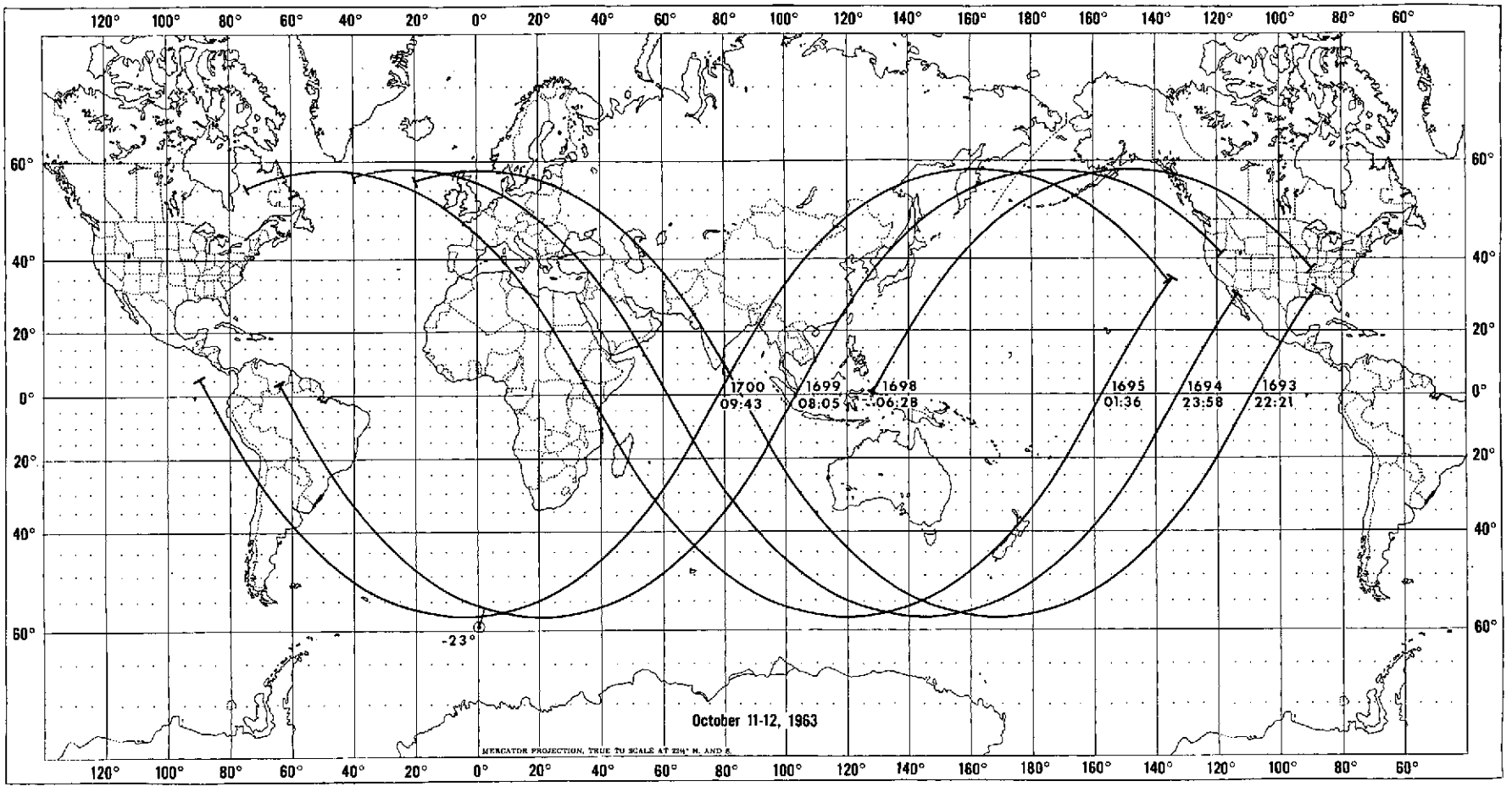

1627
11:12
1626
09:34
1625
07:57
1624
06:19
1622
03:05
1621
01:27
-30°
October 7, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

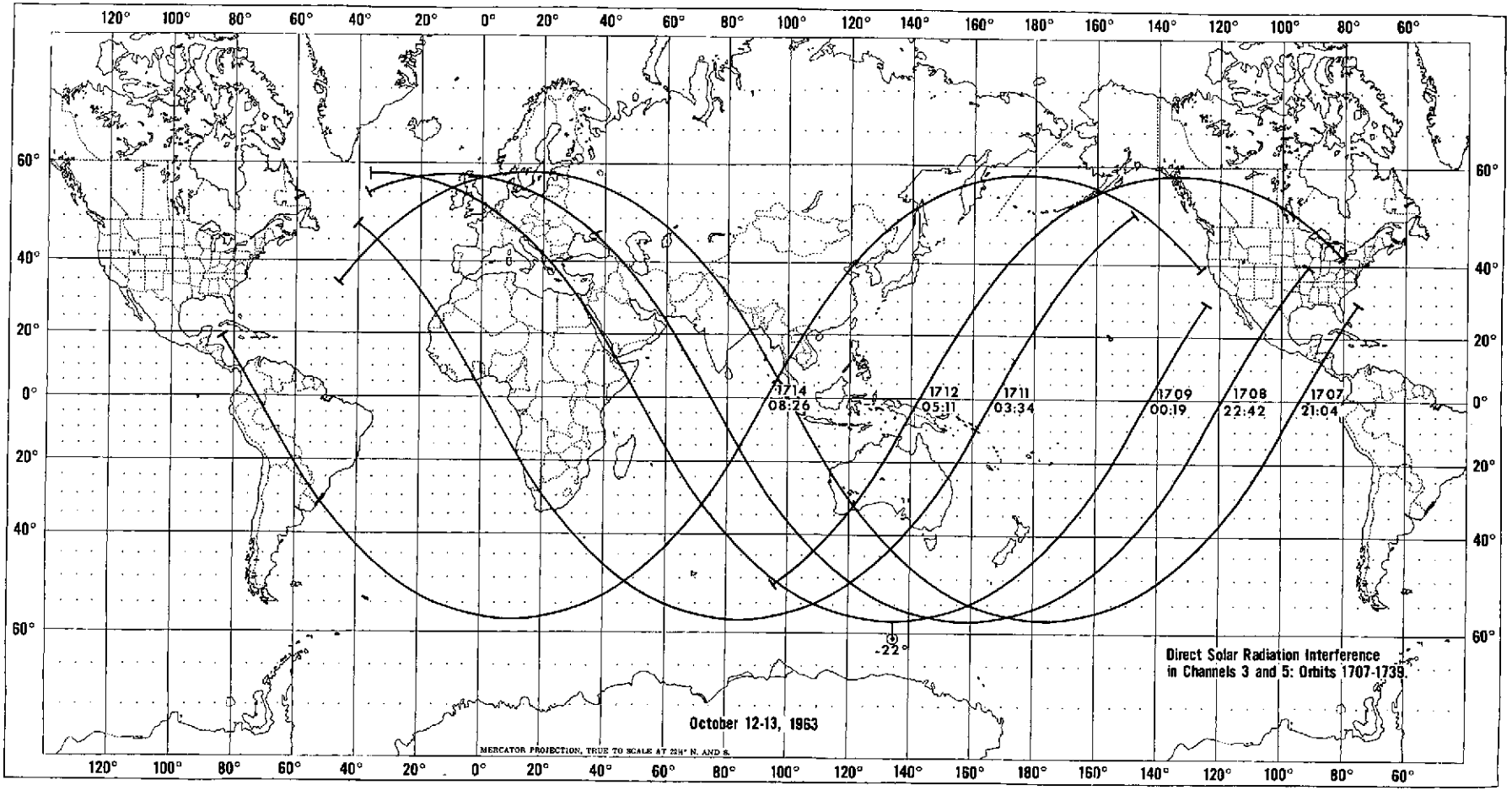

1639
06:41
1638
05:03
1636
01:48
1635
00:11
1634
22:34
29°
October 7-8, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

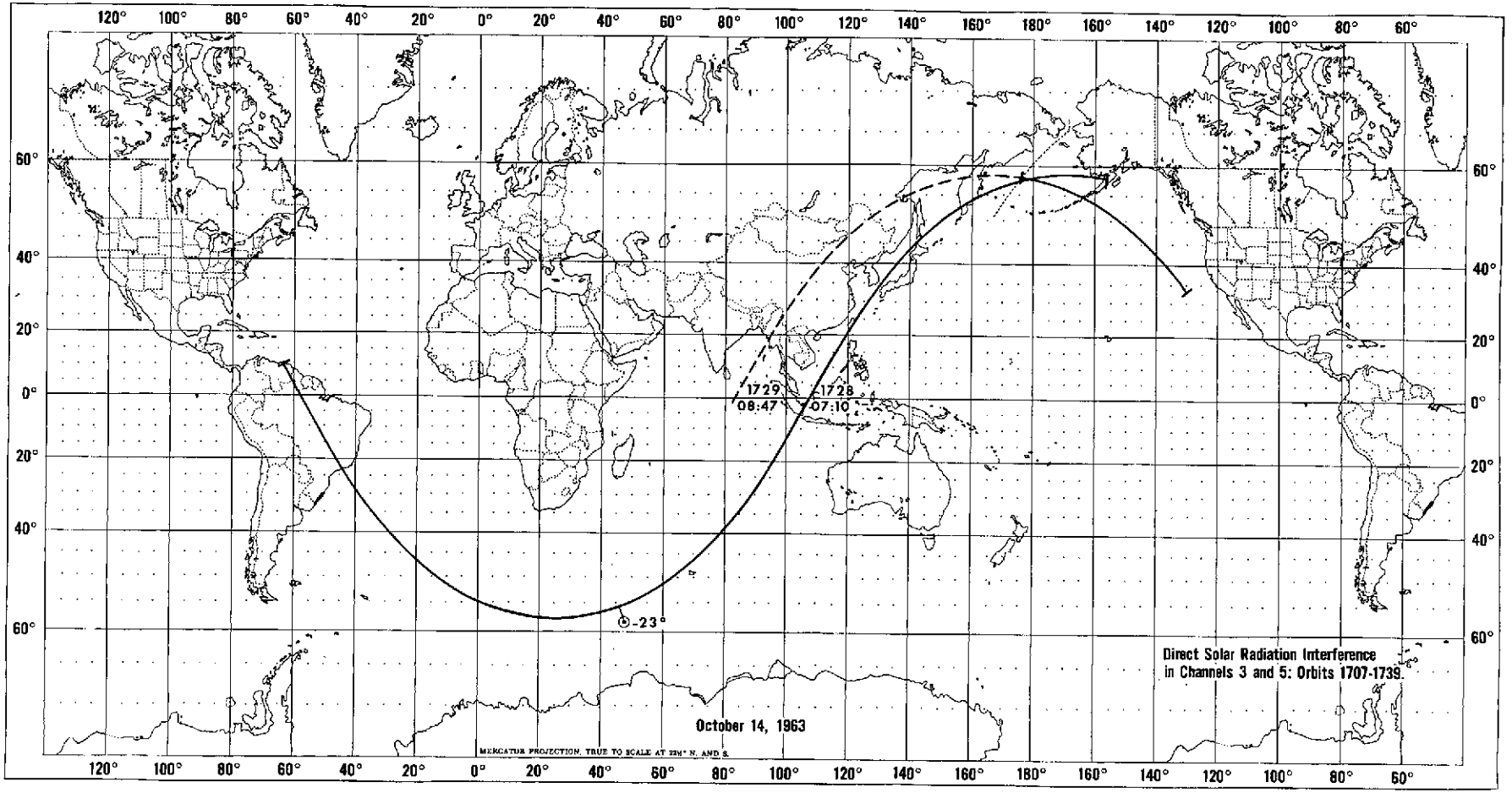

1655
08:39
1654
07:02
1653
05:24
1651
02:10
1650
00:32
1649
22:55
-27°
October 8-9, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.


1670
09:00
1669
07:23
1668
05:45
1667
04:08
1665
00:53
1664
23:16
-26°
October 9-10, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

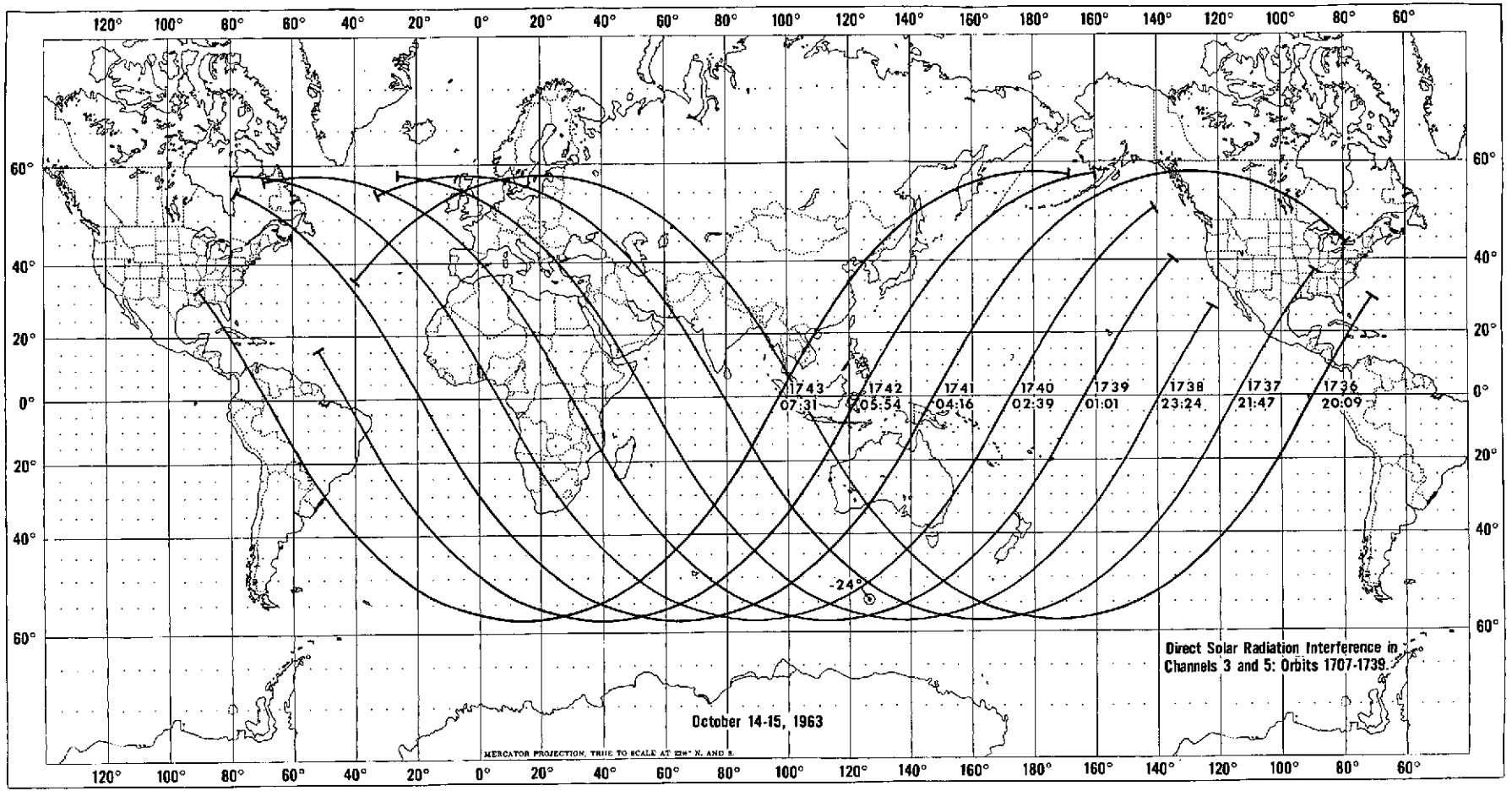

1684
07:44
1682
04:29
1680
01:14
1679
23:37
1678
22:00
-25°
October 10-11, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

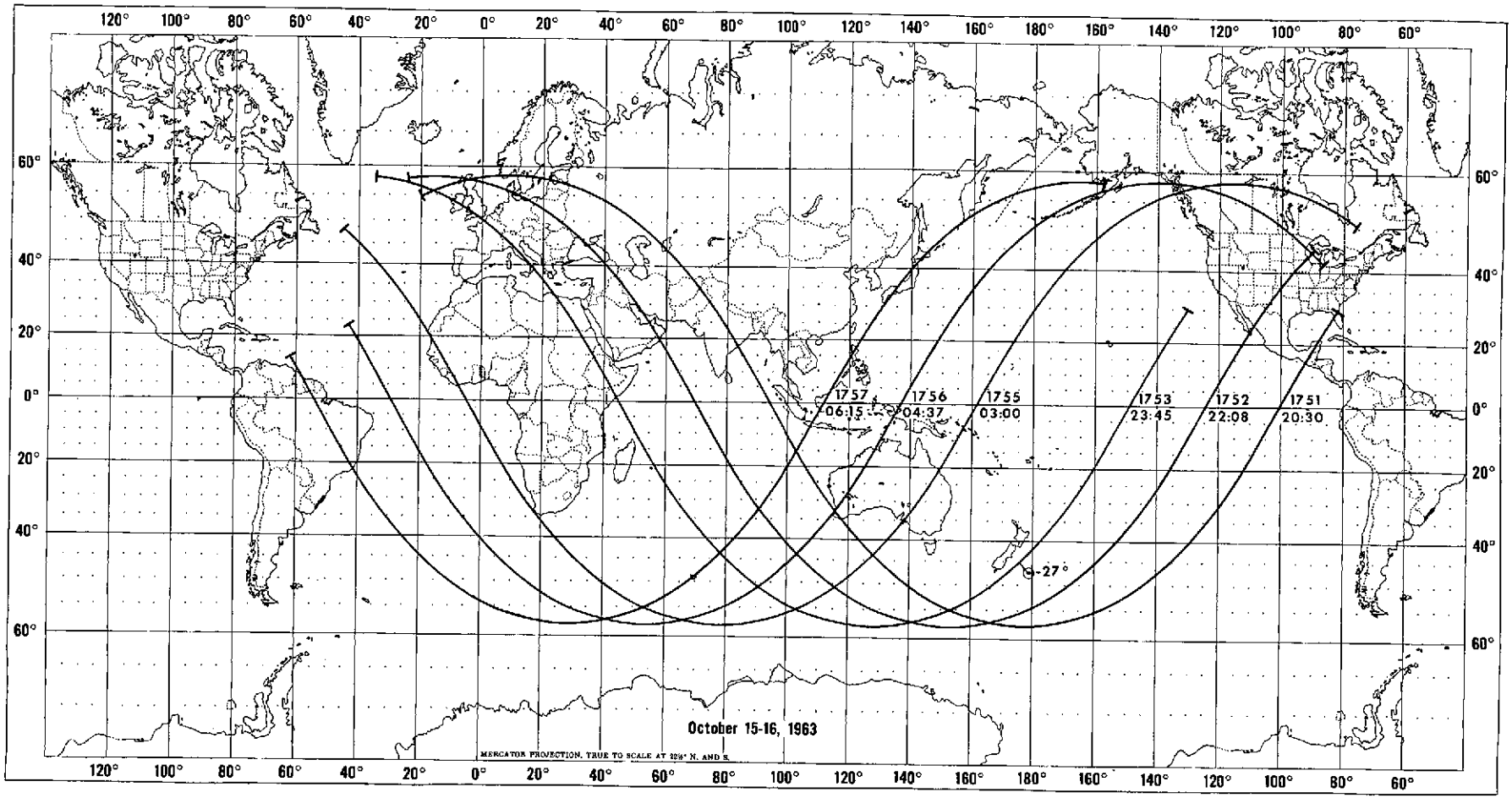

1700
09:43
1699
08:05
1698
06:28
1695
01:36
1694
23:58
1693
22:21
-23°
October 11-12, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

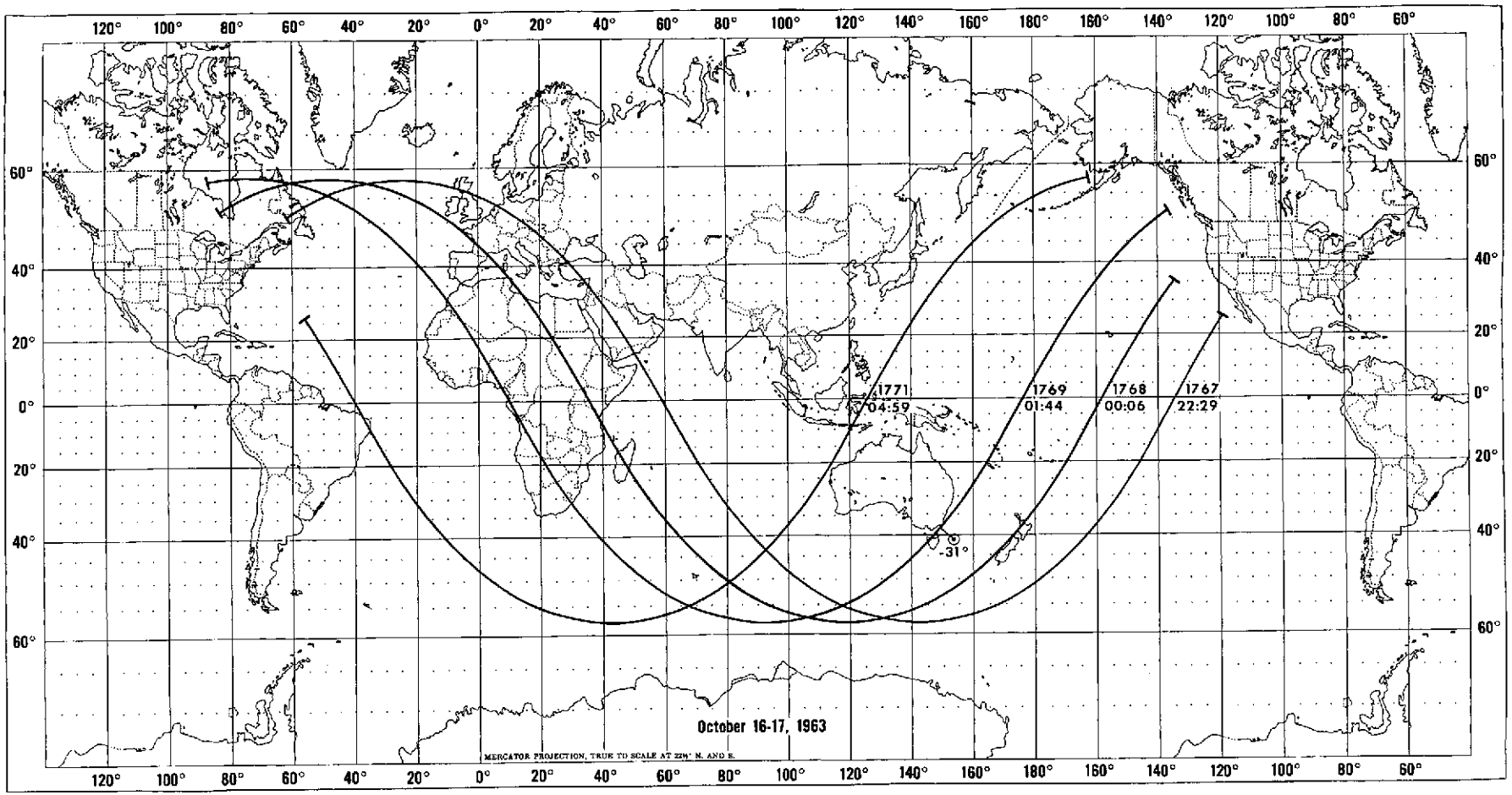

1714
08:26
1712
05:11
1711
03:34
1709
00:19
1708
22:42
1707
21:04
-22°
October 12-13, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 1707-1739.

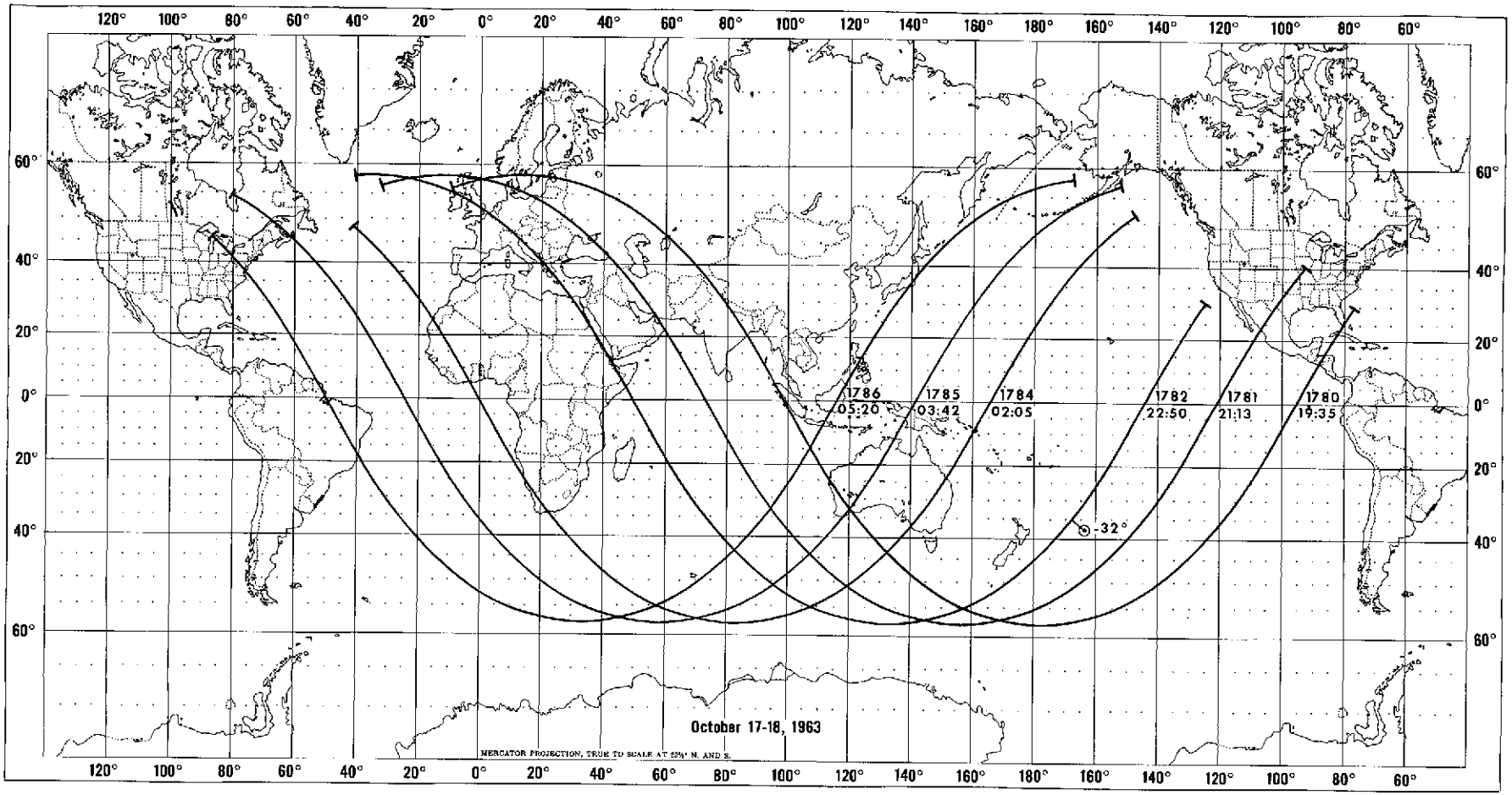


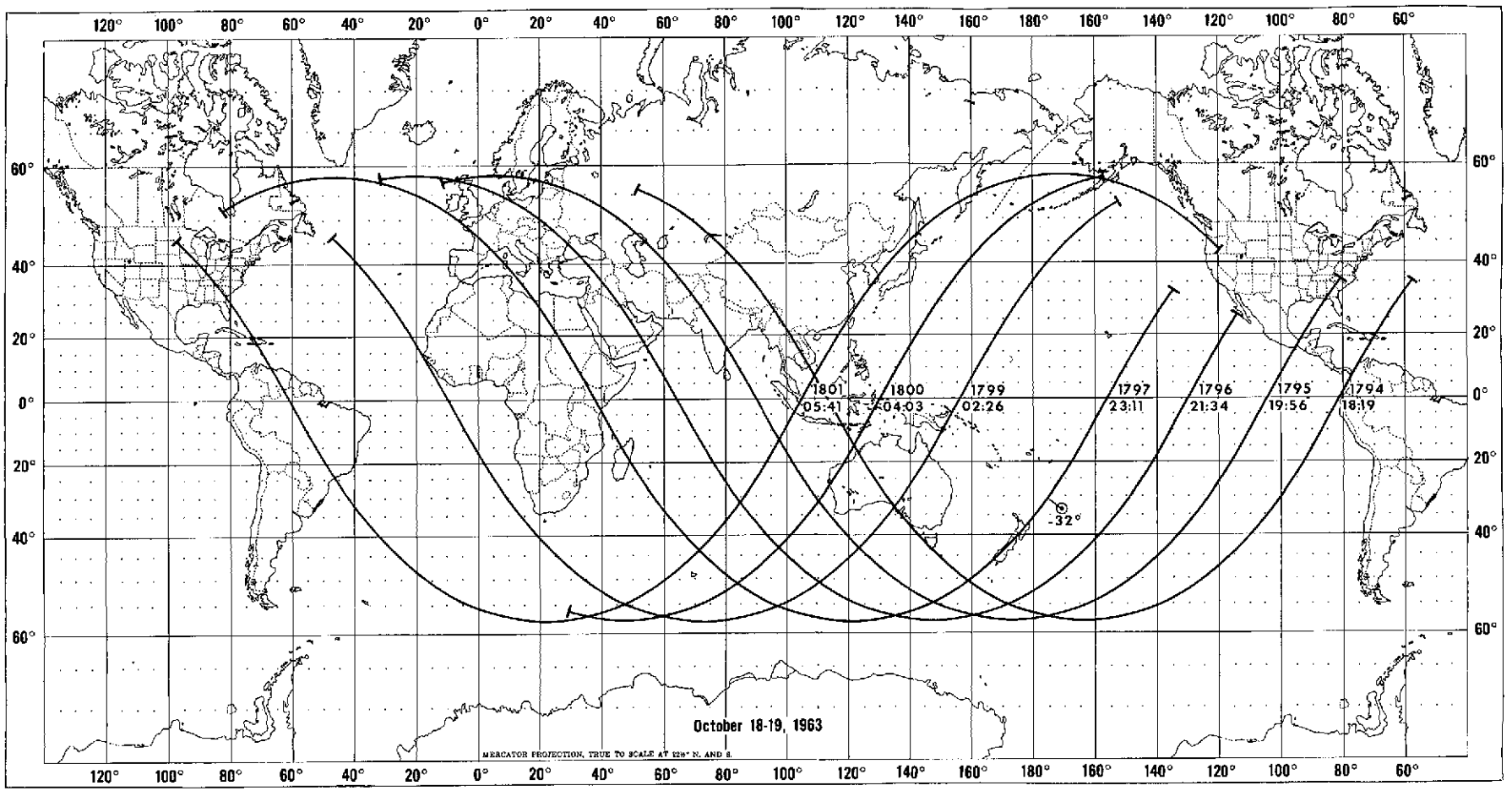
Direct Solar Radiation Interference in Channels 3 and 5: Orbits 1707-1739.

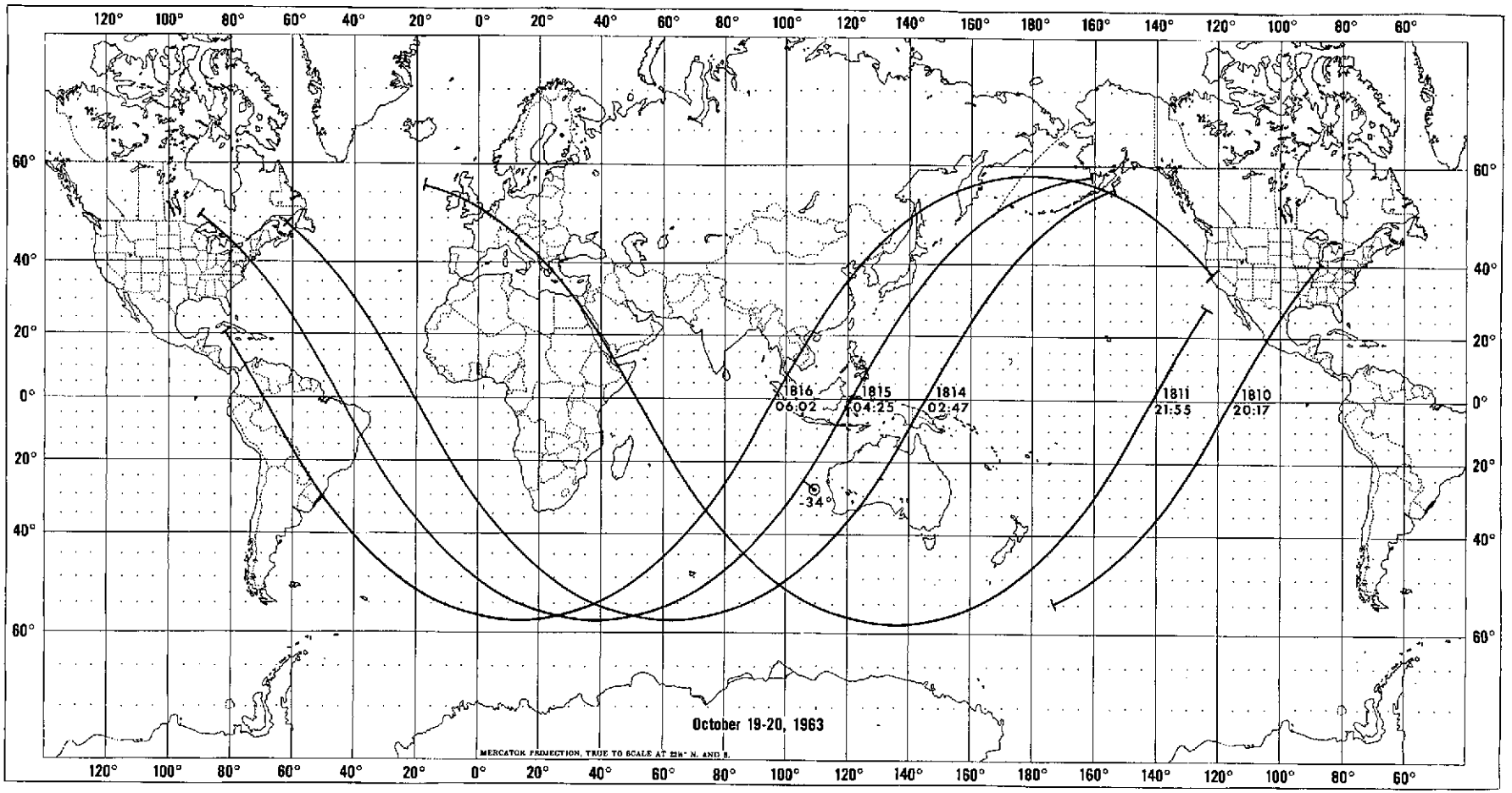

1743
07:31
1742
05:54
1741
04:16
1740
02:39
1739
01:01
1738
23:24
1737
21:47
1736
20:09
-24°
October 14-15, 1963
Direct Solar Radiation Interference in Channels 3 and 5: Orbits 1707-1739.
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

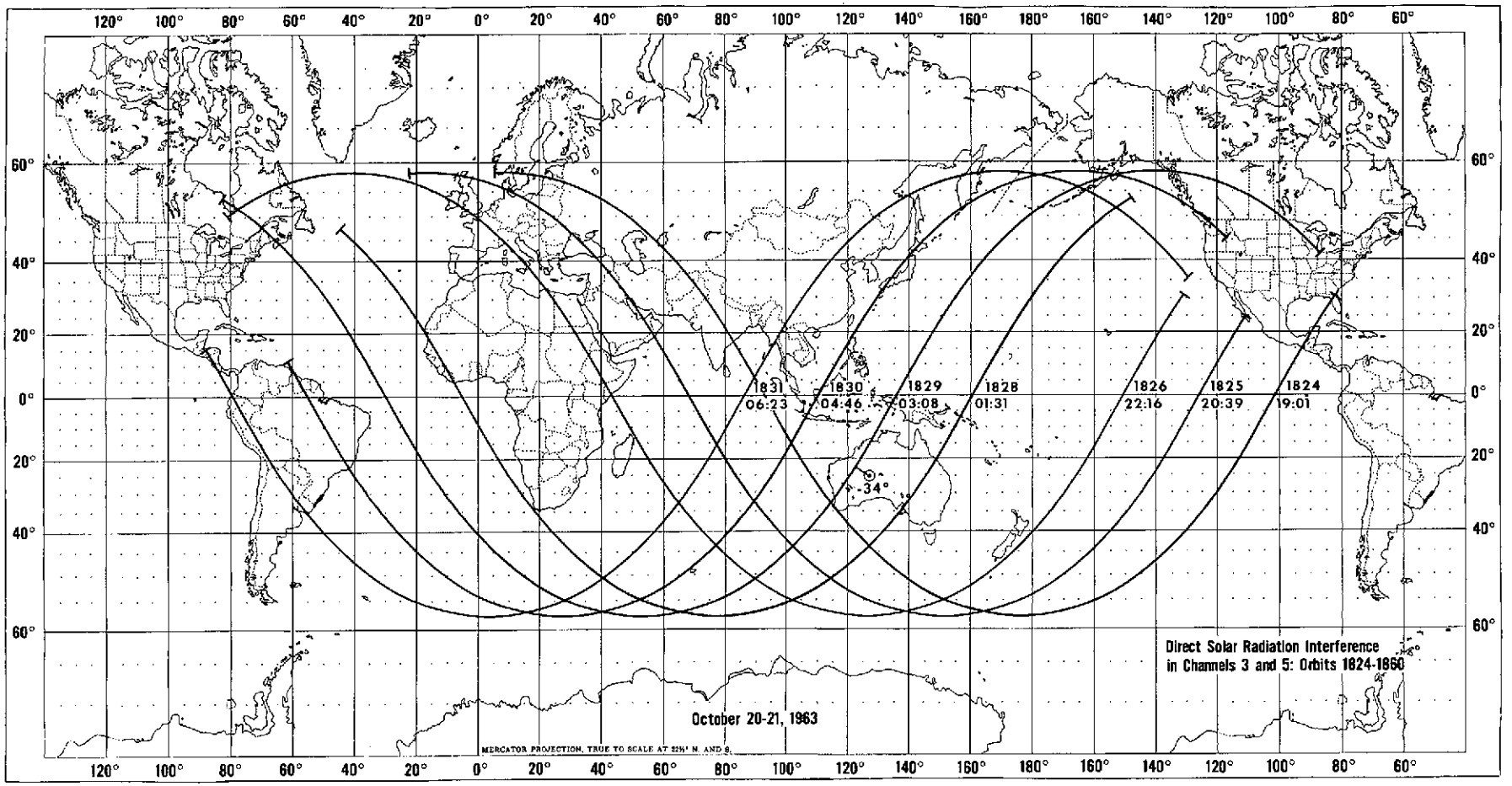

1757
06:15
1756
04:37
1755
03:00
1753
23:45
1752
22:08
1751
20:30
-27°
October 15-16, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 28½° N. AND S.

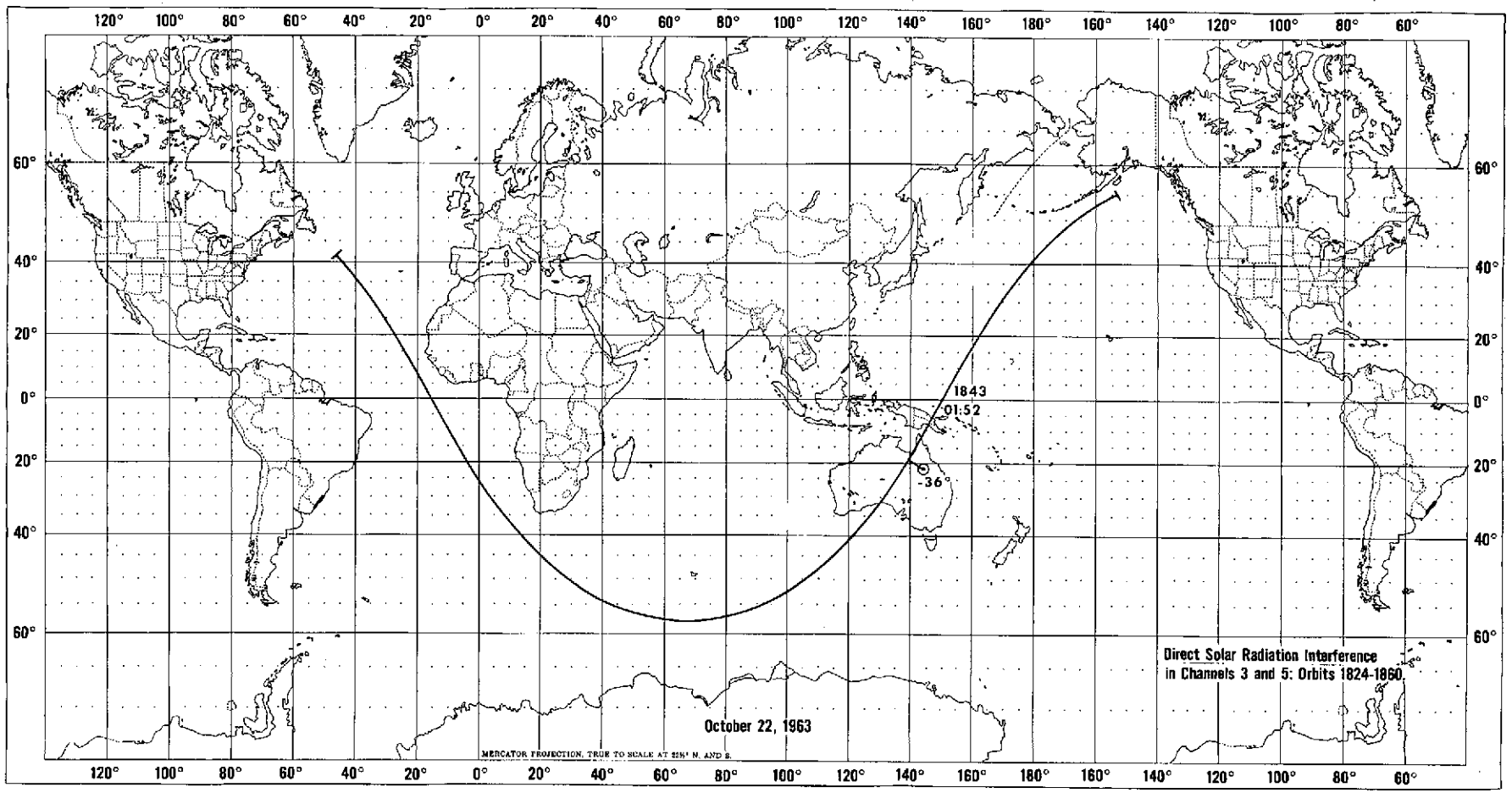

1771
04:59
1769
01:44
1768
00:06
1767
22:29
-31°
October 16-17, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

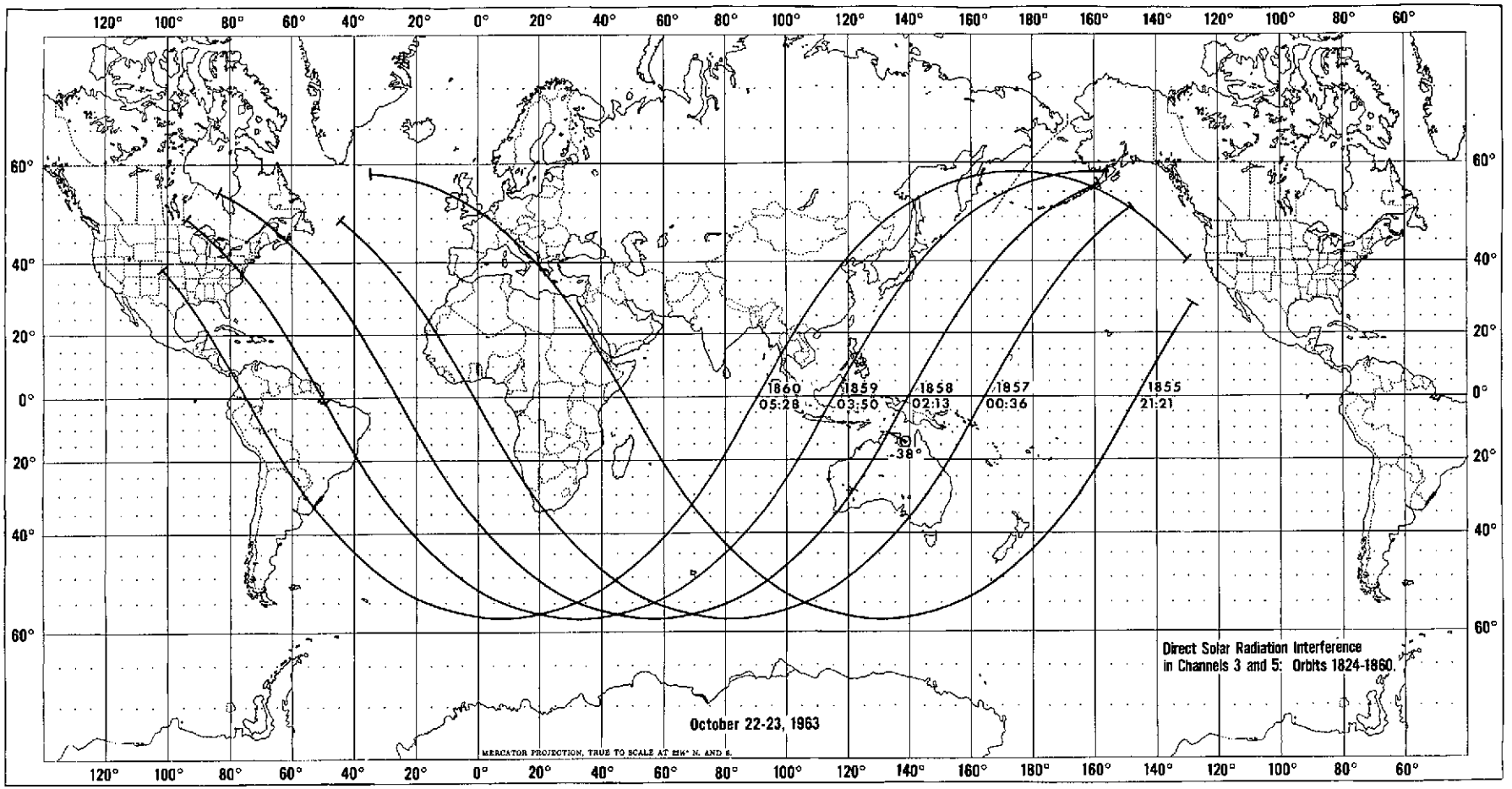

1786
05:20
1785
03:42
1784
02:05
1782
22:50
1781
21:13
1780
19:35
-32°
October 17-18, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 52½° N. AND S.

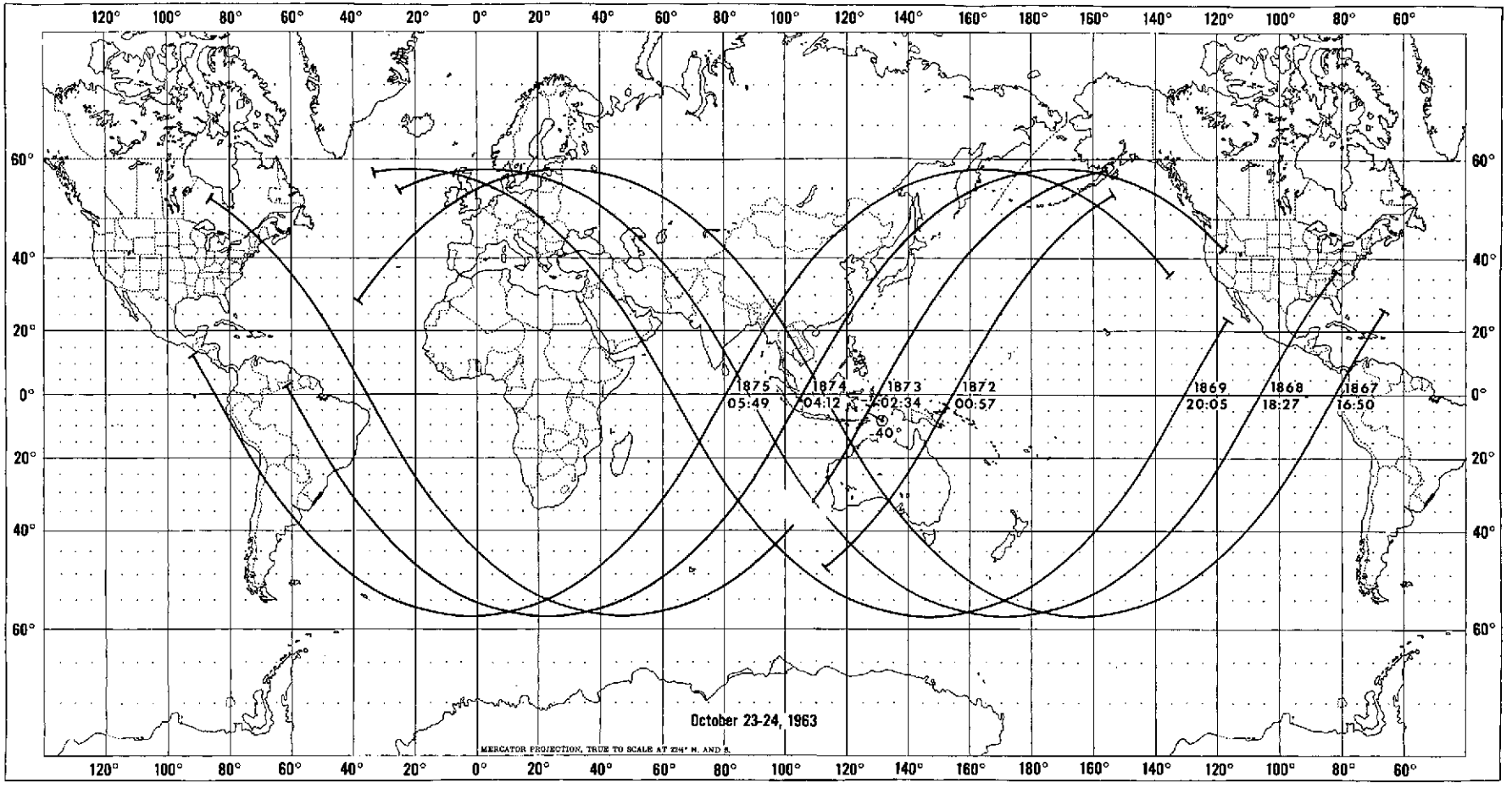

1801
05:41
1800
04:03
1799
02:26
1797
23:11
1796
21:34
1795
19:56
1794
18:19
-32°
October 18-19, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 12½° N. AND S.

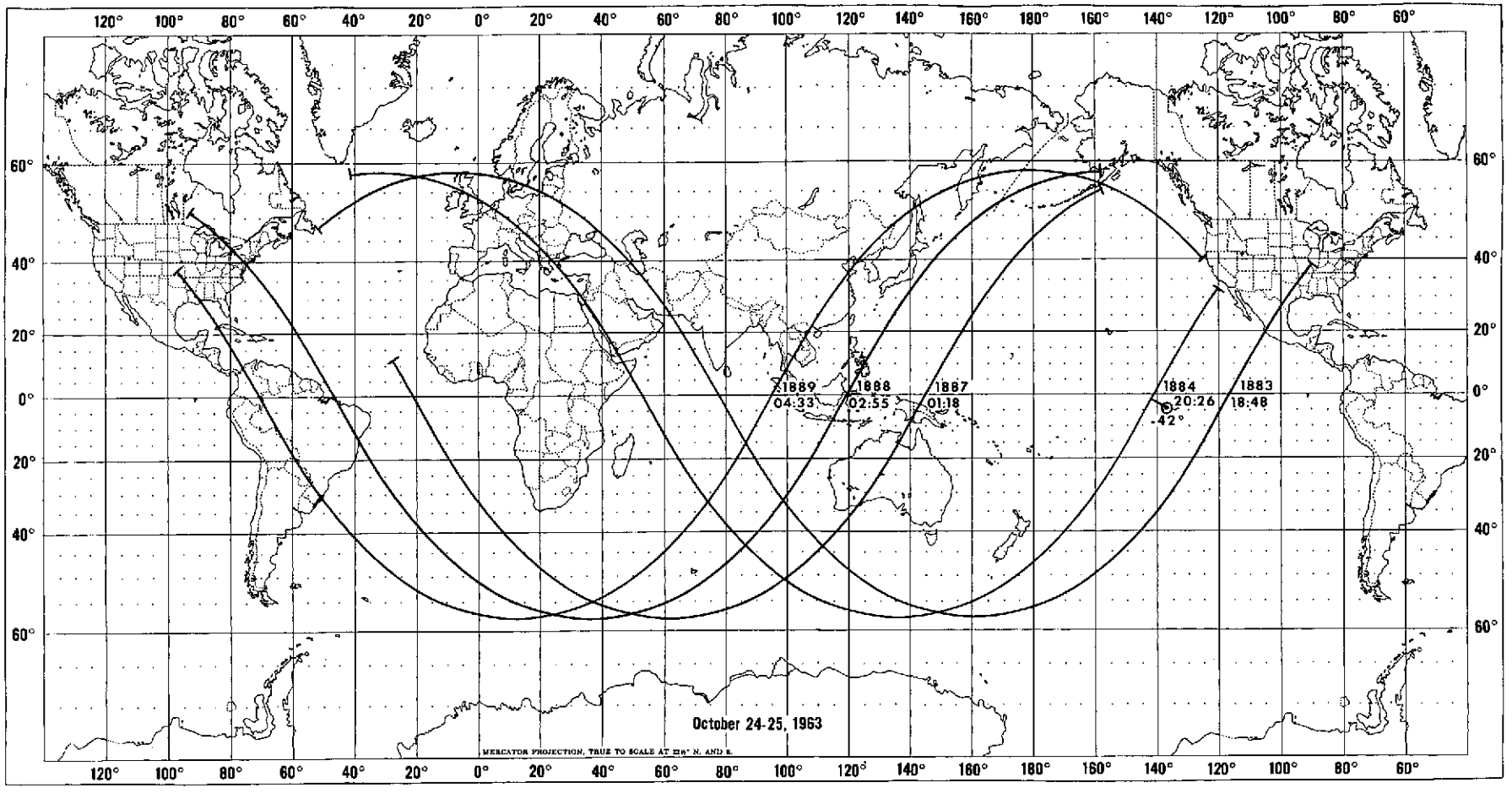

1816
06:02
1815
04:25
1814
02:47
1811
21:55
1810
20:17
-34°
October 19-20, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

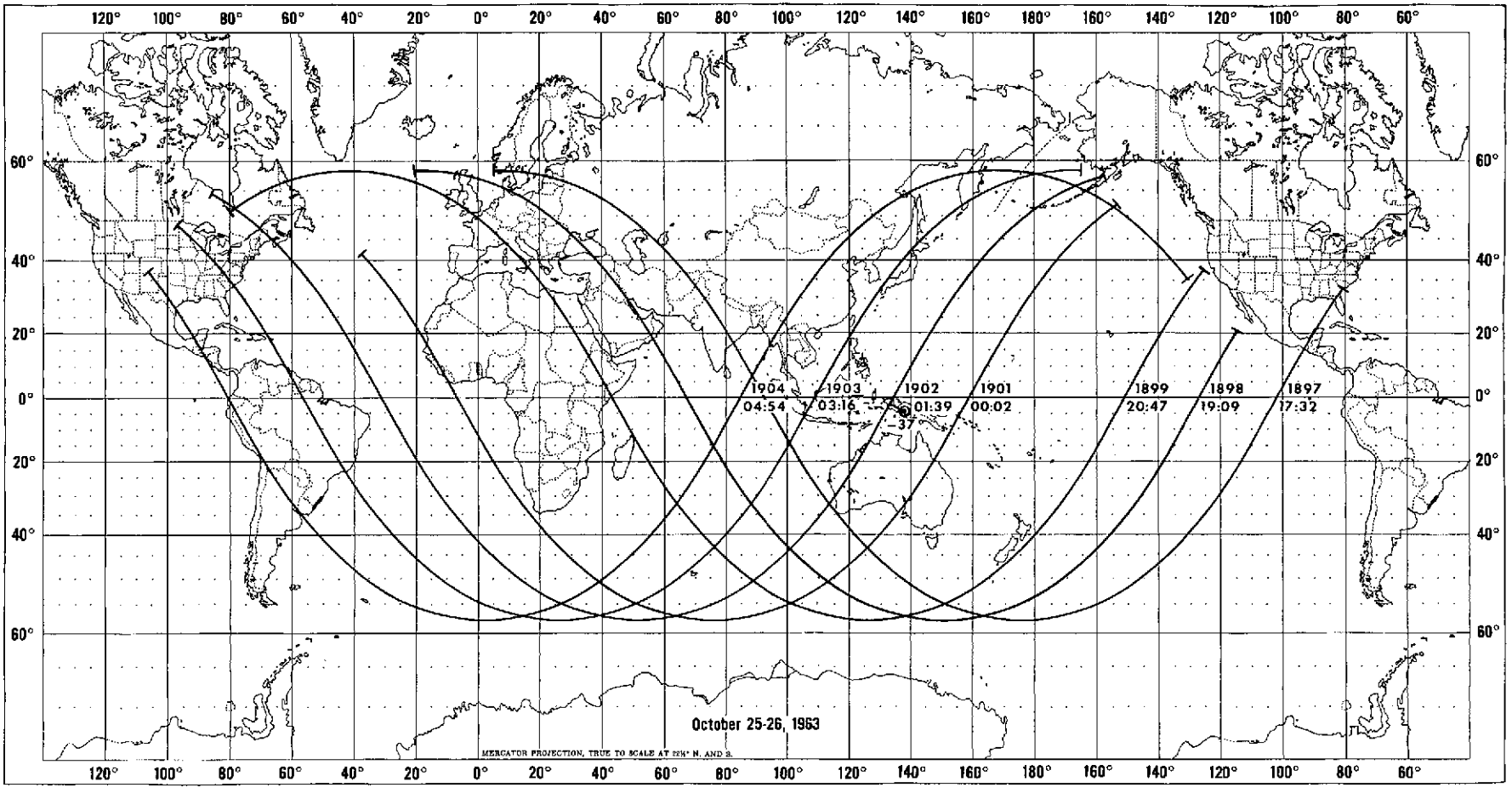

1831
06:23
1830
04:46
1829
03:08
1828
01:31
1826
22:16
1825
20:39
1824
19:01
34°
October 20-21, 1963
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 1824-1860
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

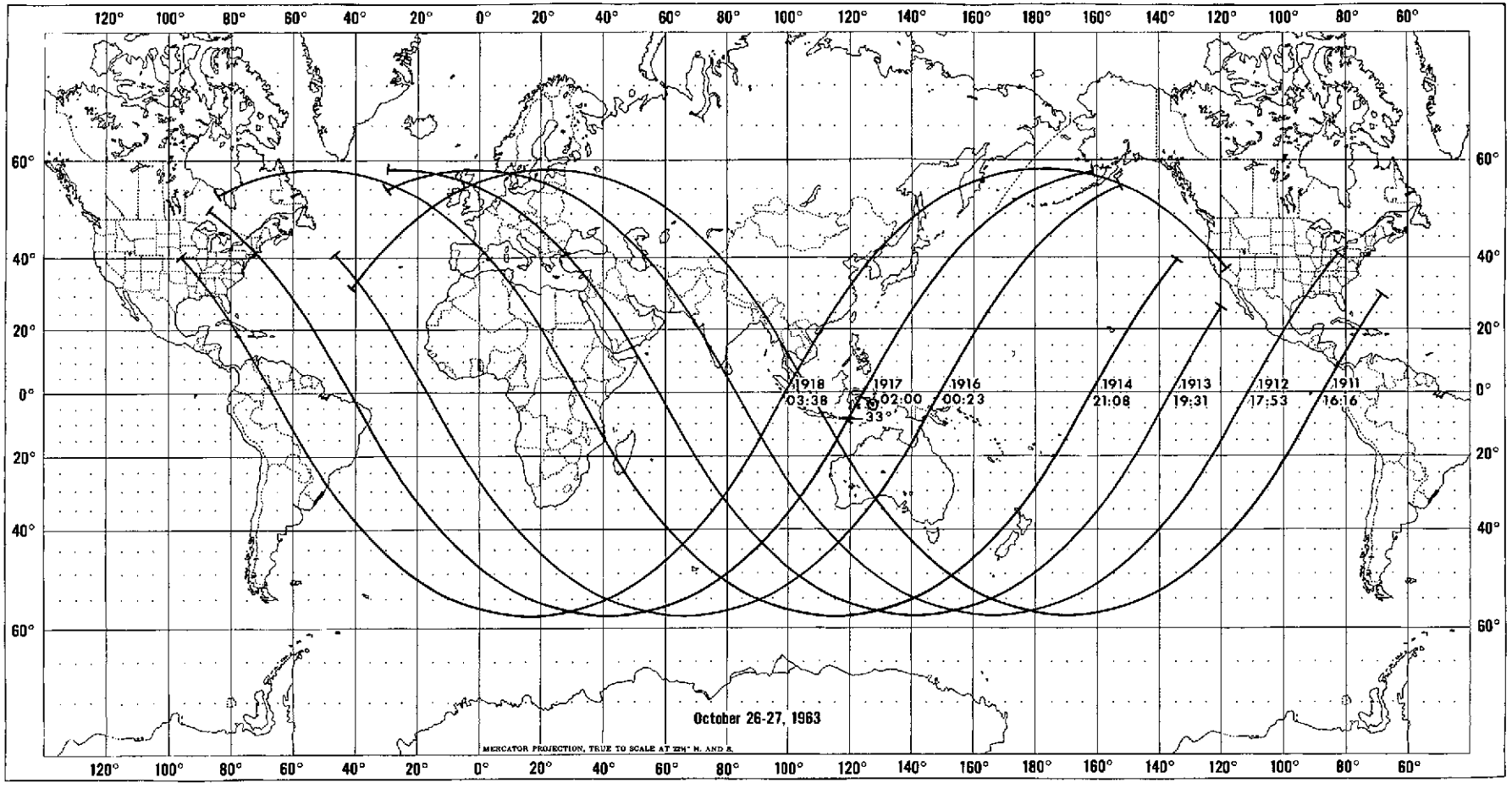

1843
01:52
-36°
October 22, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 1824-1860.

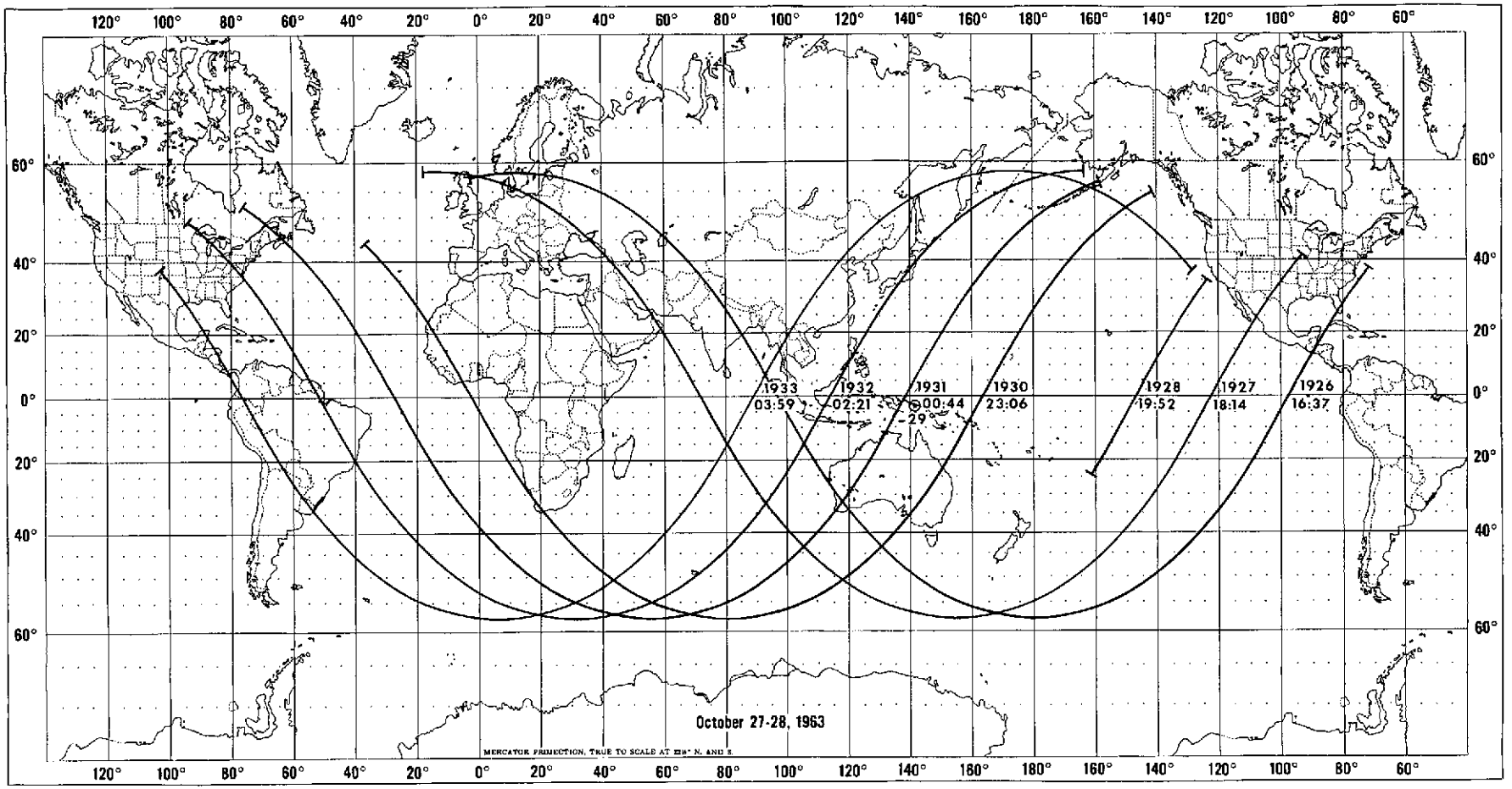

1860
05:28
1859
03:50
1858
02:13
1857
00:36
1855
21:21
-38°
October 22-23, 1963
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 1824-1860.
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

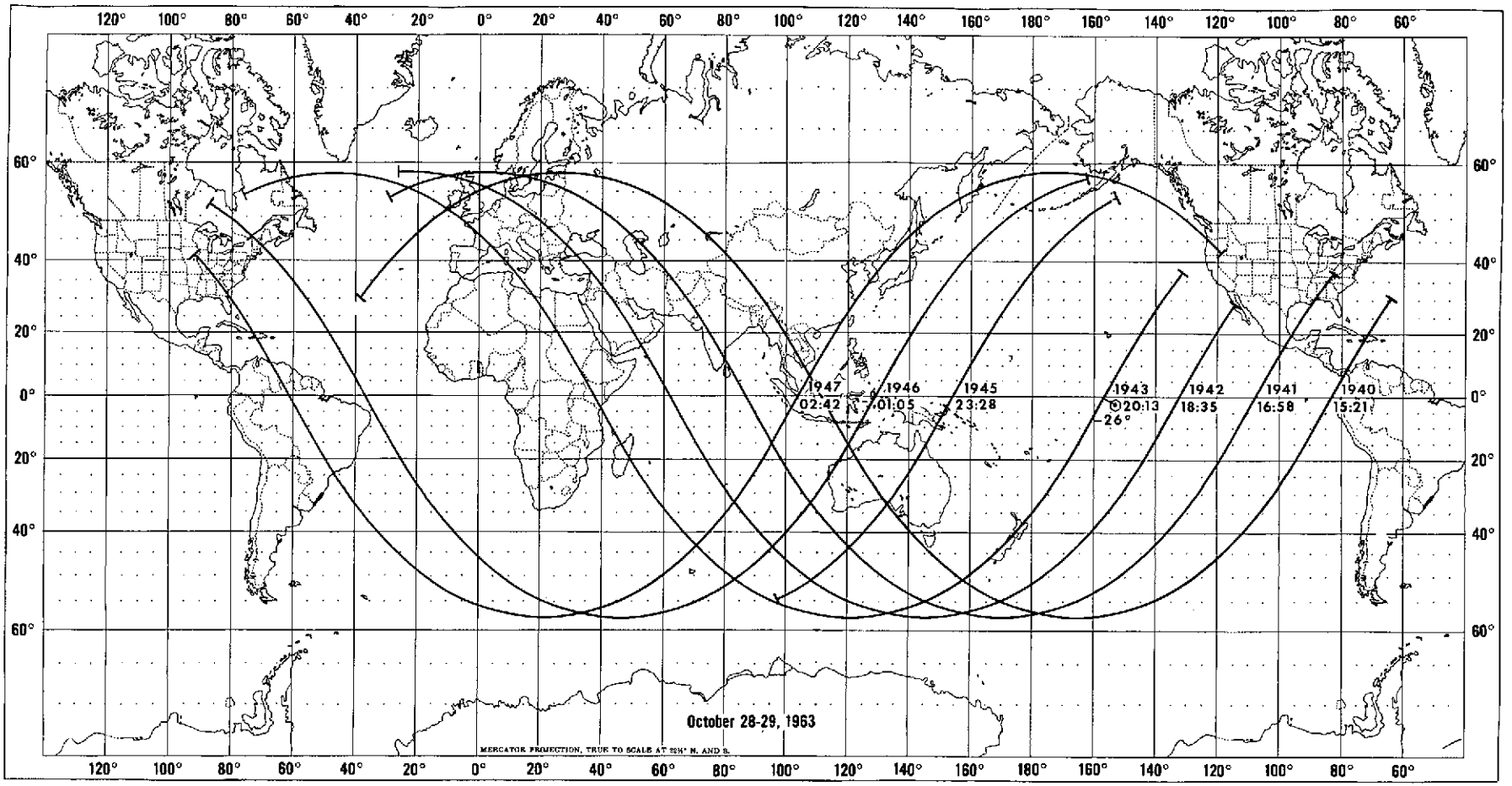

1875
05:49
1874
04:12
1873
02:34
1872
00:57
1869
20:05
1868
18:27
1867
16:50
-40°
October 23-24, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

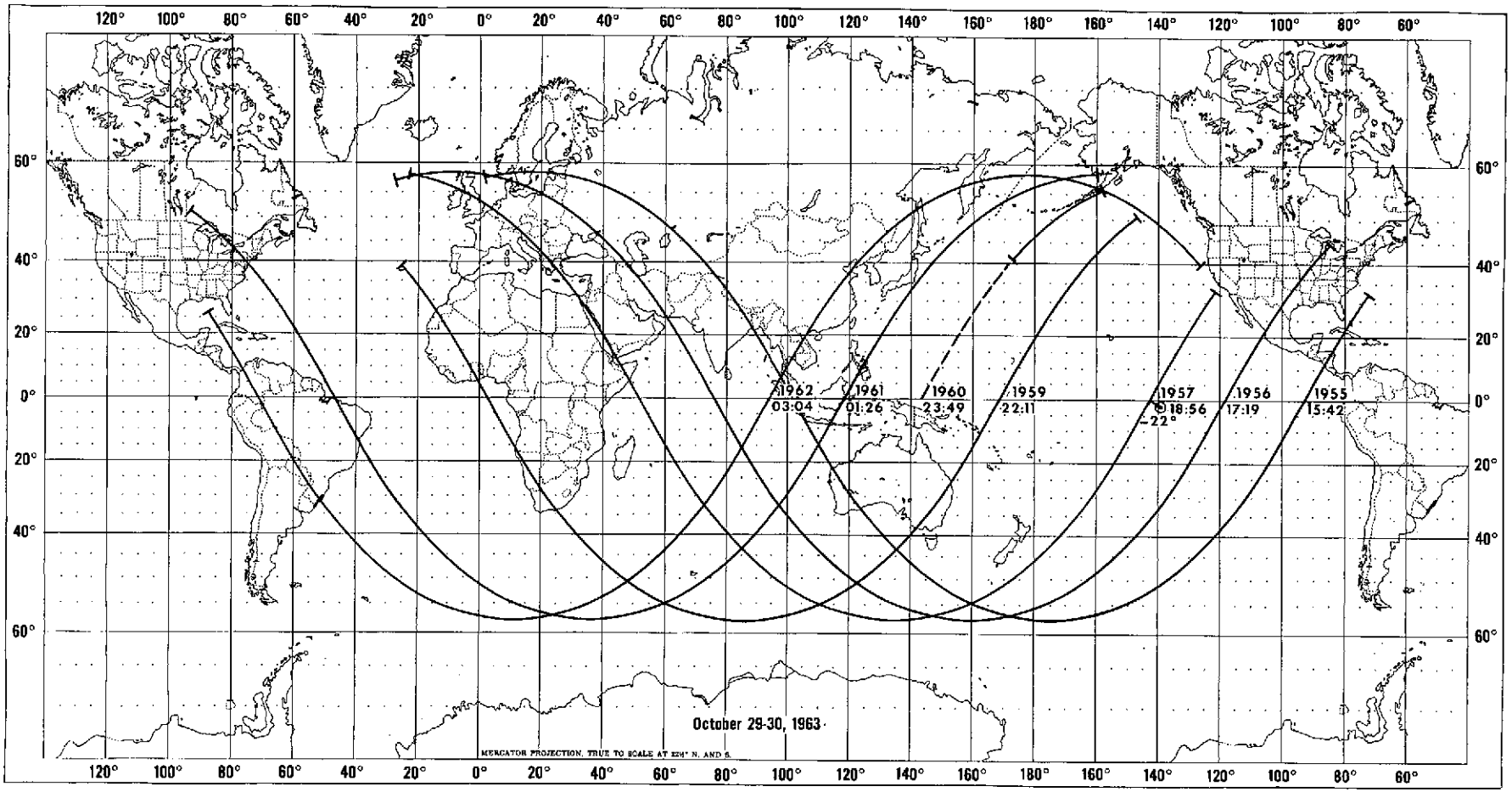

1889
04:33
1888
02:55
1887
01:18
1884
20:26
-42°
1883
18:48
October 24-25, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

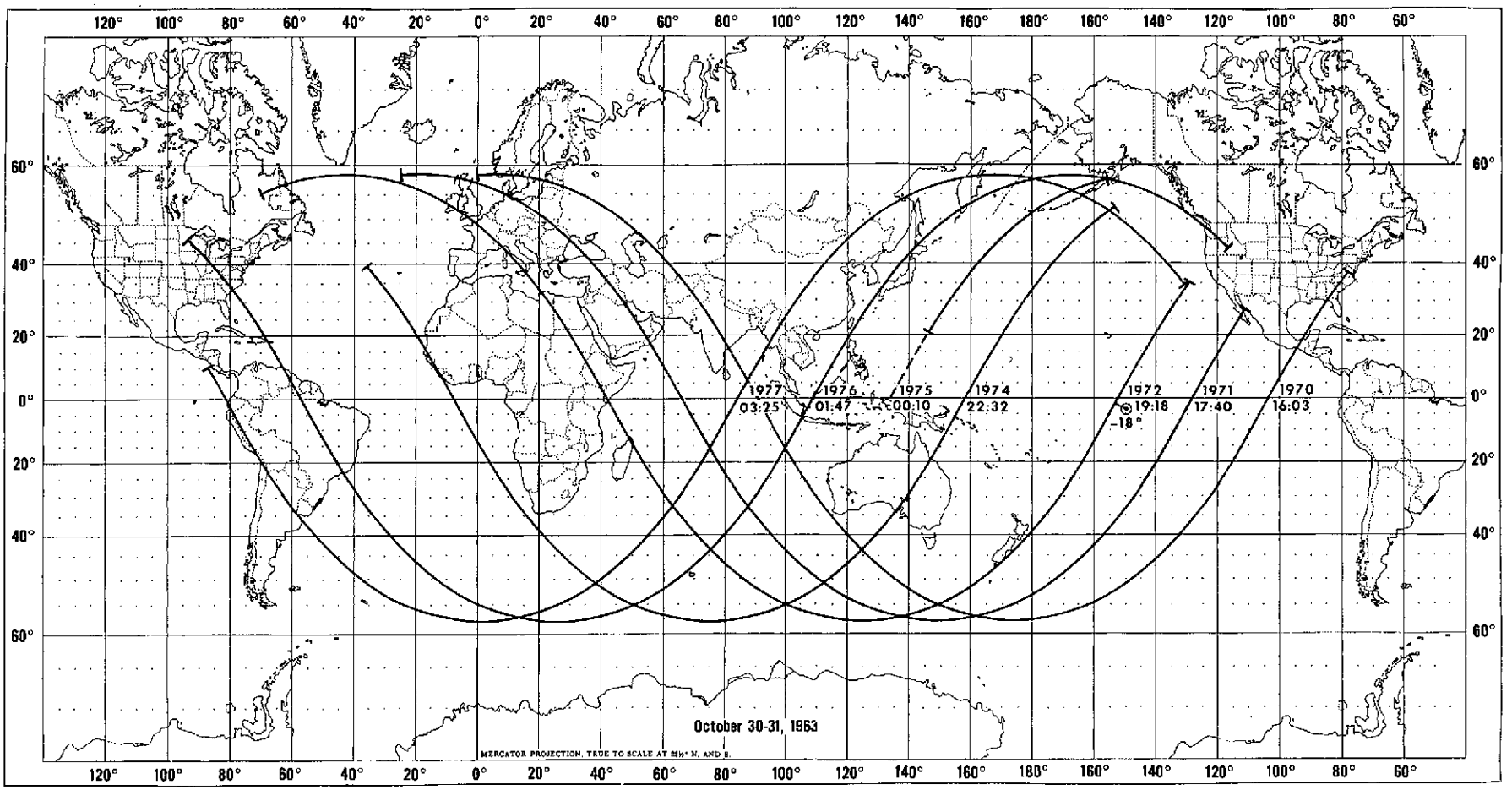

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
1904
04:54
1903
03:16
1902
01:39
1901
00:02
1899
20:47
1898
19:09
1897
17:32
-37
October 25-26, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

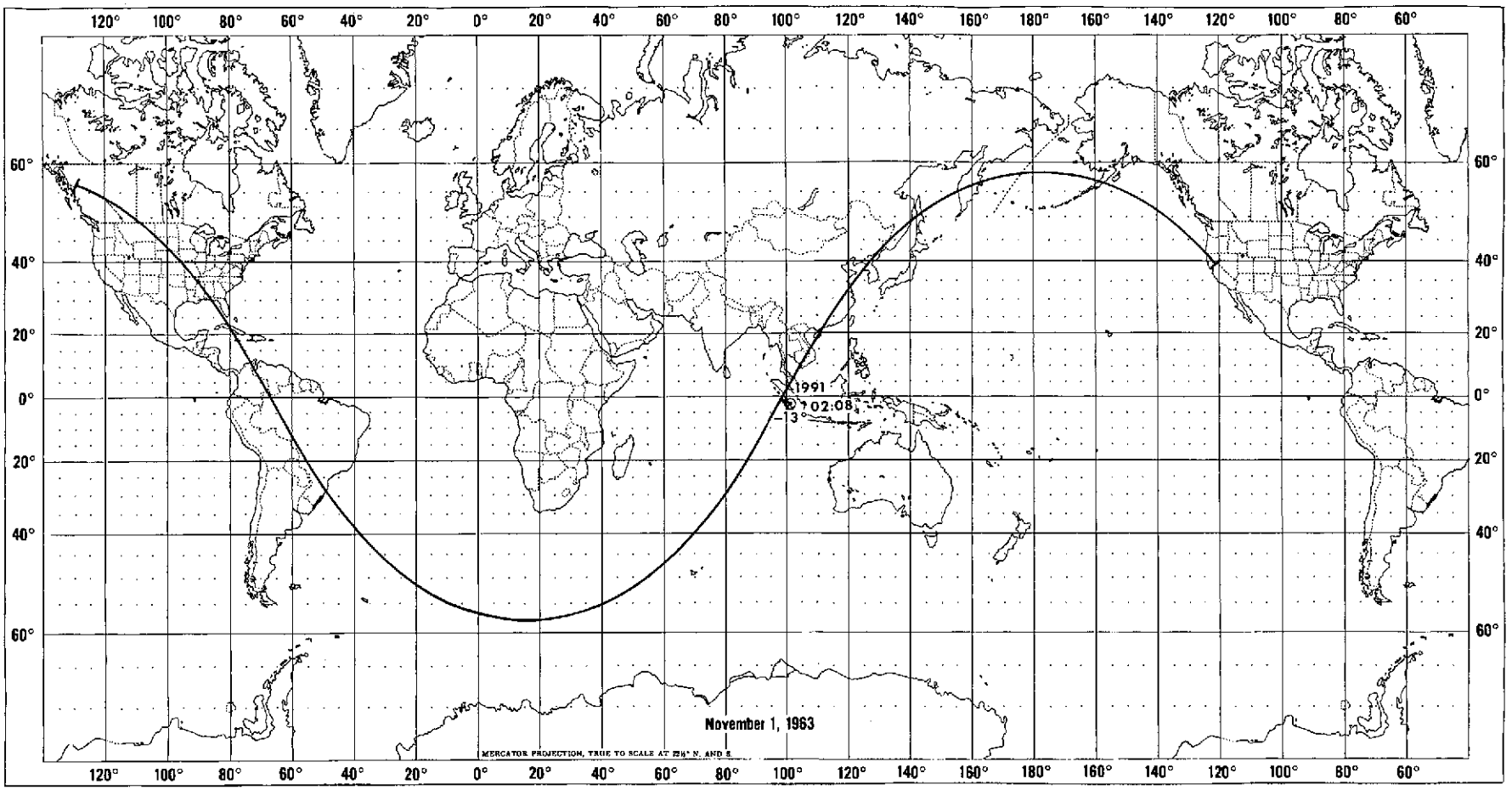

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
1918
03:38
1917
02:00
33°
1916
00:23
1914
21:08
1913
19:31
1912
17:53
1911
16:16
October 26-27, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

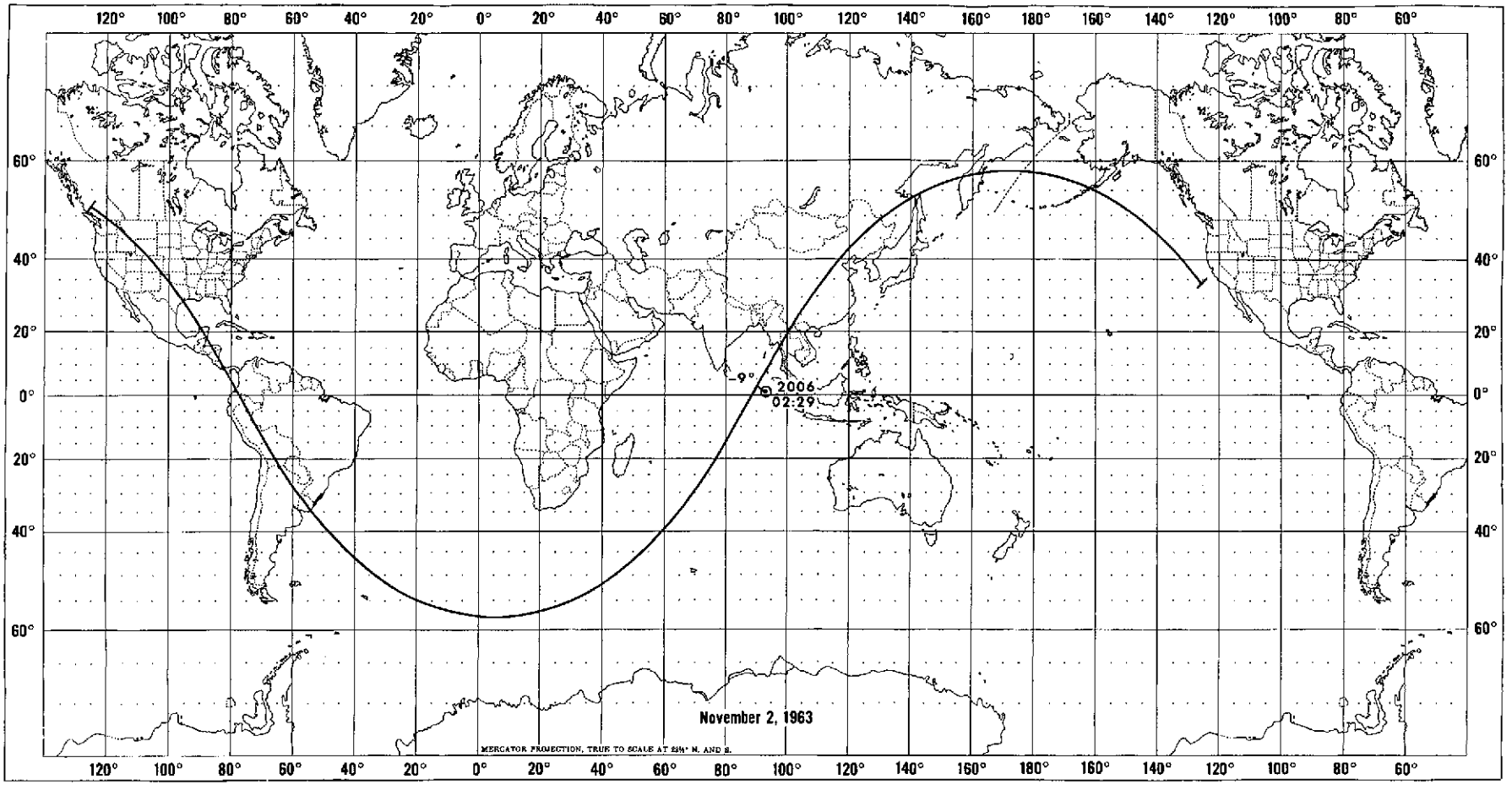

1933
03:59
1932
02:21
1931
00:44
-29°
1930
23:06
1928
19:52
1927
18:14
1926
16:37
October 27-28, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 28° N. AND S.

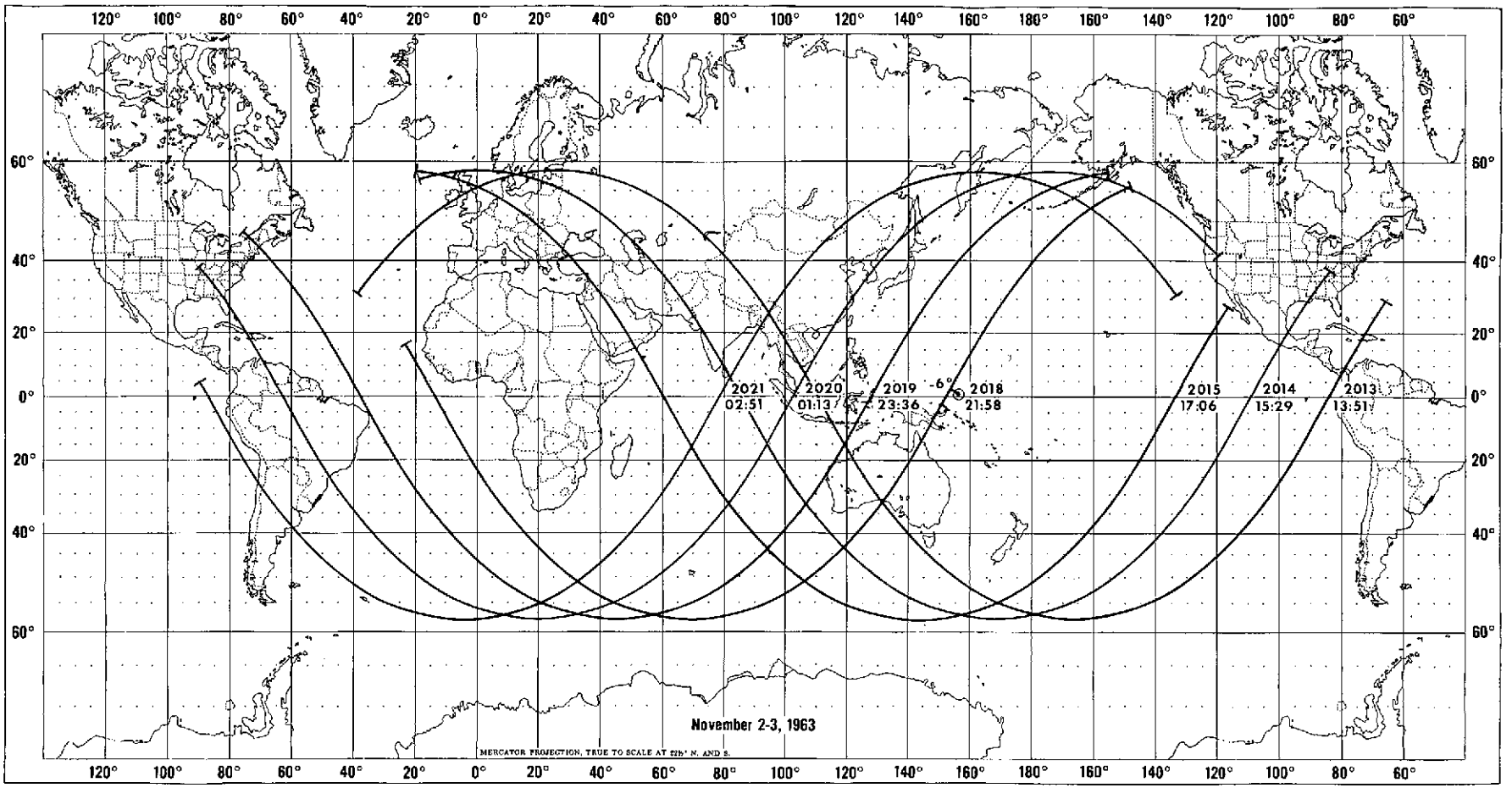

1947
02:42
1946
01:05
1945
23:28
1943
20:13
26°
1942
18:35
1941
16:58
1940
15:21
October 28-29, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

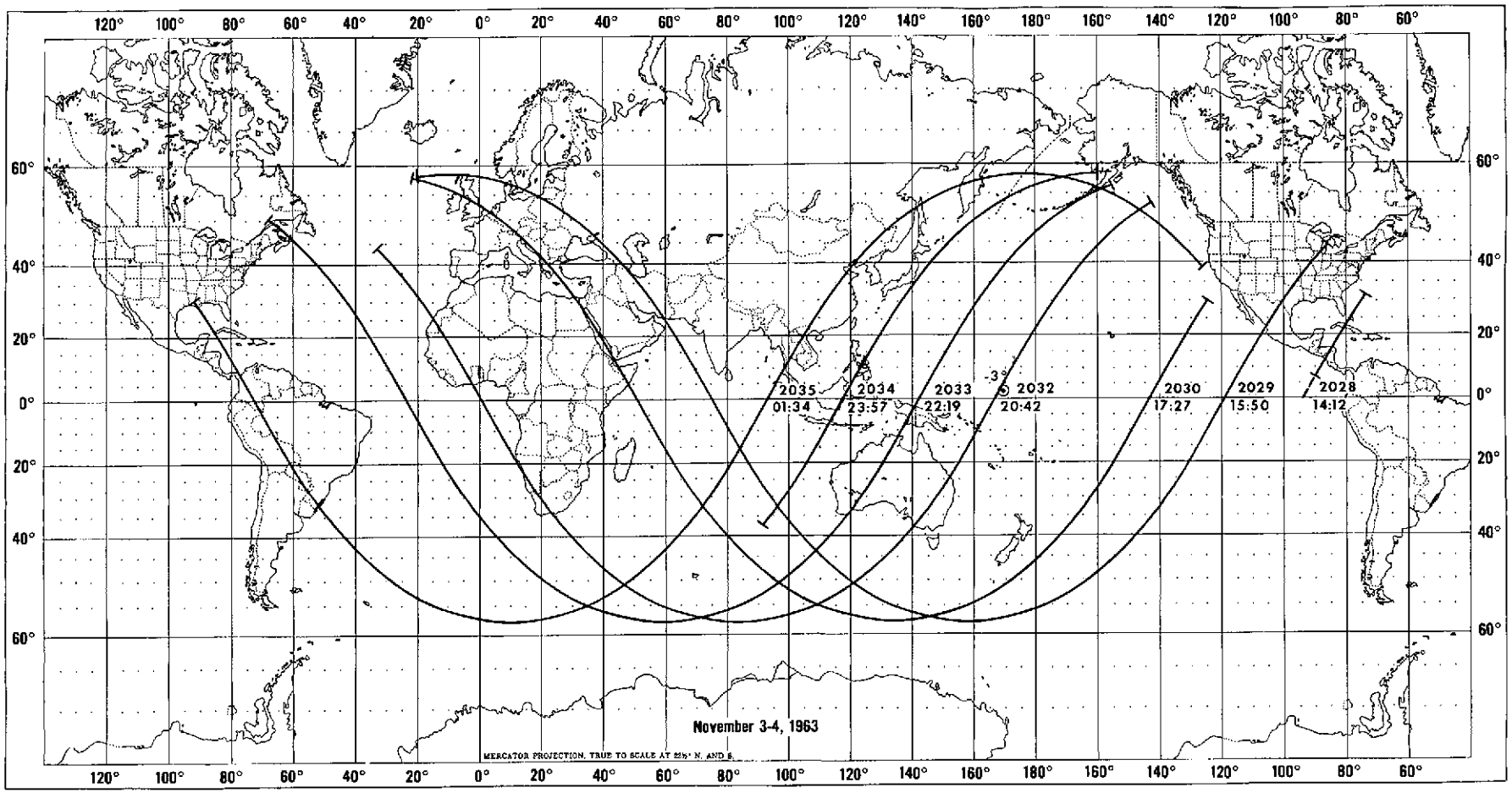

1962
03:04
1961
01:26
1960
23:49
1959
22:11
1957
18:56
-22°
1956
17:19
1955
15:42
October 29-30, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

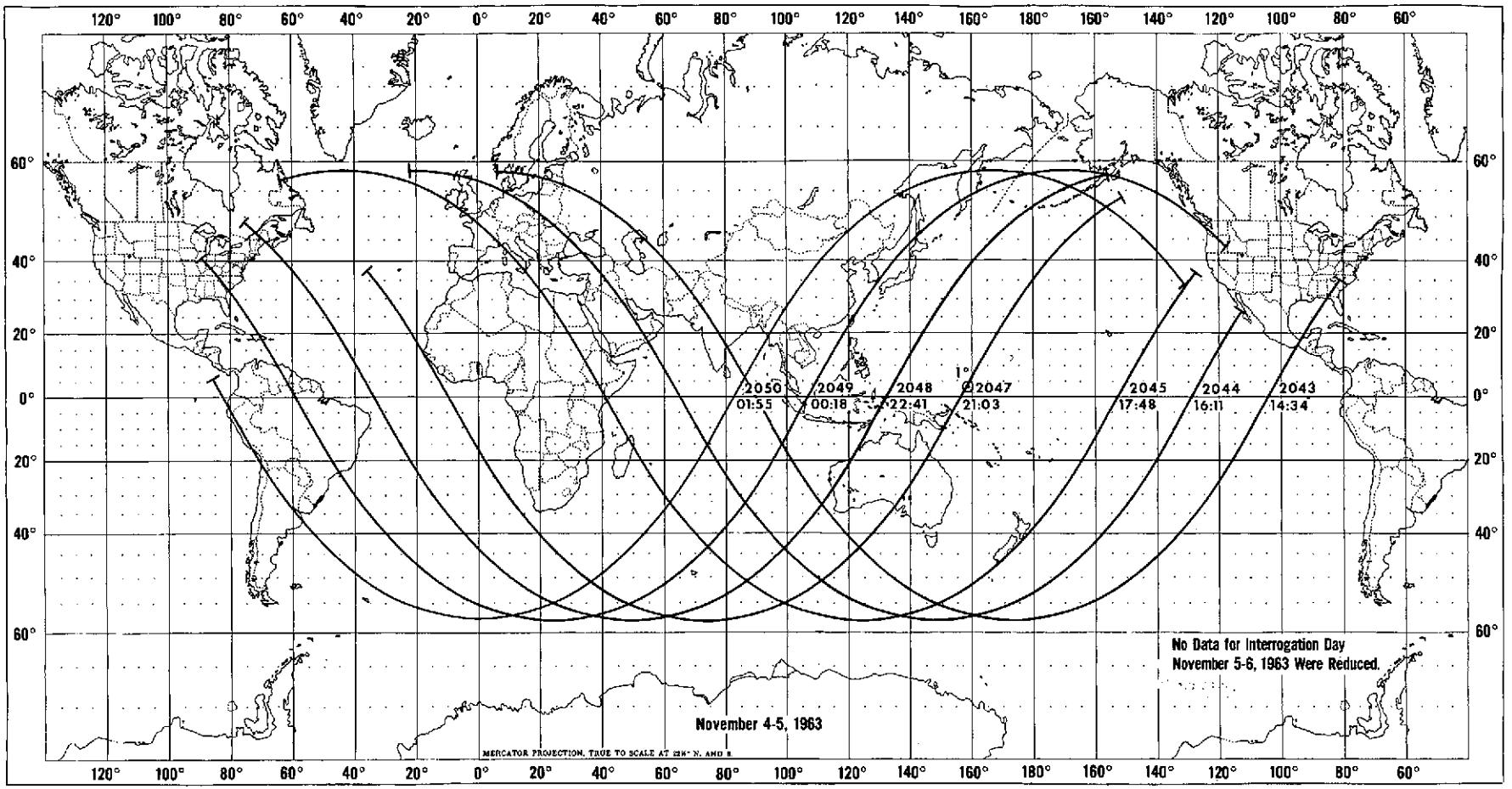

1977
03:25
1976
01:47
1975
00:10
1974
22:32
1972
19:18
-18°
1971
17:40
1970
16:03
October 30-31, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 34½° N. AND S.

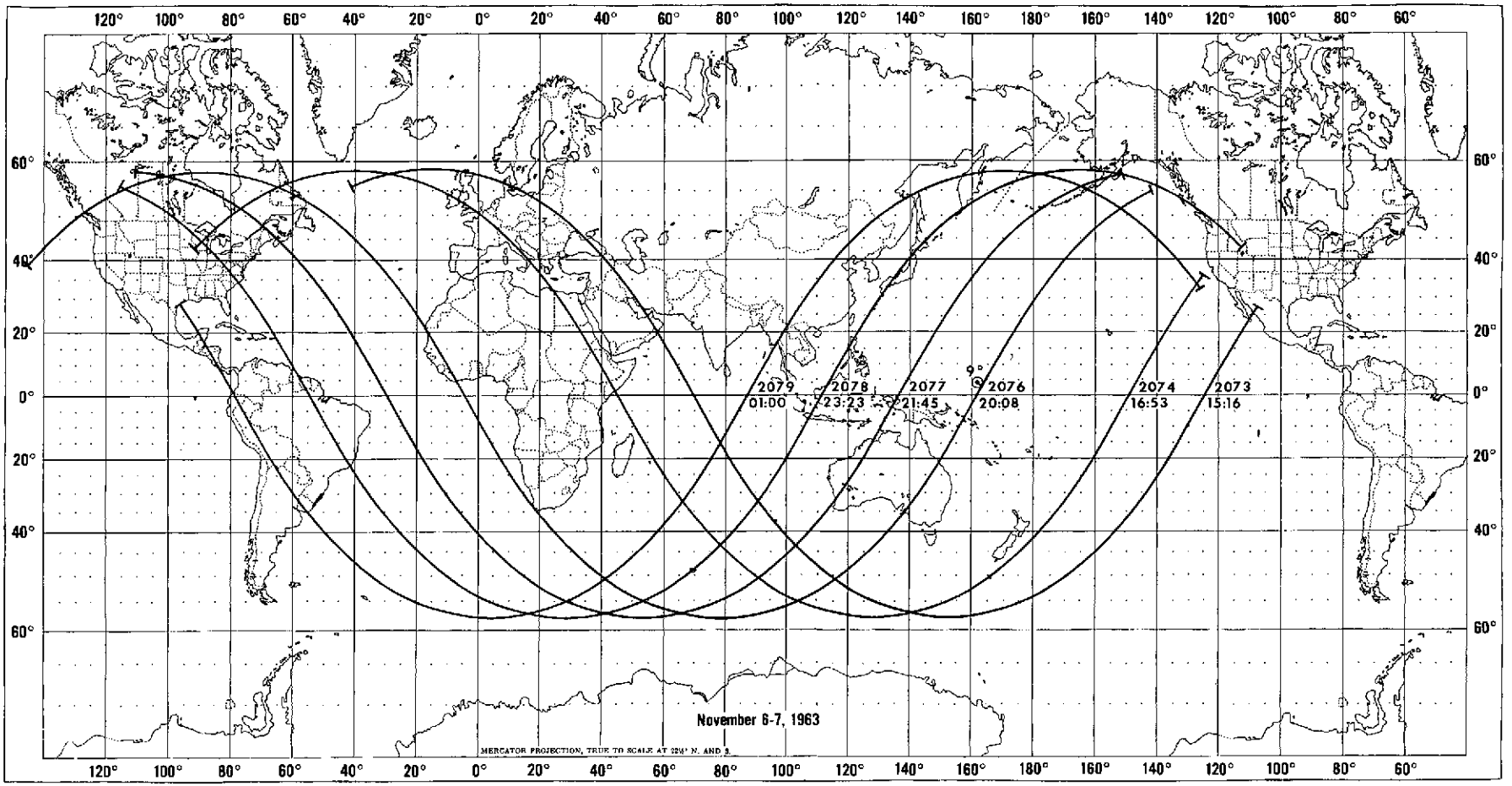

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60°
40°
20°
0°
20°
40°
60°
1991
102:08
-13°
November 1, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

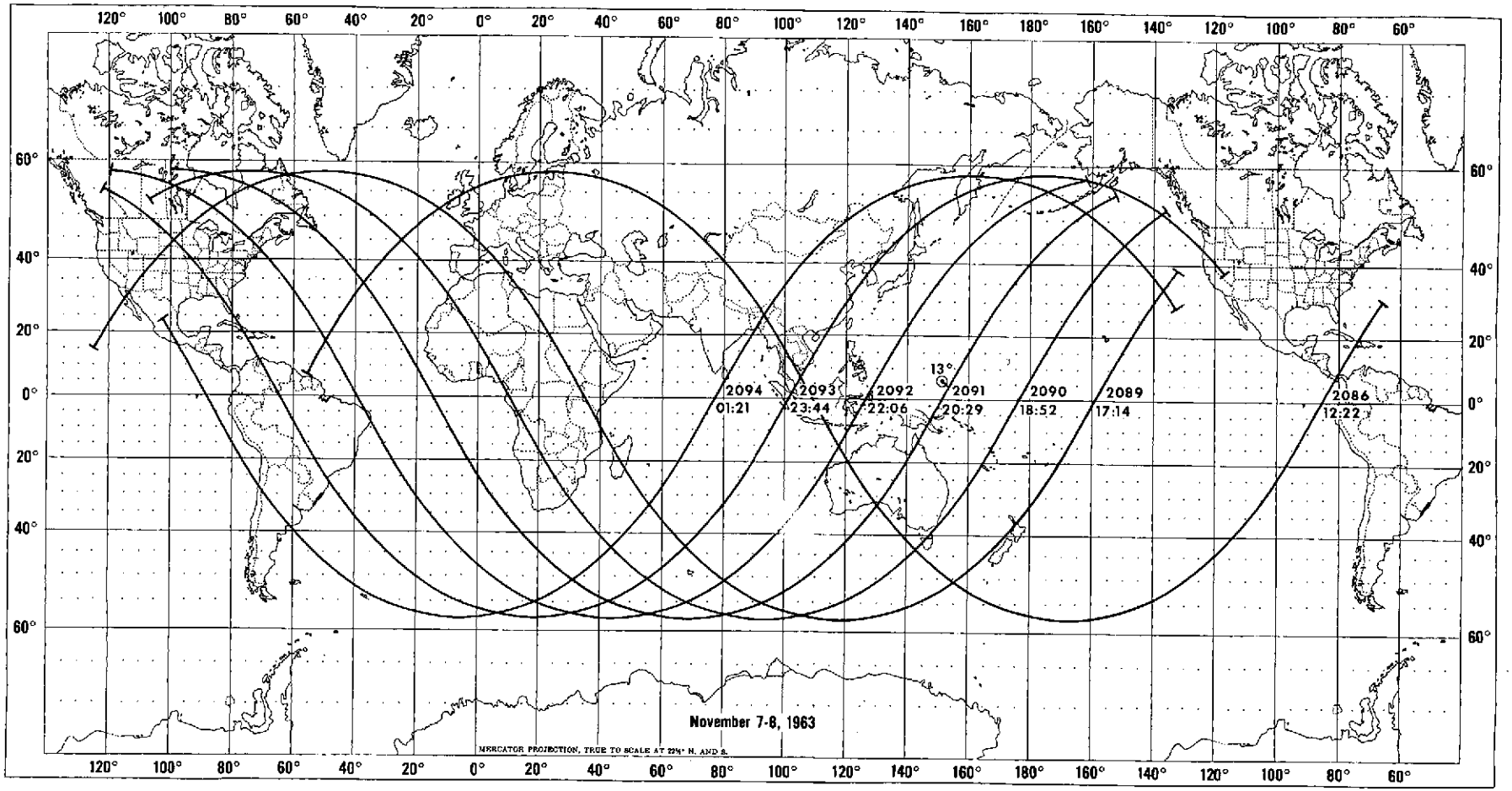

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
-9°
2006
02:29
November 2, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

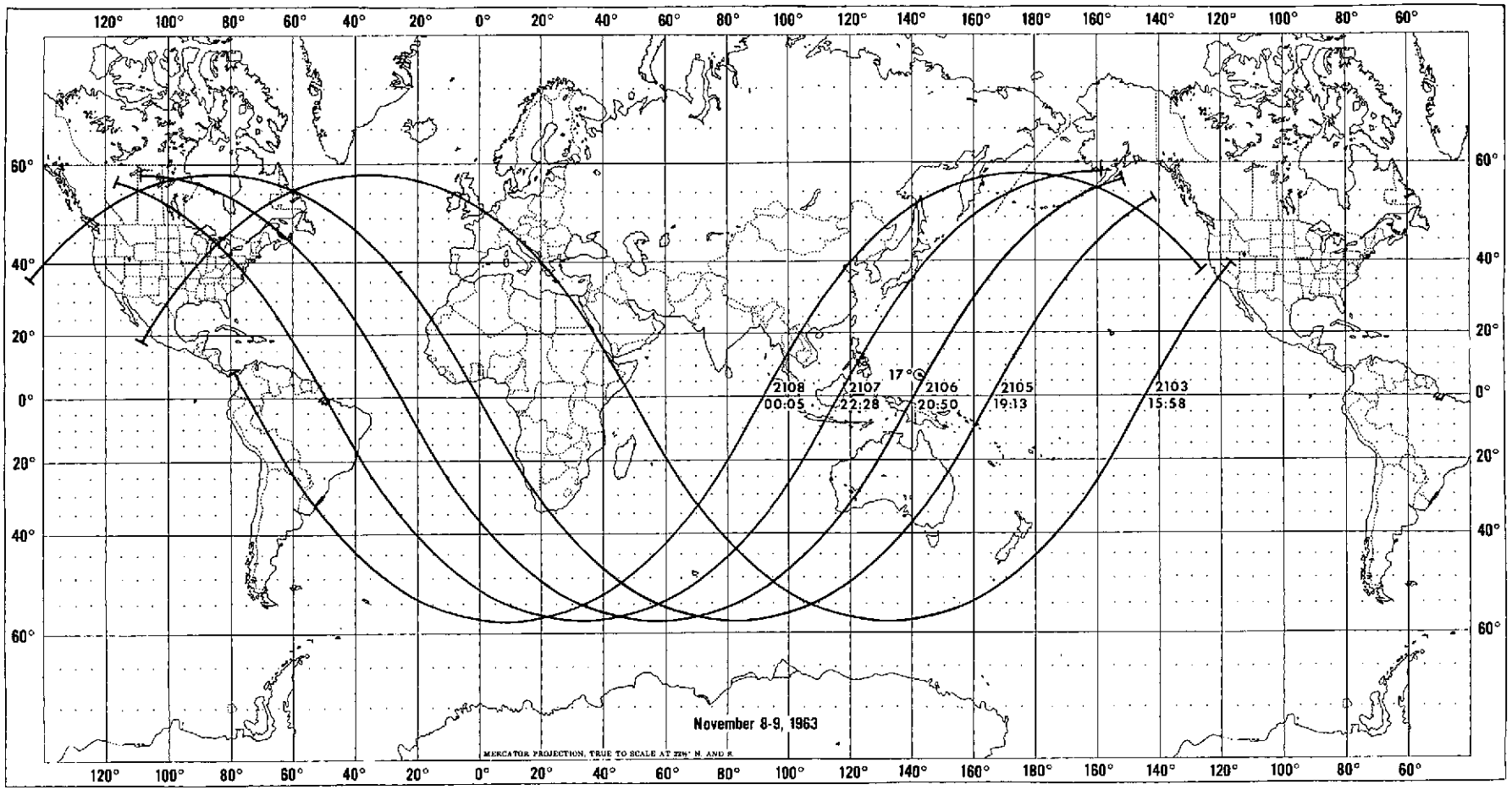

2021
02:51
2020
01:13
2019
23:36
-6°
2018
21:58
2015
17:06
2014
15:29
2013
13:51
November 2-3, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 52½° N. AND S.

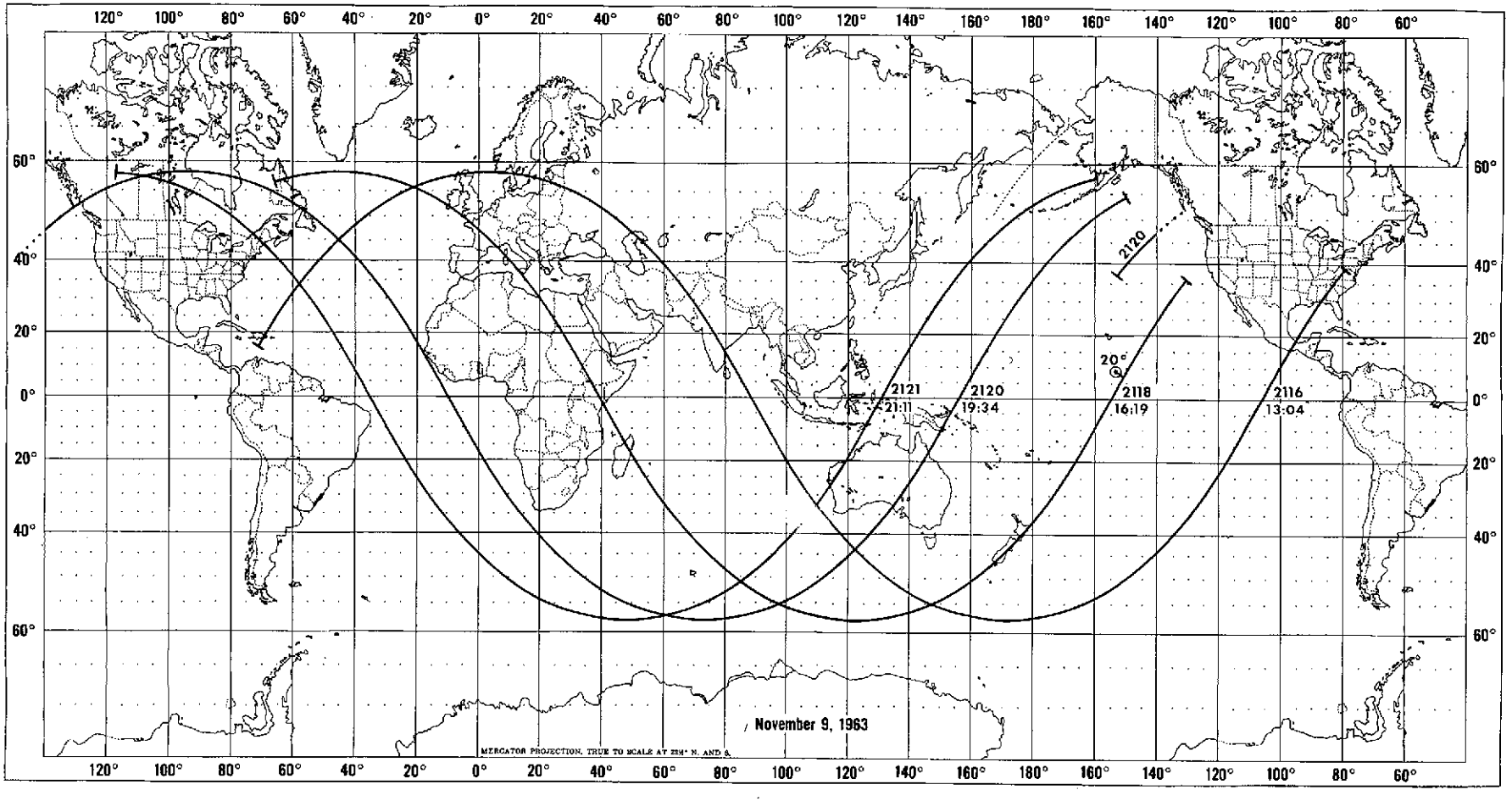

2035
01:34
2034
23:57
2033
22:19
-3°
2032
20:42
2030
17:27
2029
15:50
2028
14:12
November 3-4, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

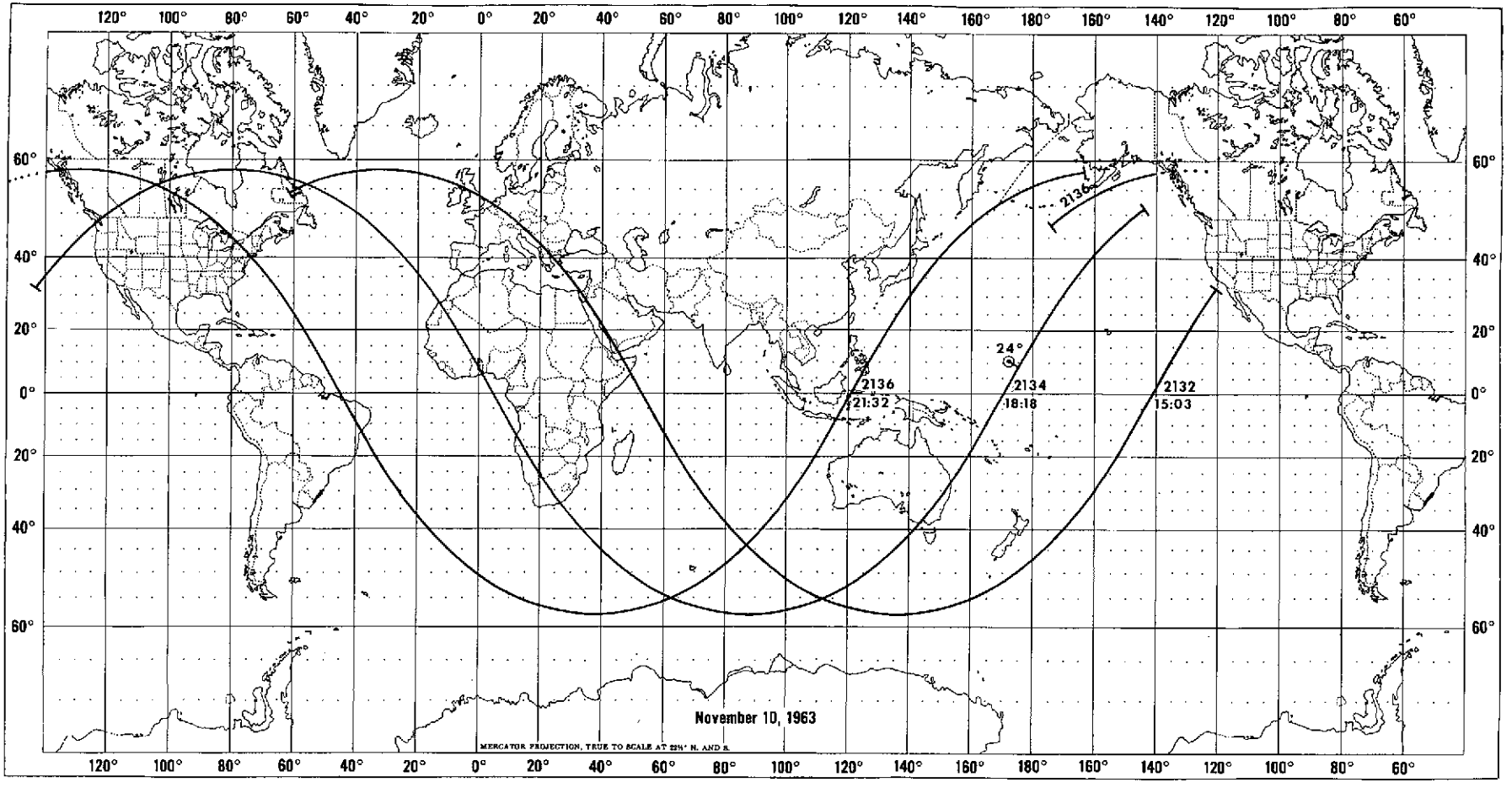

2050
01:55
2049
00:18
2048
22:41
2047
21:03
2045
17:48
2044
16:11
2043
14:34
No Data for Interrogation Day
November 5-6, 1963 Were Reduced.
November 4-5, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 12H° N. AND S

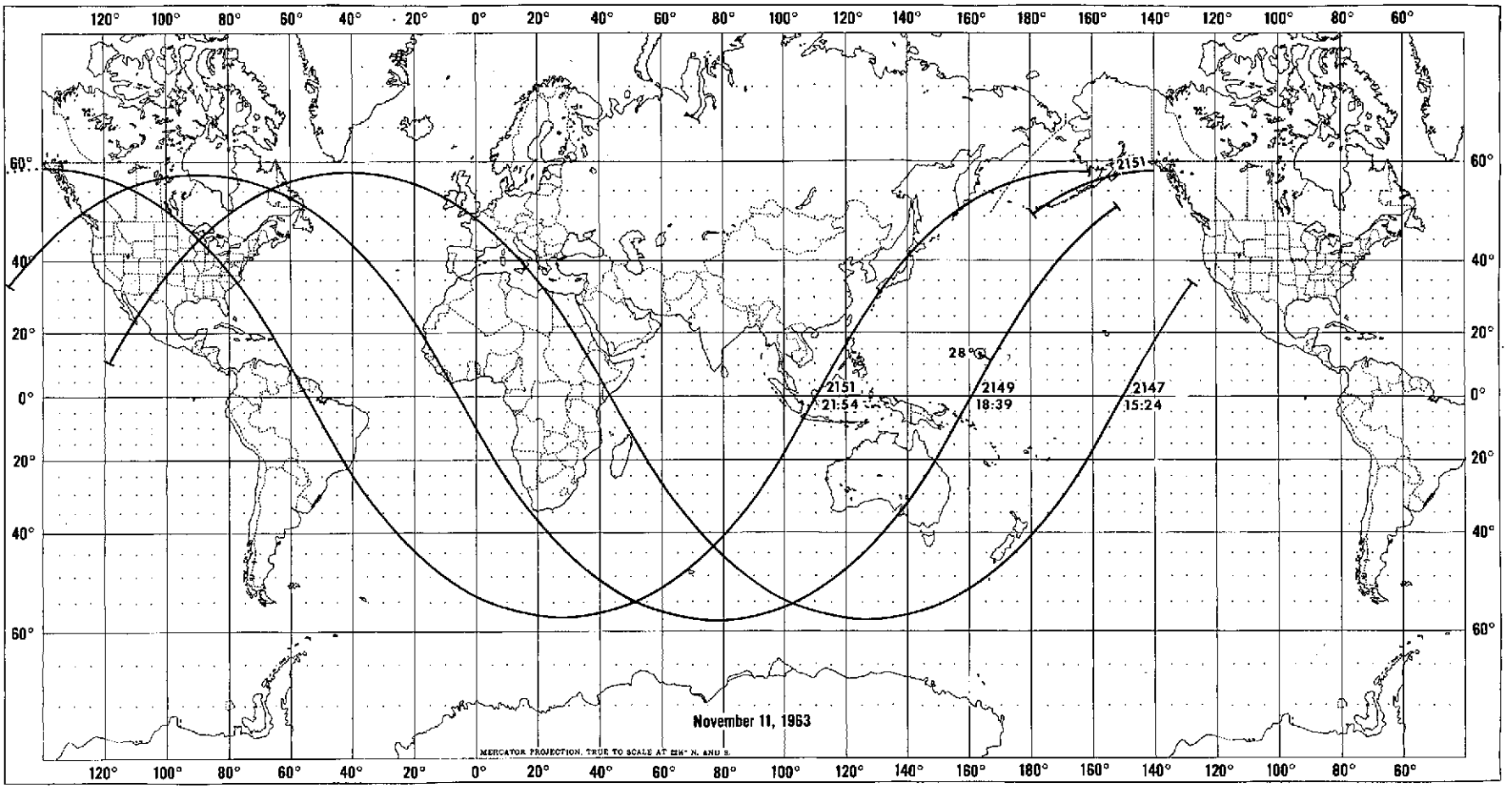

2079
01:00
2078
23:23
2077
21:45
9°
2076
20:08
2074
16:53
2073
15:16
November 6-7, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

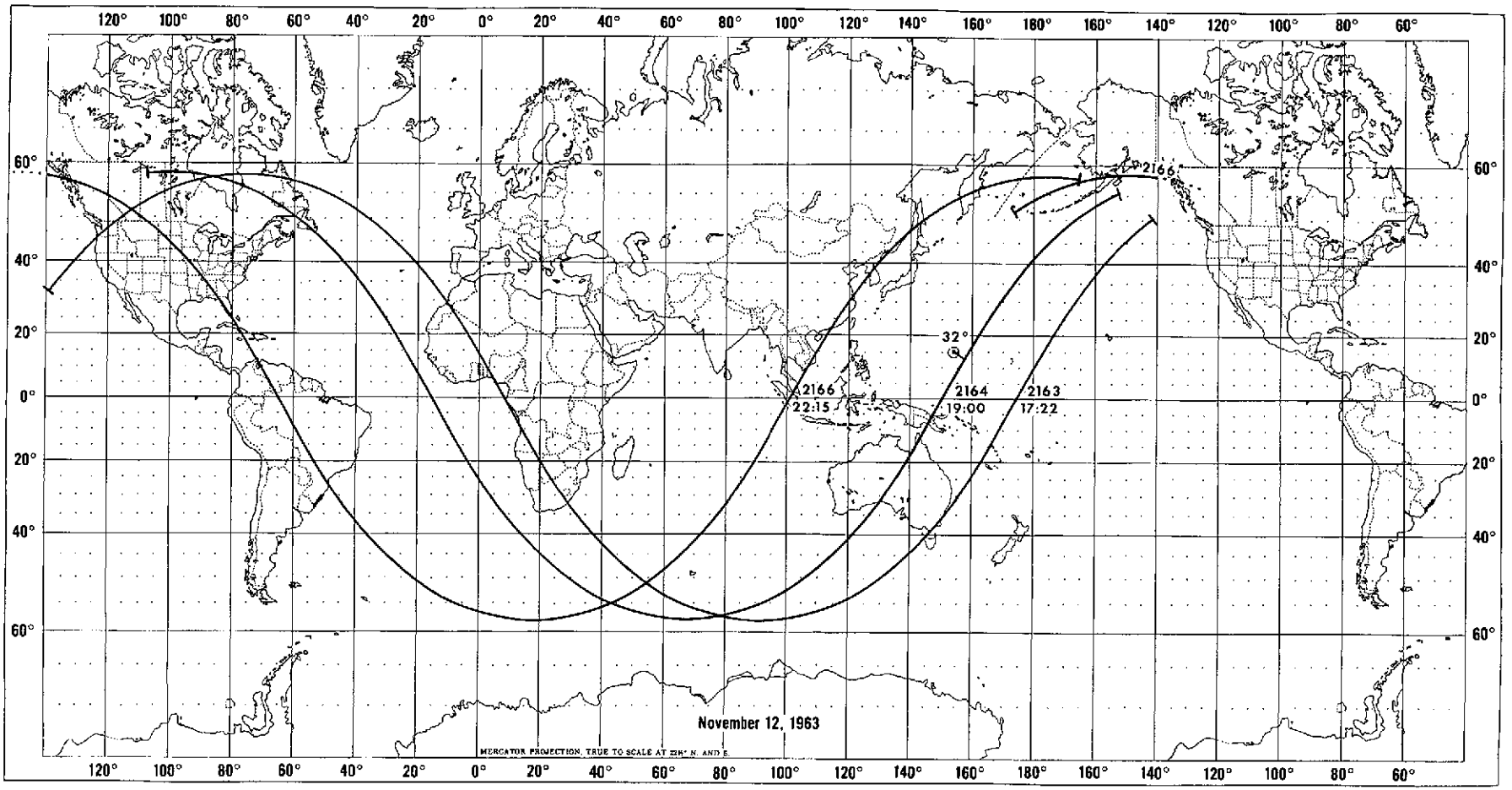

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
2094
01:21
2093
23:44
2092
22:06
13°
2091
20:29
2090
18:52
2089
17:14
2086
12:22
November 7-8, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

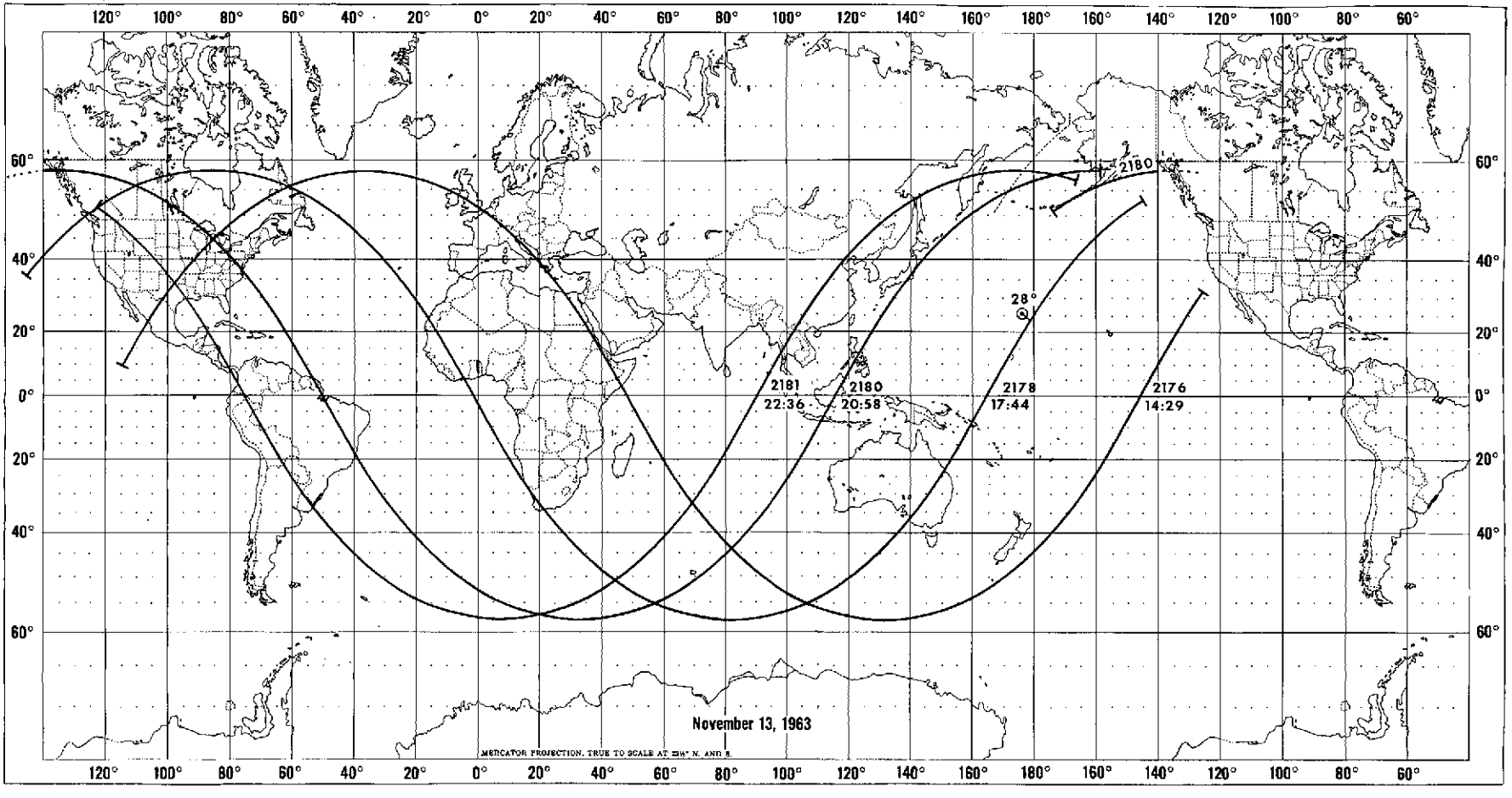

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
2108
00:05
2107
22:28
17°
2106
20:50
2105
19:13
2103
15:58
November 8-9, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

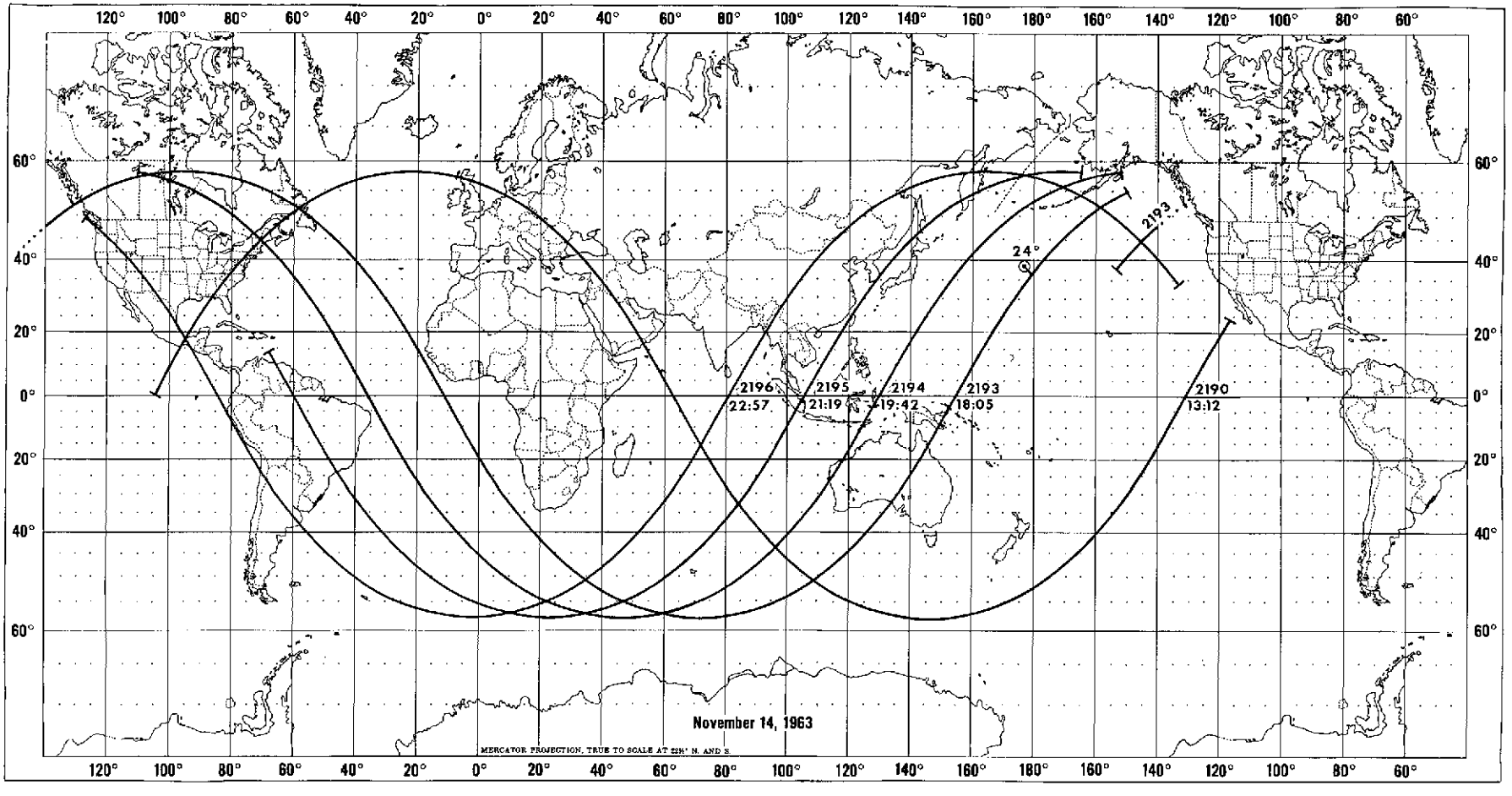

2121
21:11
2120
19:34
2118
16:19
2116
13:04
2120
20°
November 9, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

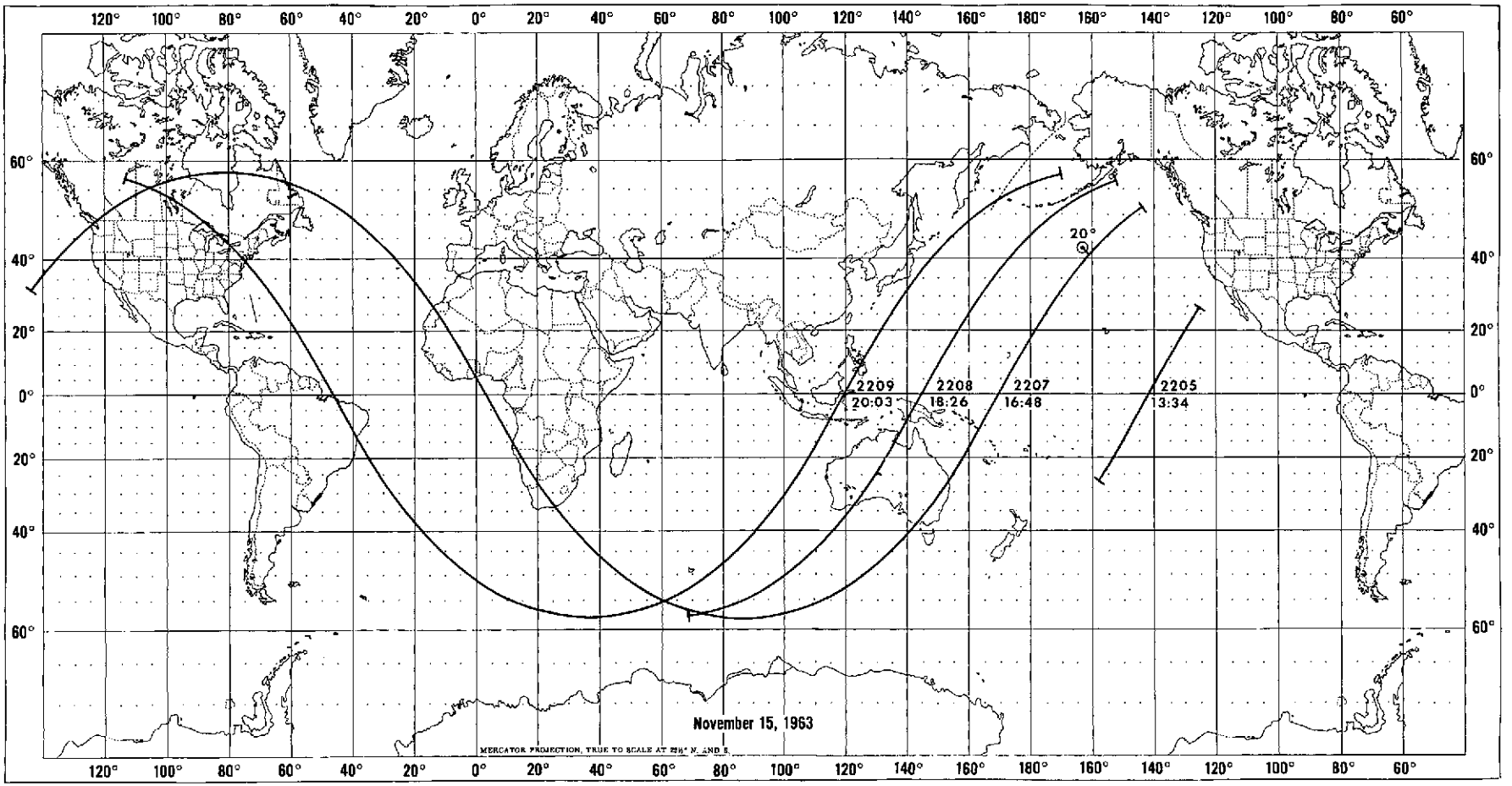

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
2136
24°
2136
21:32
2134
18:18
2132
15:03
November 10, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

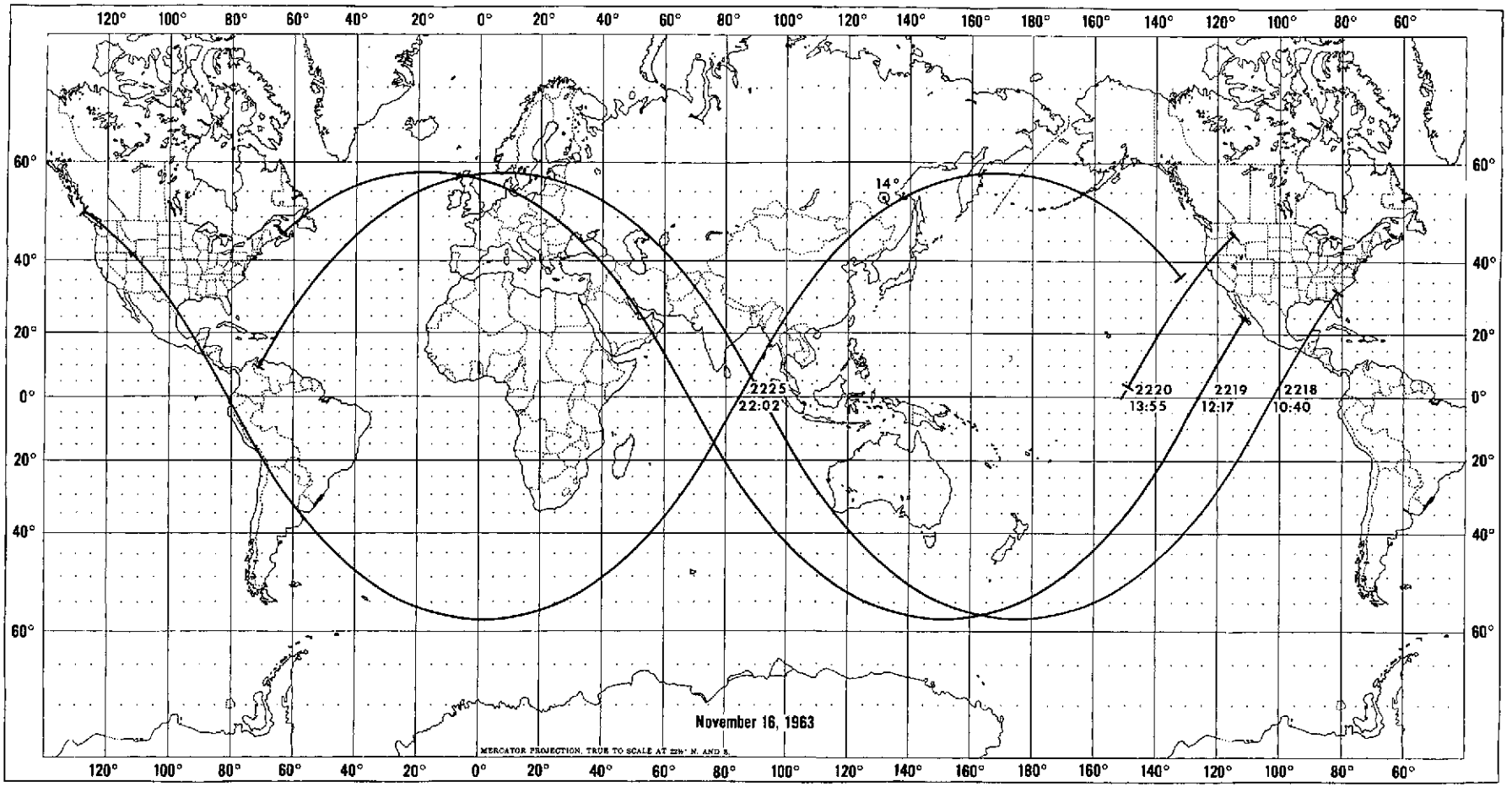

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60°
40°
20°
0°
20°
40°
60°
2151
28°
2151
21:54
2149
18:39
2147
15:24
November 11, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 28° N. AND S.

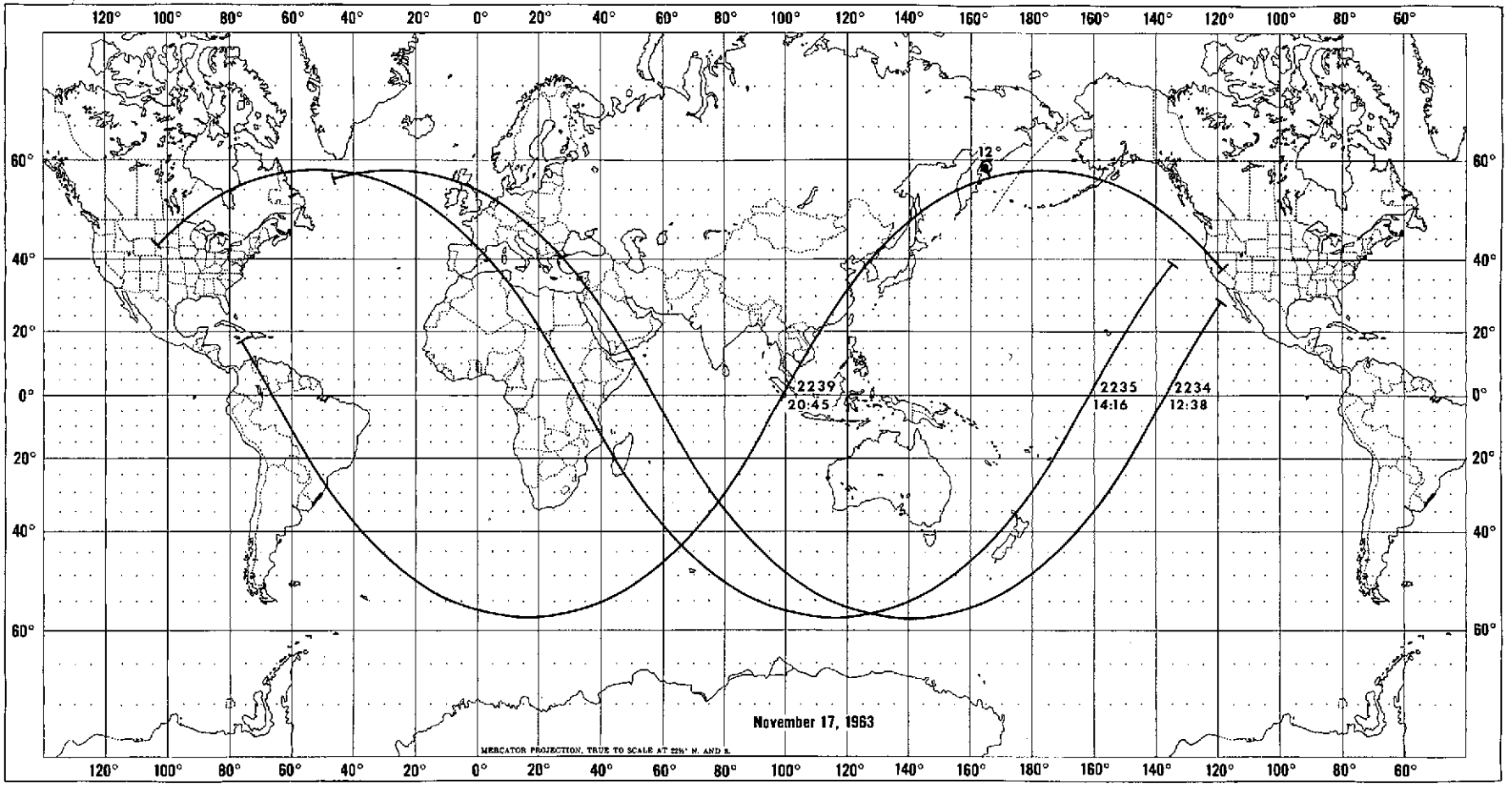

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60°
40°
20°
0°
20°
40°
60°
2166
32°
2166
22:15
2164
19:00
2163
17:22
November 12, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

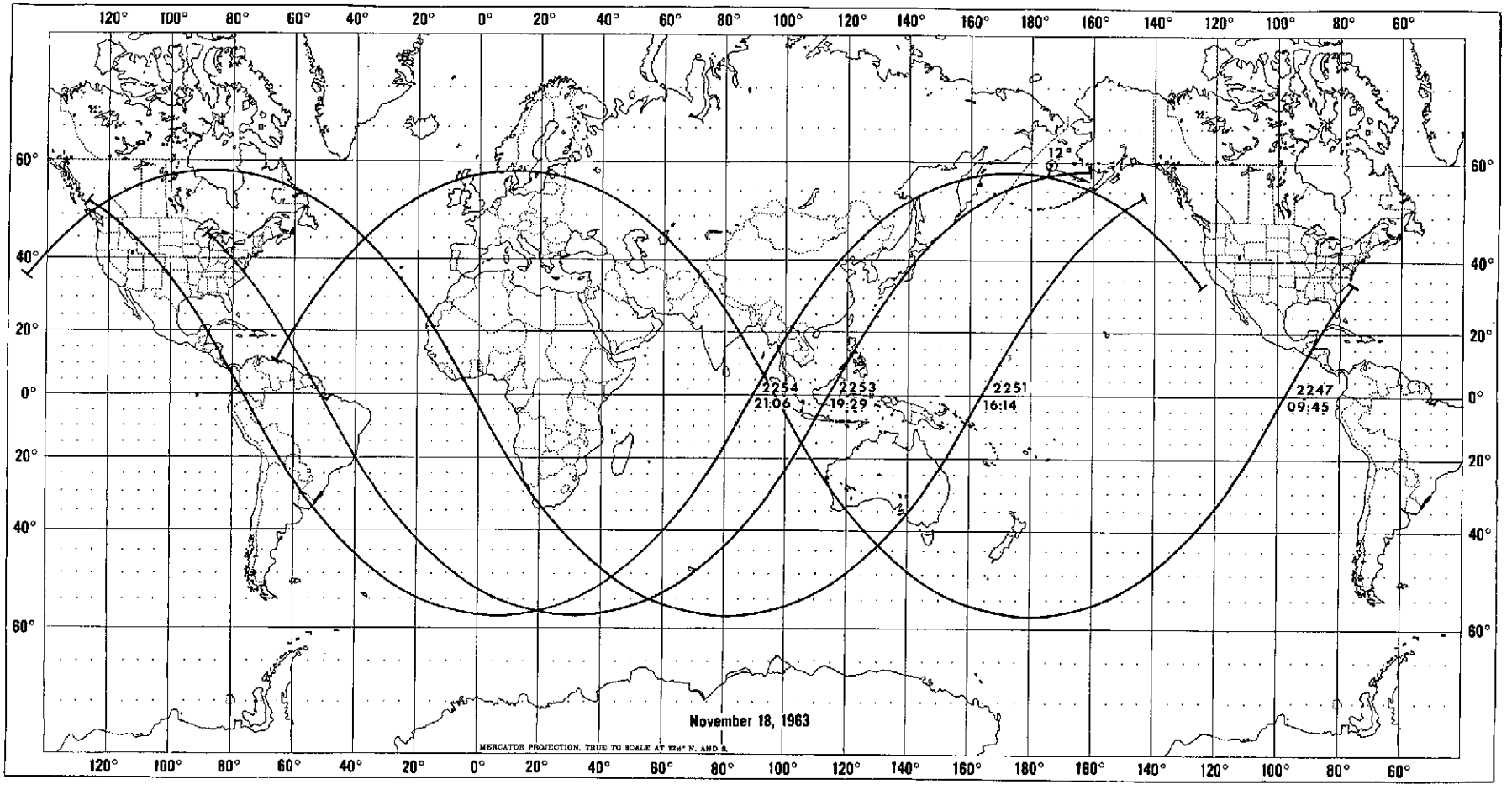

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60°
40°
20°
0°
20°
40°
60°
2180
28°
2181
22:36
2180
20:58
2178
17:44
2176
14:29
November 13, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

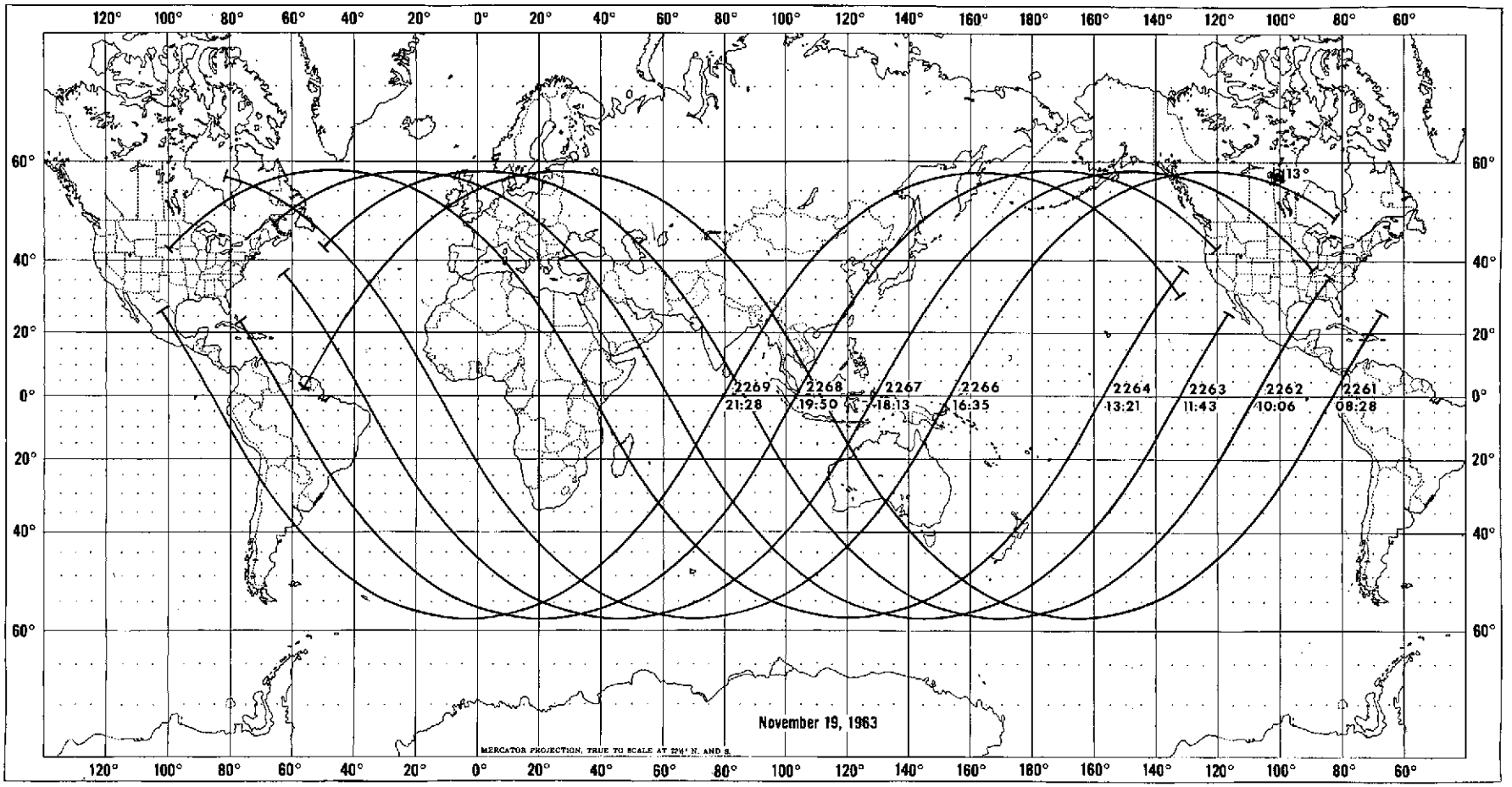

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
2196
22:57
2195
21:19
2194
19:42
2193
18:05
2190
13:12
2193
24°
November 14, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

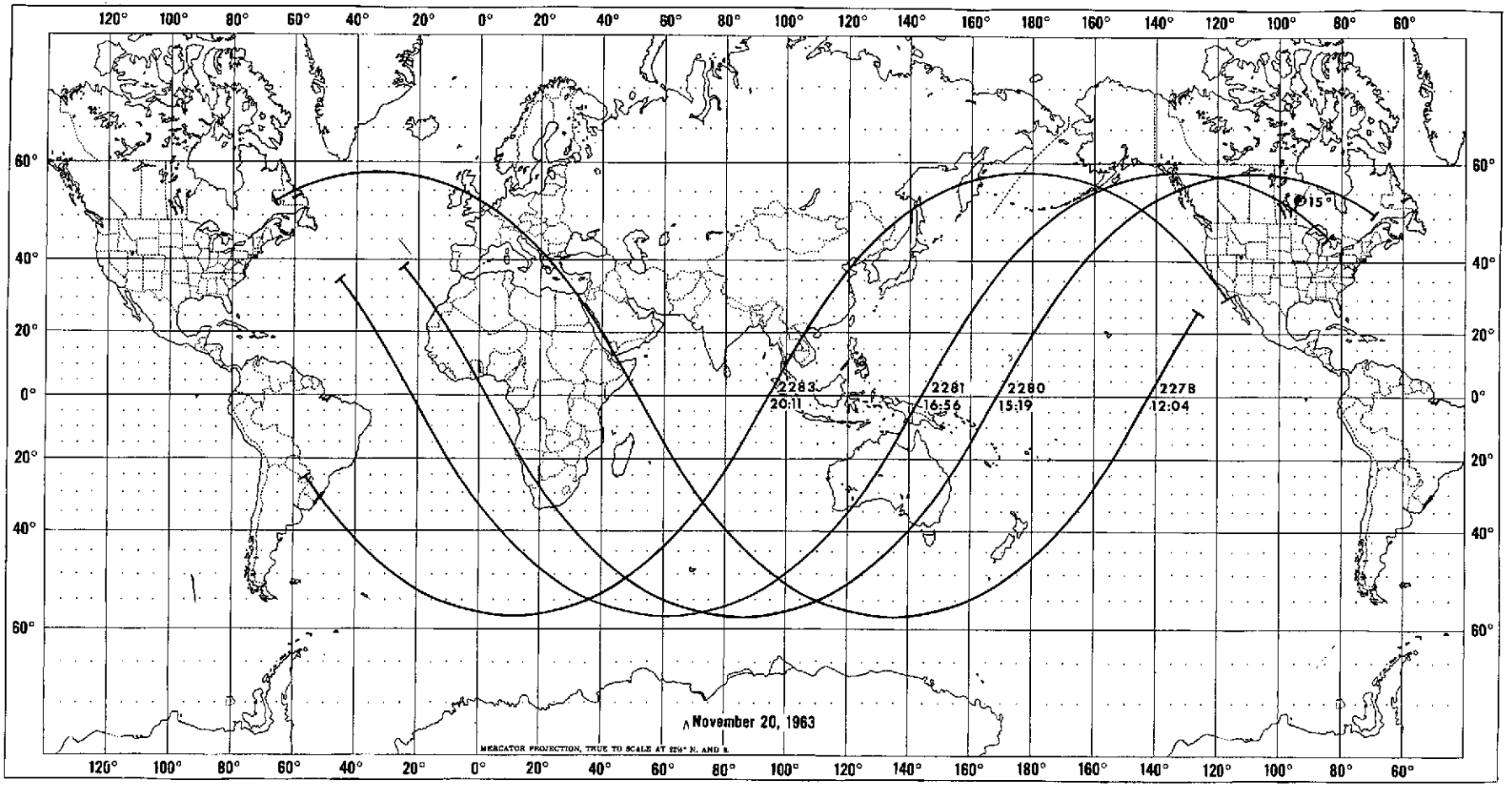

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
20°
2209
20:03
2208
18:26
2207
16:48
2205
13:34
November 15, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

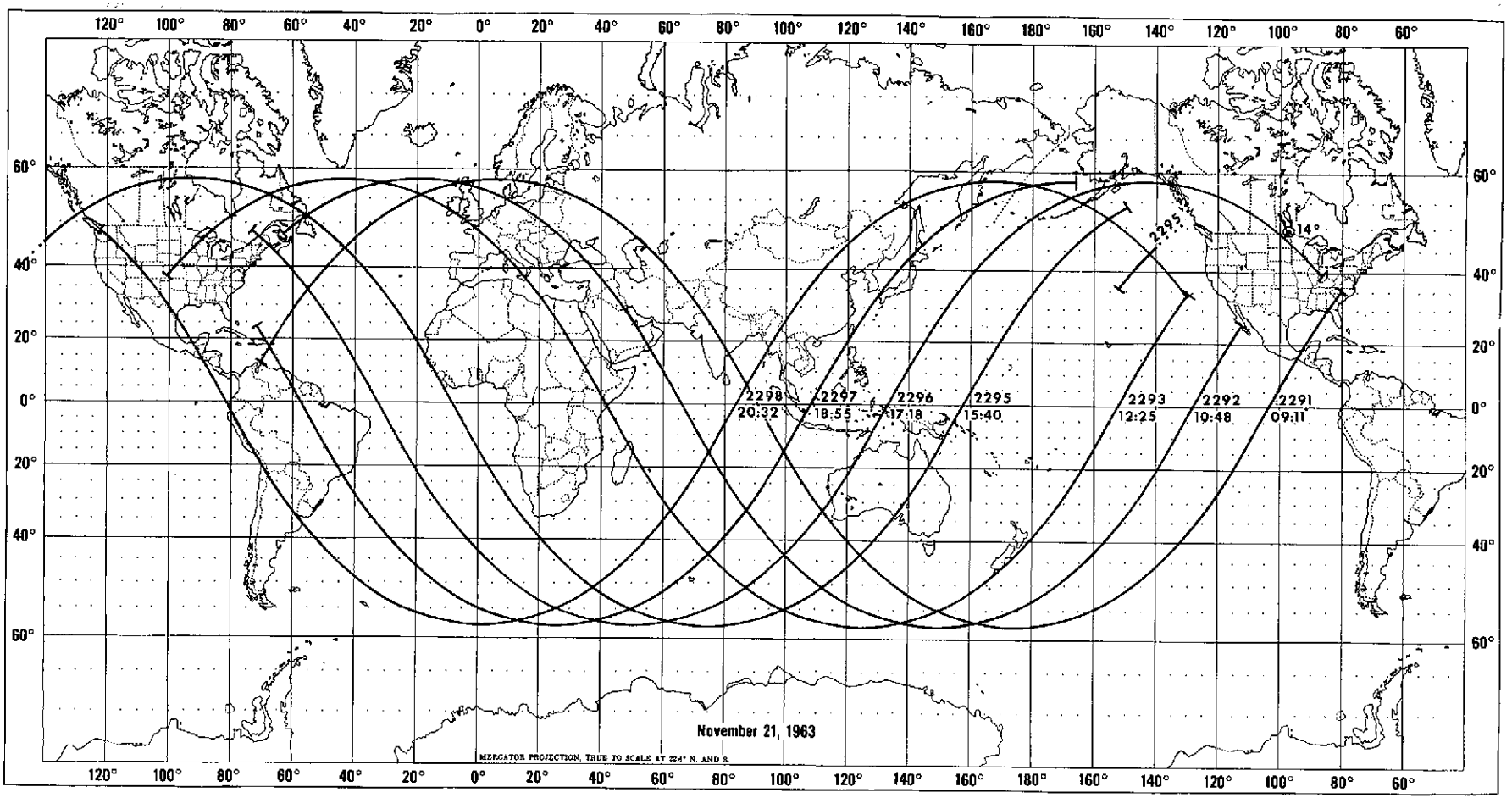

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60°
40°
20°
0°
20°
40°
60°
14°
2225
22:02
2220
13:55
2219
12:17
2218
10:40
November 16, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

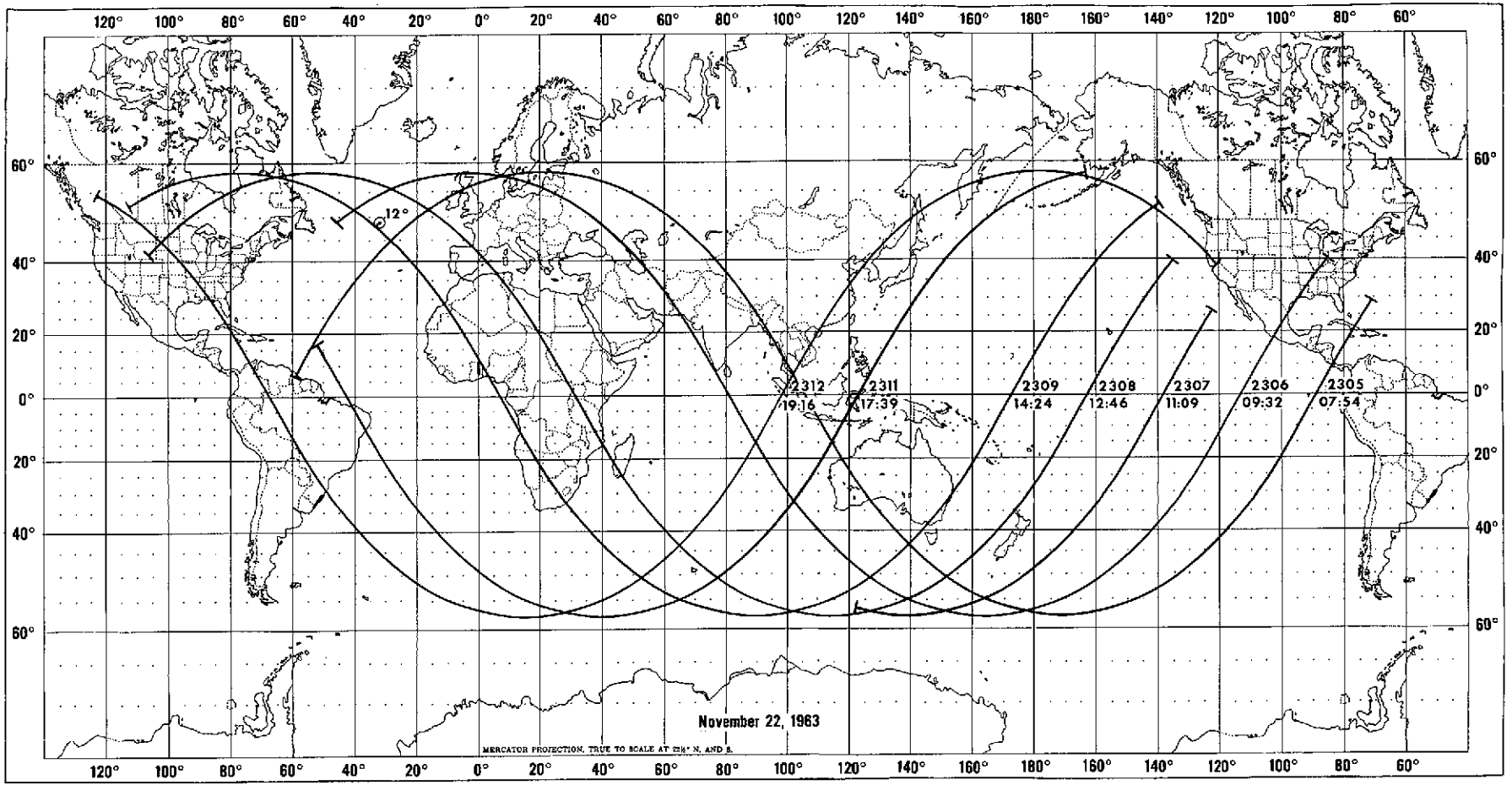

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
12°
2239
20:45
2235
14:16
2234
12:38
November 17, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

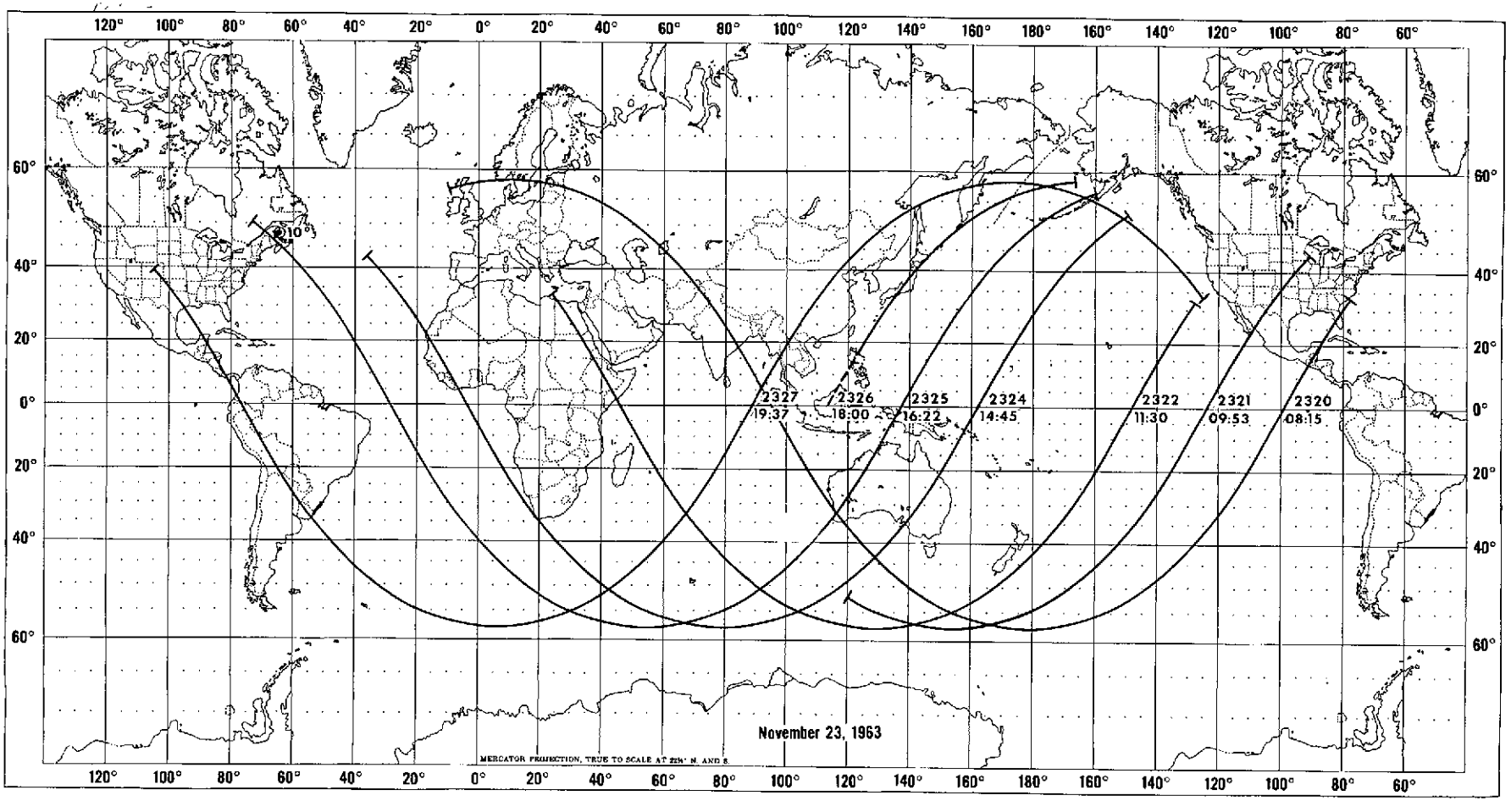

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
12°
2254
21:06
2253
19:29
2251
16:14
2247
09:45
November 18, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 12N° N. AND S.

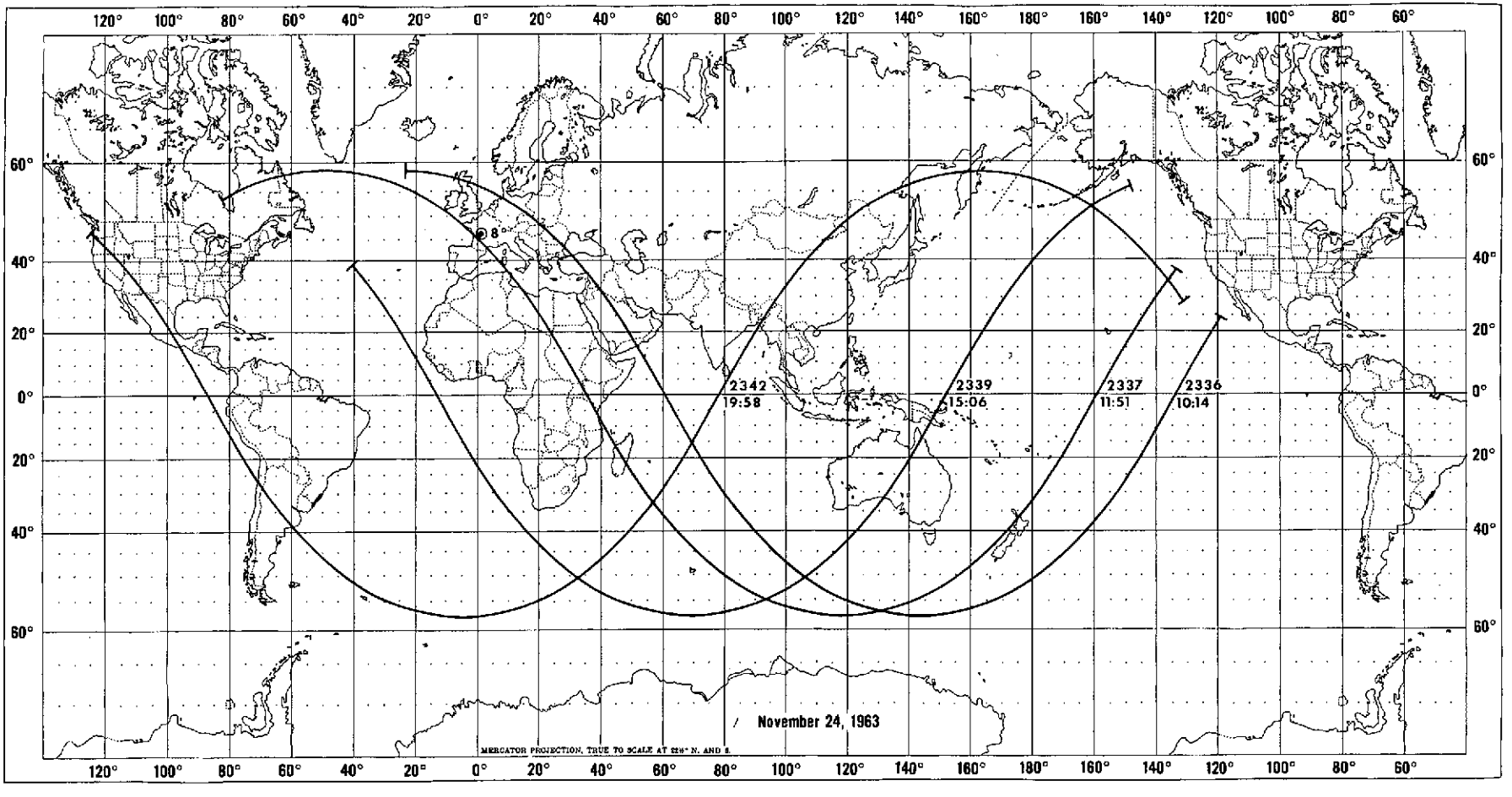

2269
21:28
2268
19:50
2267
18:13
2266
16:35
2264
13:21
2263
11:43
2262
10:06
2261
08:28
13°
November 19, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 24° N. AND S.

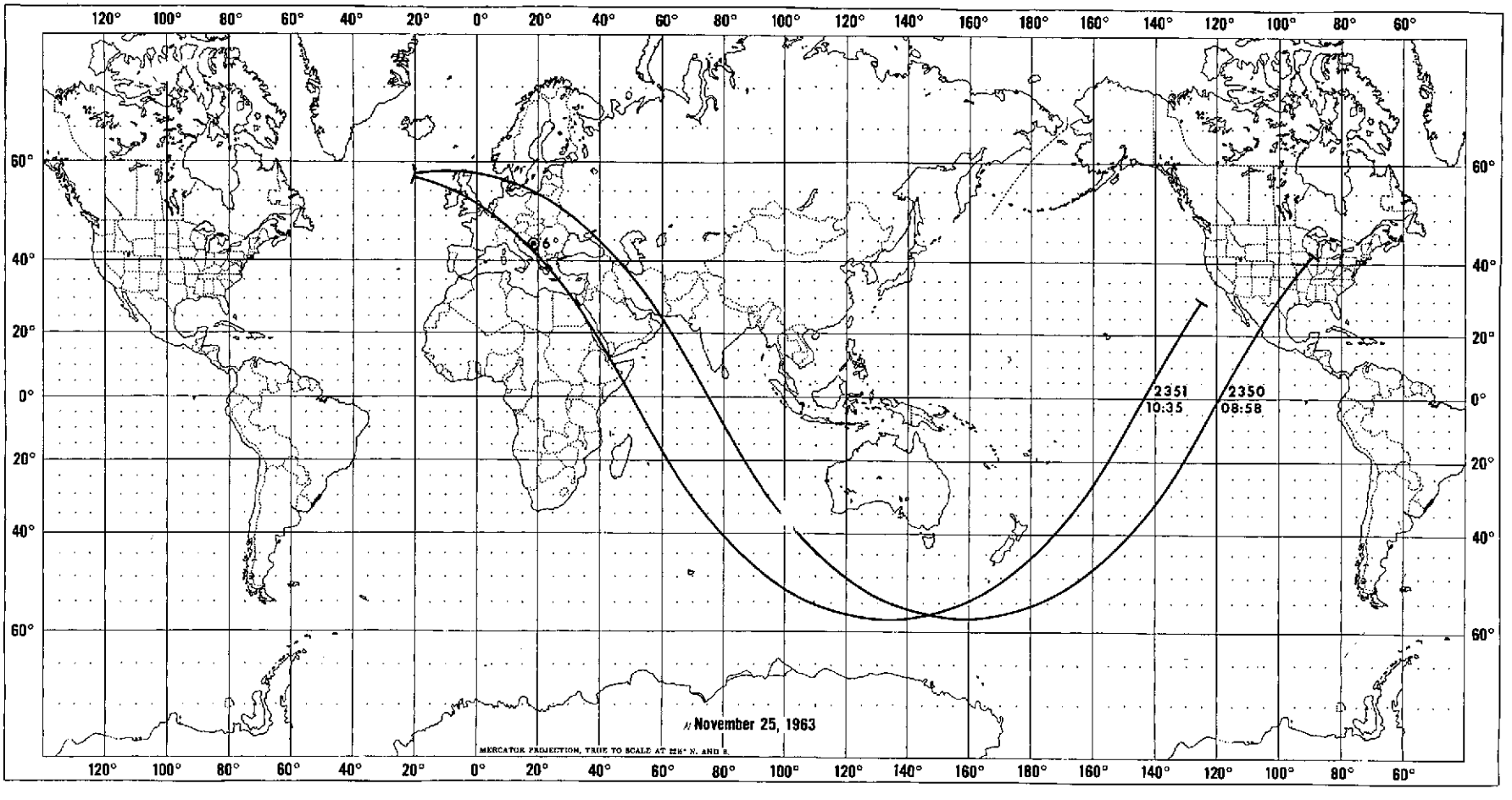

2283
20:11
2281
16:56
2280
15:19
2278
12:04
15°
November 20, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

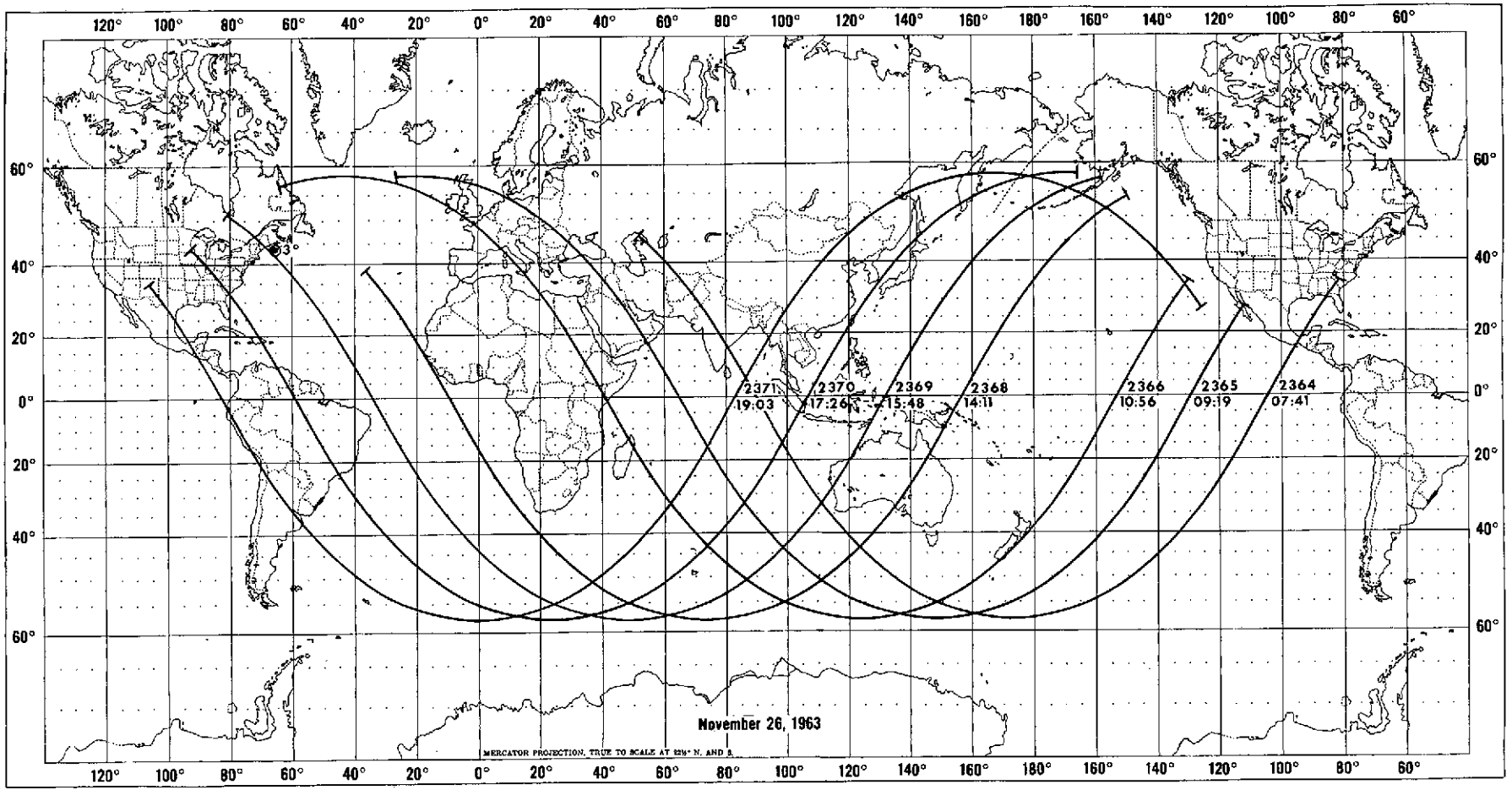

2298
20:32
2297
18:55
2296
17:18
2295
15:40
2293
12:25
2292
10:48
2291
09:11
2295
14°
November 21, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

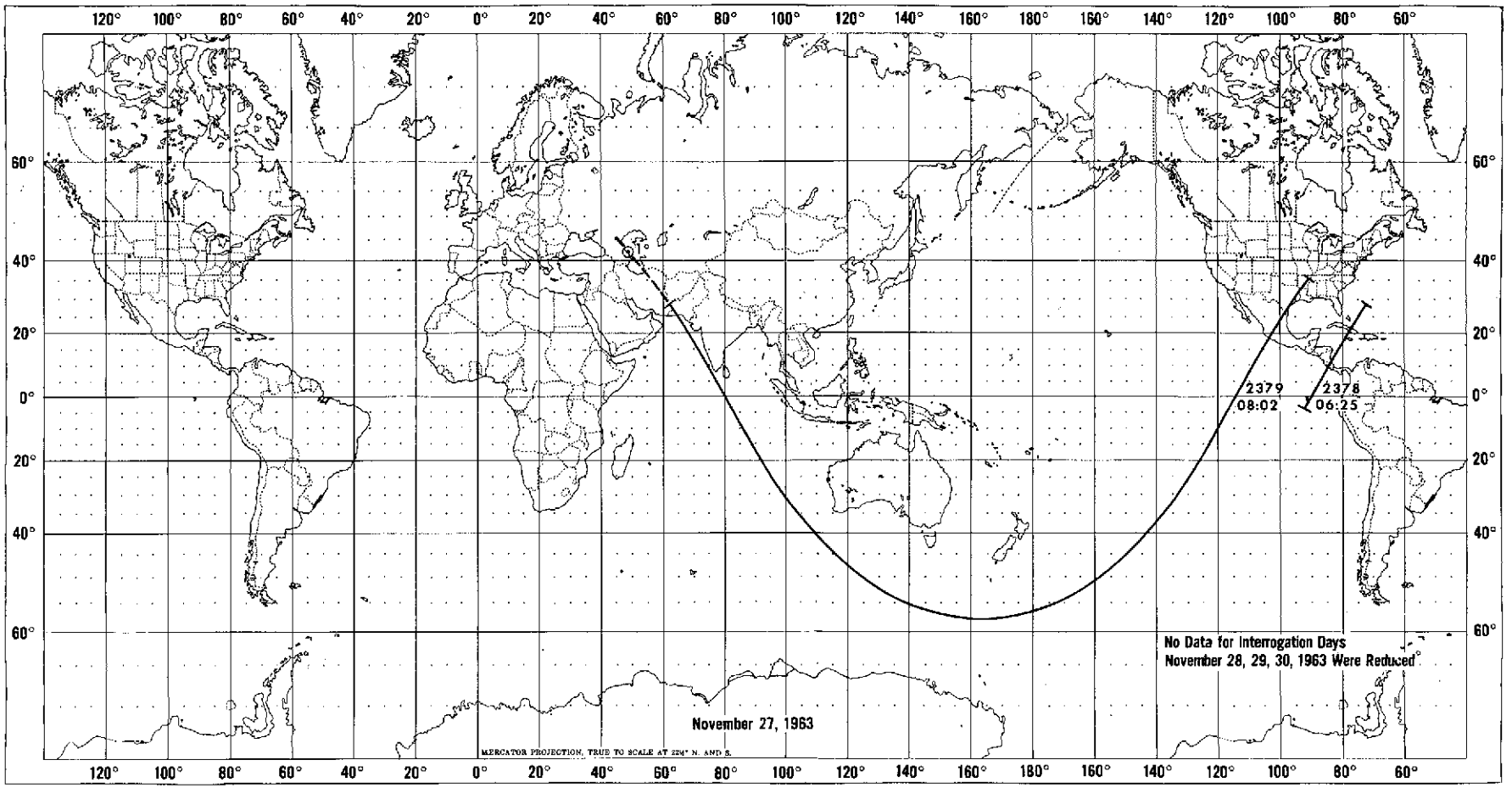

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
12°
2312 19:16
2311 17:39
2309 14:24
2308 12:46
2307 11:09
2306 09:32
2305 07:54
November 22, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

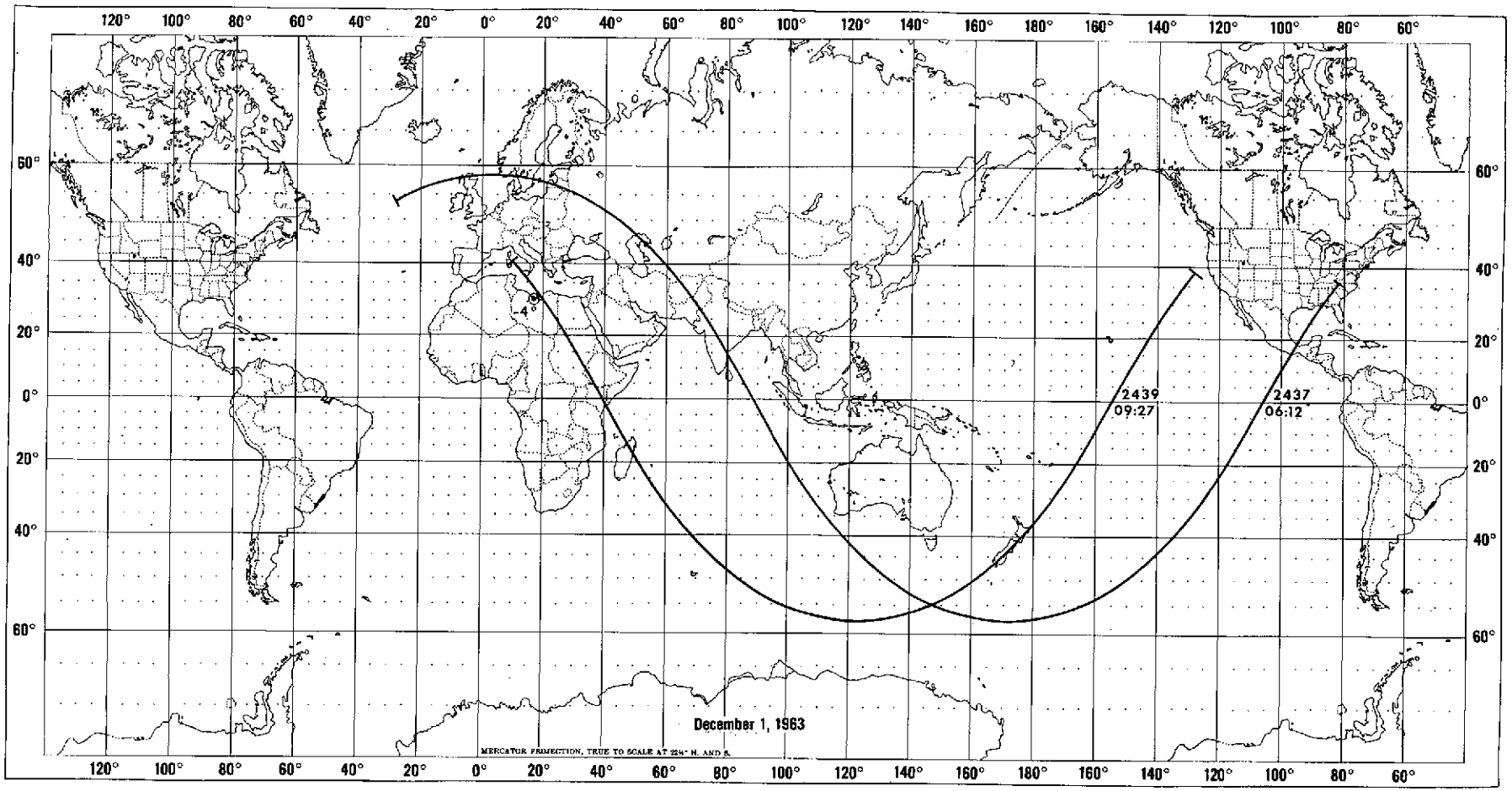

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
10
2327
19:37
2326
18:00
2325
16:22
2324
14:45
2322
11:30
2321
09:53
2320
08:15
November 23, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

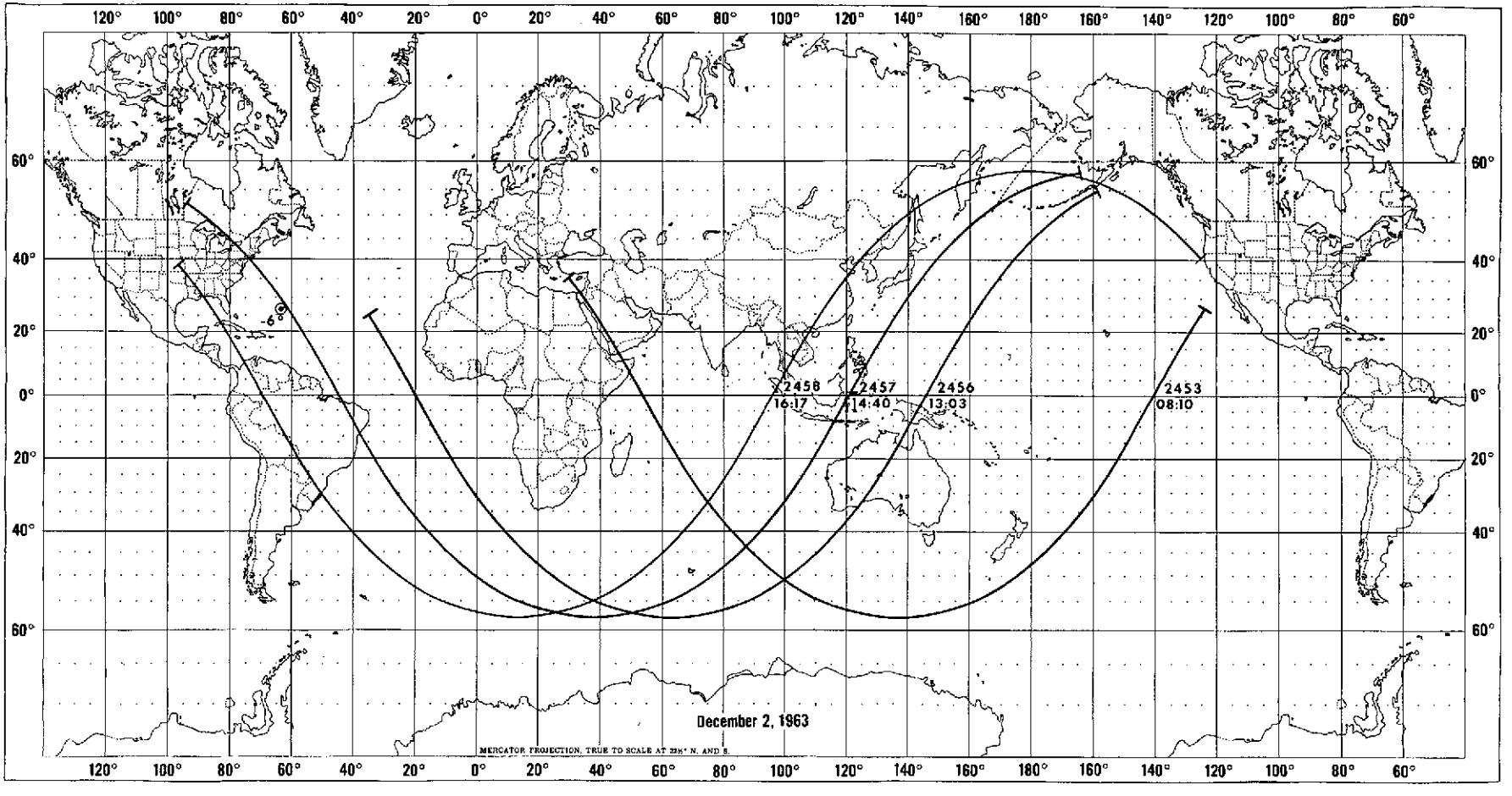

2342
19:58
2339
15:06
2337
11:51
2336
10:14
November 24, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

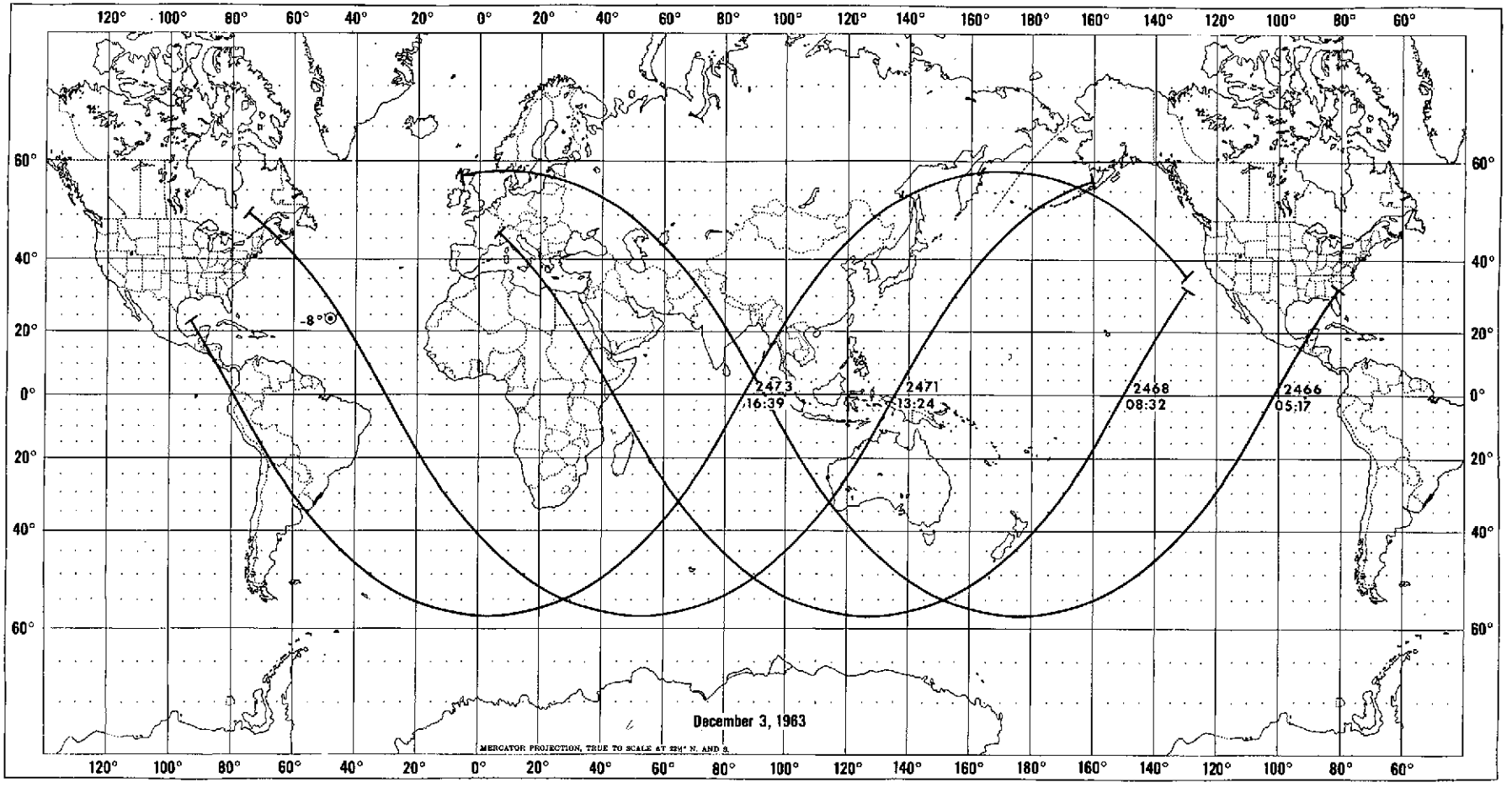

2351
10:35
2350
08:58
November 25, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

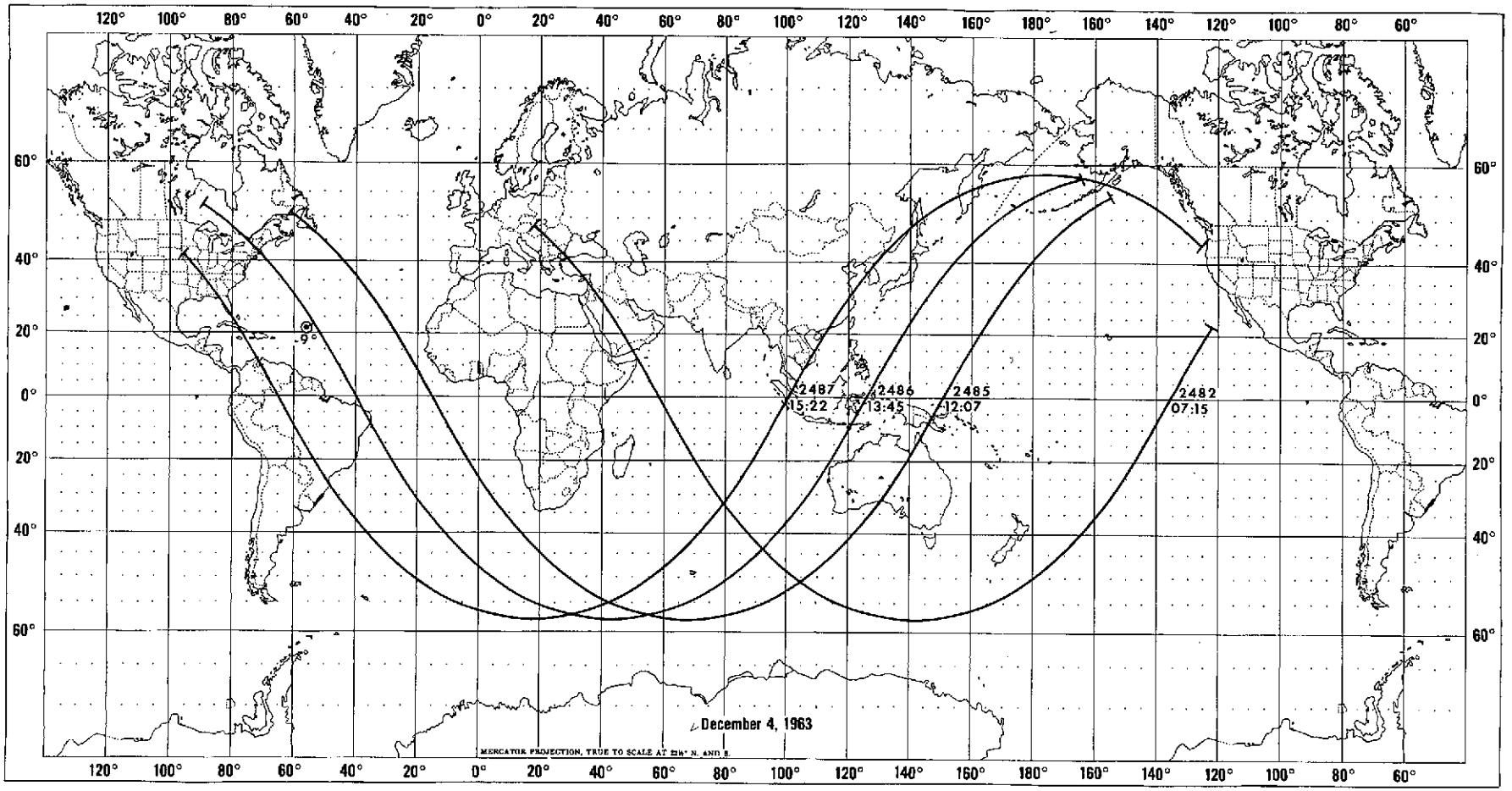

2371
19:03
2370
17:26
2369
15:48
2368
14:11
2366
10:56
2365
09:19
2364
07:41
November 26, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 12½° N. AND S.

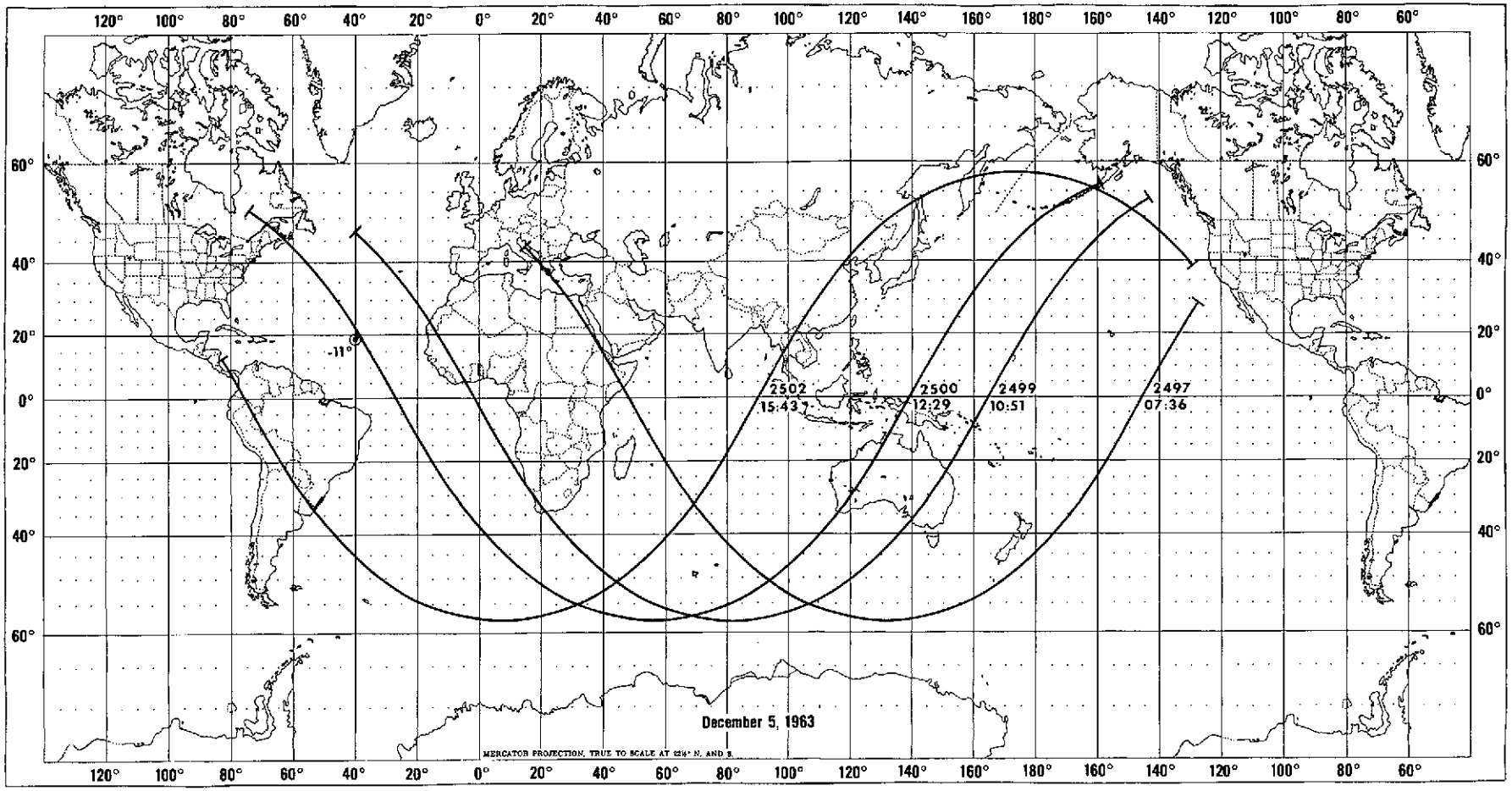

2379
08:02
2378
06:25
No Data for Interrogation Days
November 28, 29, 30, 1963 Were Reduced
November 27, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

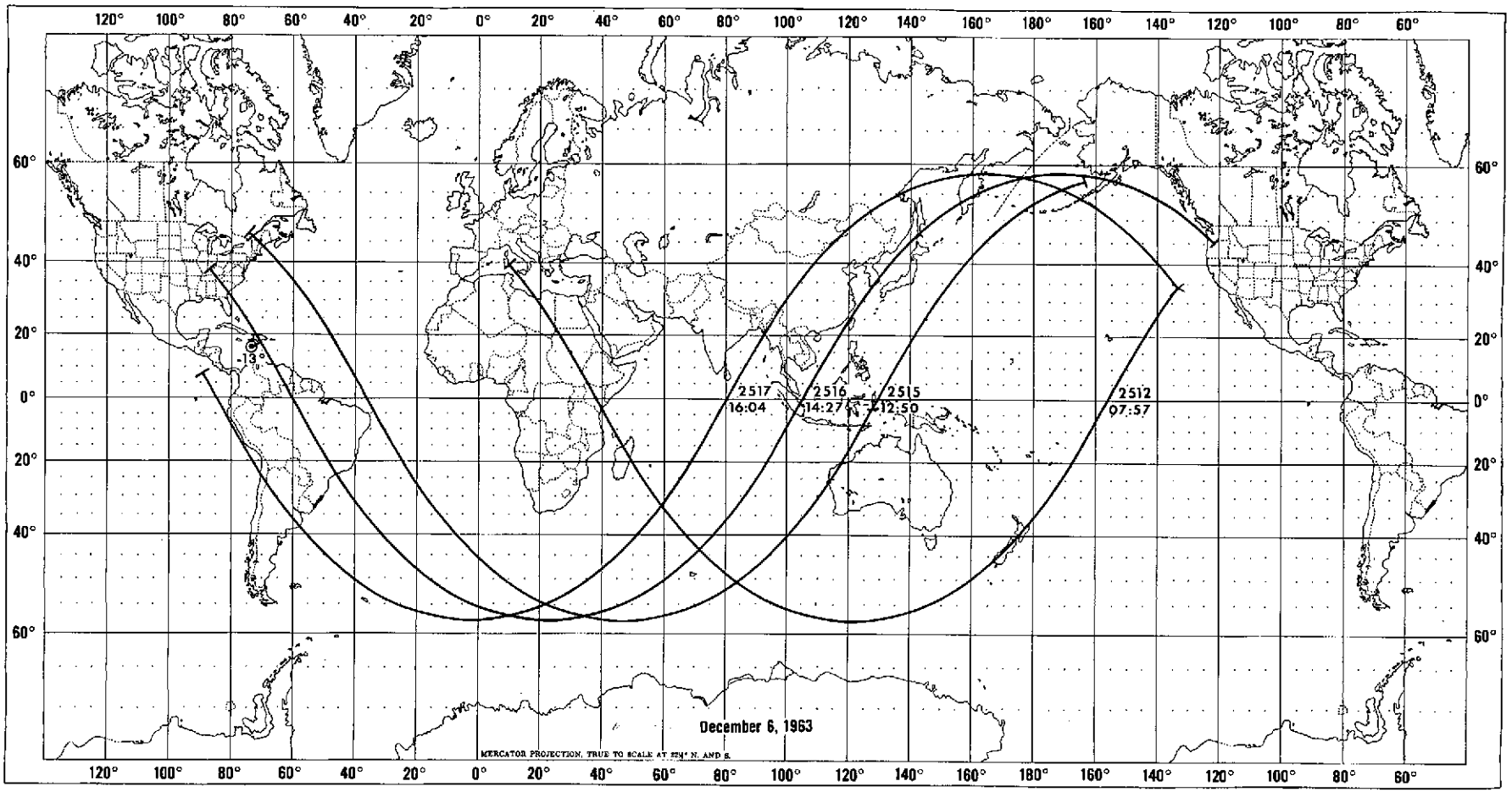

2439
09:27
2437
06:12
December 1, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

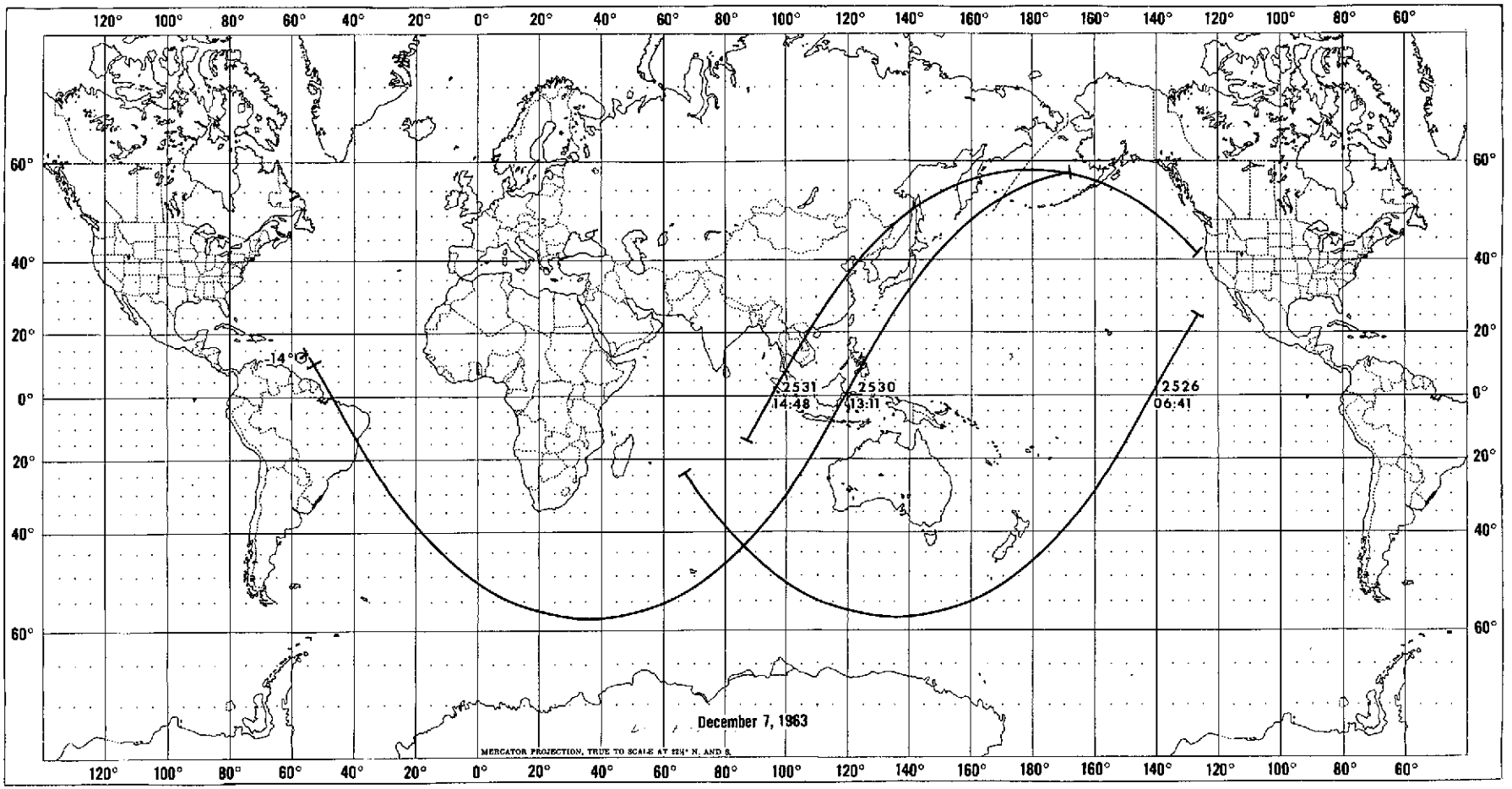

2458
16:17
2457
14:40
2456
13:03
2453
08:10
December 2, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

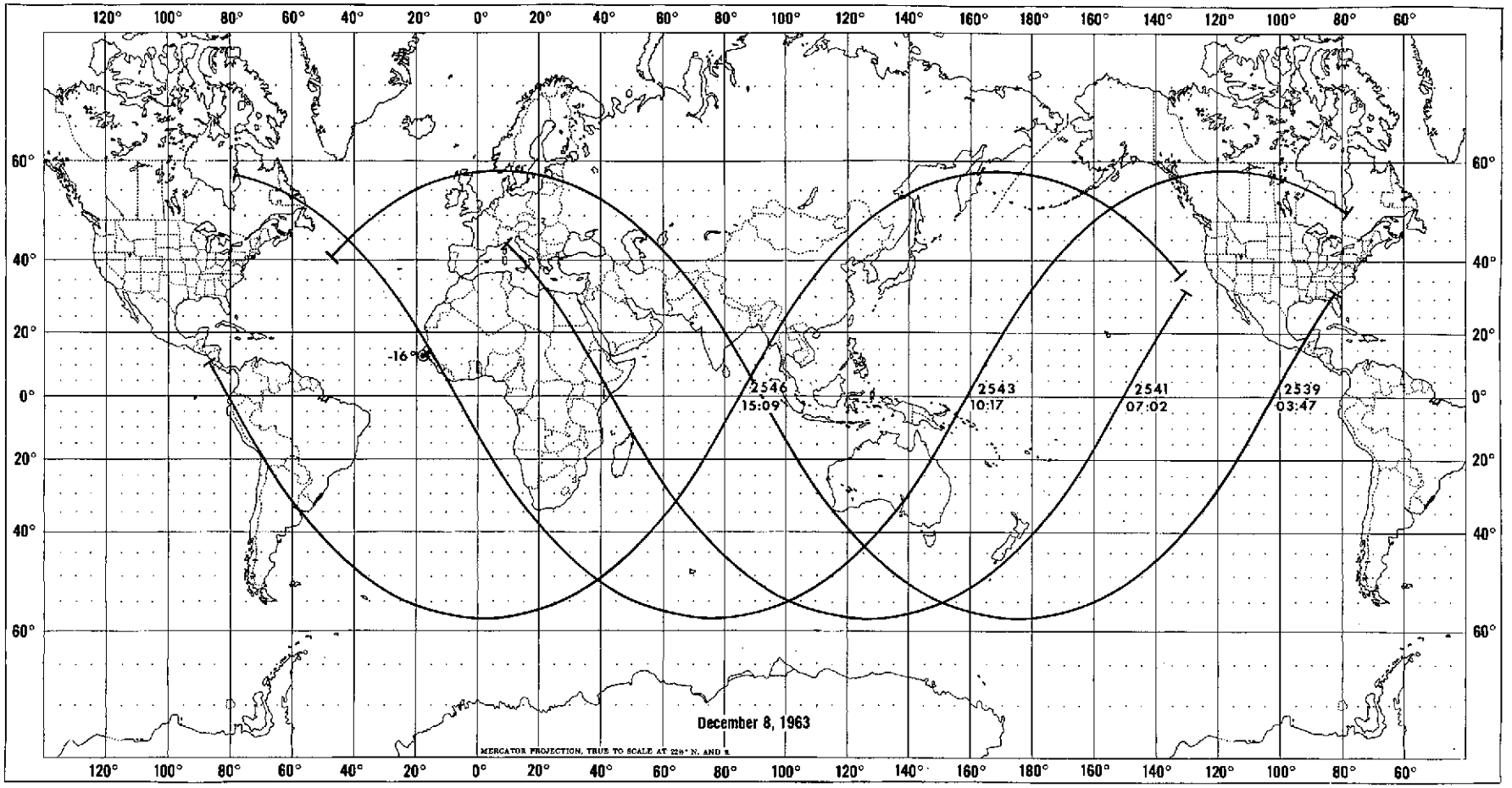

2473
16:39
2471
13:24
2468
08:32
2466
05:17
-8°
December 3, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

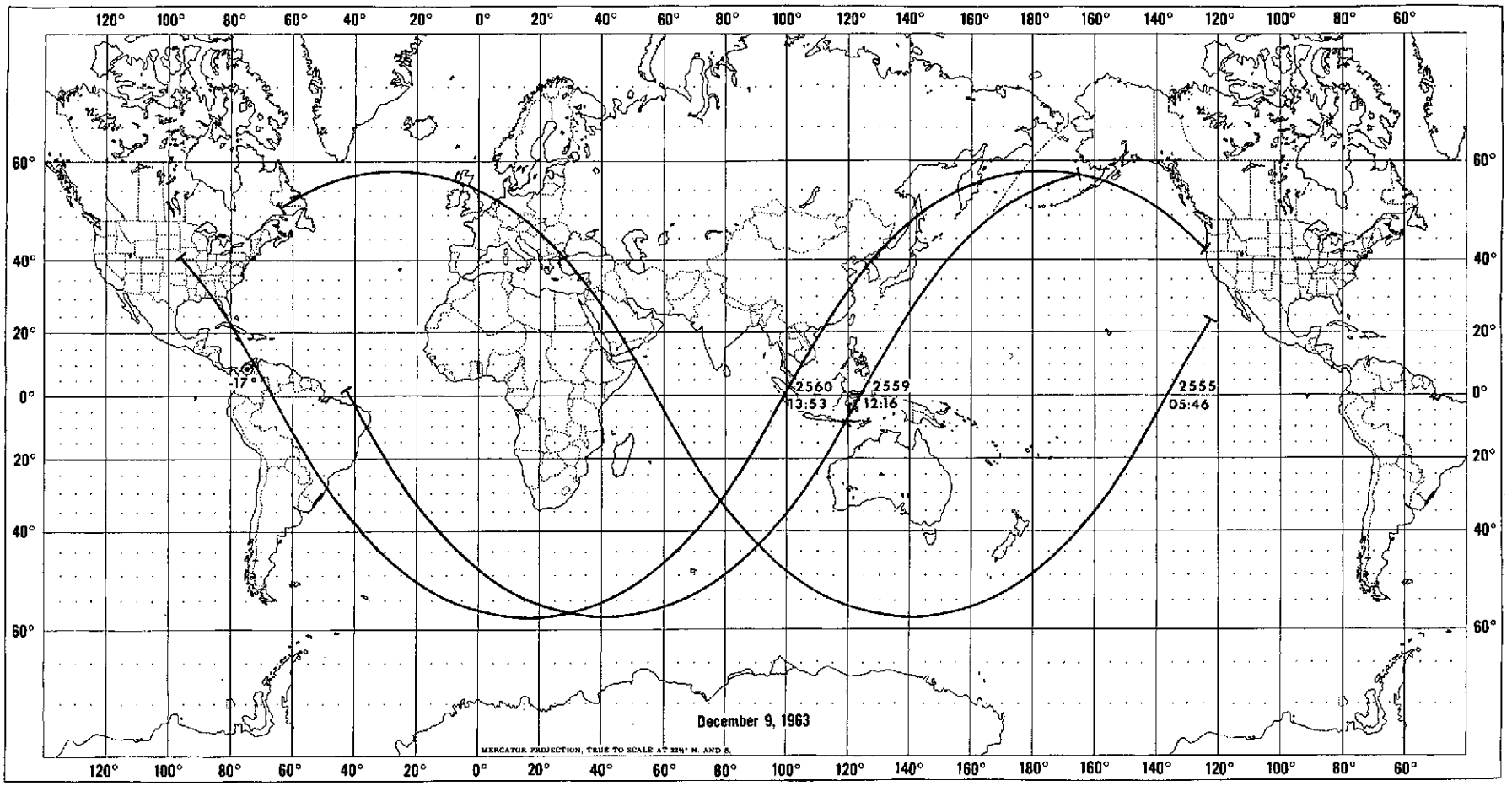

2487
15:22
2486
13:45
2485
12:07
2482
07:15
December 4, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

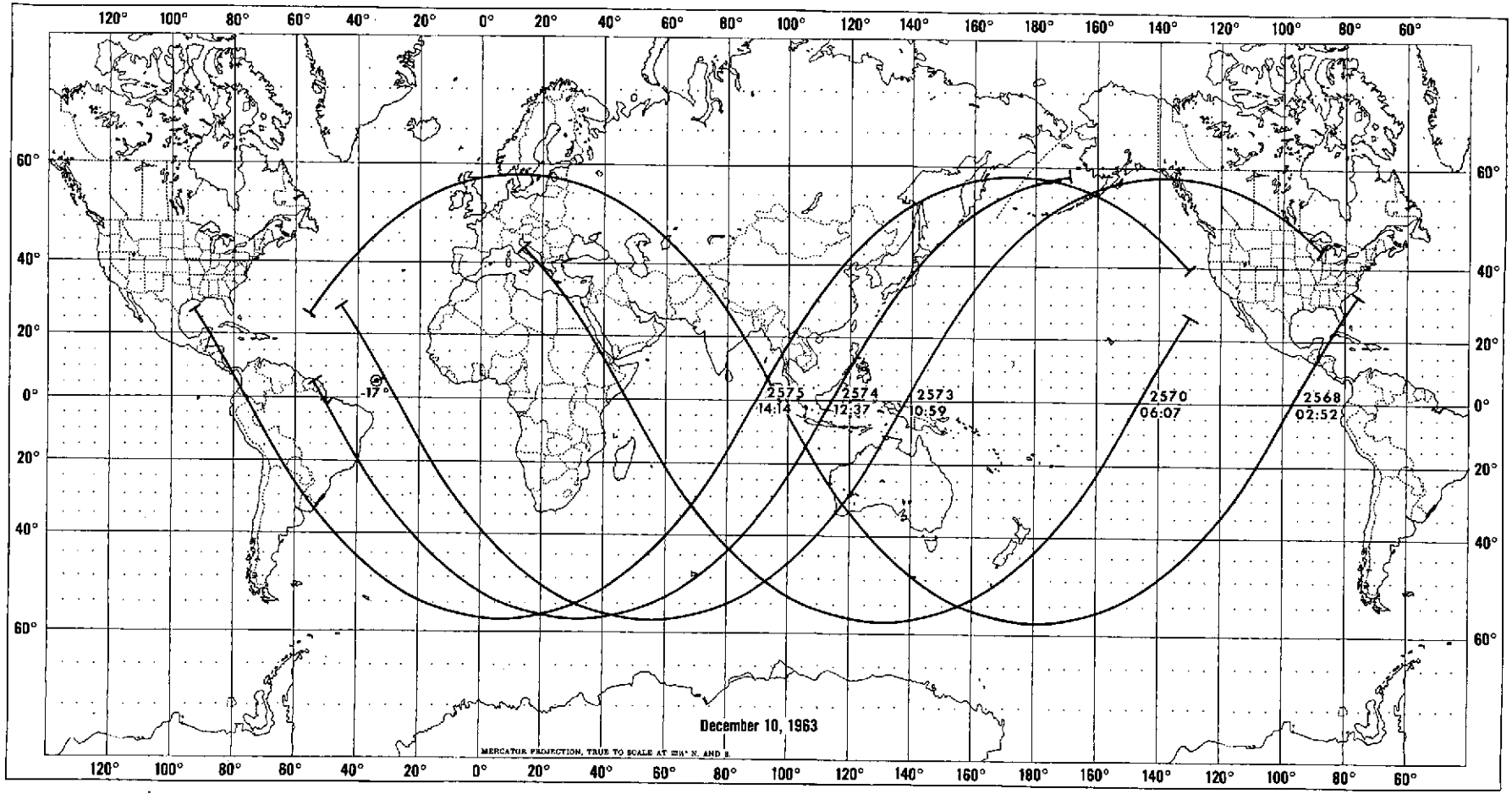

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
-11°
2502
15:43
2500
12:29
2499
10:51
2497
07:36
December 5, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

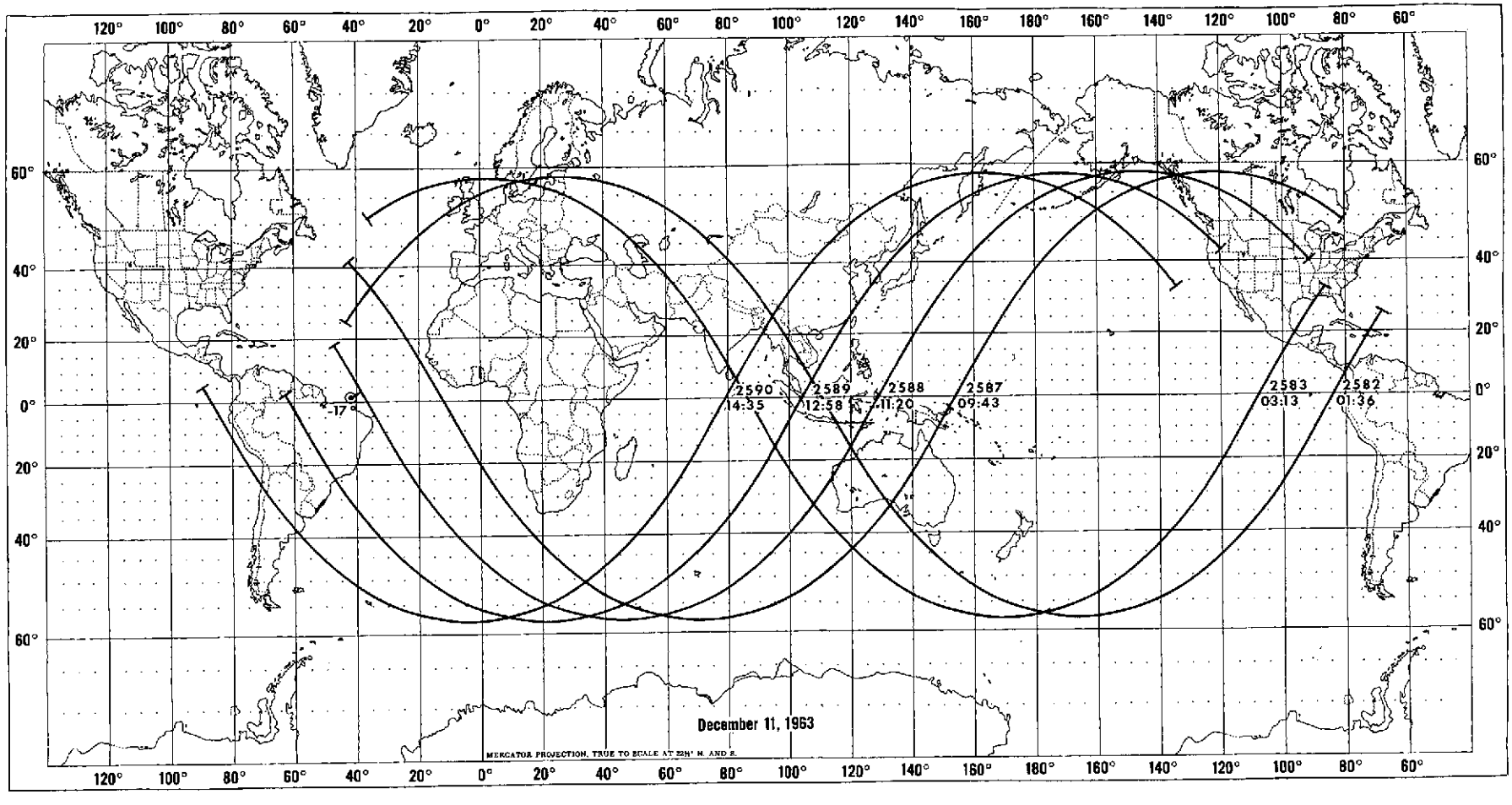

2517
16:04
2516
14:27
2515
12:50
2512
07:57
December 6, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

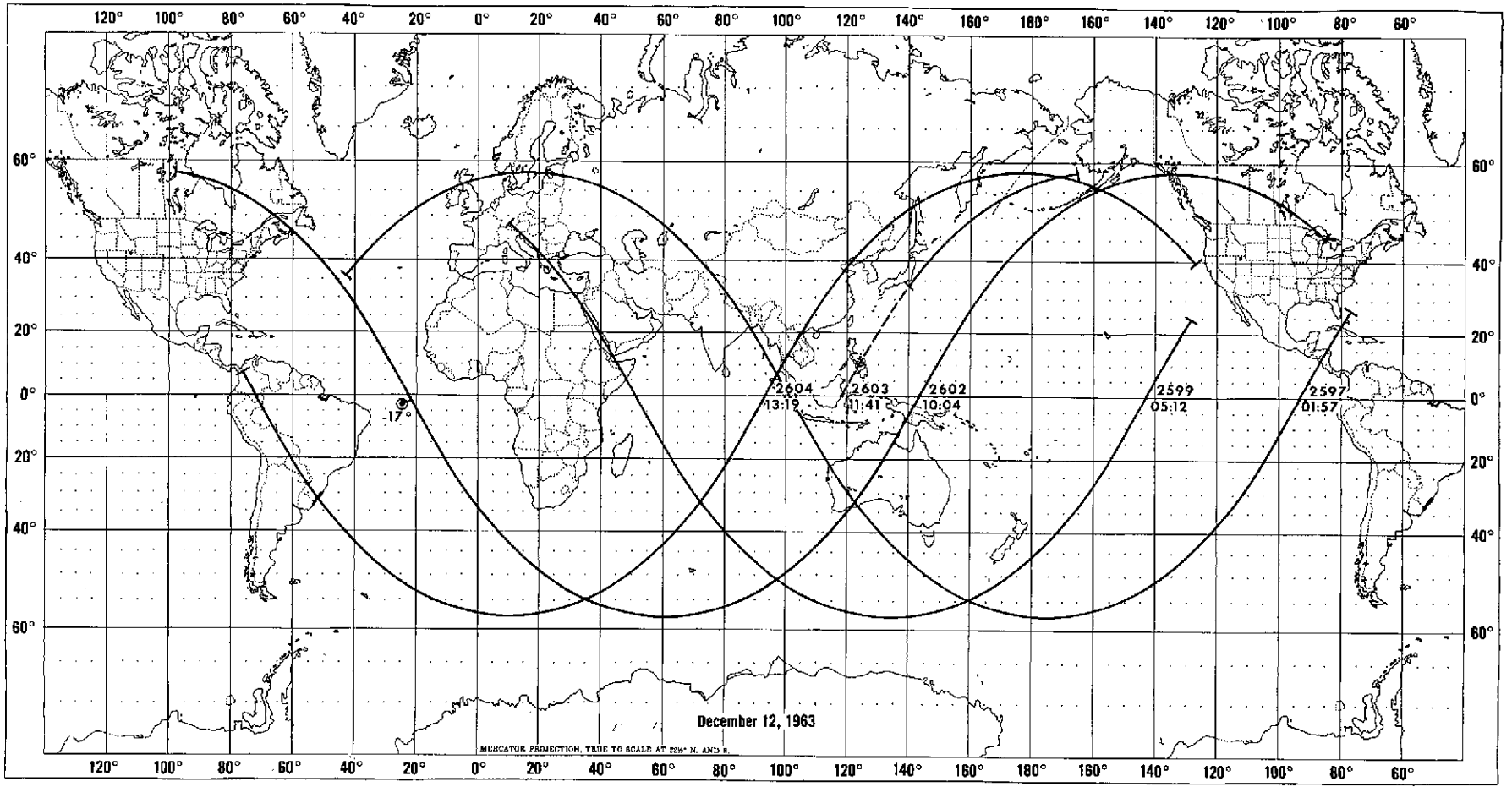

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
-14°
2531
14:48
2530
13:11
2526
06:41
December 7, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

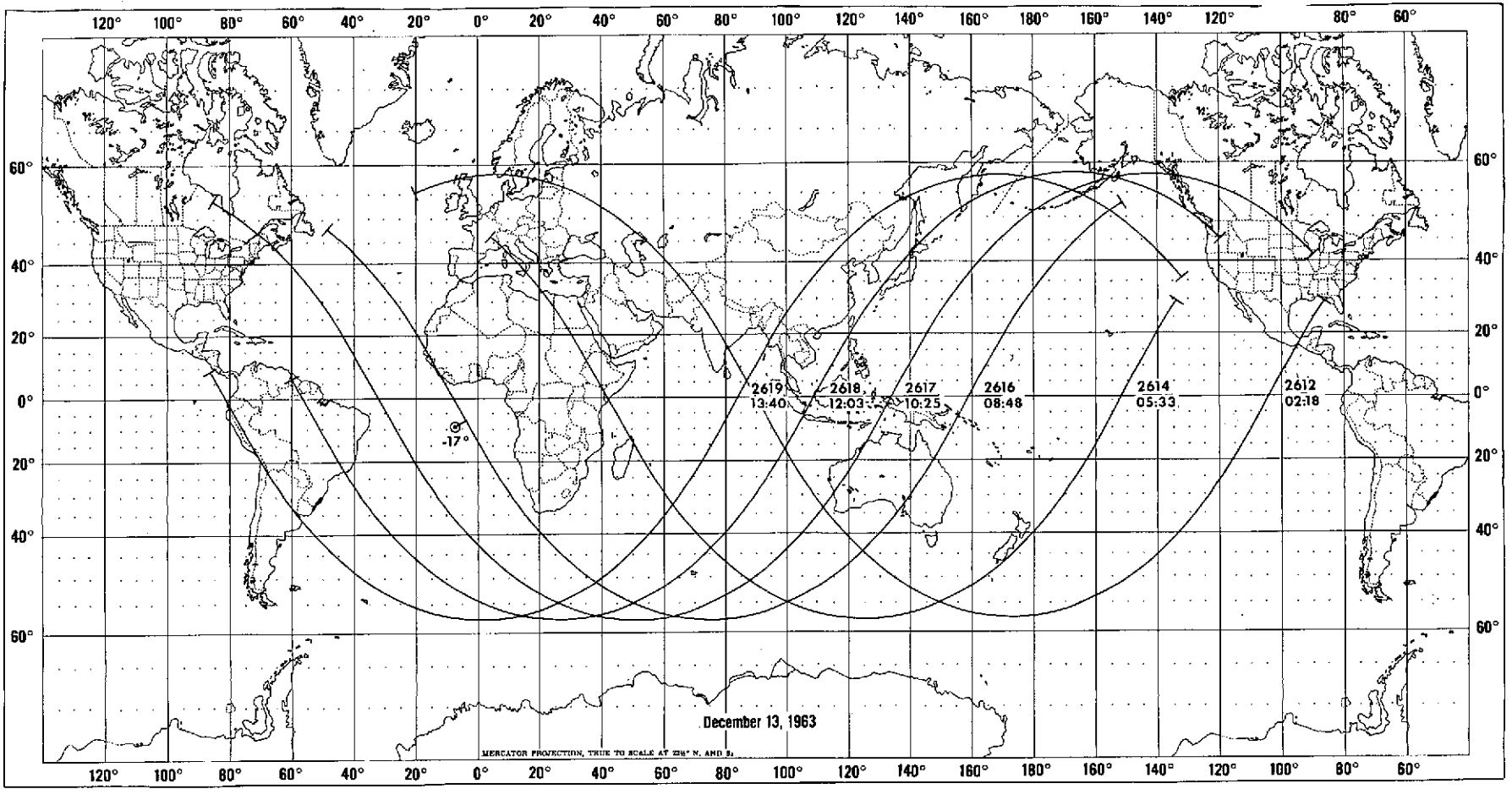

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60°
40°
20°
0°
20°
40°
60°
-16°
2546
15:09
2543
10:17
2541
07:02
2539
03:47
December 8, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

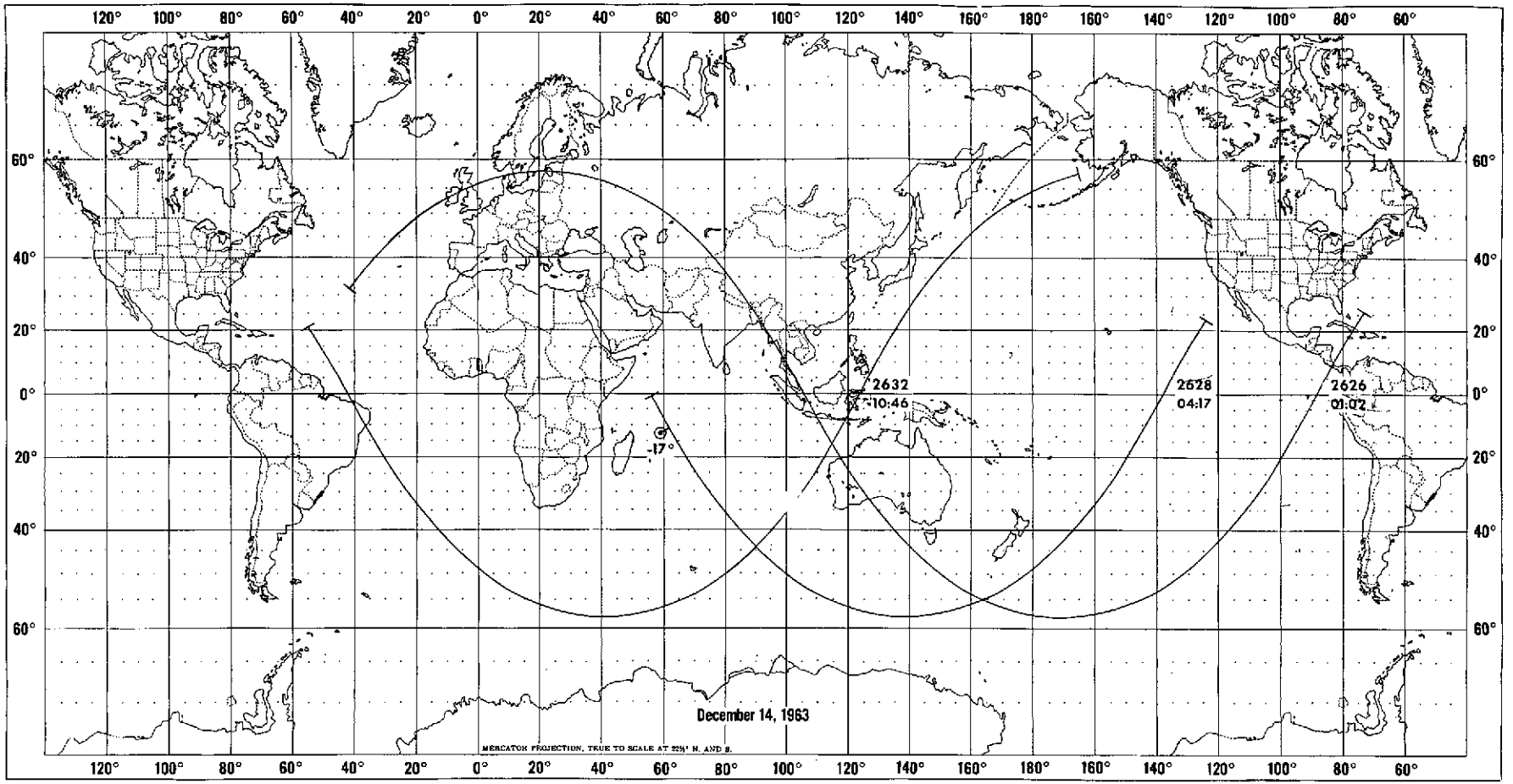

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60°
40°
20°
0°
20°
40°
60°
-17°
2560
13:53
2559
12:16
2555
05:46
December 9, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

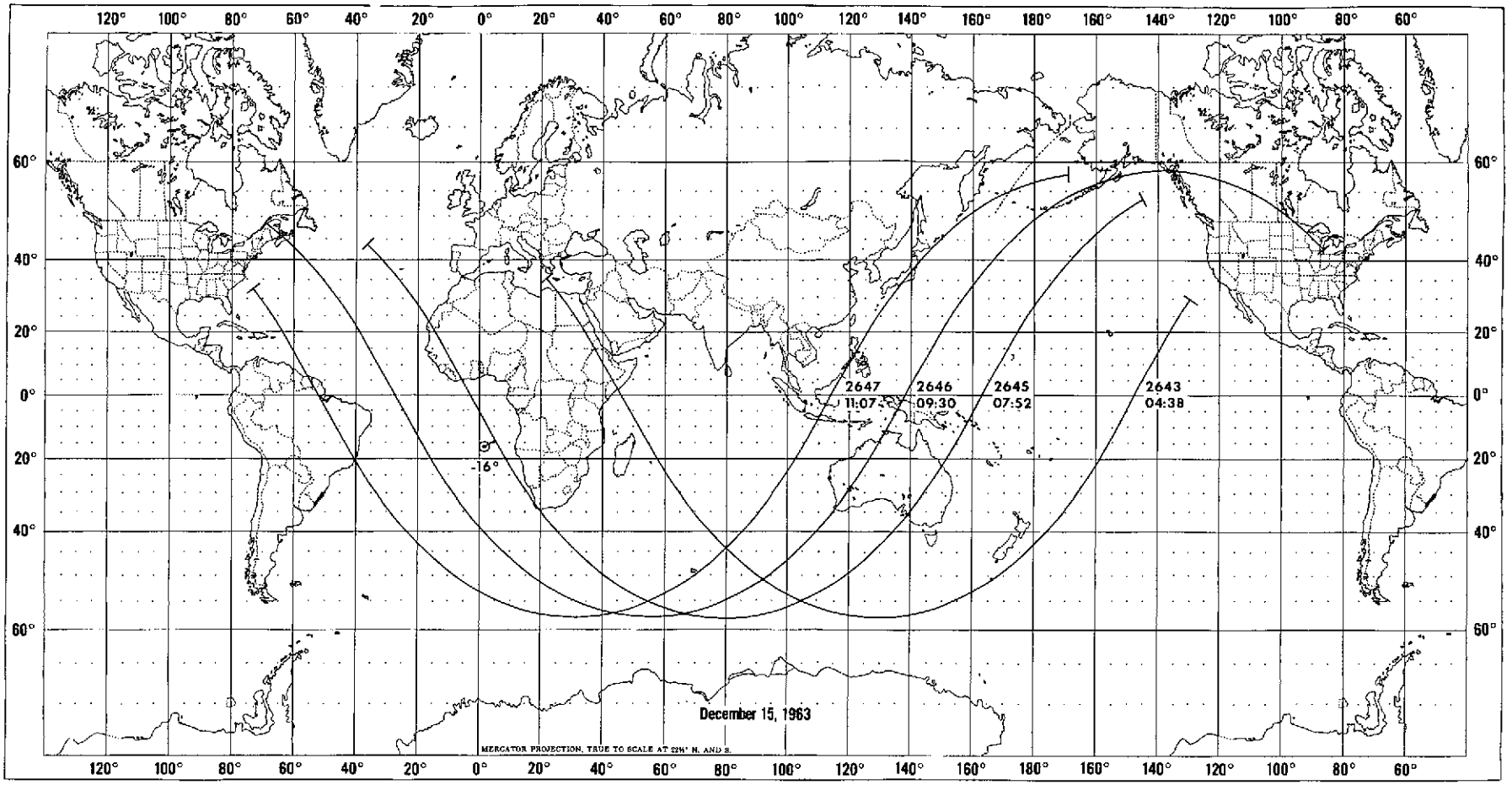

2575
14:14
2574
12:37
2573
10:59
2570
06:07
2568
02:52
-17°
December 10, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 28½° N. AND S.

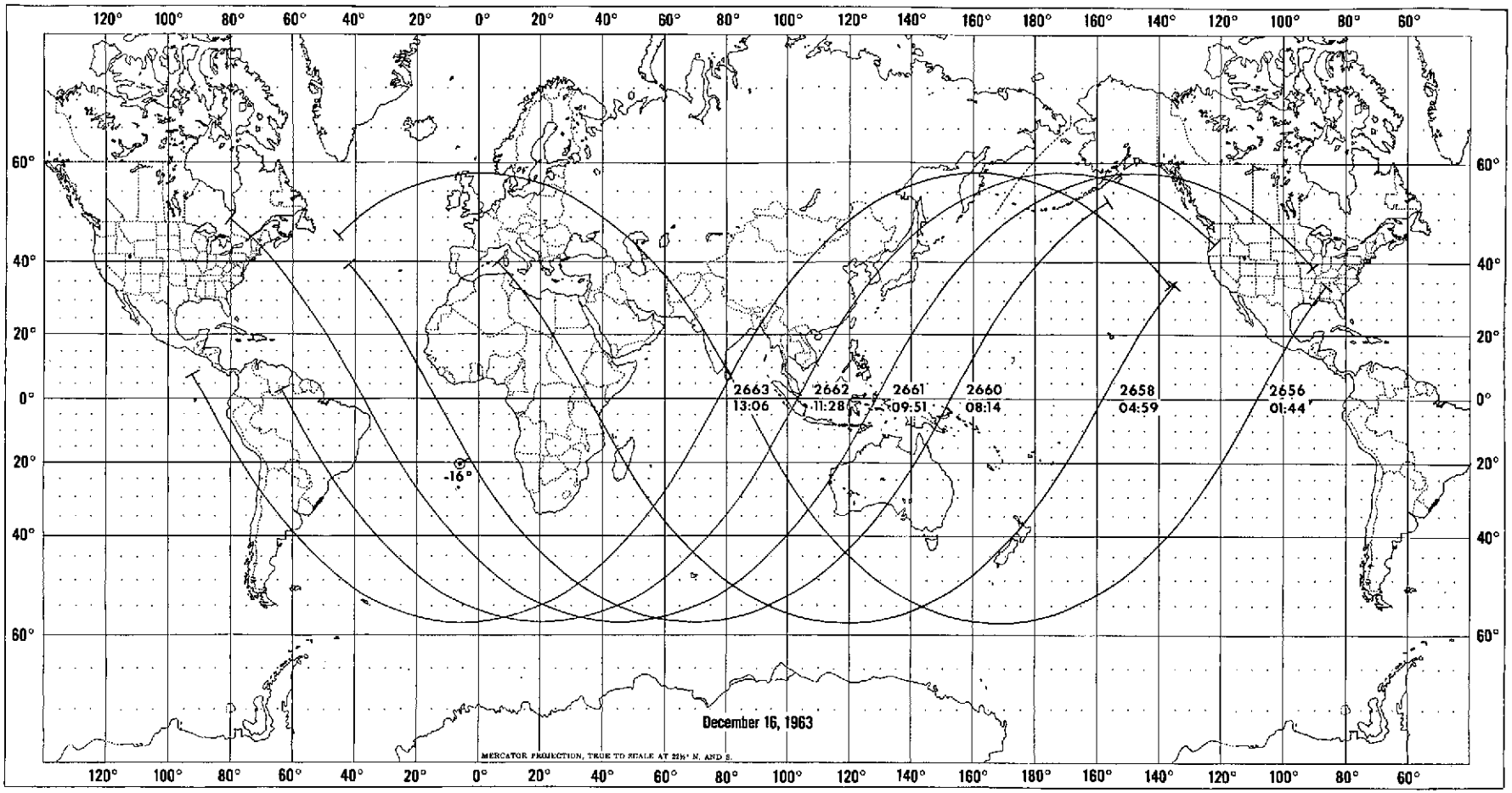

2590
14:35
2589
12:58
2588
11:20
2587
09:43
2583
03:13
2582
01:36
-17°
December 11, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

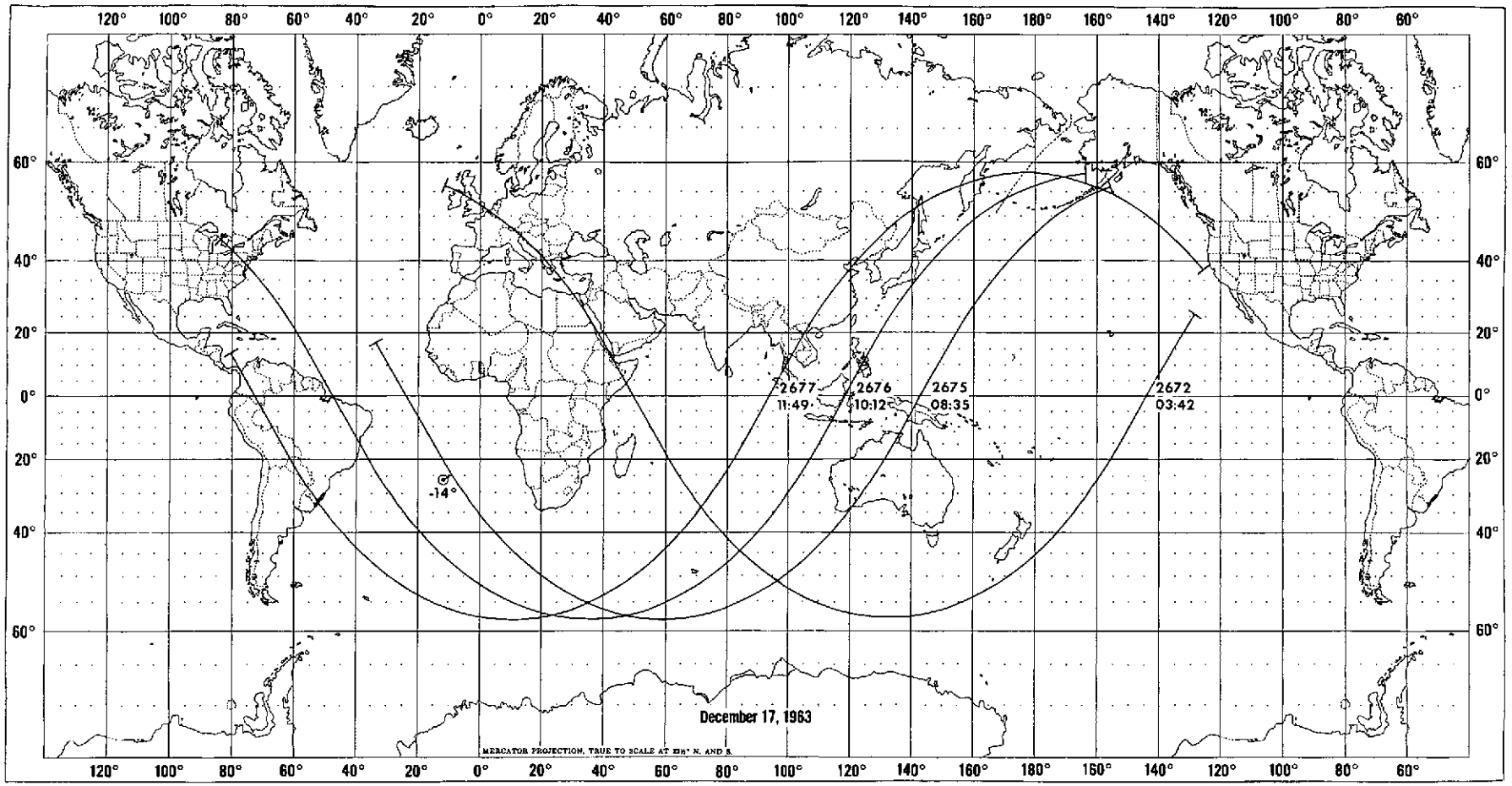

2604
13:19
2603
11:41
2602
10:04
2599
05:12
2597
01:57
-17°
December 12, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

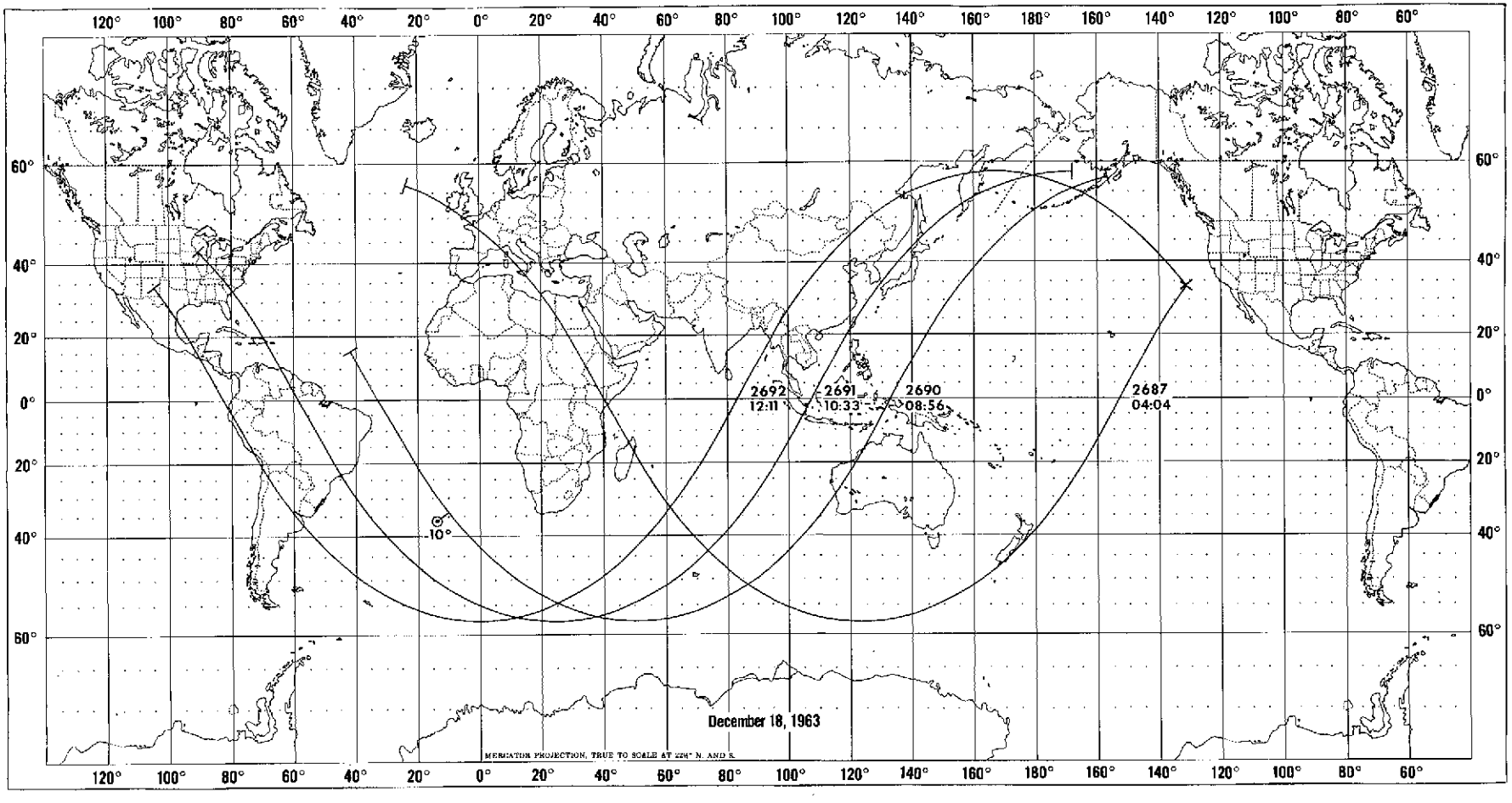

2619
13:40
2618
12:03
2617
10:25
2616
08:48
2614
05:33
2612
02:18
-17°
December 13, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

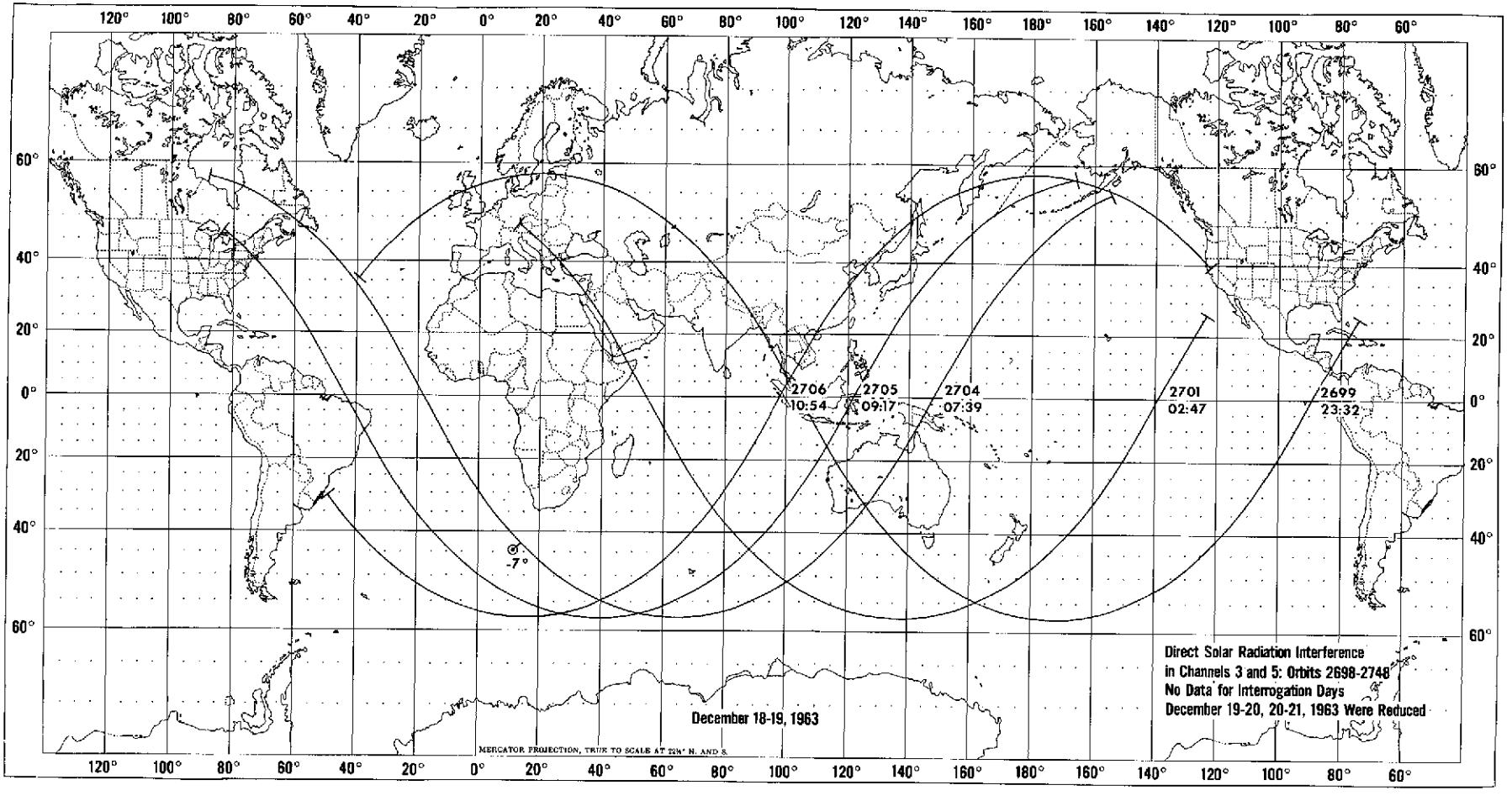

2632
10:46
2628
04:17
2626
01:02
-17°
December 14, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

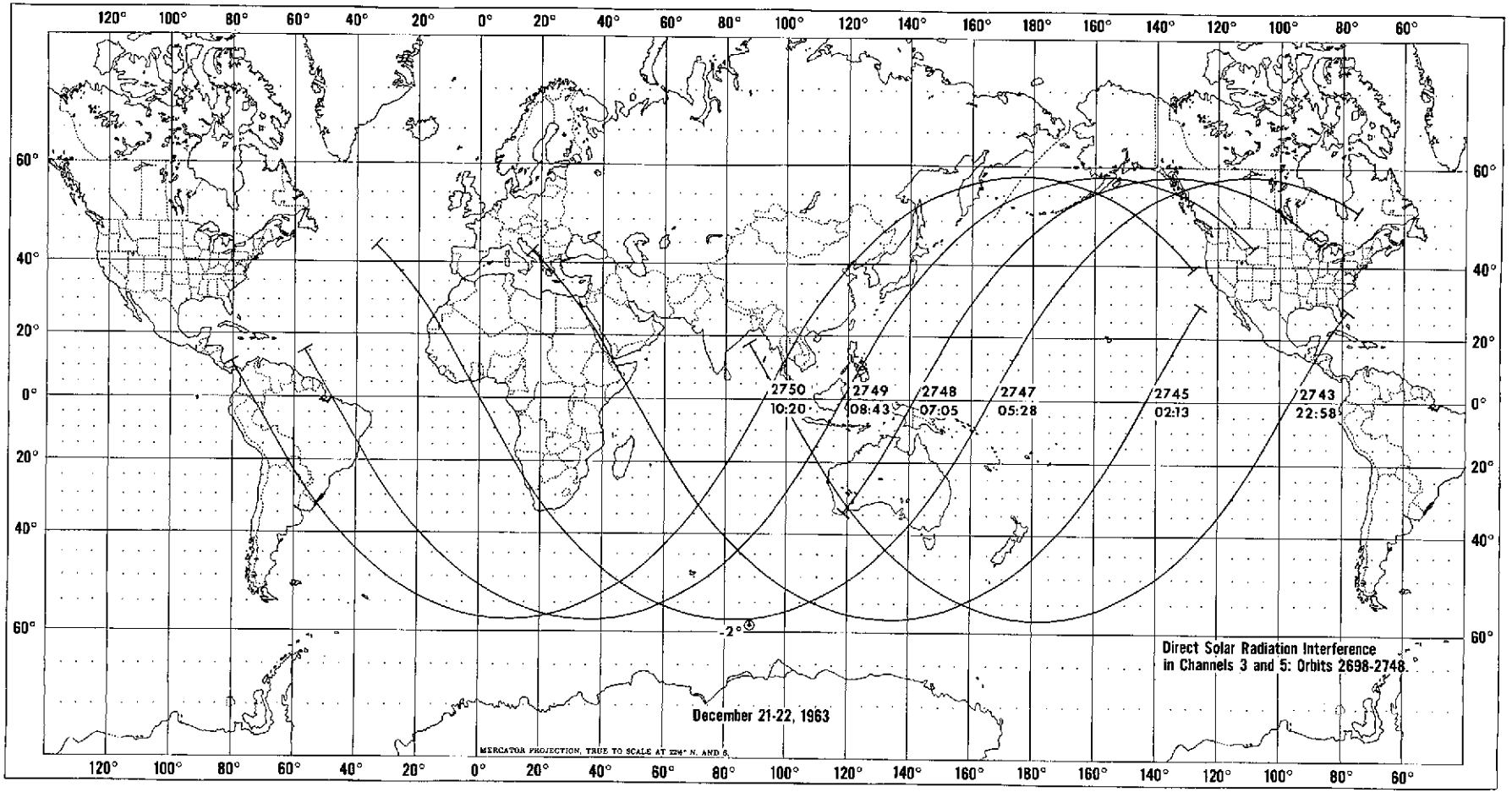

2647
11:07
2646
09:30
2645
07:52
2643
04:38
-16°
December 15, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

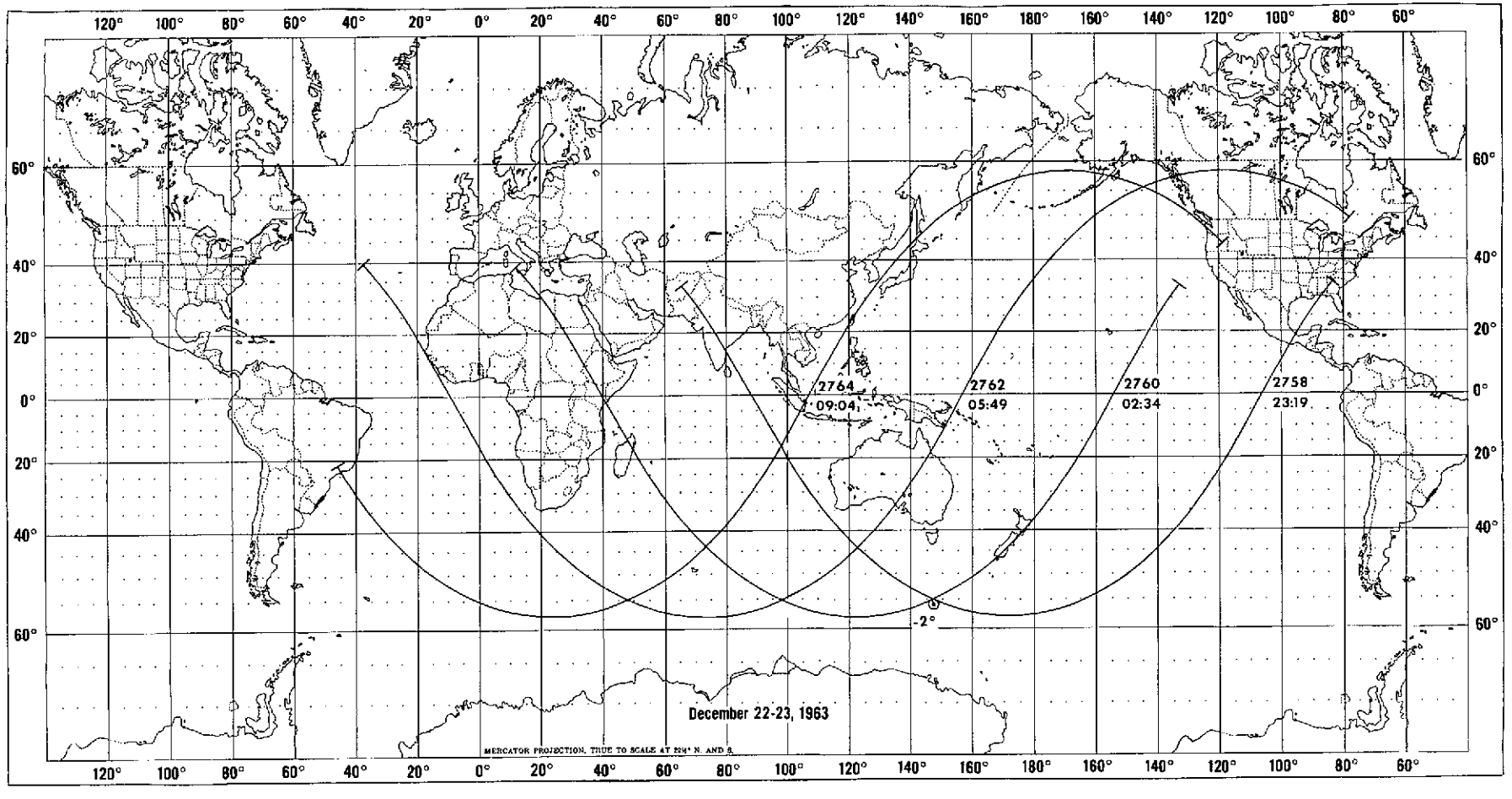

2663
13:06
2662
11:28
2661
09:51
2660
08:14
2658
04:59
2656
01:44
-16°
December 16, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

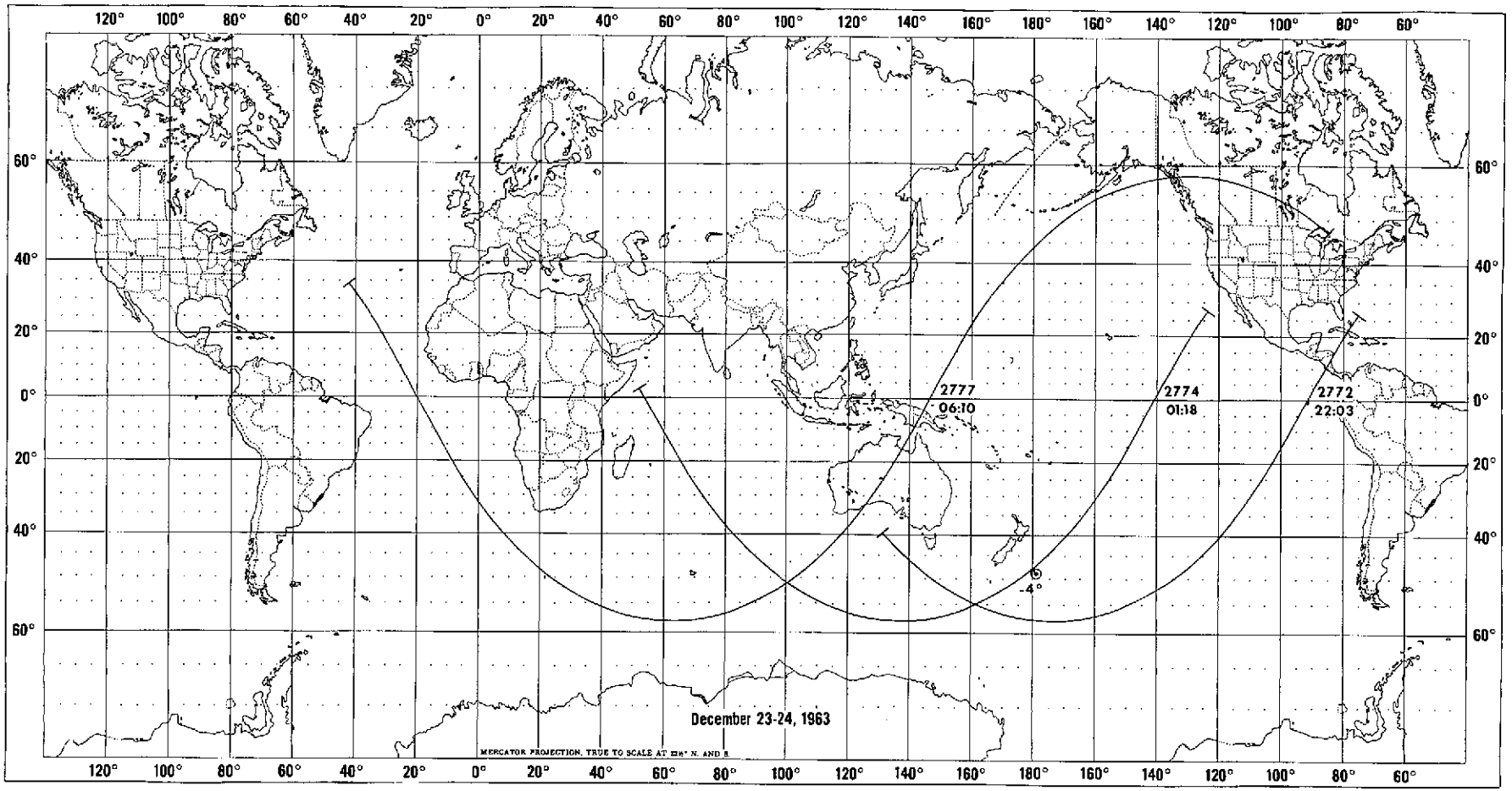

2677
11:49
2676
10:12
2675
08:35
2672
03:42
-14°
December 17, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 28½° N. AND S.

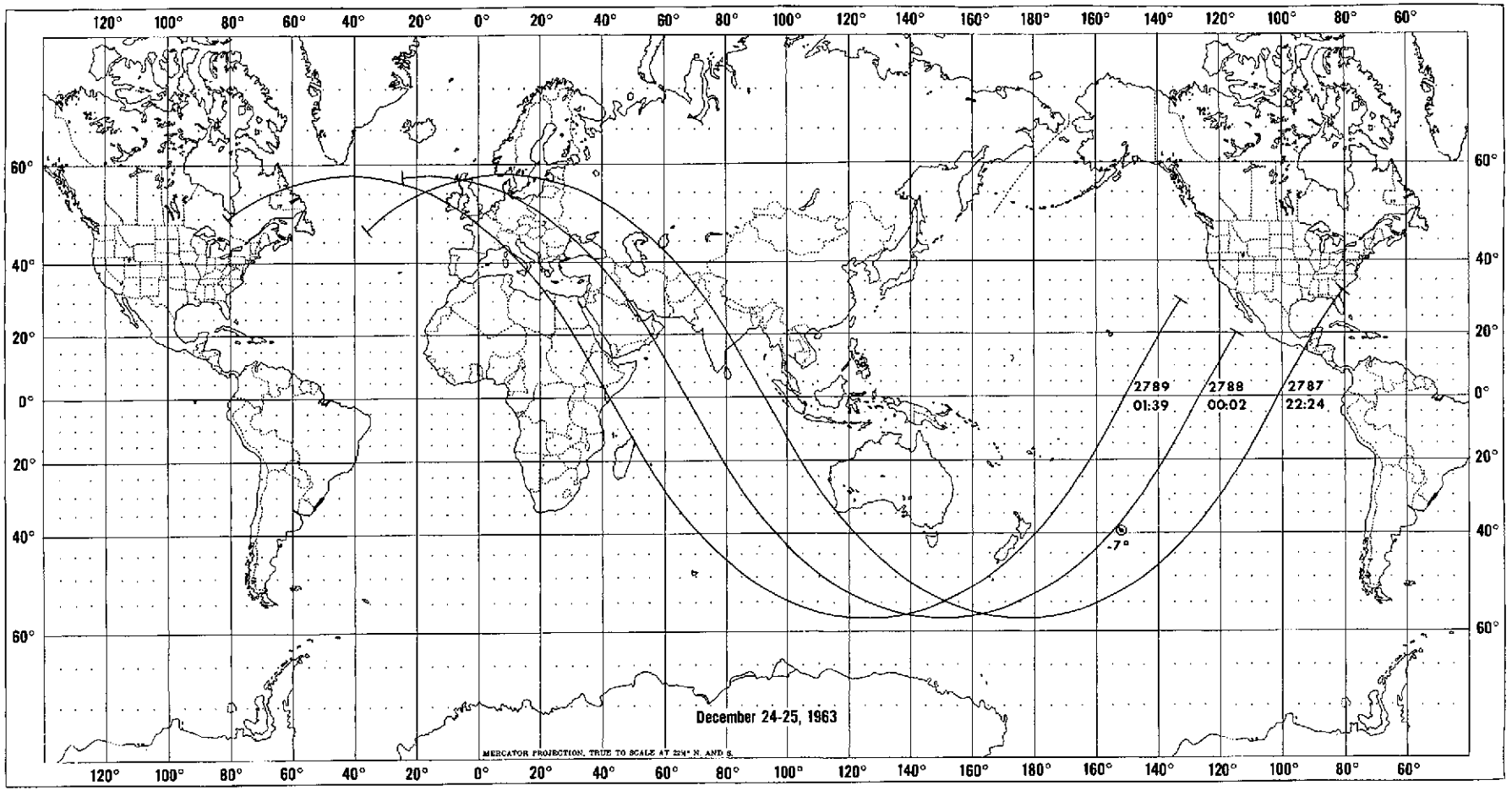

2692
12:11
2691
10:33
2690
08:56
2687
04:04
-10°
December 18, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

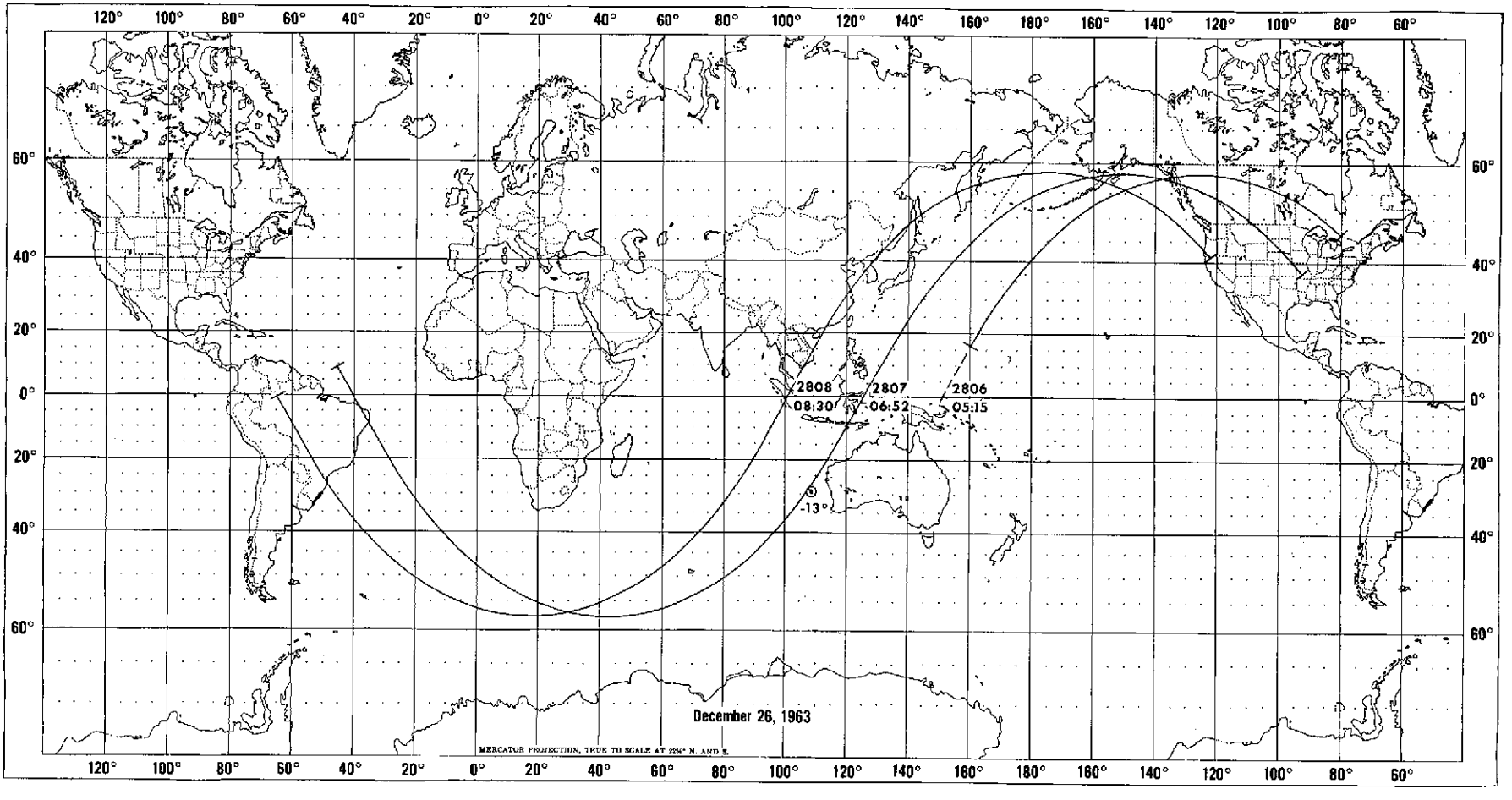

2706
10:54
2705
09:17
2704
07:39
2701
02:47
2699
23:32
-7°
December 18-19, 1963
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 2698-2748
No Data for Interrogation Days
December 19-20, 20-21, 1963 Were Reduced
MERCATOR PROJECTION, TRUE TO SCALE AT 72½° N. AND S.

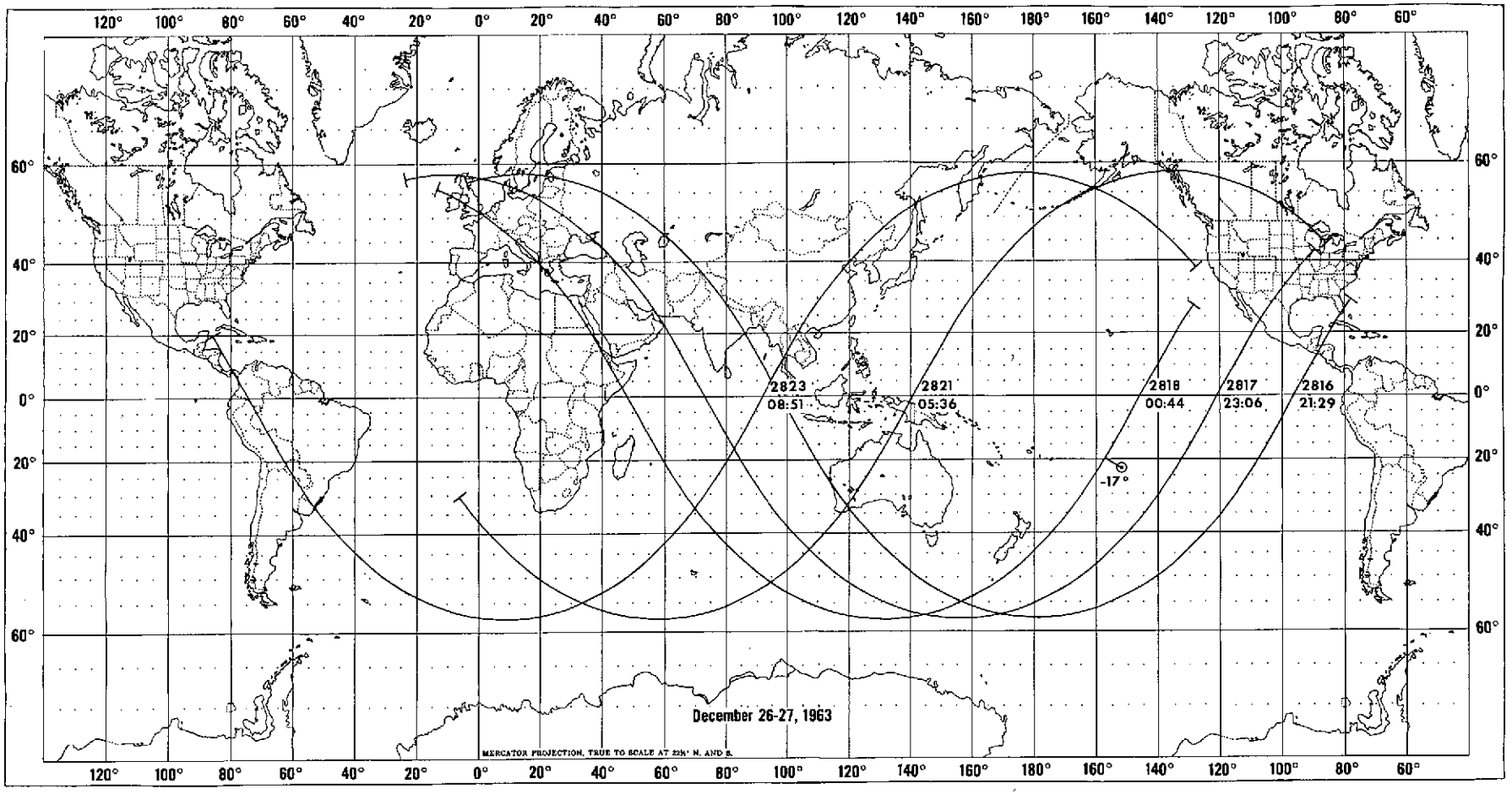

2750
10:20
2749
08:43
2748
07:05
2747
05:28
2745
02:13
2743
22:58
-2°
December 21-22, 1963
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 2698-2748.
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

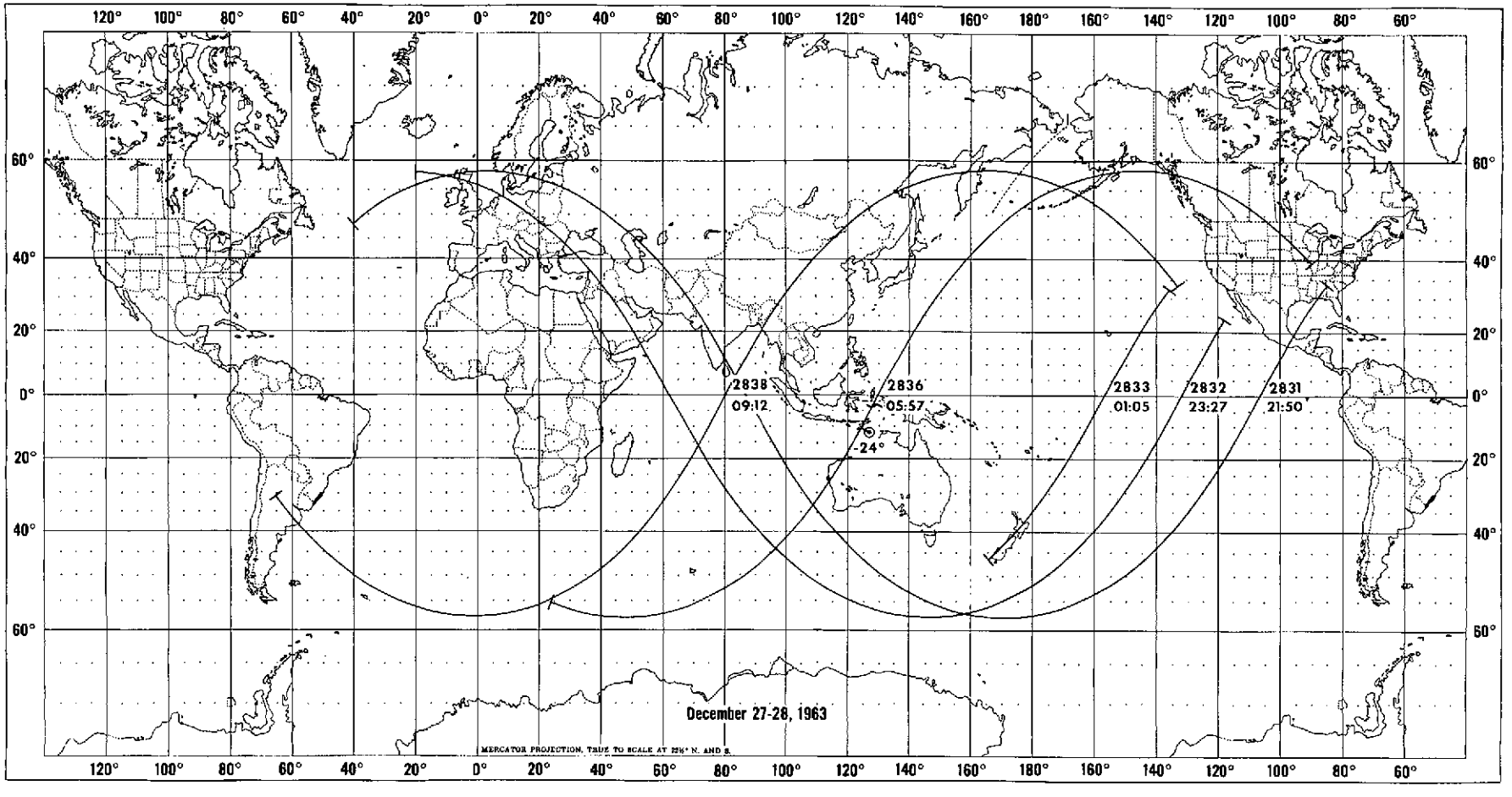

2764
09:04
2762
05:49
2760
02:34
2758
23:19
-2°
December 22-23, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

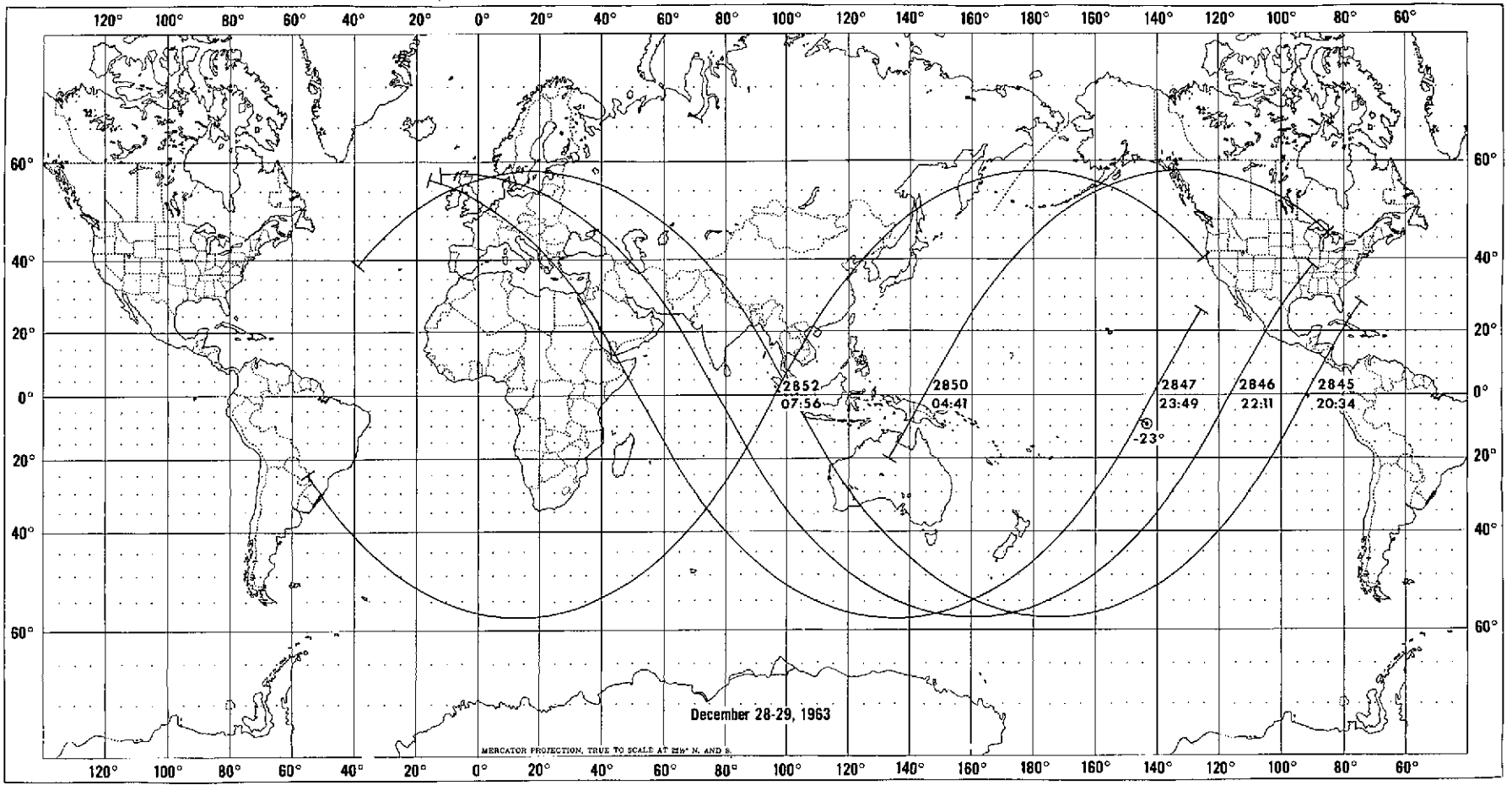

2777
06:10
2774
01:18
2772
22:03
-4°
December 23-24, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 216° N. AND S.

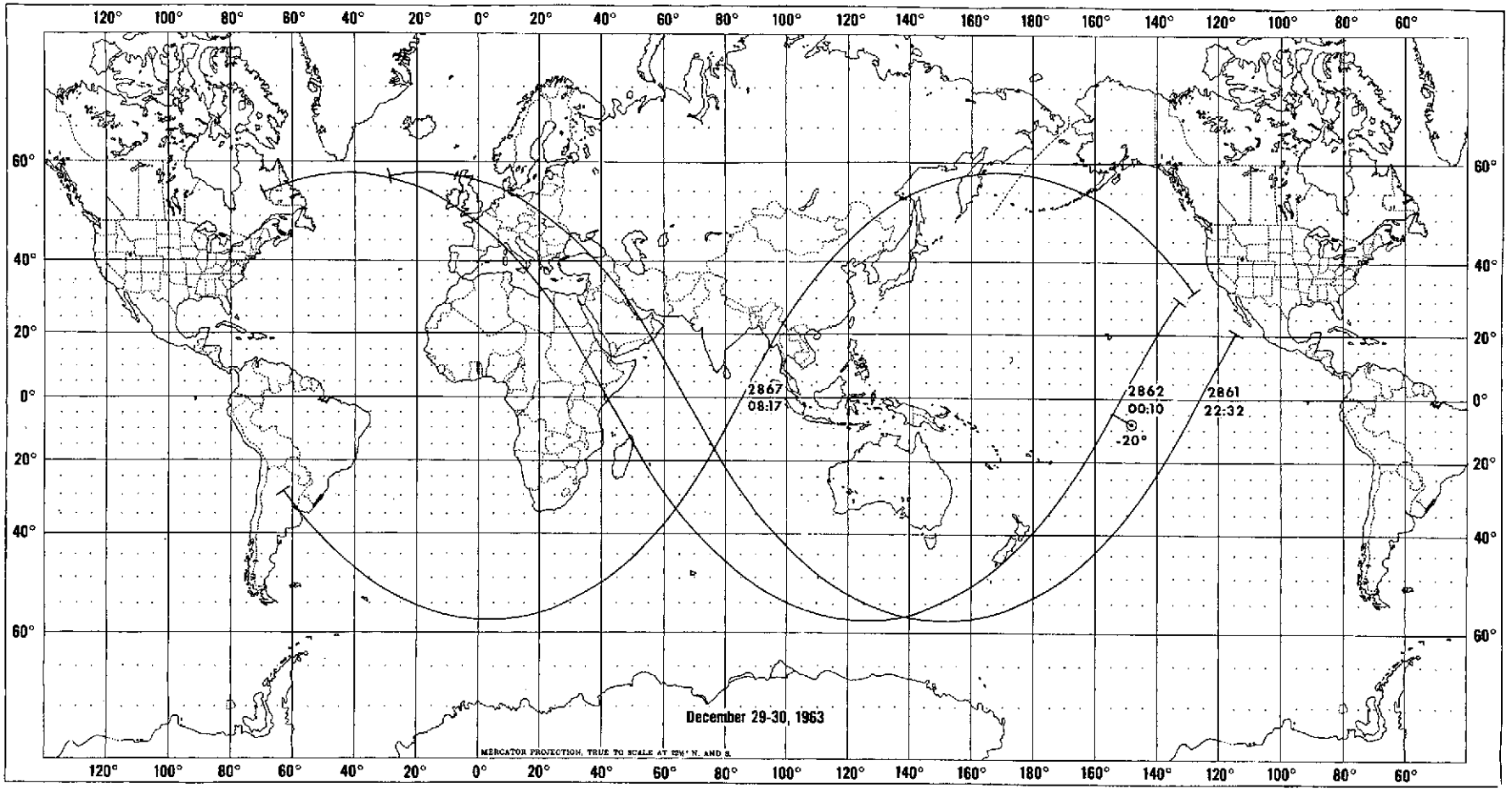

2789
01:39
2788
00:02
2787
22:24
-7°
December 24-25, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

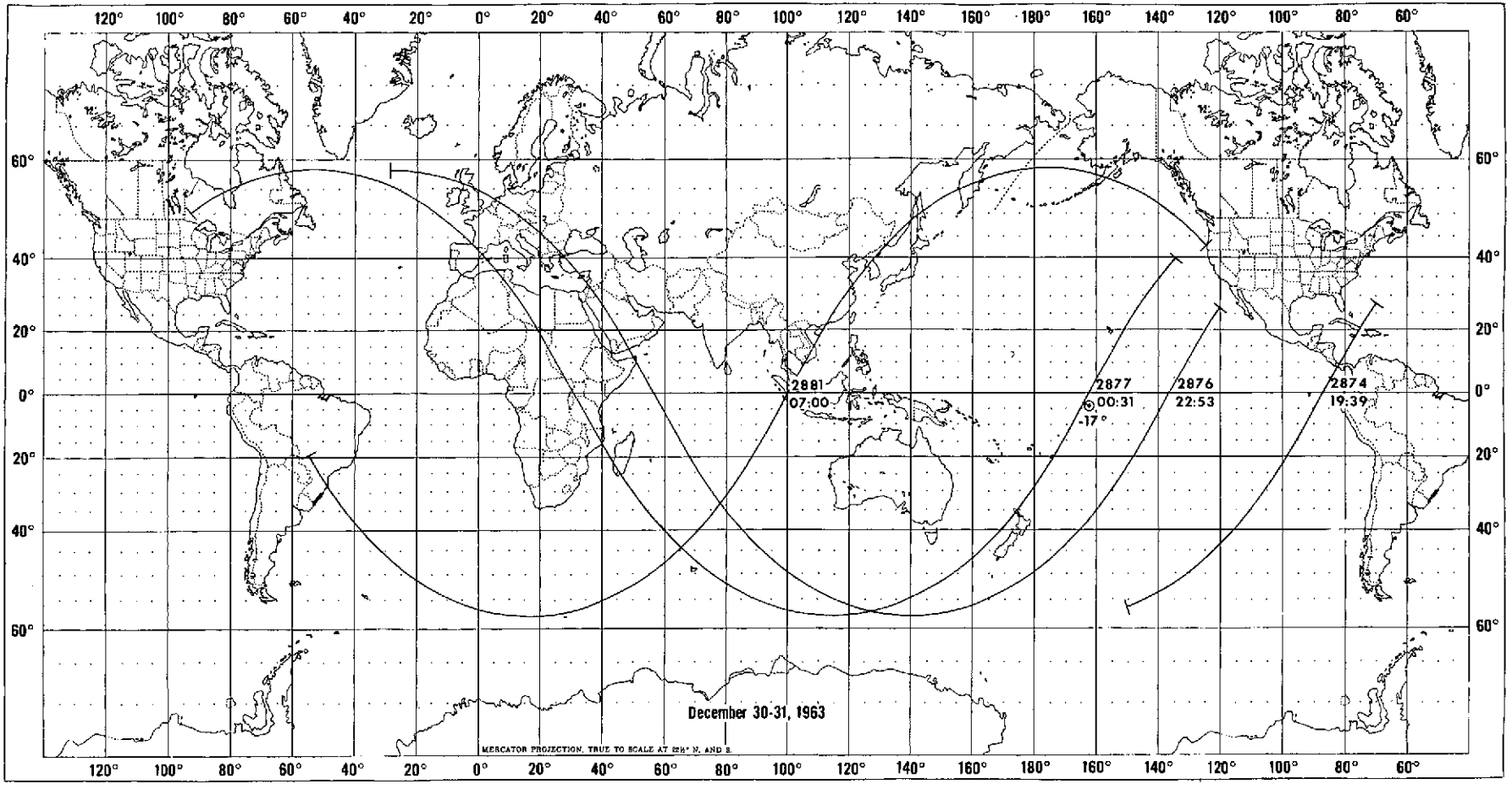

2808
08:30
2807
06:52
2806
05:15
-13°
December 26, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

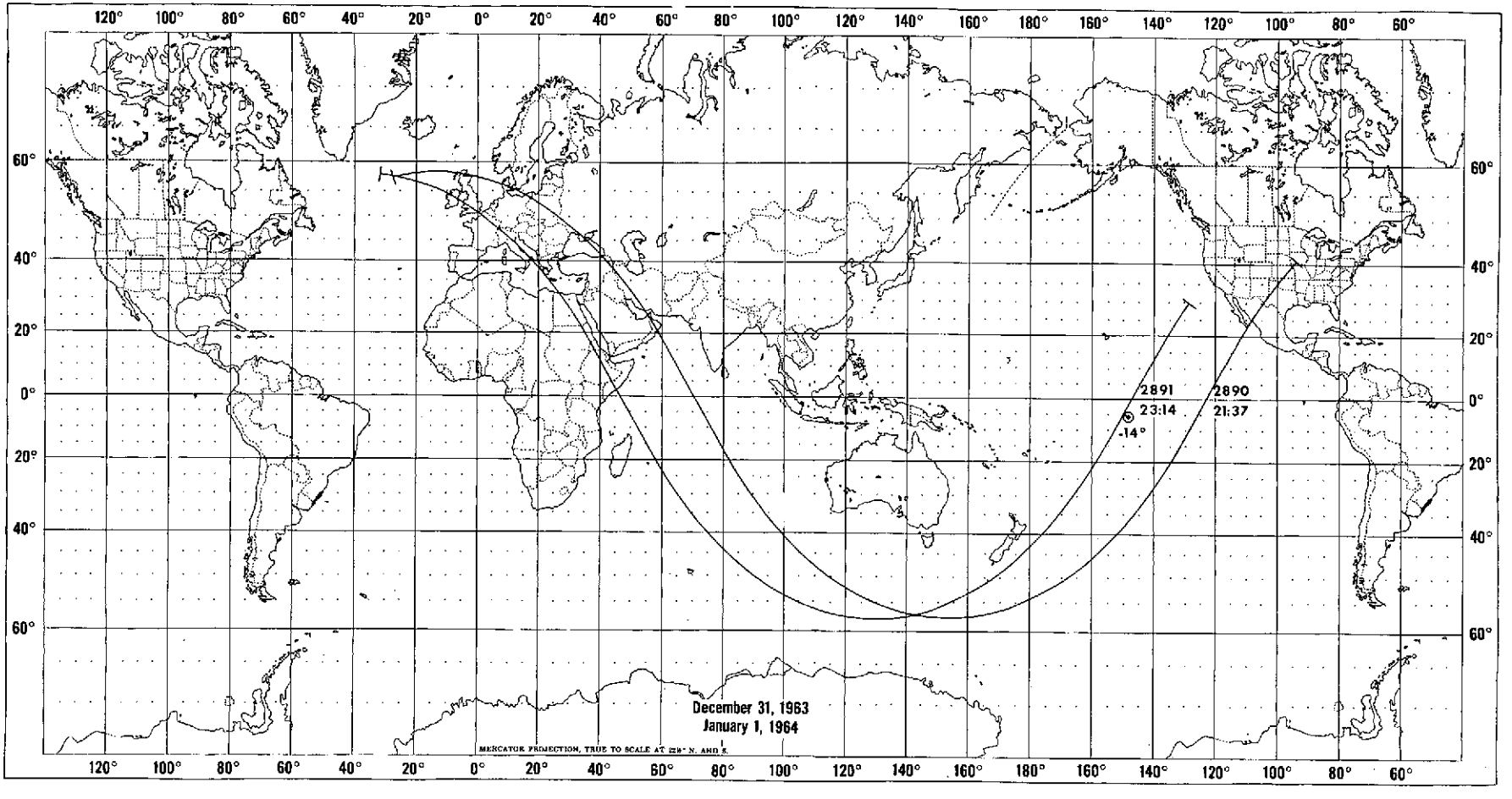

2823
08:51
2821
05:36
2818
00:44
2817
23:06
2816
21:29
-17°
December 26-27, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

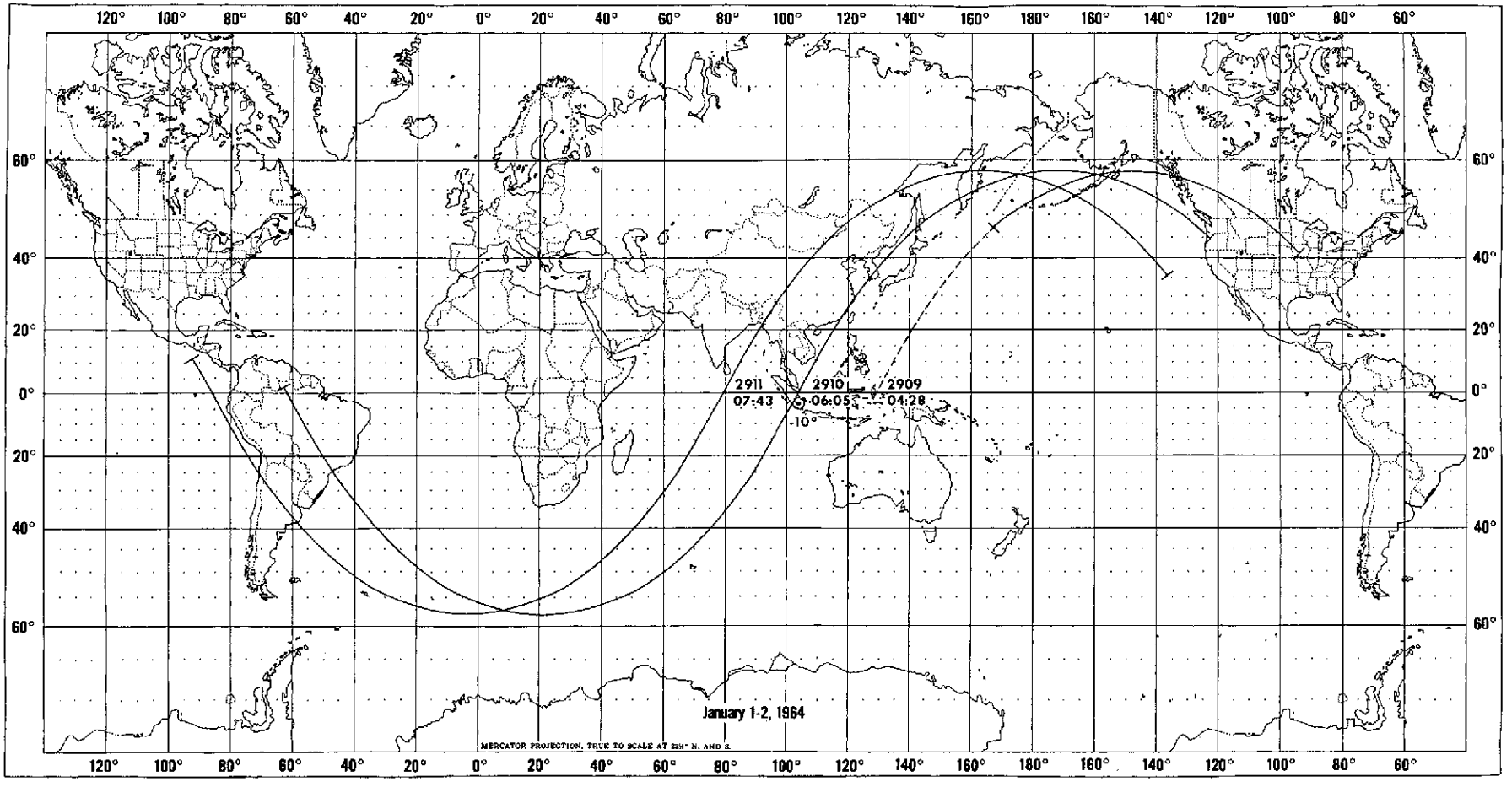

2838
09:12
2836
05:57
-24°
2833
01:05
2832
23:27
2831
21:50
December 27-28, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

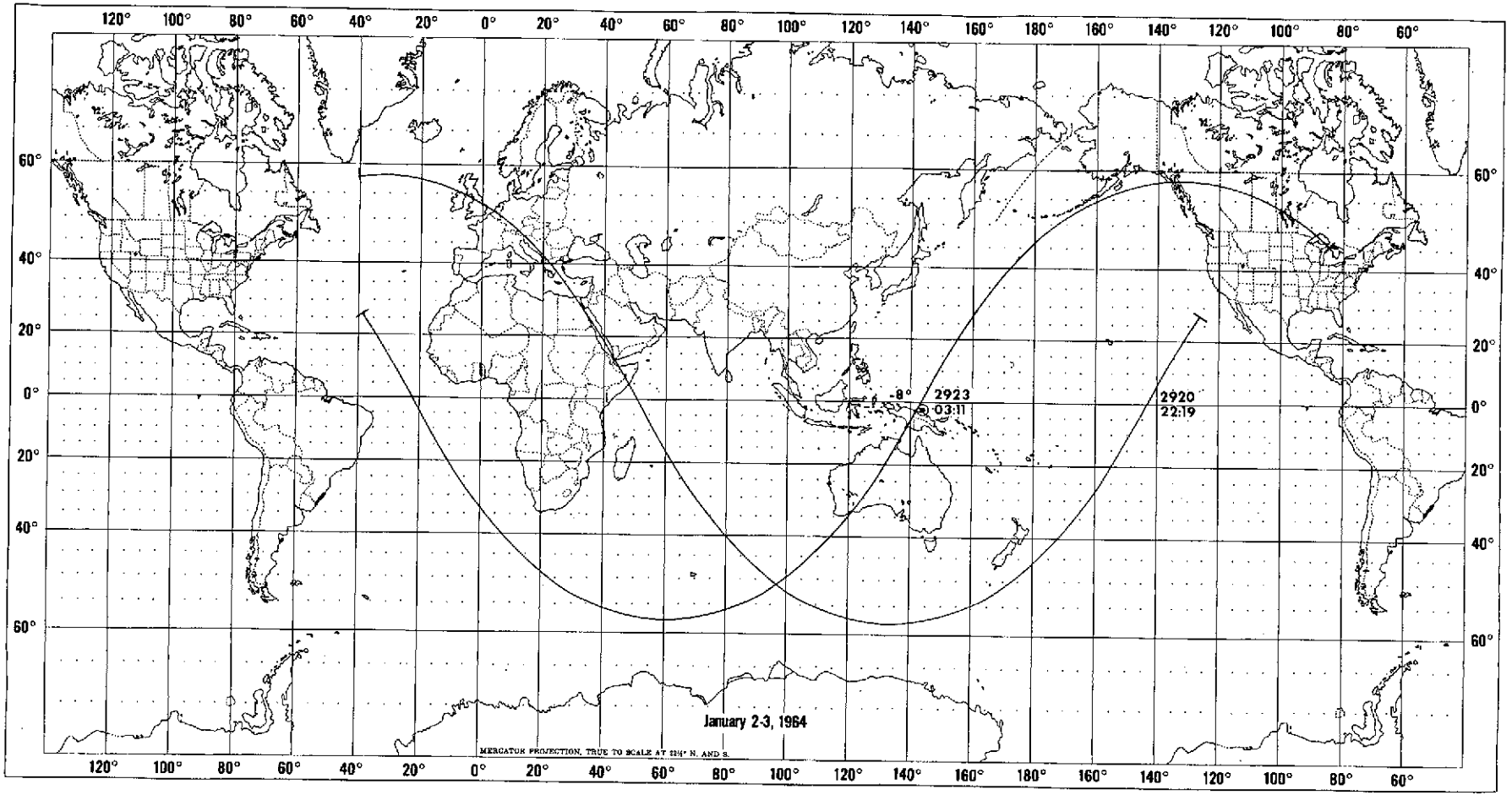

2852
07:56
2850
04:41
2847
23:49
2846
22:11
2845
20:34
-23°
December 28-29, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 28½° N. AND S.

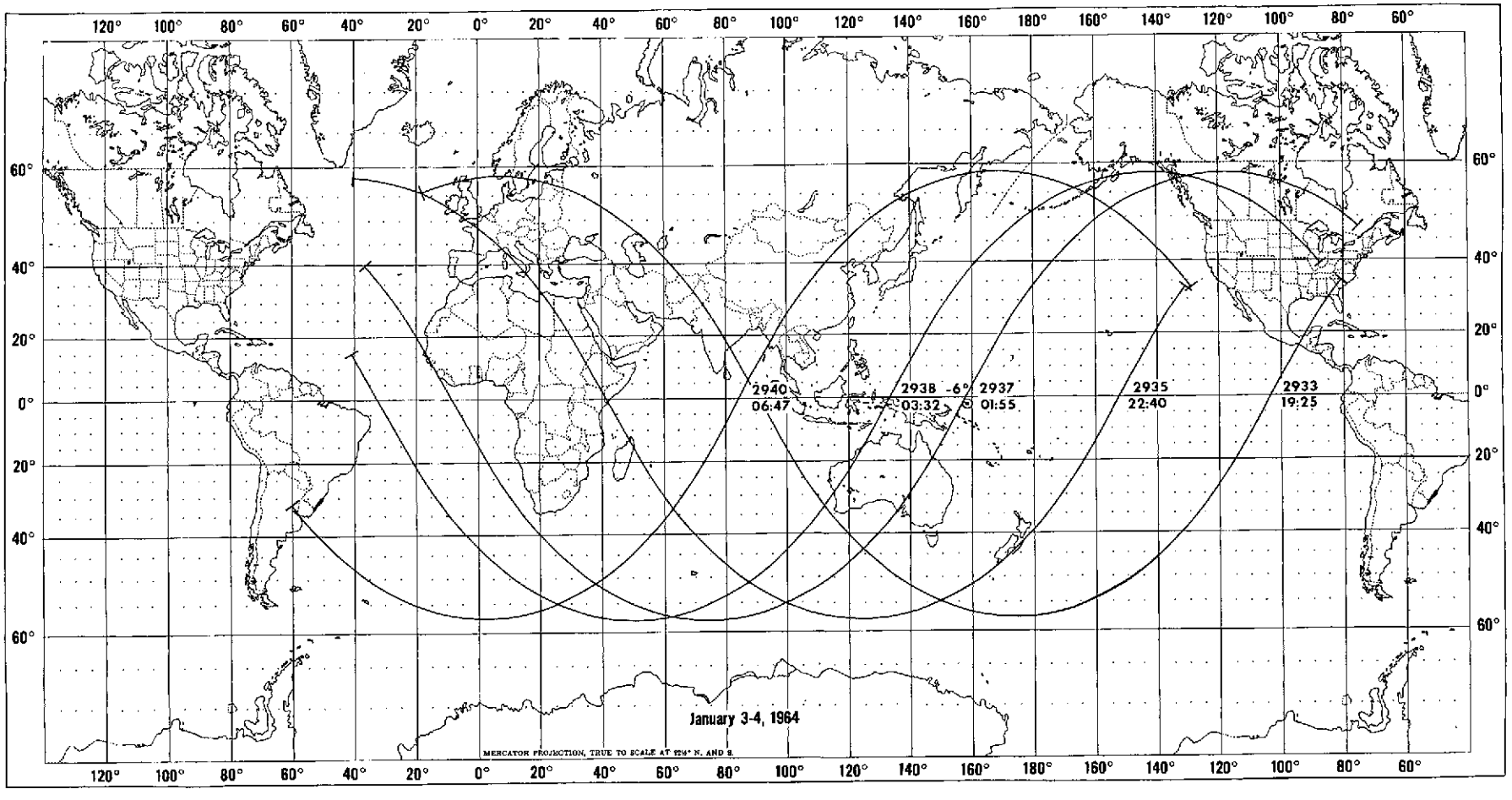

2867
08:17
2862
00:10
-20°
2861
22:32
December 29-30, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

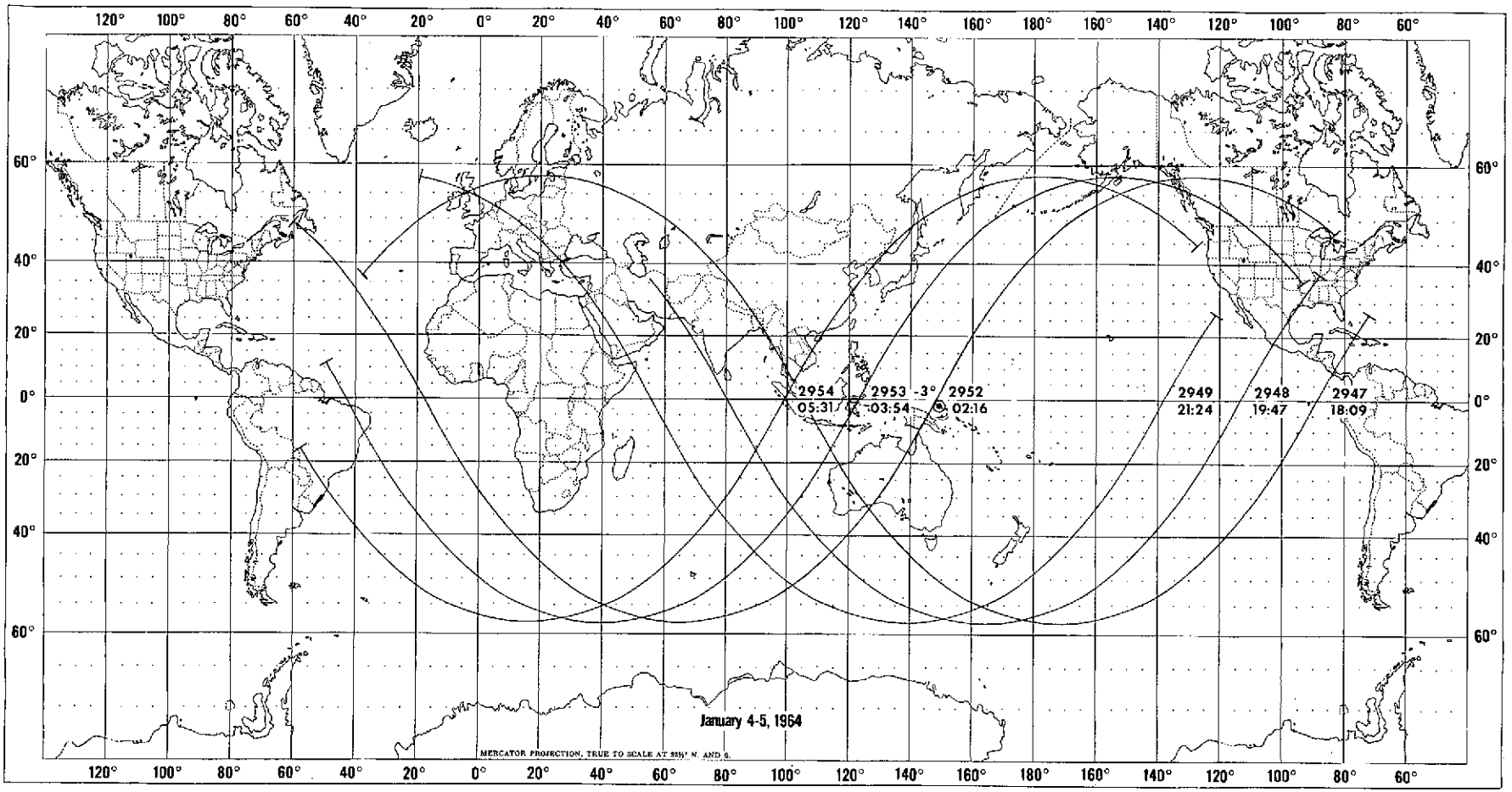

2881
07:00
2877
00:31
-17°
2876
22:53
2874
19:39
December 30-31, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

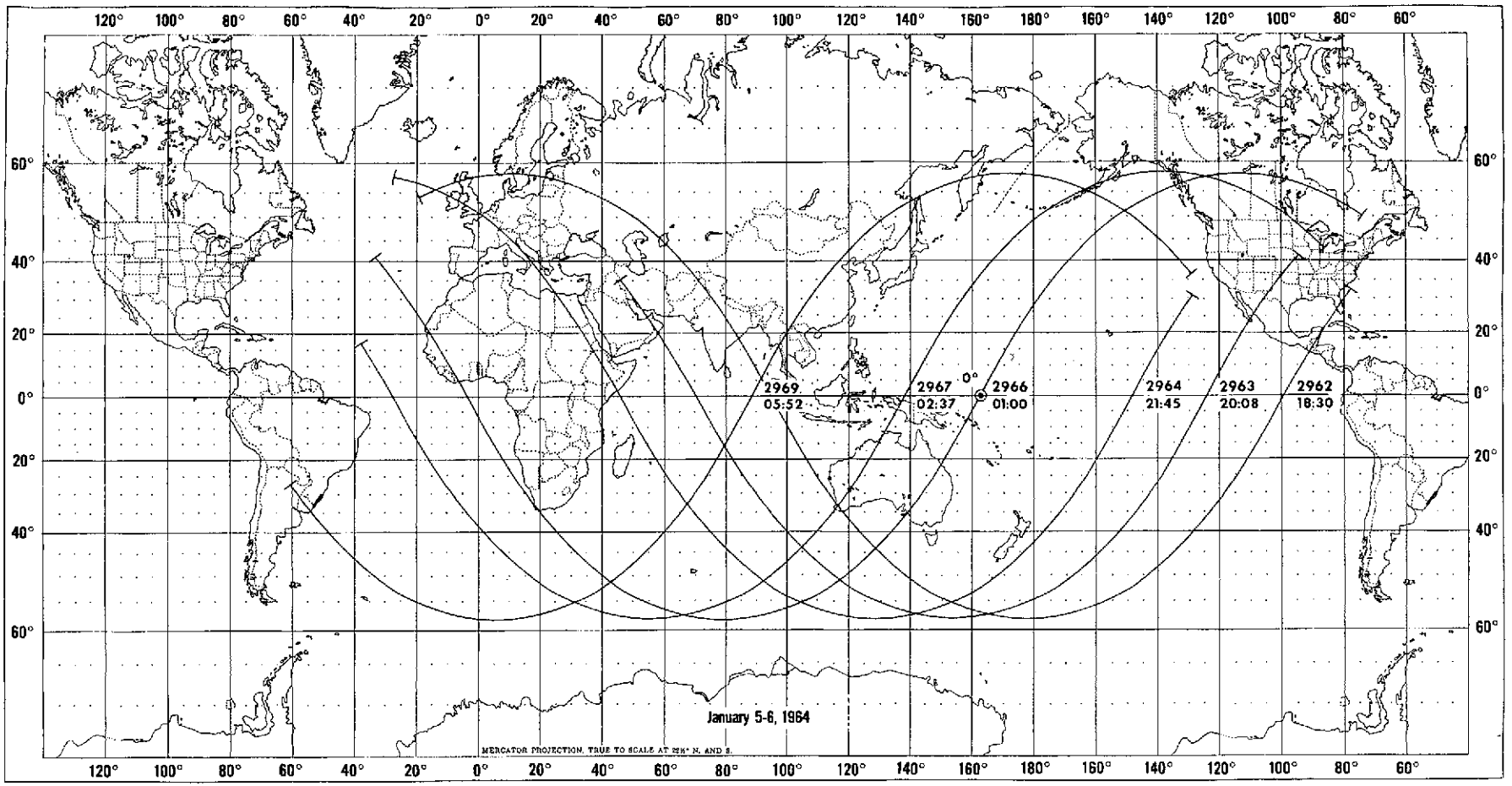

2891
23:14
-14°
2890
21:37
December 31, 1963
January 1, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

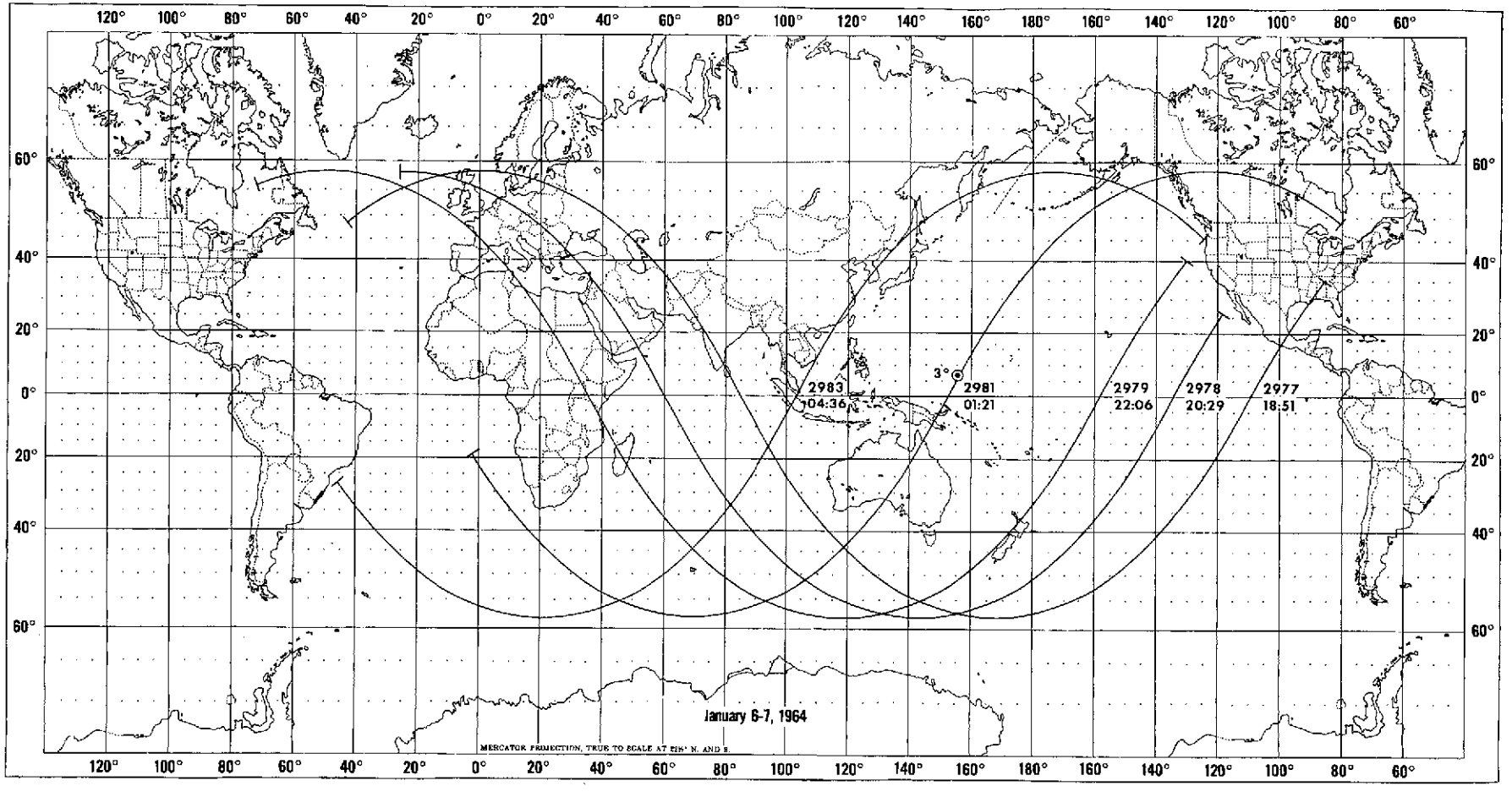

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
2911
07:43
2910
06:05
-10°
2909
04:28
January 1-2, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

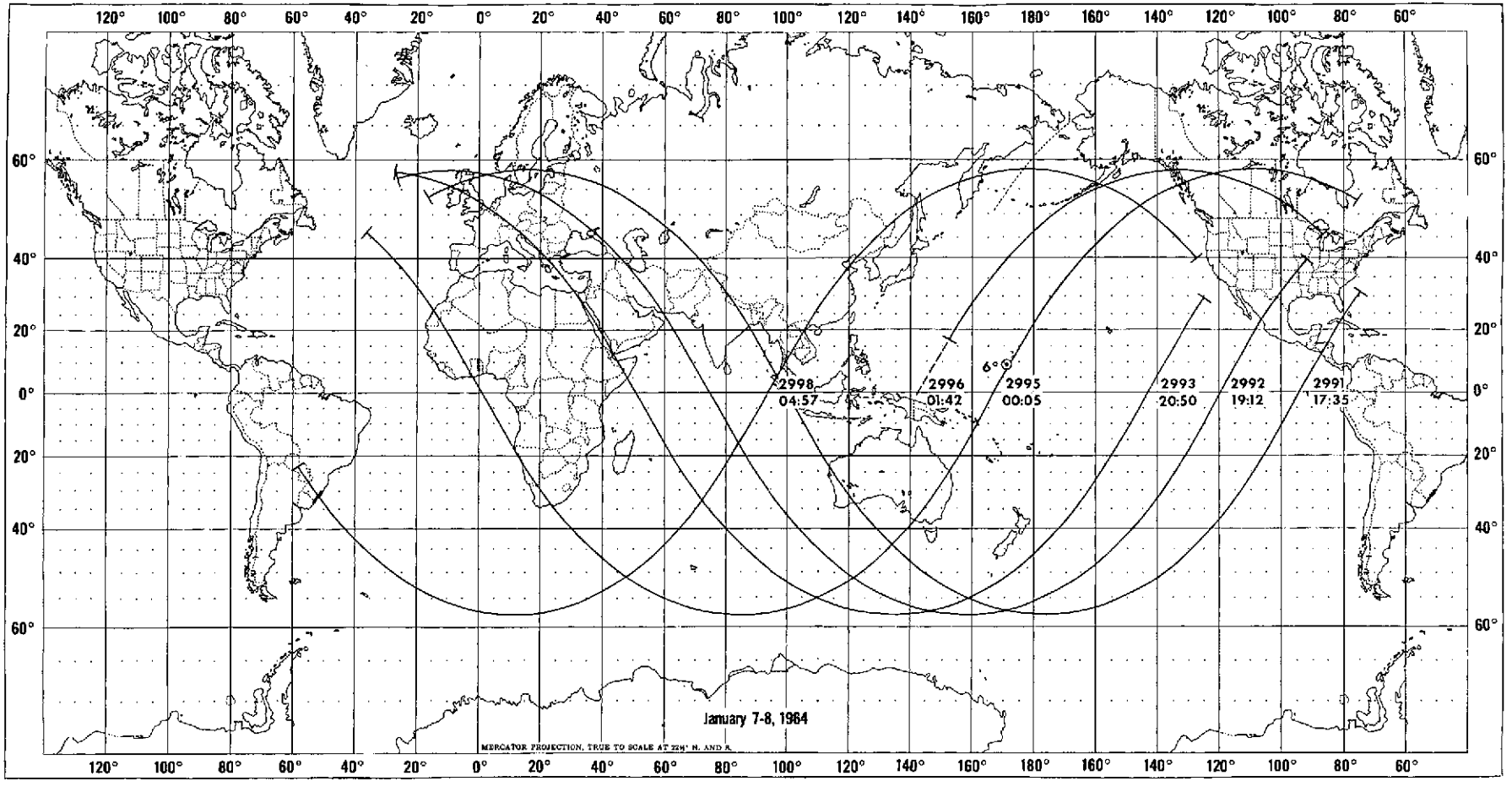

-8°
2923
03:11
2920
22:19
January 2-3, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

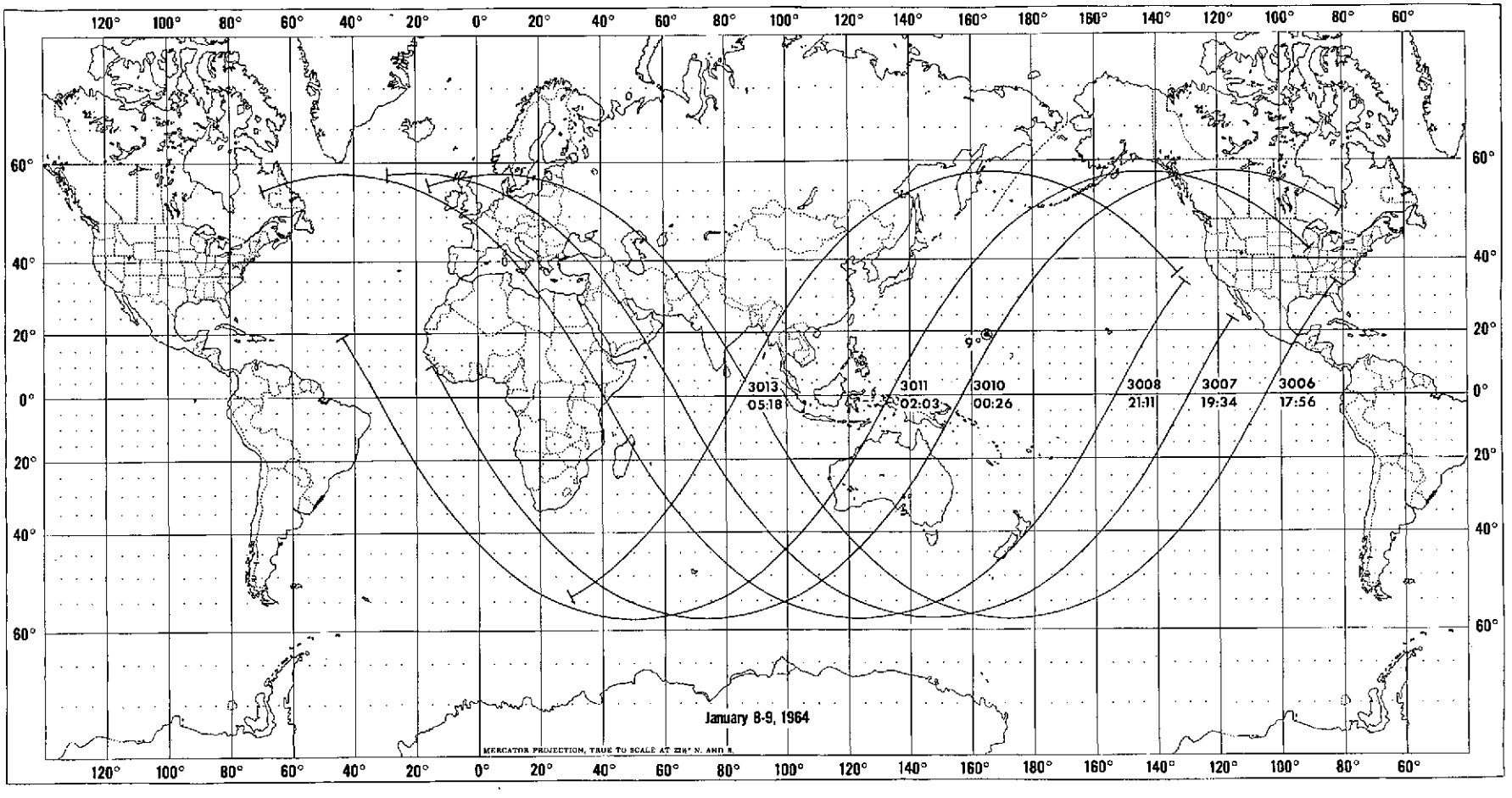

2940
06:47
2938 -6° 2937
03:32 01:55
2935
22:40
2933
19:25
January 3-4, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 72½° N. AND S.

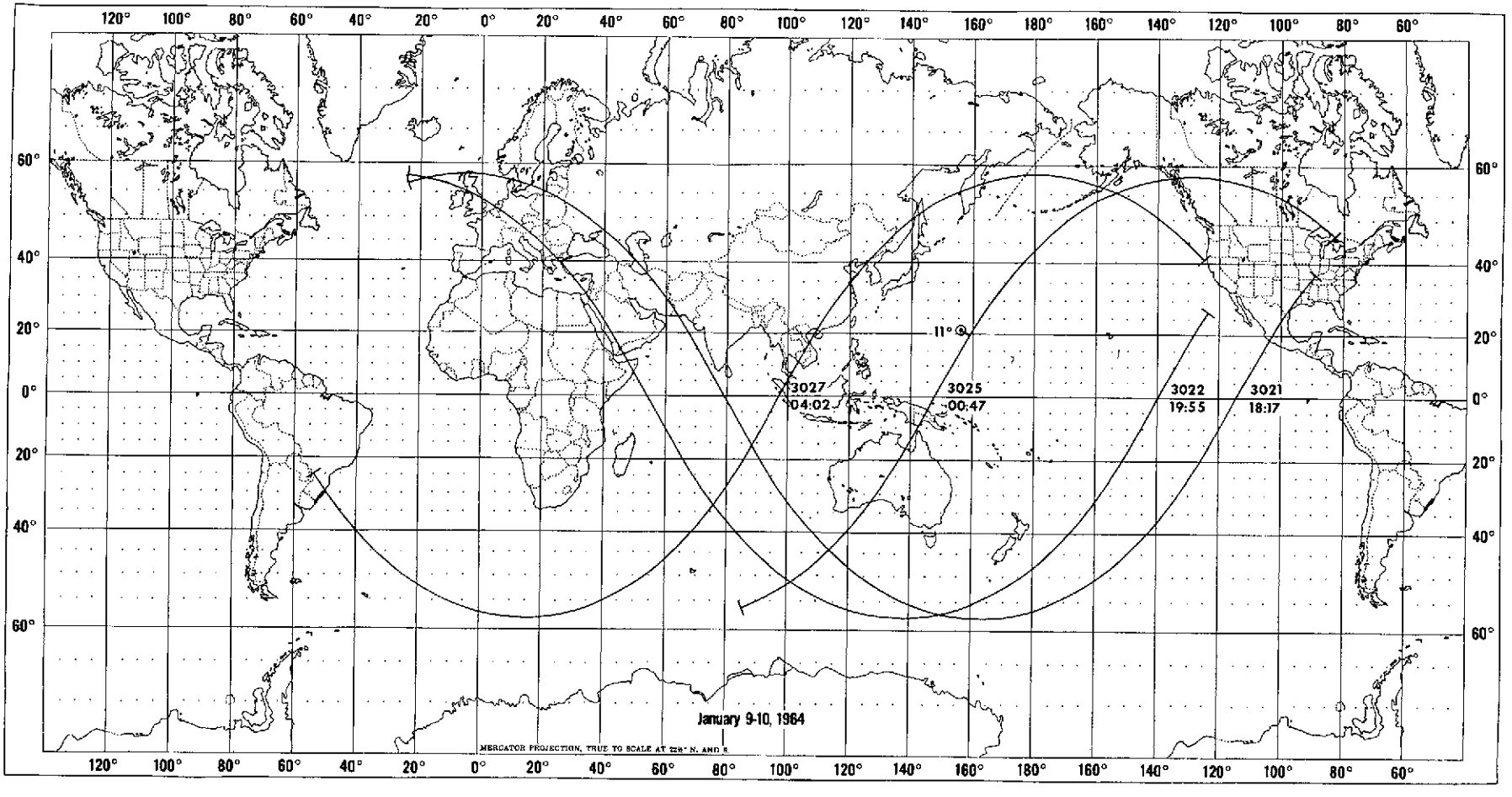

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
2954
05:31
2953 -3°
03:54
2952
02:16
2949
21:24
2948
19:47
2947
18:09
January 4-5, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

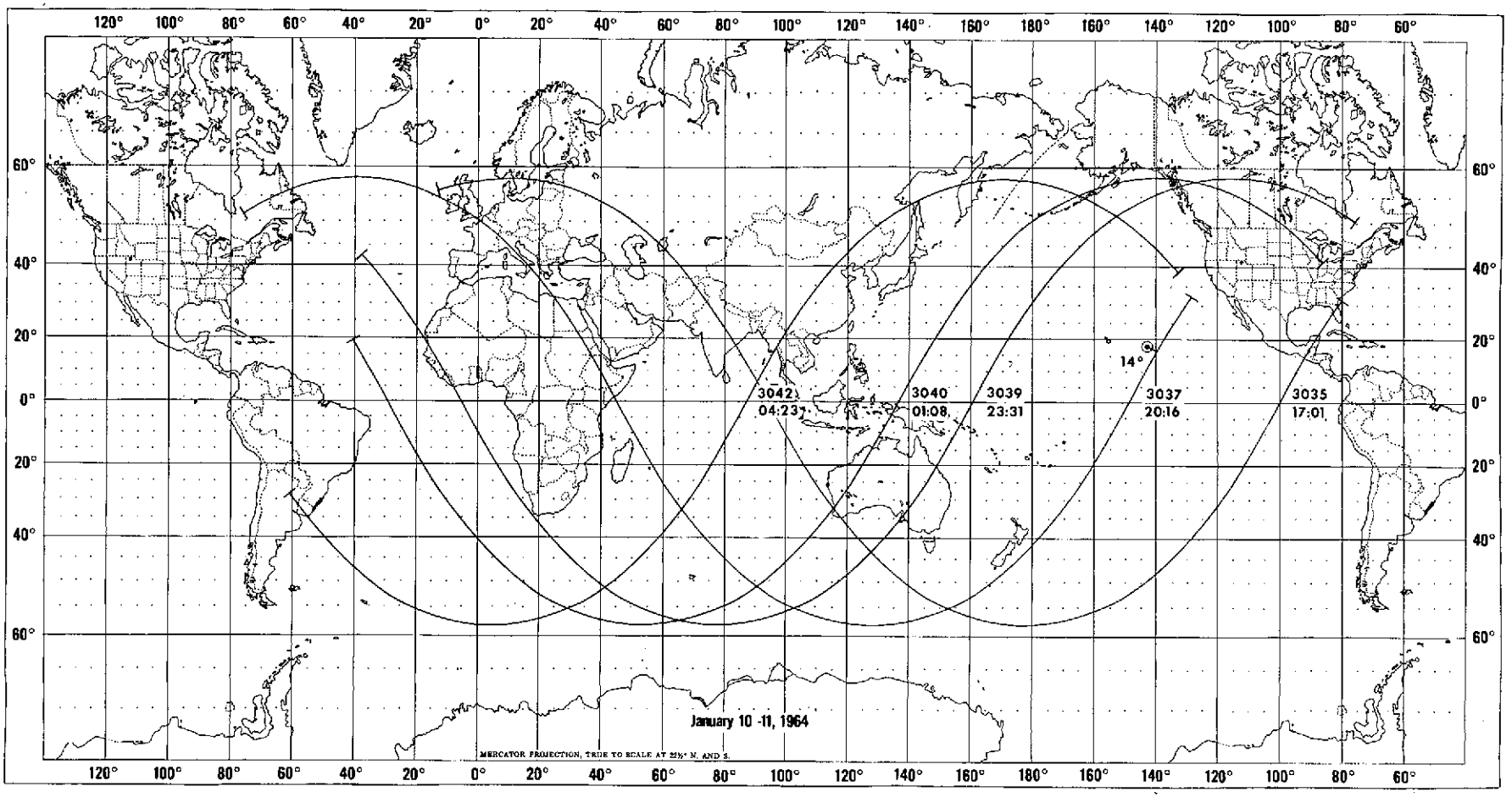

2969
05:52
2967
02:37
0°
2966
01:00
2964
21:45
2963
20:08
2962
18:30
January 5-6, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

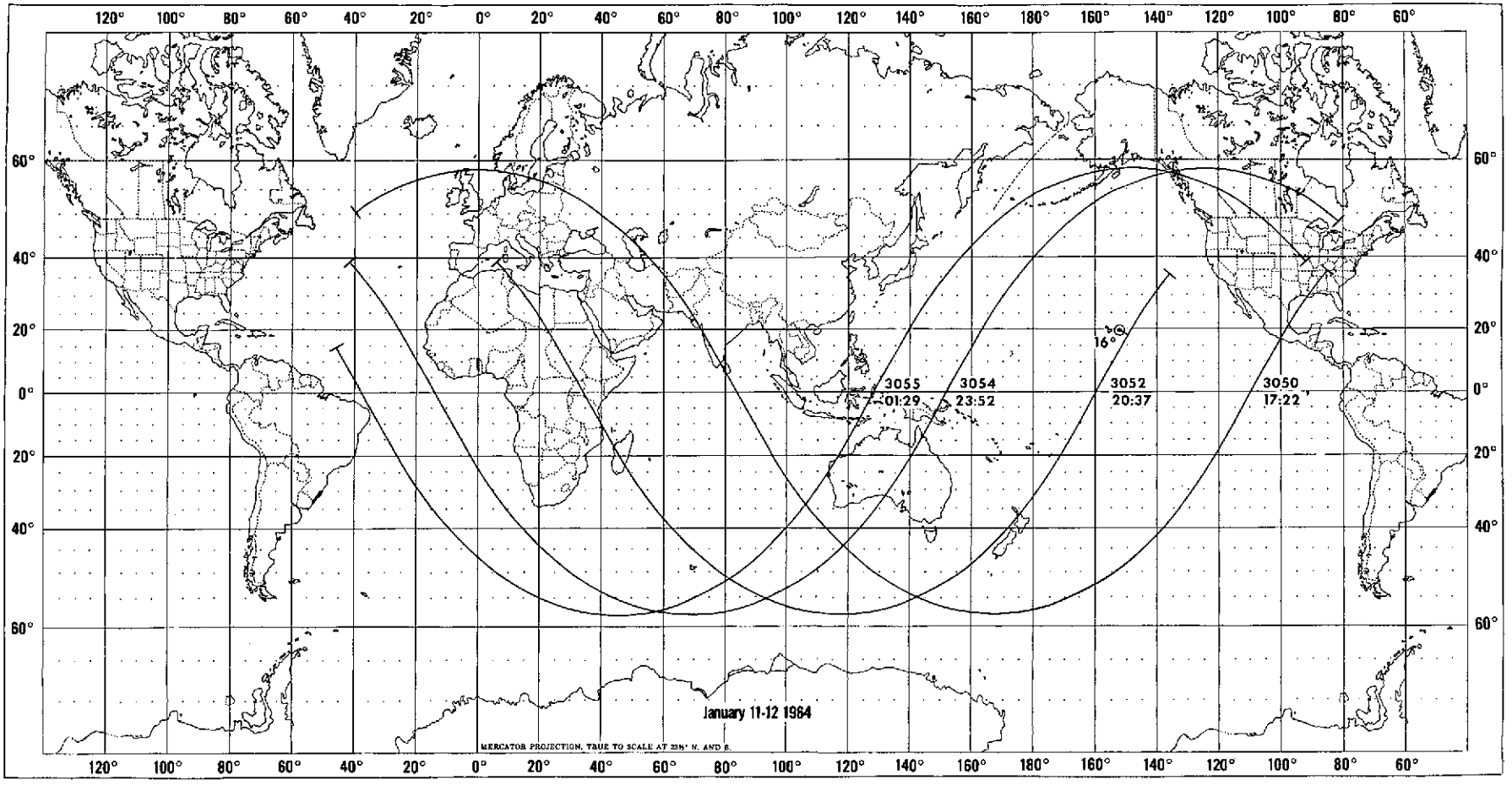

2983
04:36
3°
2981
01:21
2979
22:06
2978
20:29
2977
18:51
January 6-7, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 21½° N. AND S.

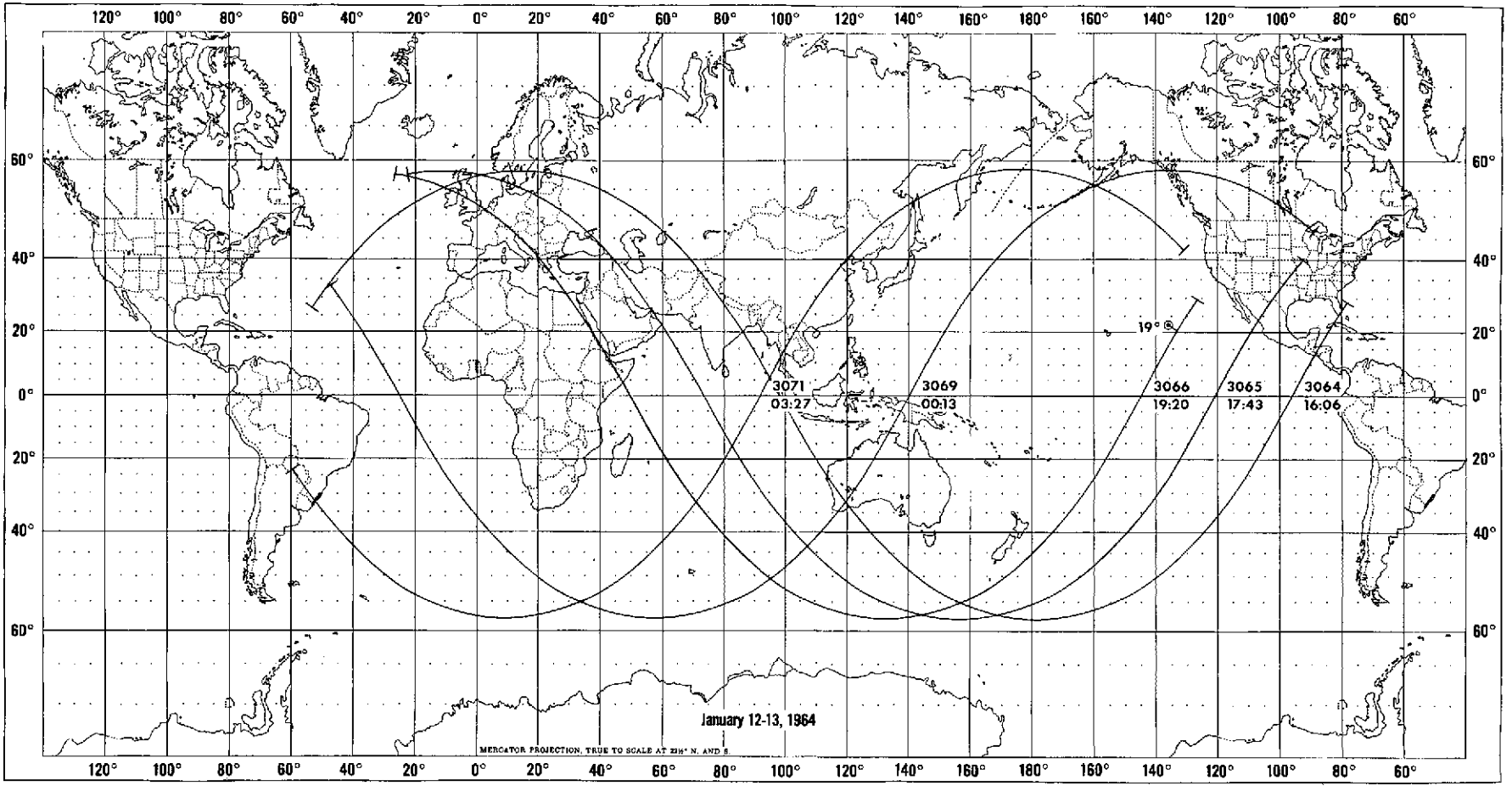

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
2998
04:57
2996
01:42
6°
2995
00:05
2993
20:50
2992
19:12
2991
17:35
January 7-8, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

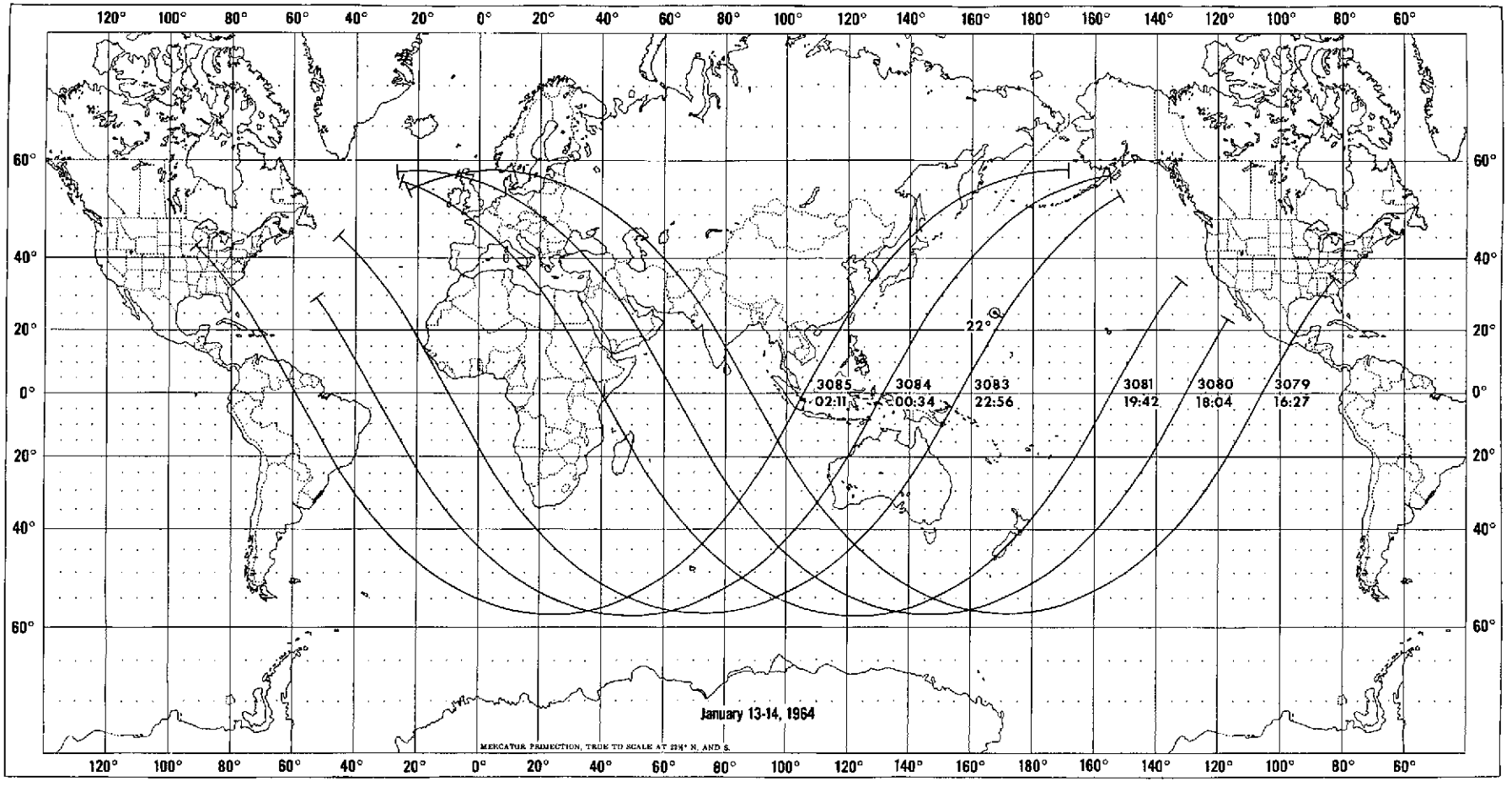

3013
05:18
3011
02:03
3010
00:26
3008
21:11
3007
19:34
3006
17:56
January 8-9, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

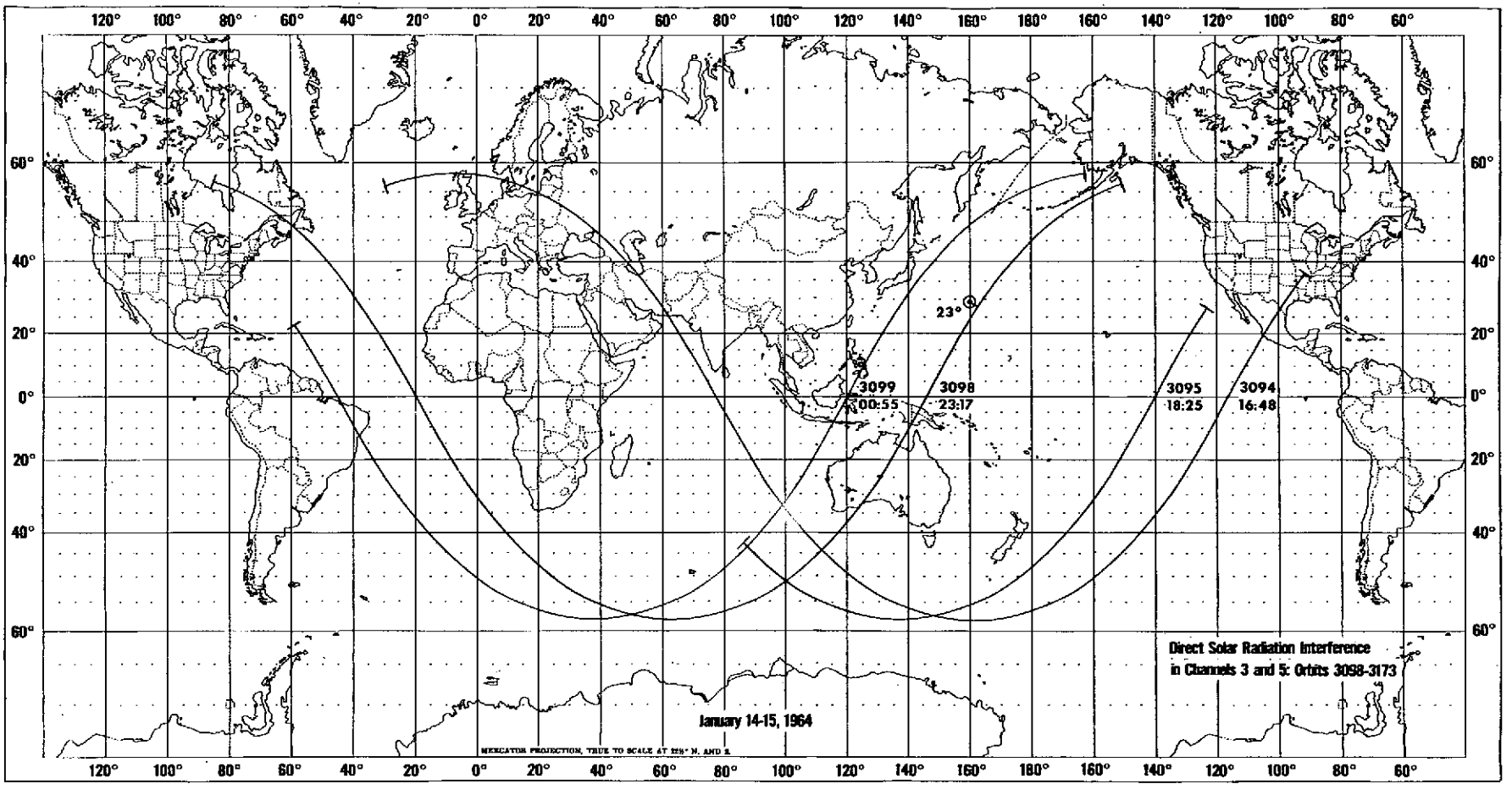

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
11°
3027
04:02
3025
00:47
3022
19:55
3021
18:17
January 9-10, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

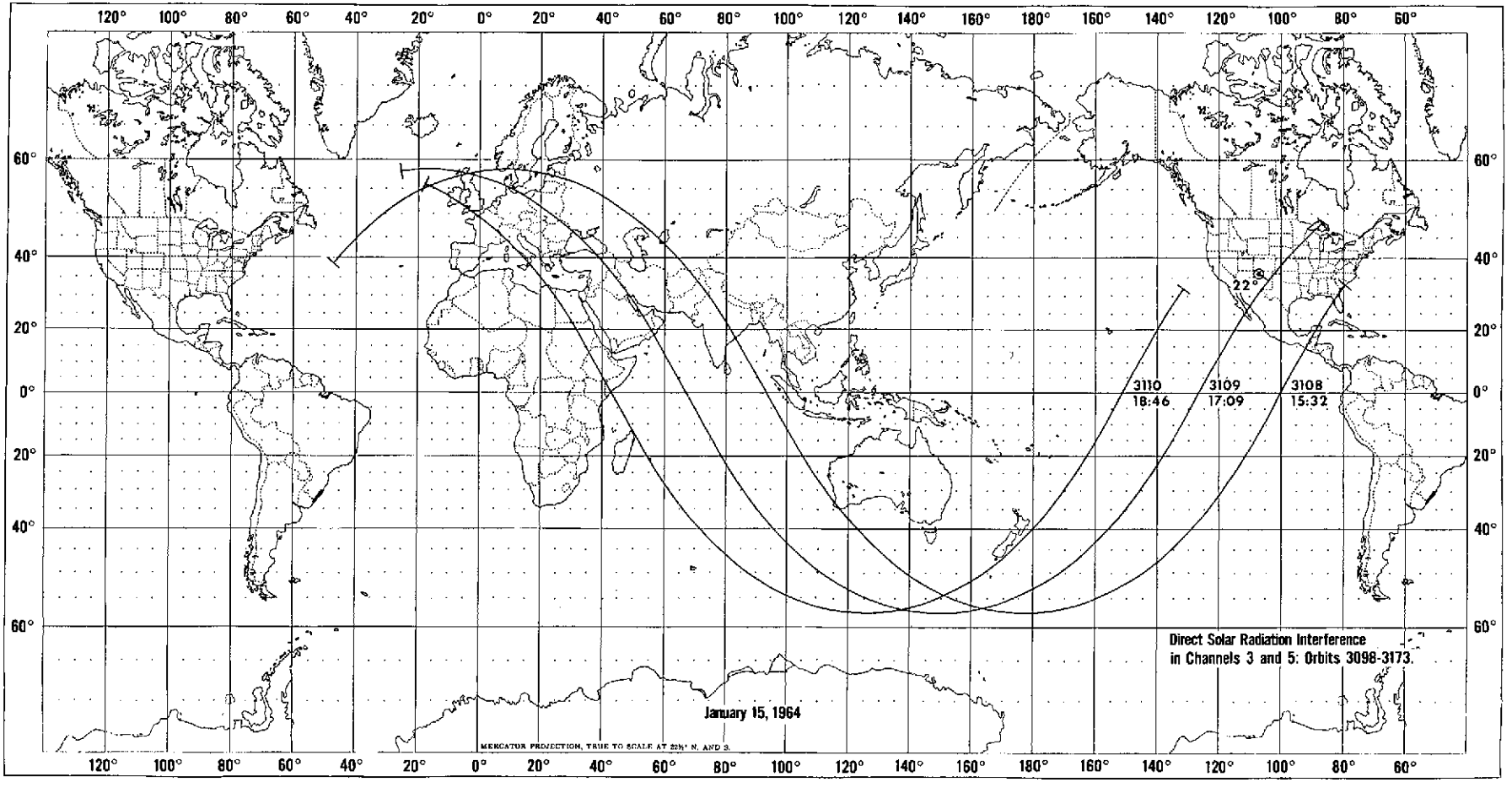

3042
04:23
3040
01:08
3039
23:31
3037
20:16
3035
17:01
14°
January 10 -11, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 21½° N. AND S.

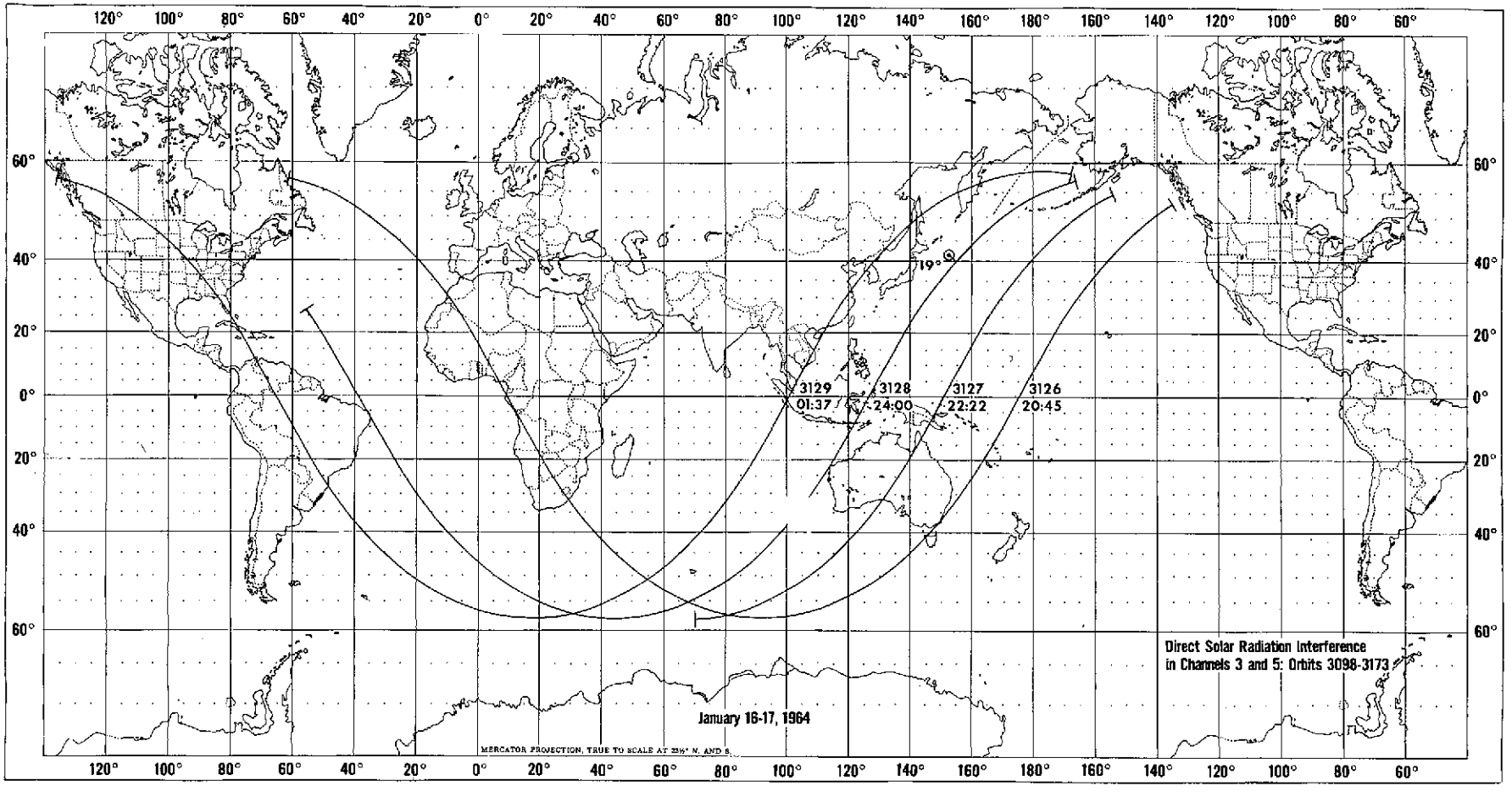

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
3055
01:29
3054
23:52
3052
20:37
3050
17:22
16°
January 11-12 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

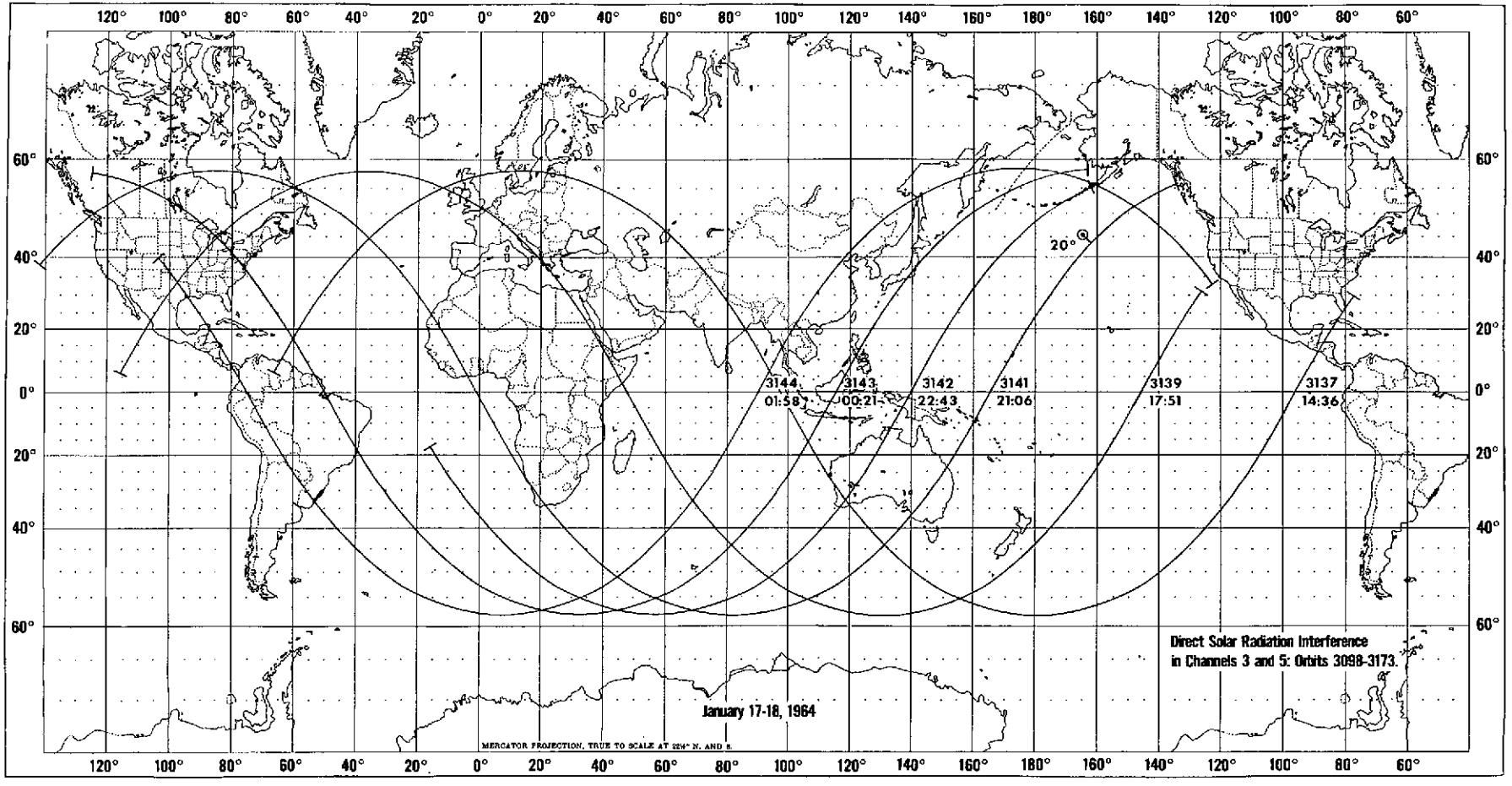

3071
03:27
3069
00:13
3066
19:20
3065
17:43
3064
16:06
19°
January 12-13, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

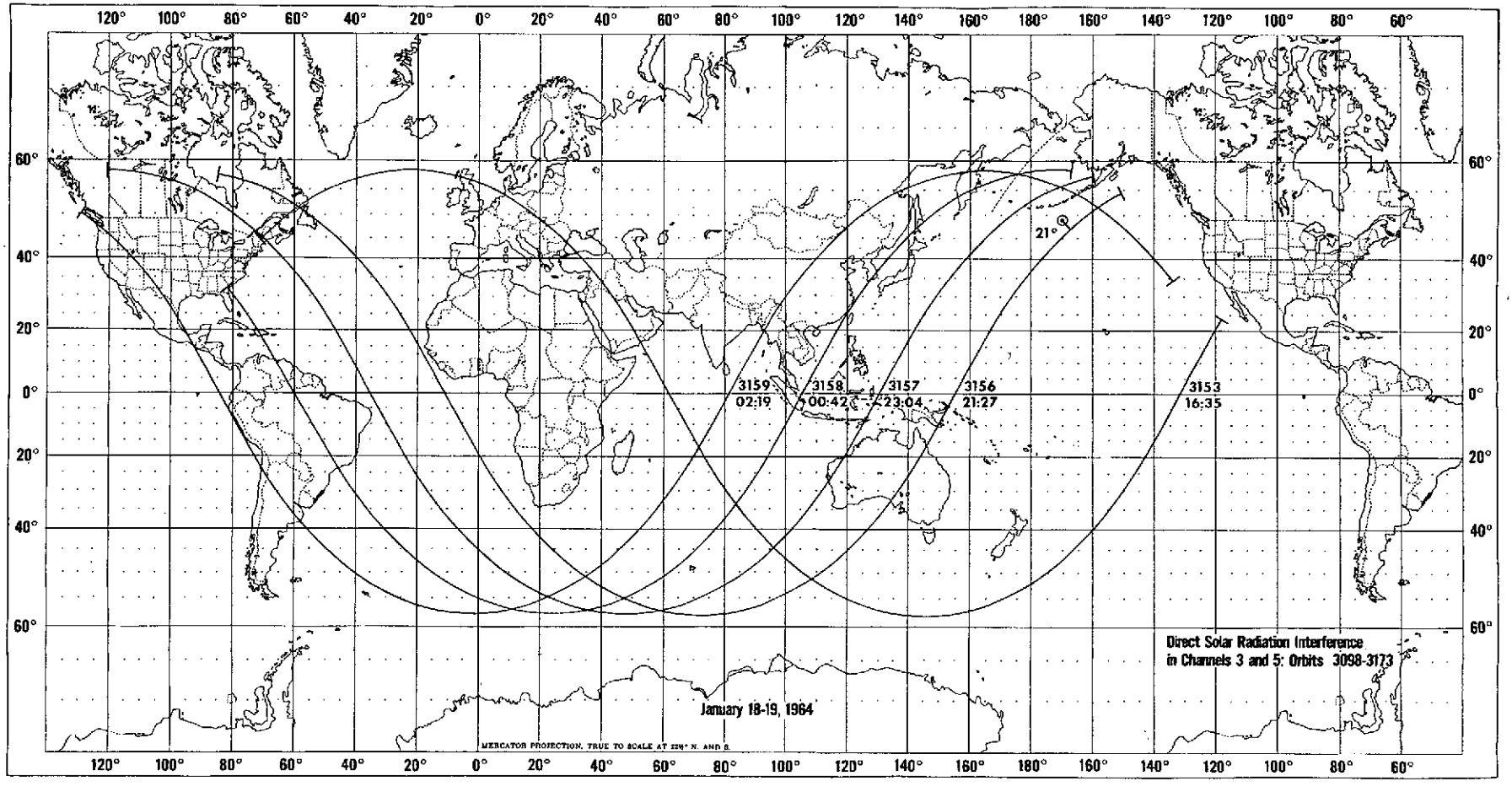

3085
02:11
3084
00:34
3083
22:56
3081
19:42
3080
18:04
3079
16:27
22°
January 13-14, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

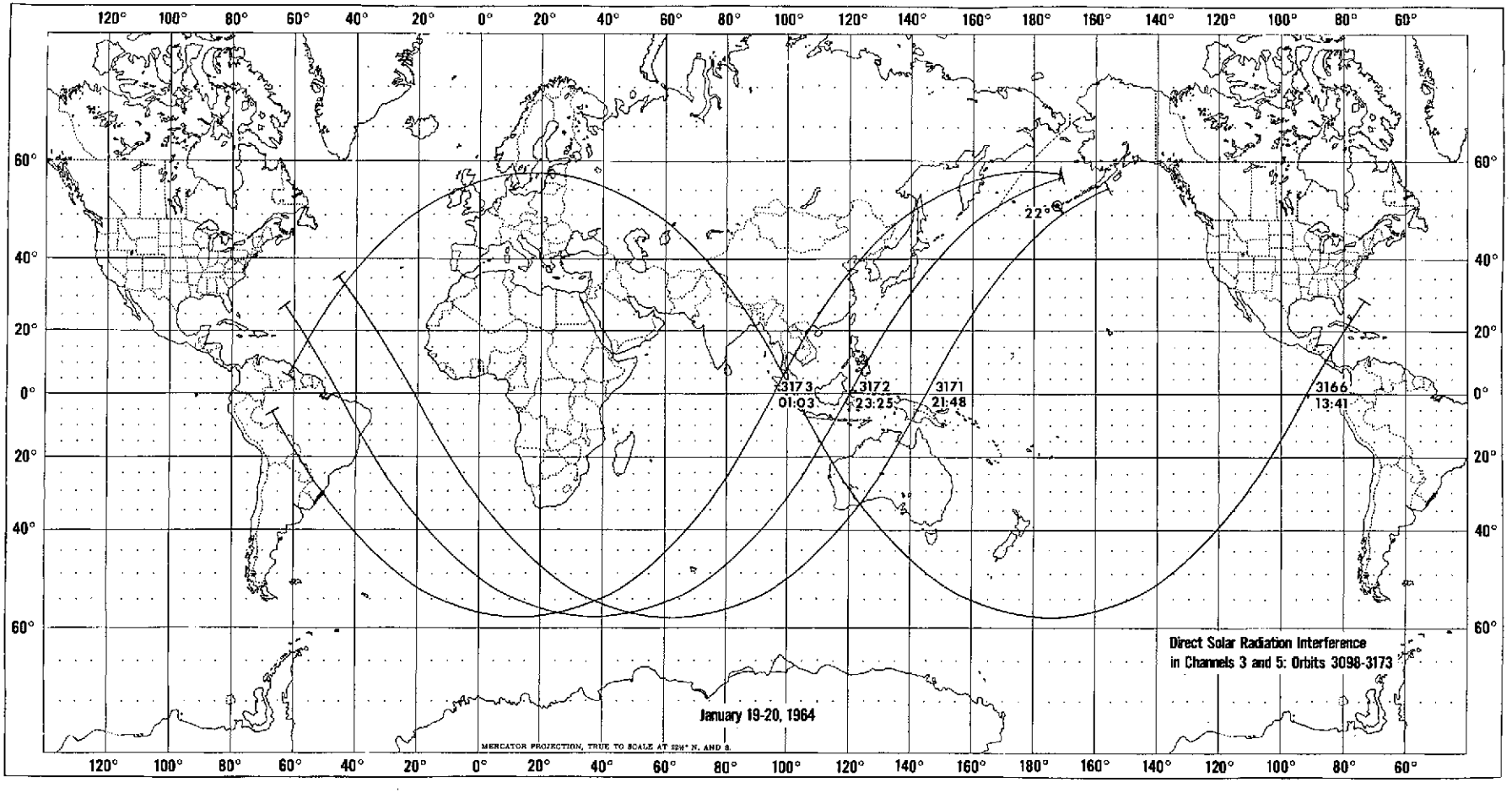

Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3098-3173
January 14-15, 1964
3099
00:55
3098
23:17
3095
18:25
3094
16:48
23°

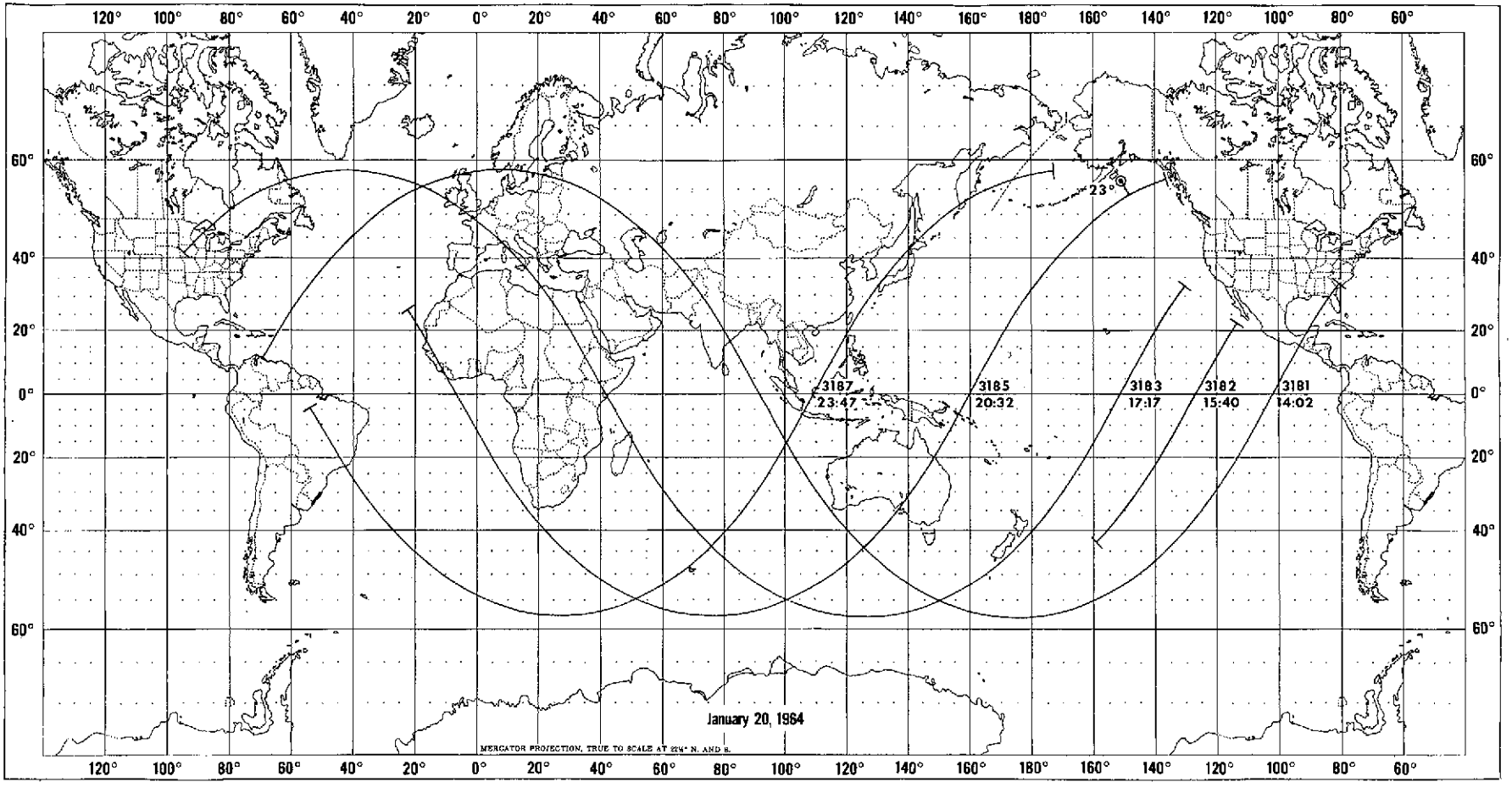

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
22°
3110
18:46
3109
17:09
3108
15:32
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3098-3173.
January 15, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

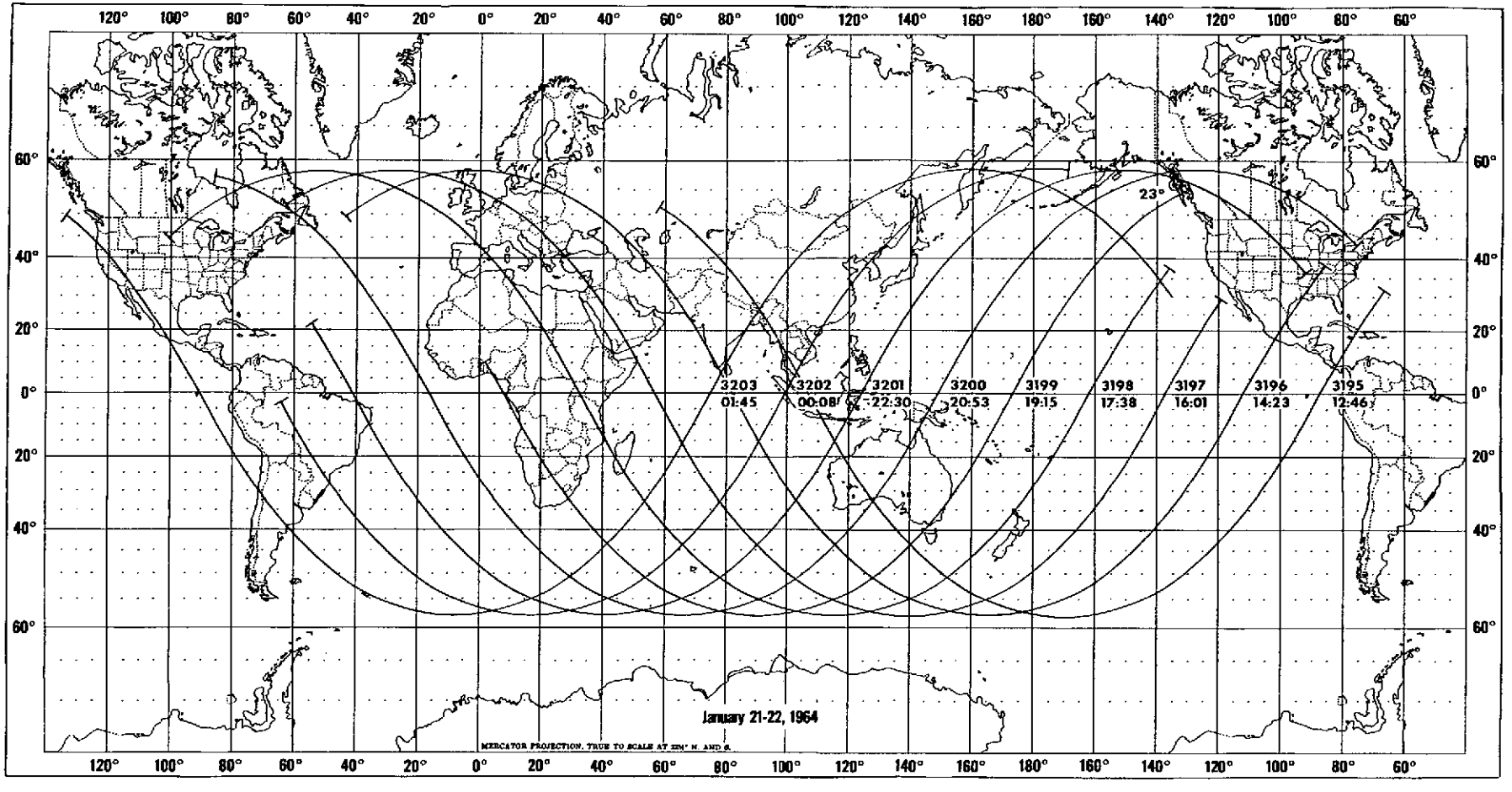

3129
01:37
3128
24:00
3127
22:22
3126
20:45
19°
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3098-3173
January 16-17, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

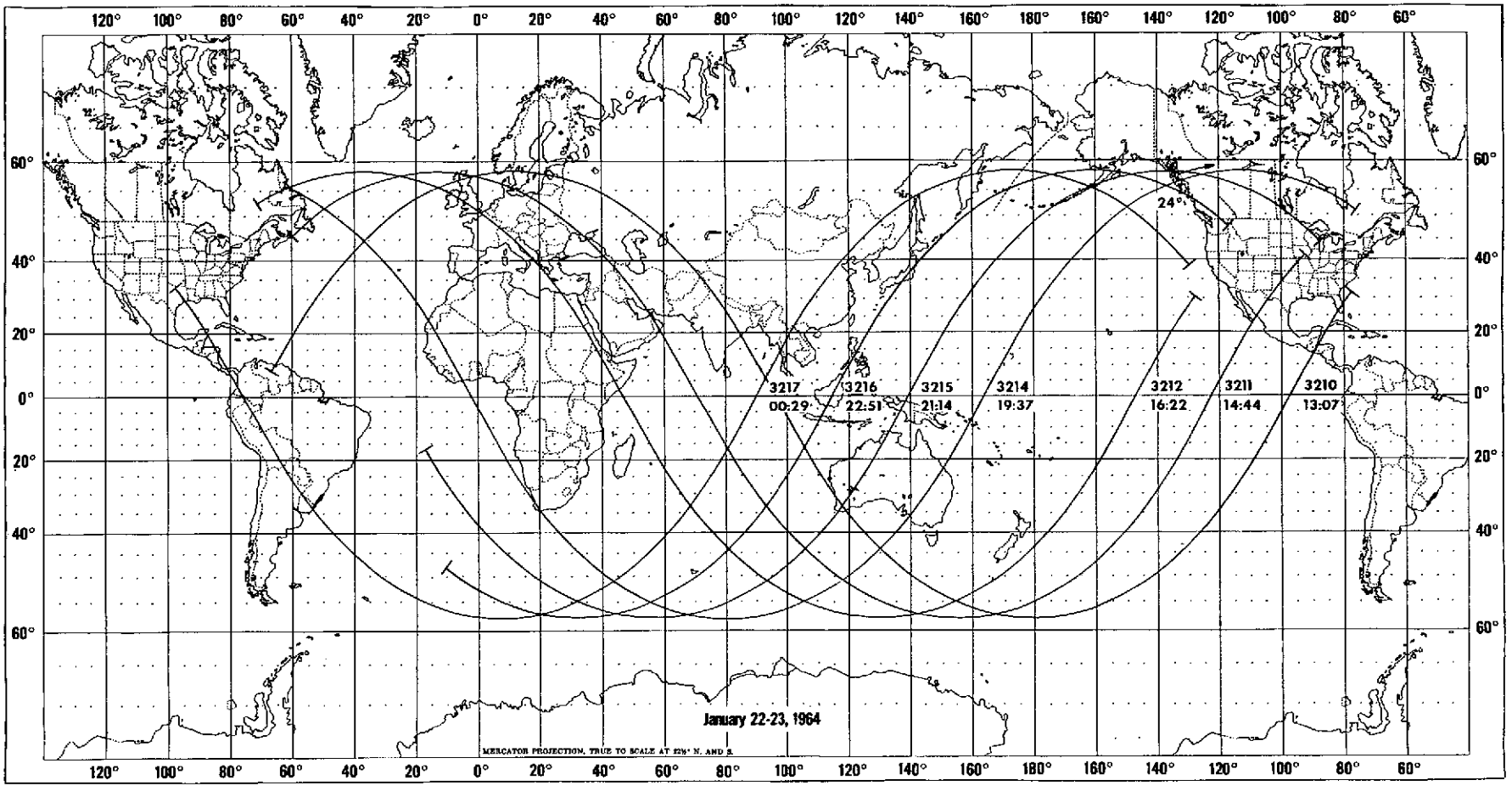

3144
01:58
3143
00:21
3142
22:43
3141
21:06
3139
17:51
3137
14:36
20°
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3098-3173.
January 17-18, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

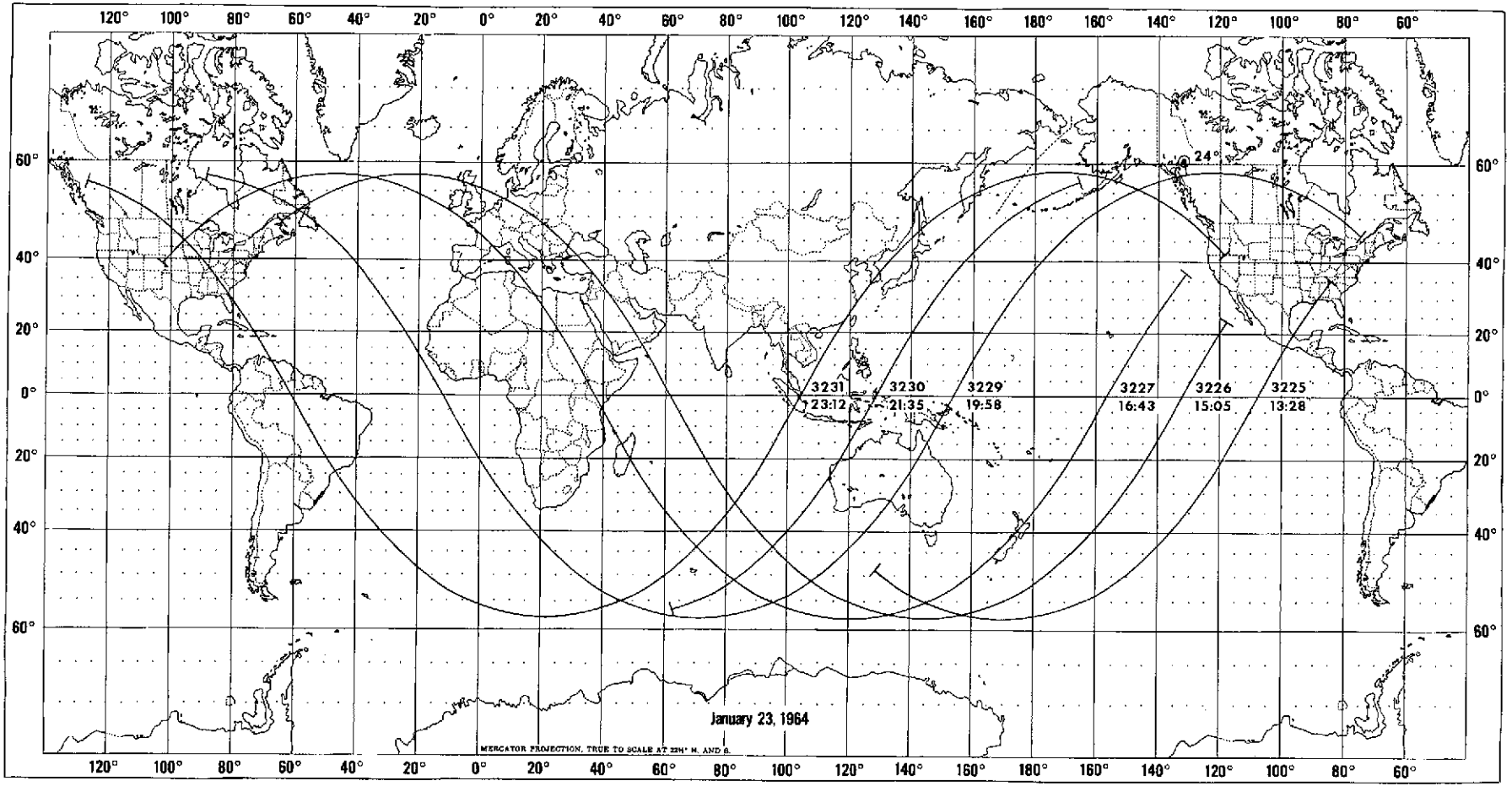

3159
02:19
3158
00:42
3157
23:04
3156
21:27
3153
16:35
21°
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3098-3173
January 18-19, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

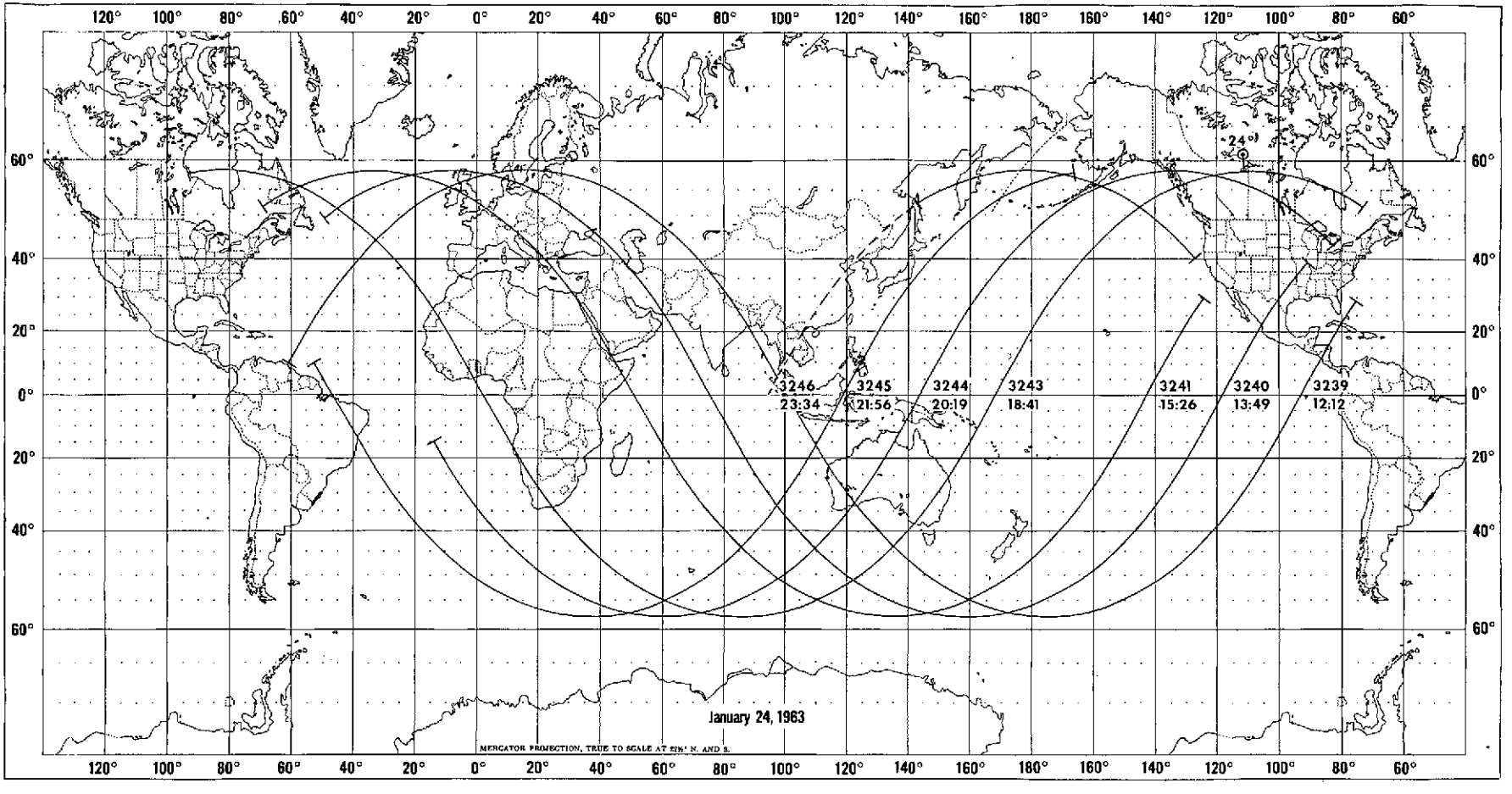

Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3098-3173
January 19-20, 1964
3173
01:03
3172
23:25
3171
21:48
3166
13:41
22°
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

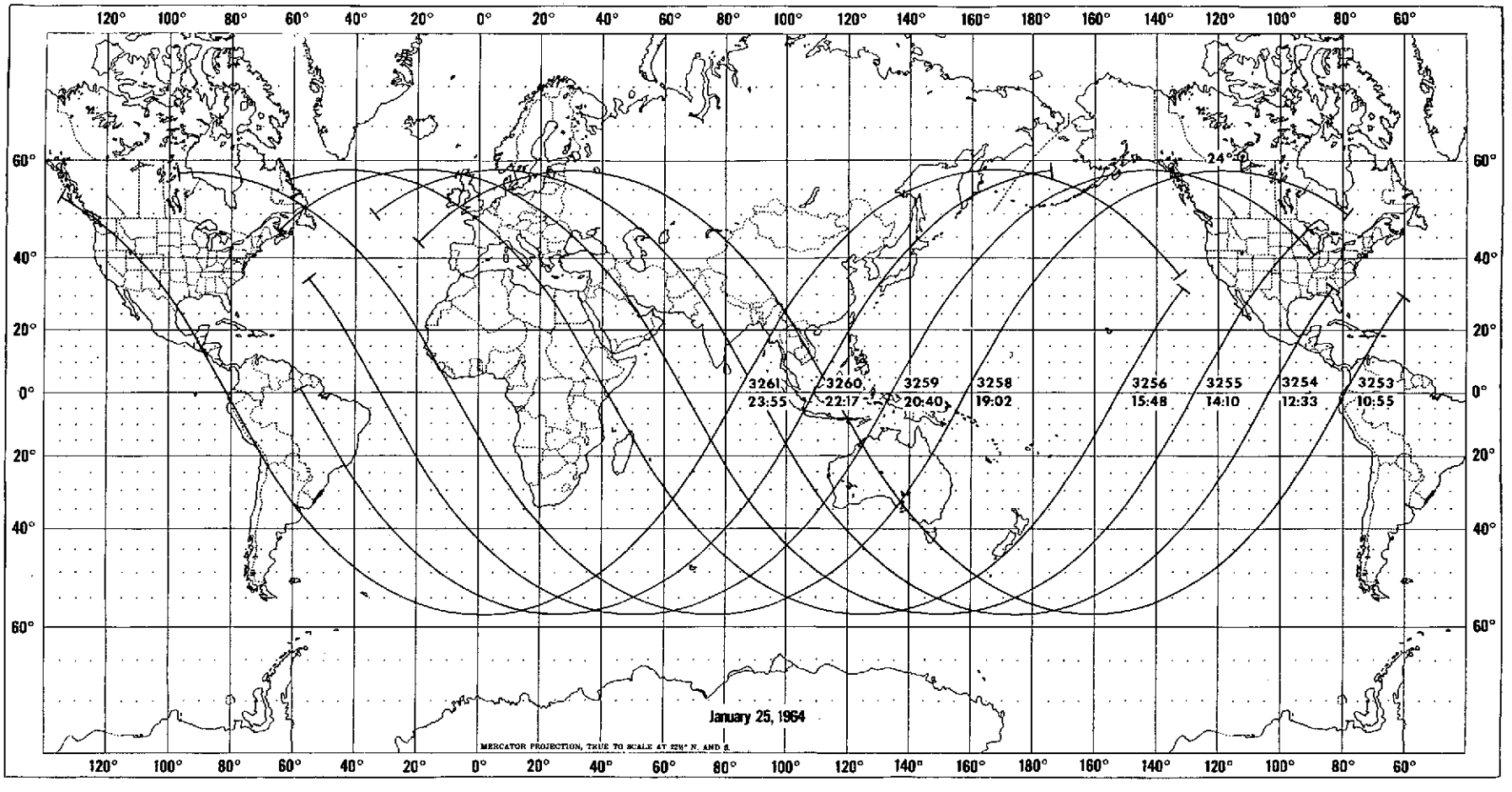

3187
23:47
3185
20:32
3183
17:17
3182
15:40
3181
14:02
23°
January 20, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

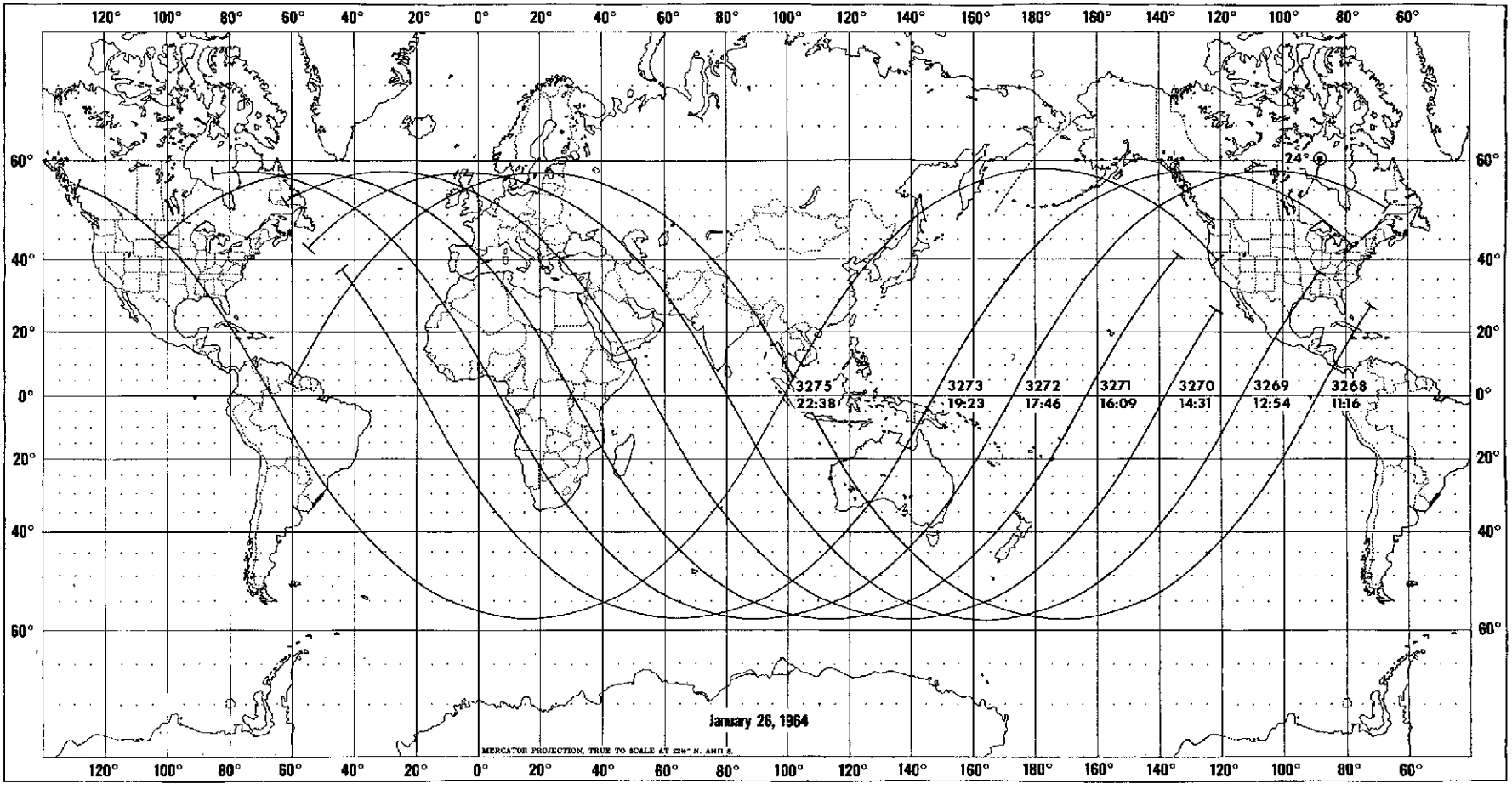

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
23°
3203 01:45
3202 00:08
3201 22:30
3200 20:53
3199 19:15
3198 17:38
3197 16:01
3196 14:23
3195 12:46
January 21-22, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

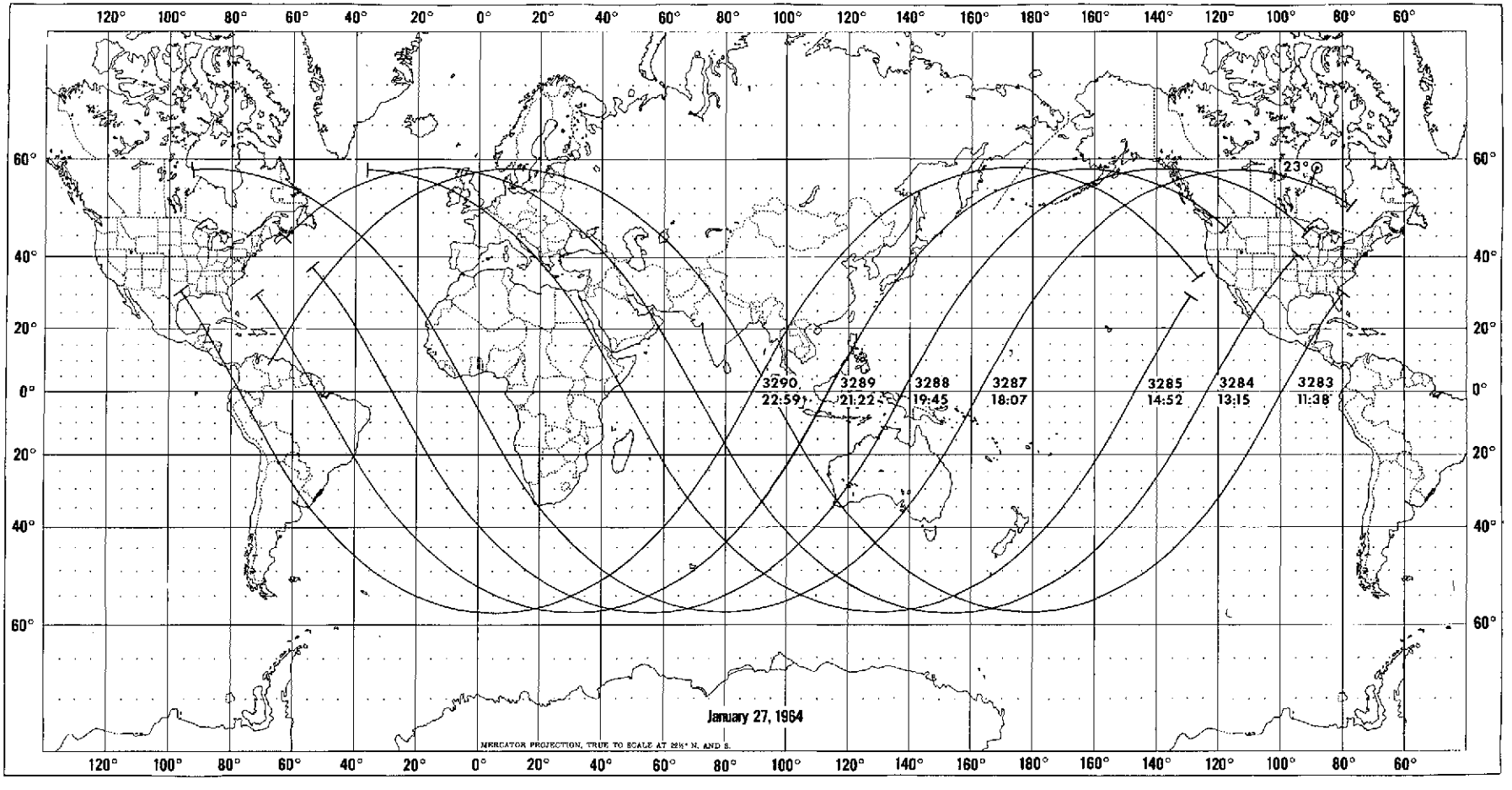

3217
00:29
3216
22:51
3215
21:14
3214
19:37
3212
16:22
3211
14:44
3210
13:07
24°
January 22-23, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 52½° N. AND S.

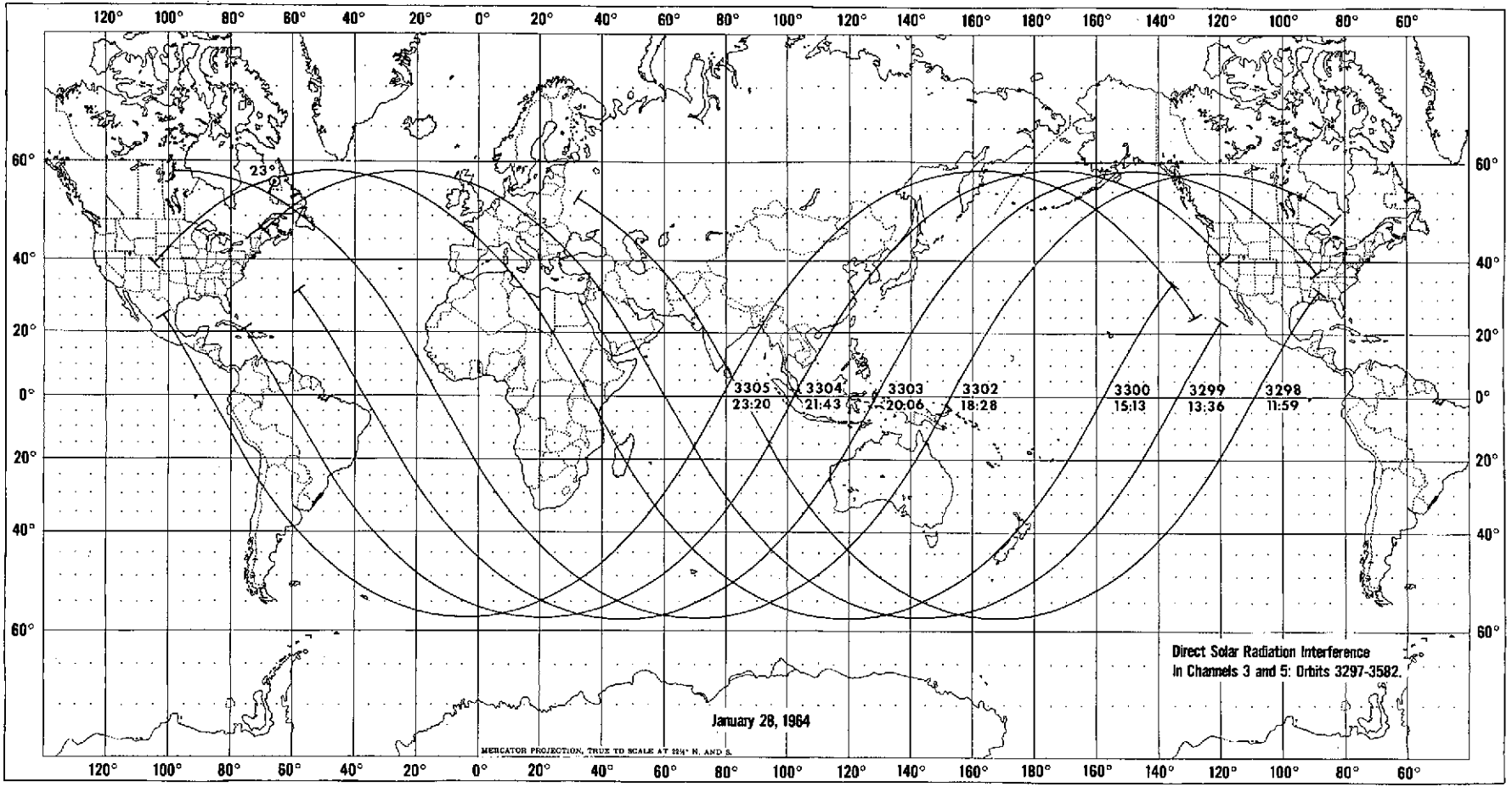

3231
23:12
3230
21:35
3229
19:58
3227
16:43
3226
15:05
3225
13:28
24°
January 23, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

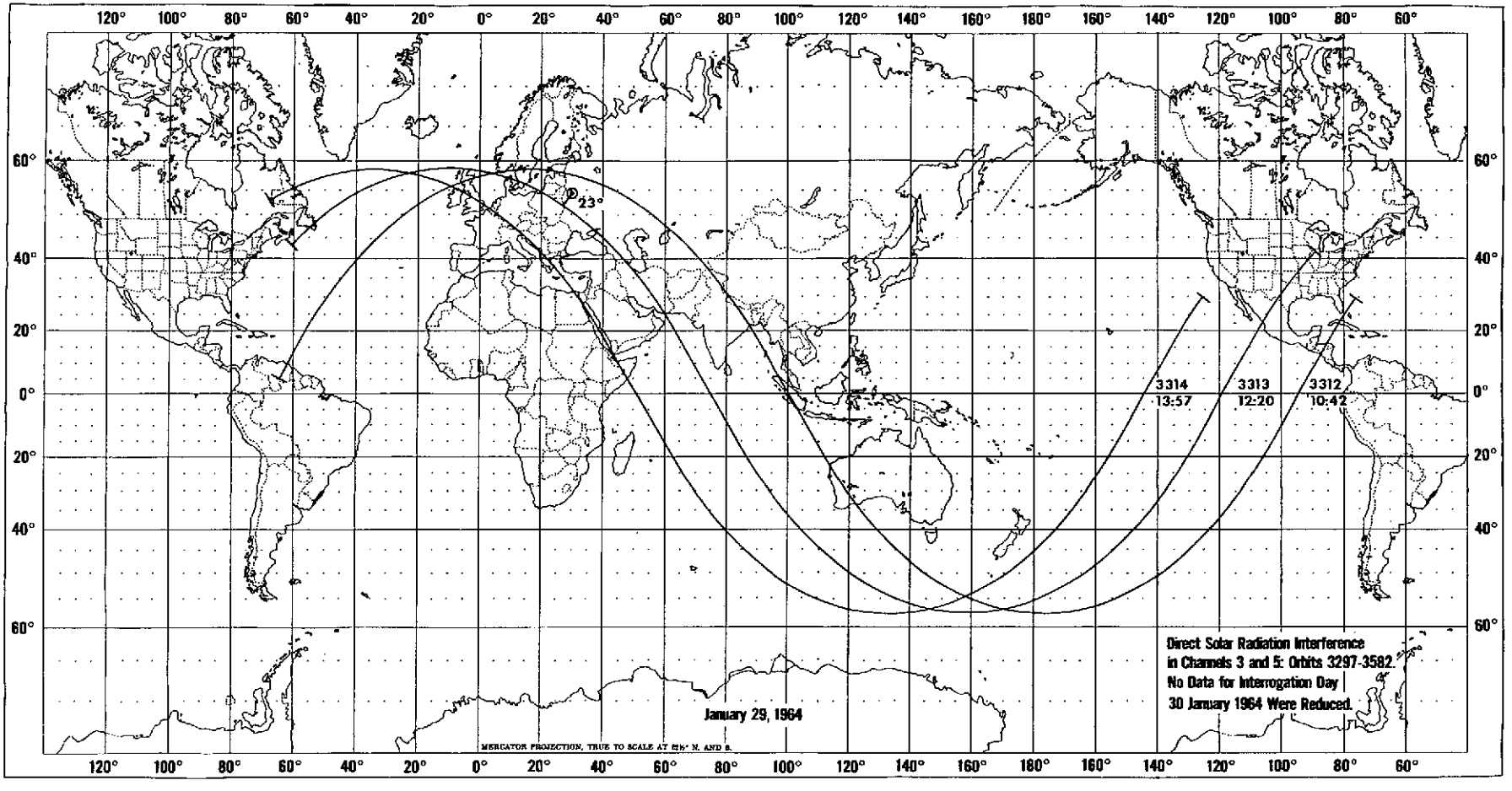

3246
23:34
3245
21:56
3244
20:19
3243
18:41
3241
15:26
3240
13:49
3239
12:12
24
January 24, 1963
MERCATOR PROJECTION, TRUE TO SCALE AT 21½° N. AND S.

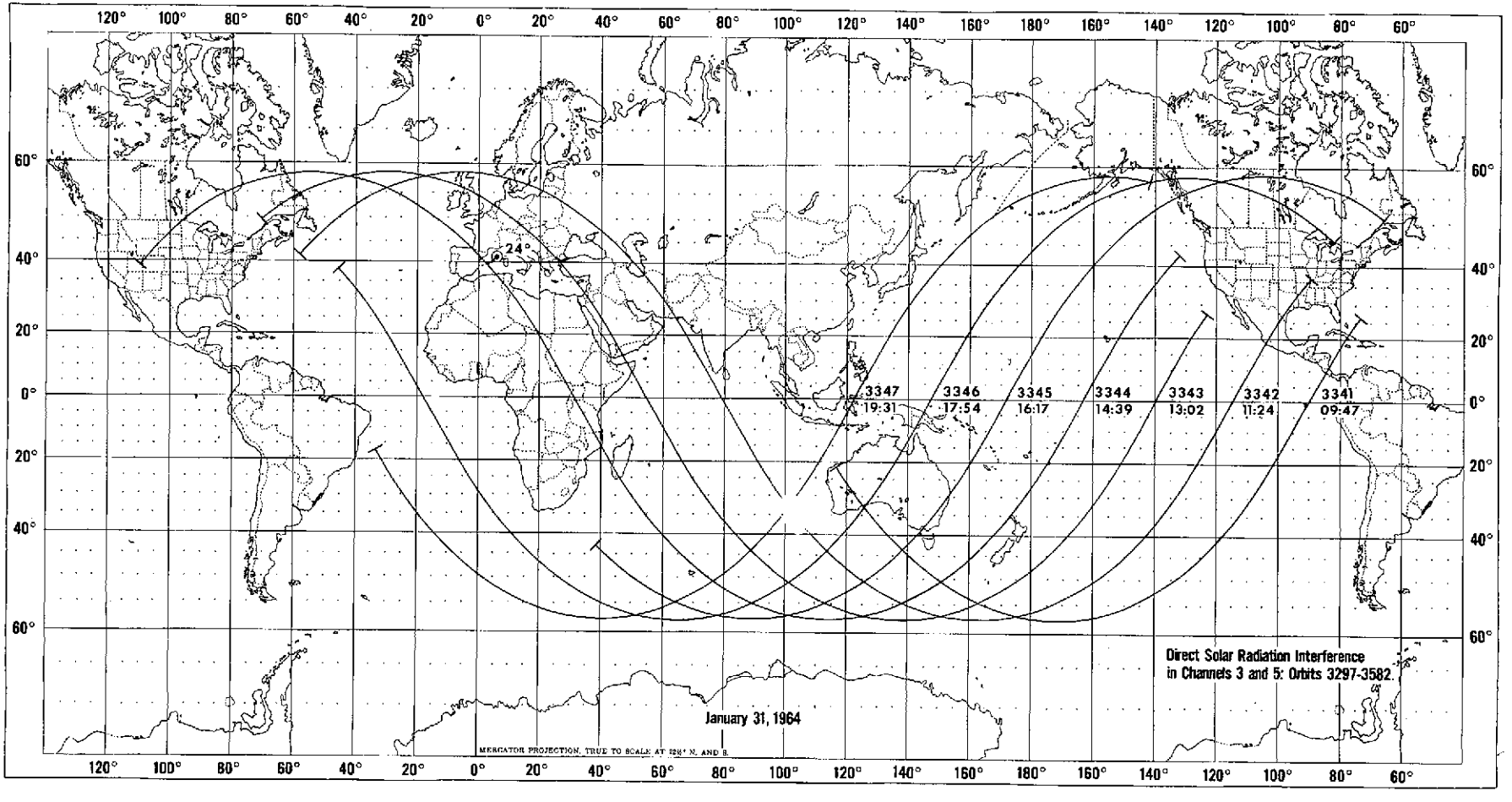

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
24°
3261 23:55
3260 22:17
3259 20:40
3258 19:02
3256 15:48
3255 14:10
3254 12:33
3253 10:55
January 25, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

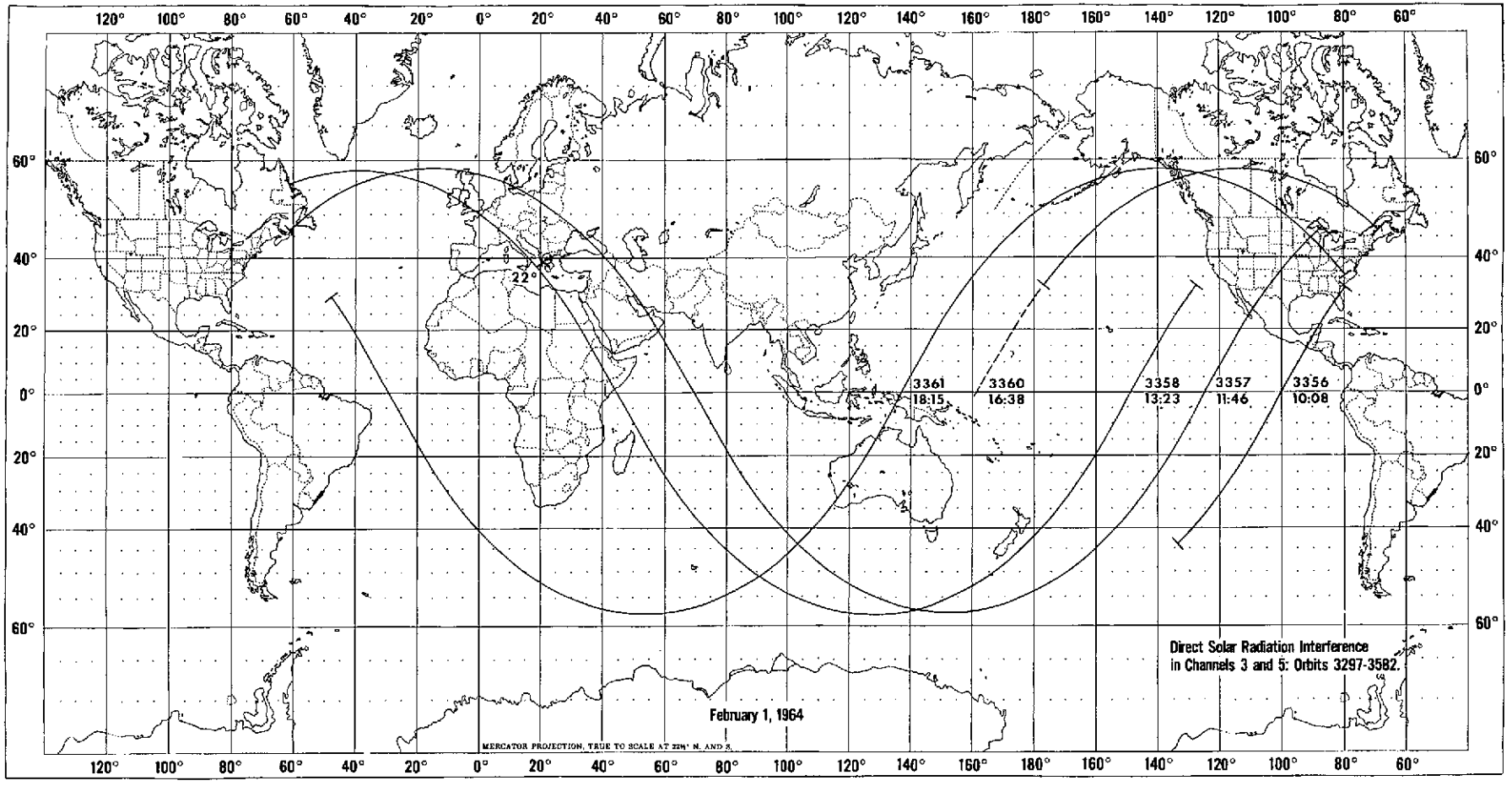

3275
22:38
3273
19:23
3272
17:46
3271
16:09
3270
14:31
3269
12:54
3268
11:16
24°
January 26, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

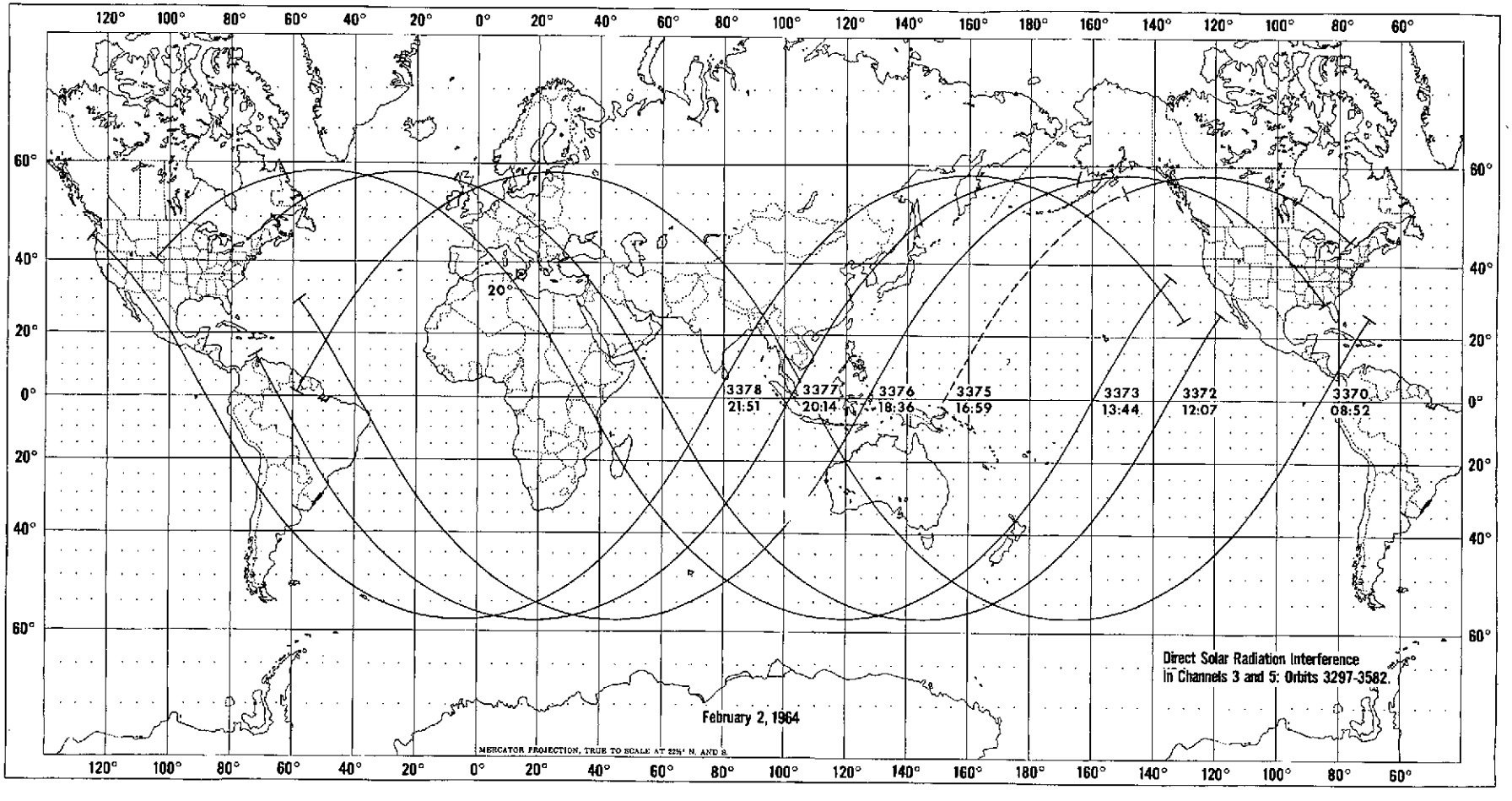

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
23°
3290 22:59
3289 21:22
3288 19:45
3287 18:07
3285 14:52
3284 13:15
3283 11:38
January 27, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

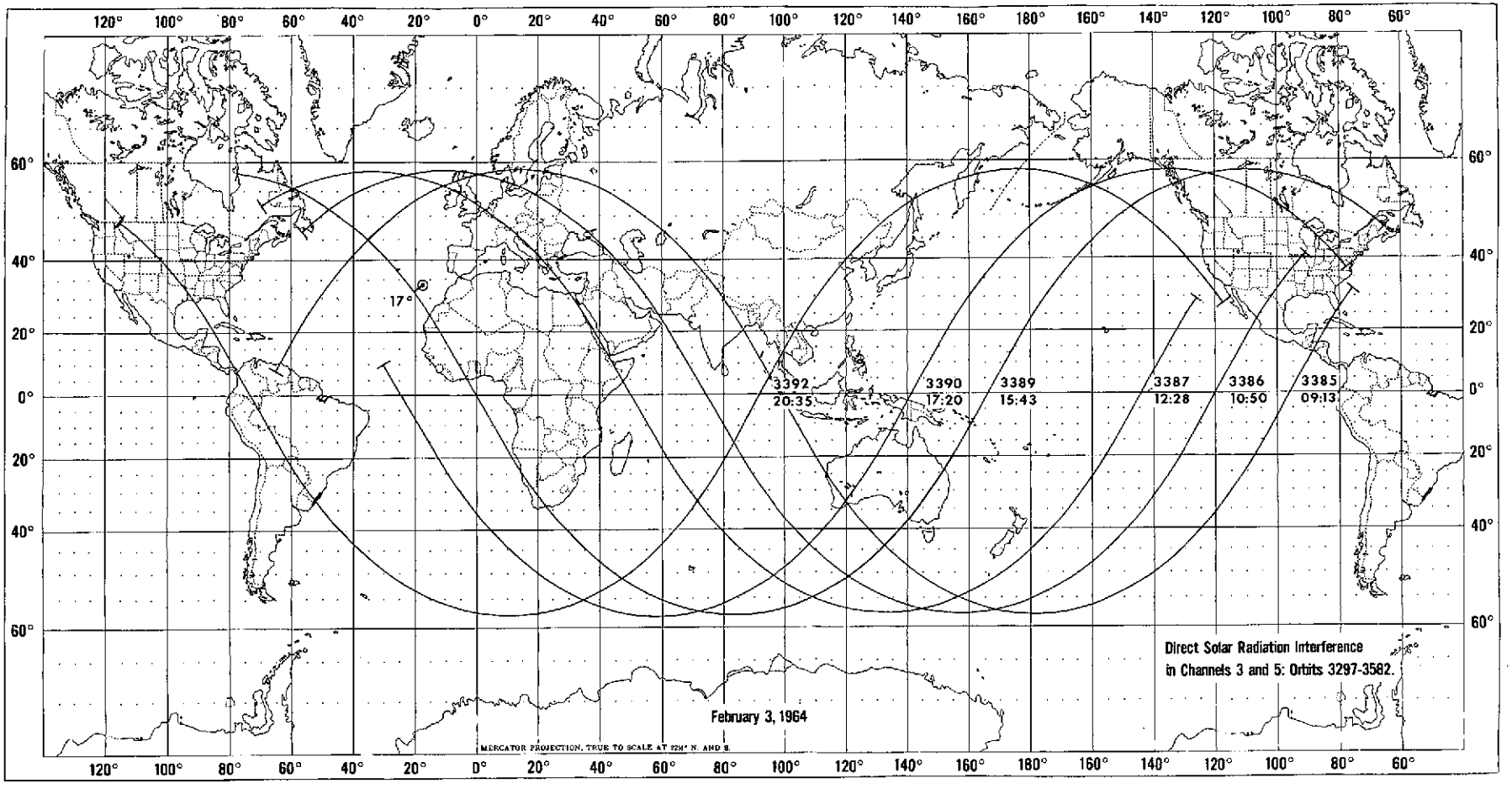

Direct Solar Radiation Interference
In Channels 3 and 5: Orbits 3297-3582.
January 28, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.
23°
3305
23:20
3304
21:43
3303
20:06
3302
18:28
3300
15:13
3299
13:36
3298
11:59

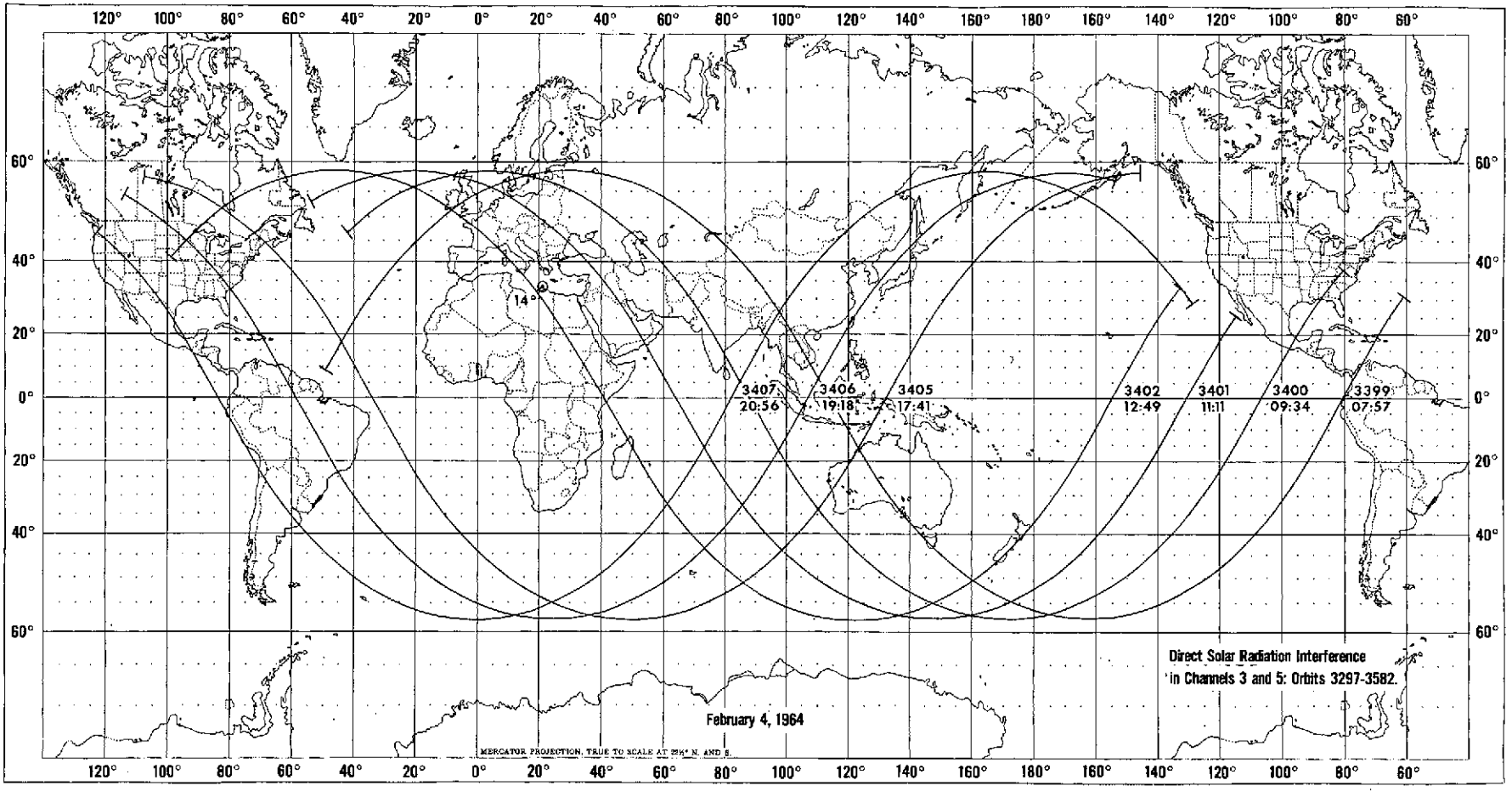

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
23°
3314
13:57
3313
12:20
3312
10:42
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582.
No Data for Interrogation Day
30 January 1964 Were Reduced.
January 29, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 62½° N. AND S.

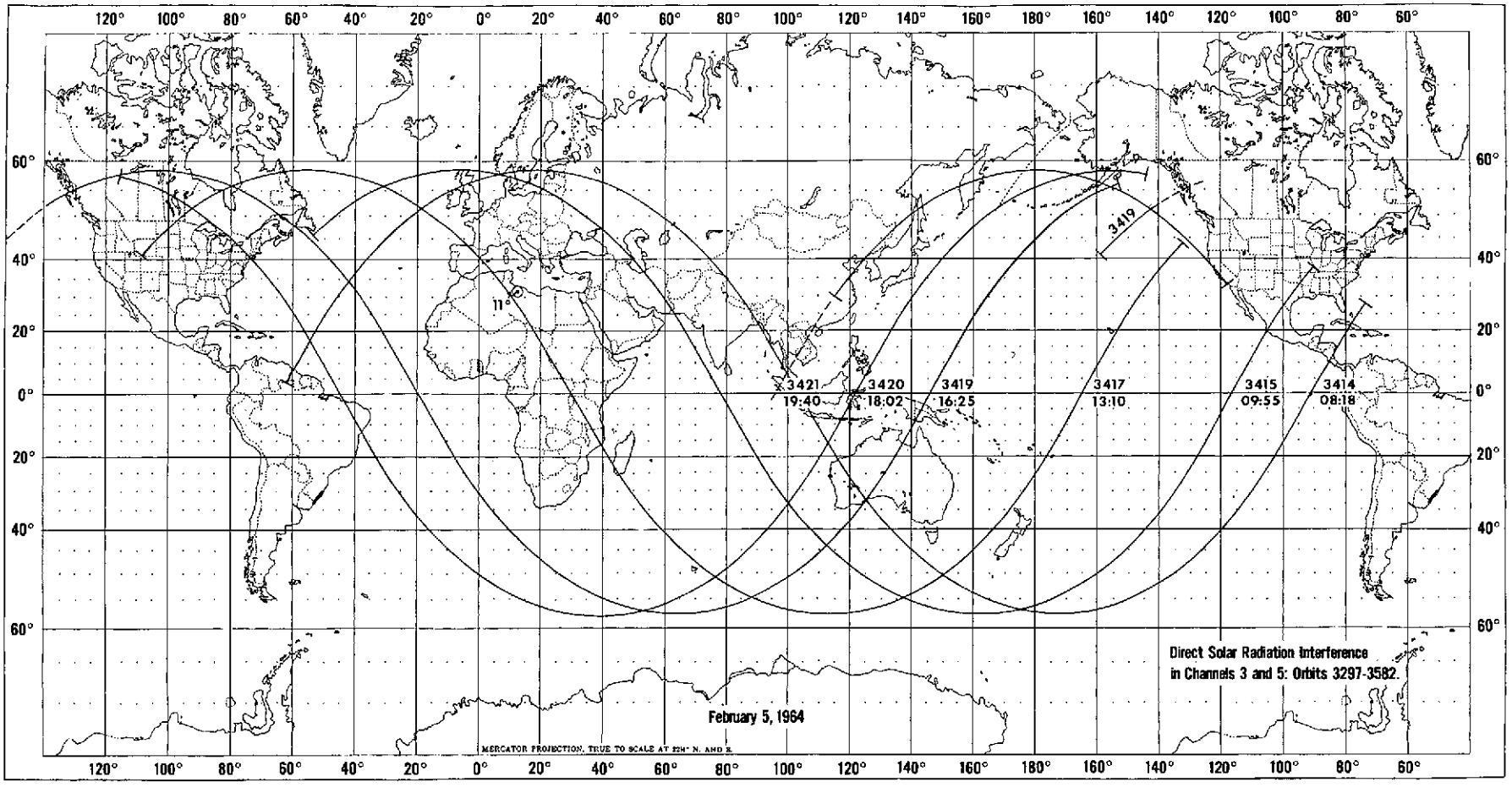

3347
19:31
3346
17:54
3345
16:17
3344
14:39
3343
13:02
3342
11:24
3341
09:47
24°
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582.
January 31, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 28½° N. AND S.

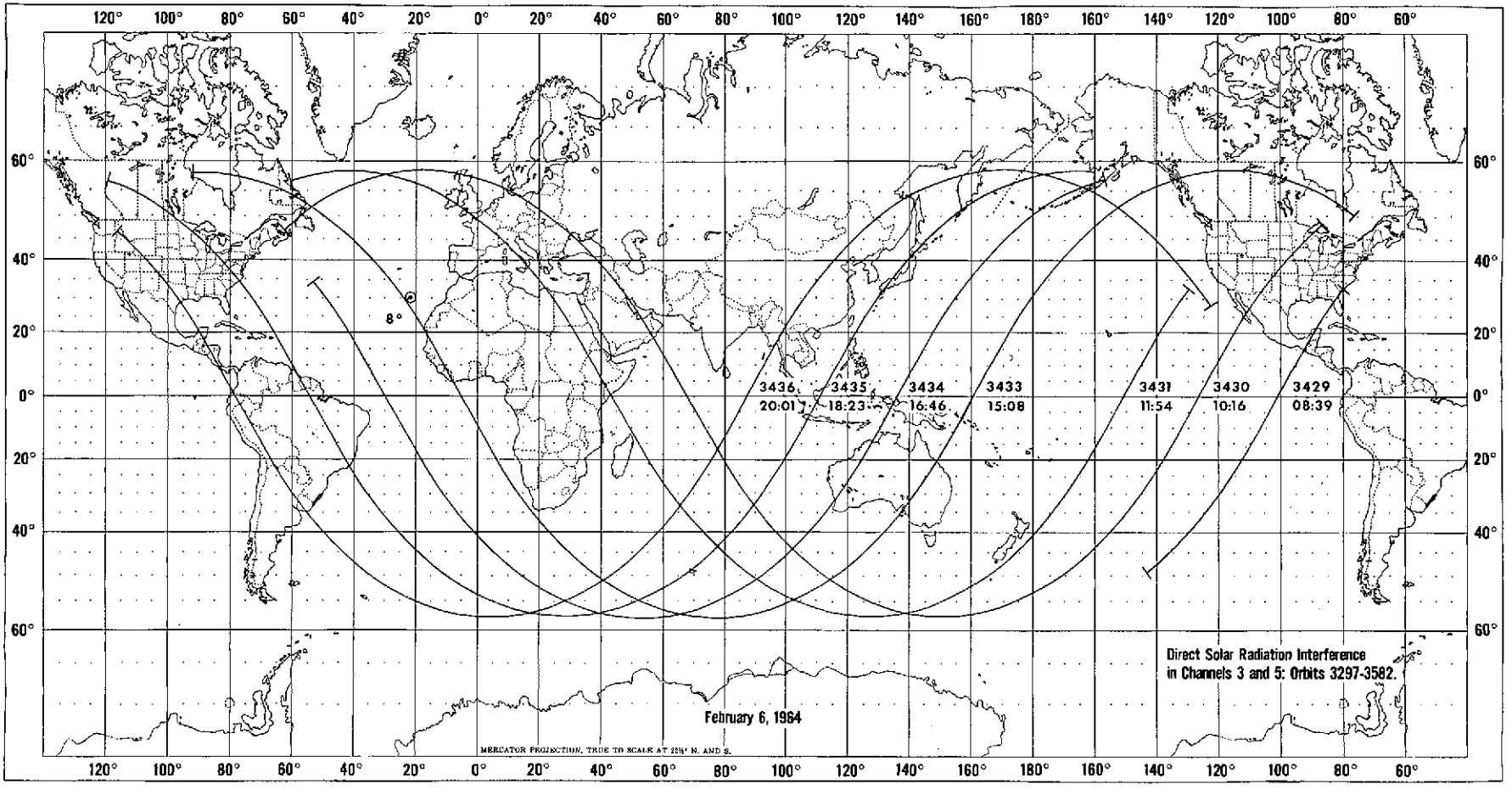

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60°
40°
20°
0°
20°
40°
60°
22°
3361
18:15
3360
16:38
3358
13:23
3357
11:46
3356
10:08
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582.
February 1, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

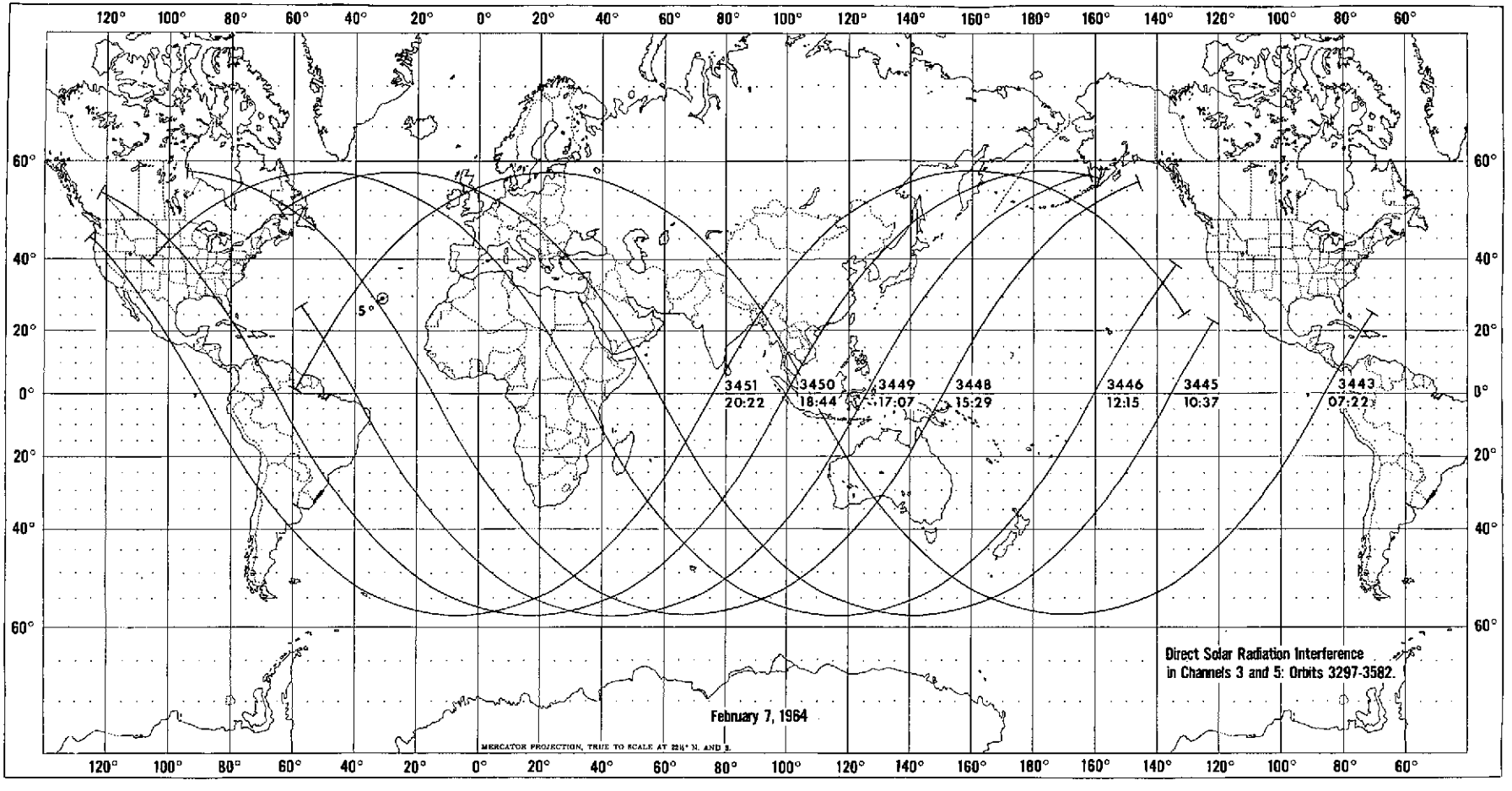

3378
21:51
3377
20:14
3376
18:36
3375
16:59
3373
13:44
3372
12:07
3370
08:52
20°
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582.
February 2, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

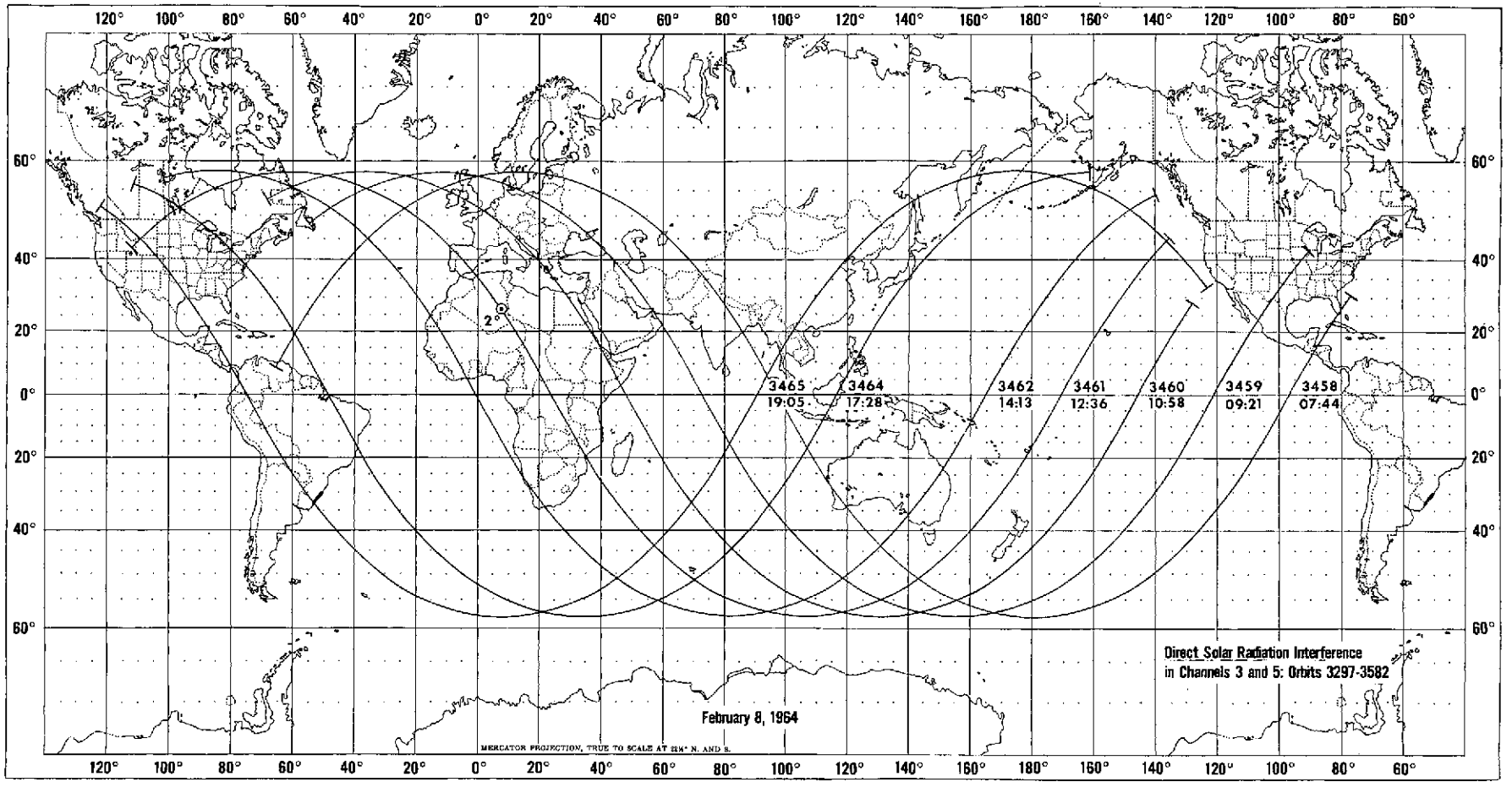

3392
20:35
3390
17:20
3389
15:43
3387
12:28
3386
10:50
3385
09:13
17°
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582.
February 3, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

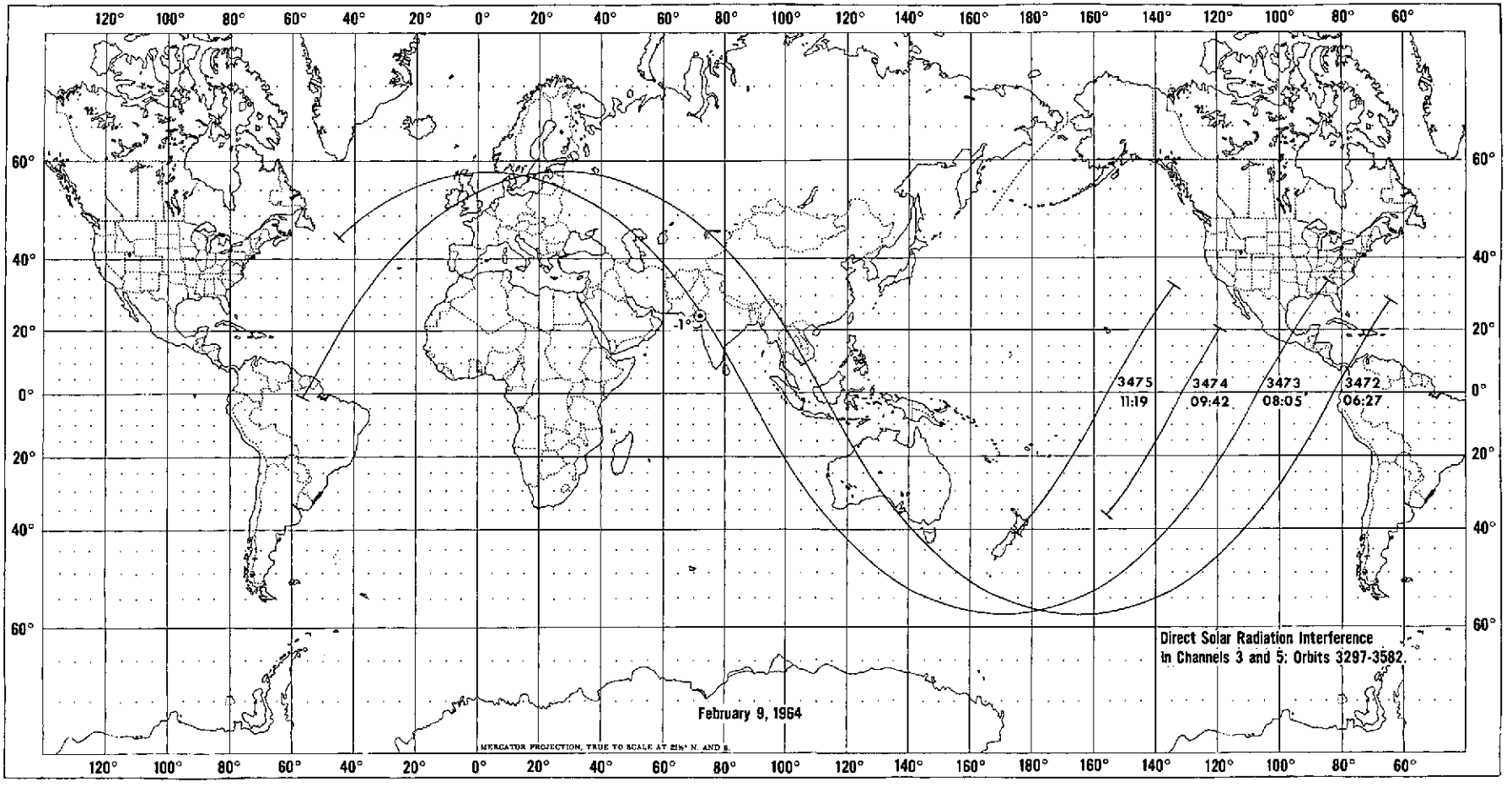

Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582.
February 4, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 28½° N. AND S.
3407
20:56
3406
19:18
3405
17:41
3402
12:49
3401
11:11
3400
09:34
3399
07:57
14°

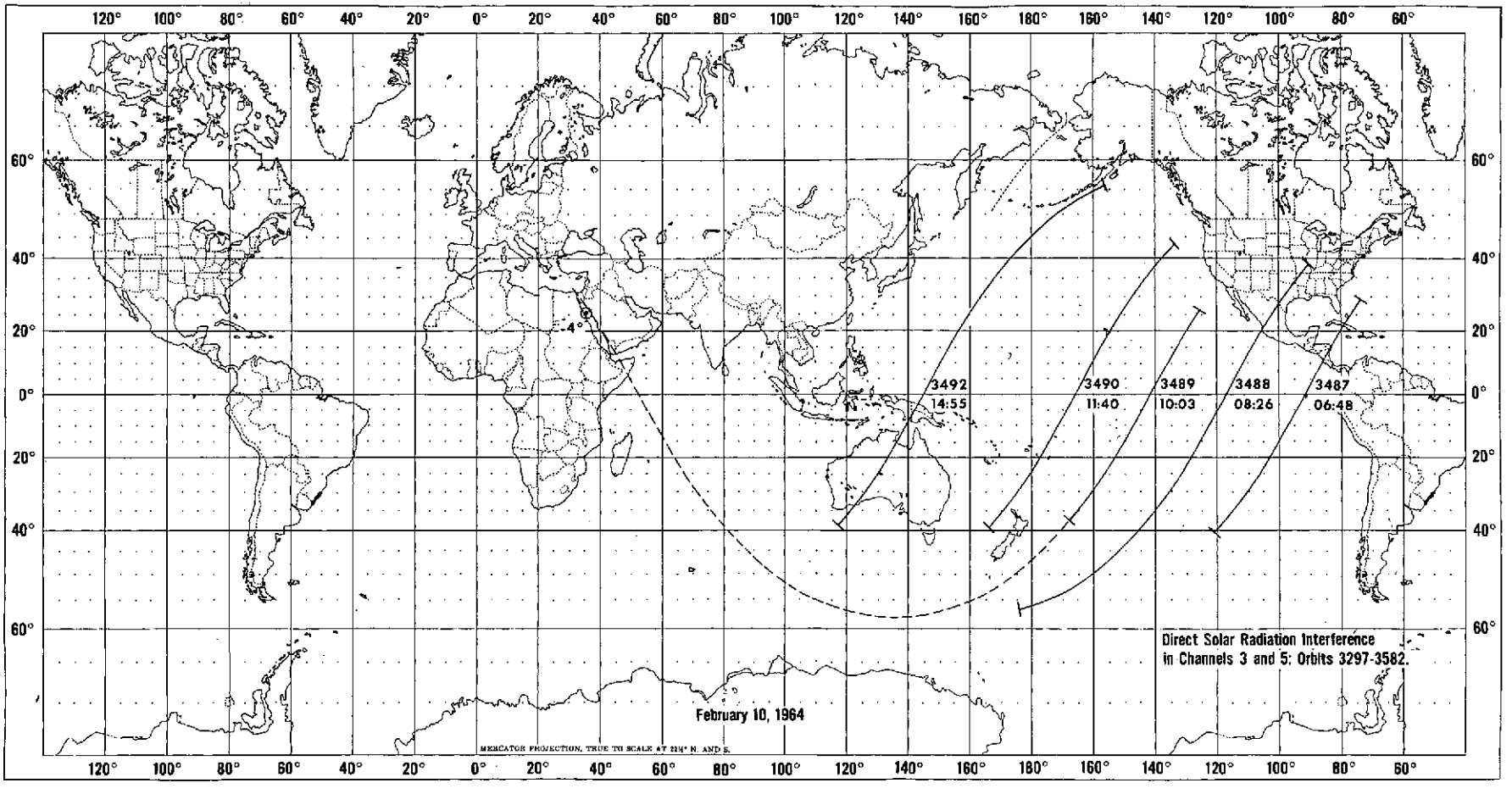

3421
19:40
3420
18:02
3419
16:25
3417
13:10
3415
09:55
3414
08:18
3419
11°
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582.
February 5, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 12½° N. AND S.

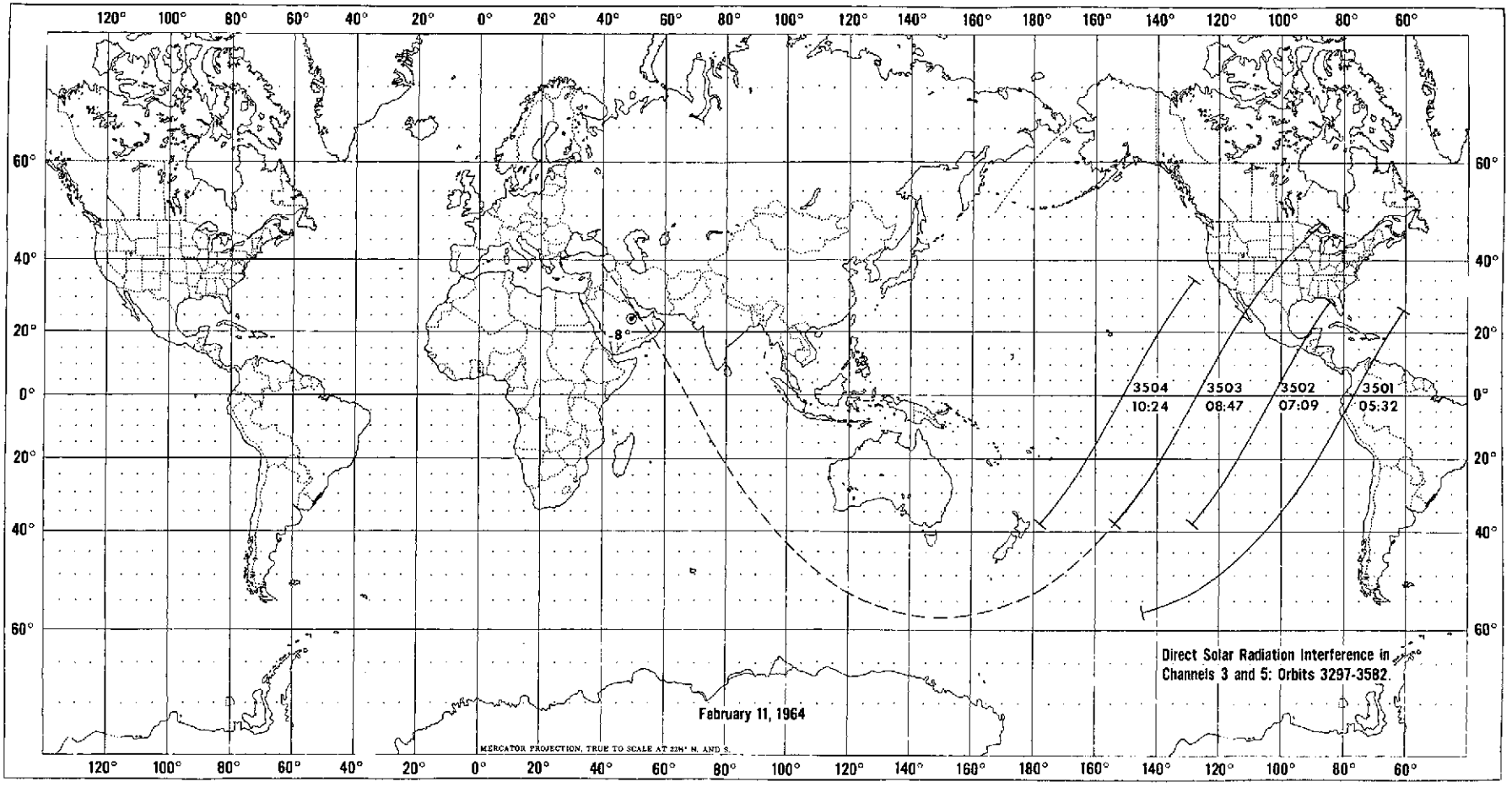

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
8°
3436 20:01
3435 18:23
3434 16:46
3433 15:08
3431 11:54
3430 10:16
3429 08:39
Direct Solar Radiation Interference in Channels 3 and 5: Orbits 3297-3582.
February 6, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 25¾° N. AND S.


3451
20:22
3450
18:44
3449
17:07
3448
15:29
3446
12:15
3445
10:37
3443
07:22
5°
February 7, 1964
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582.
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

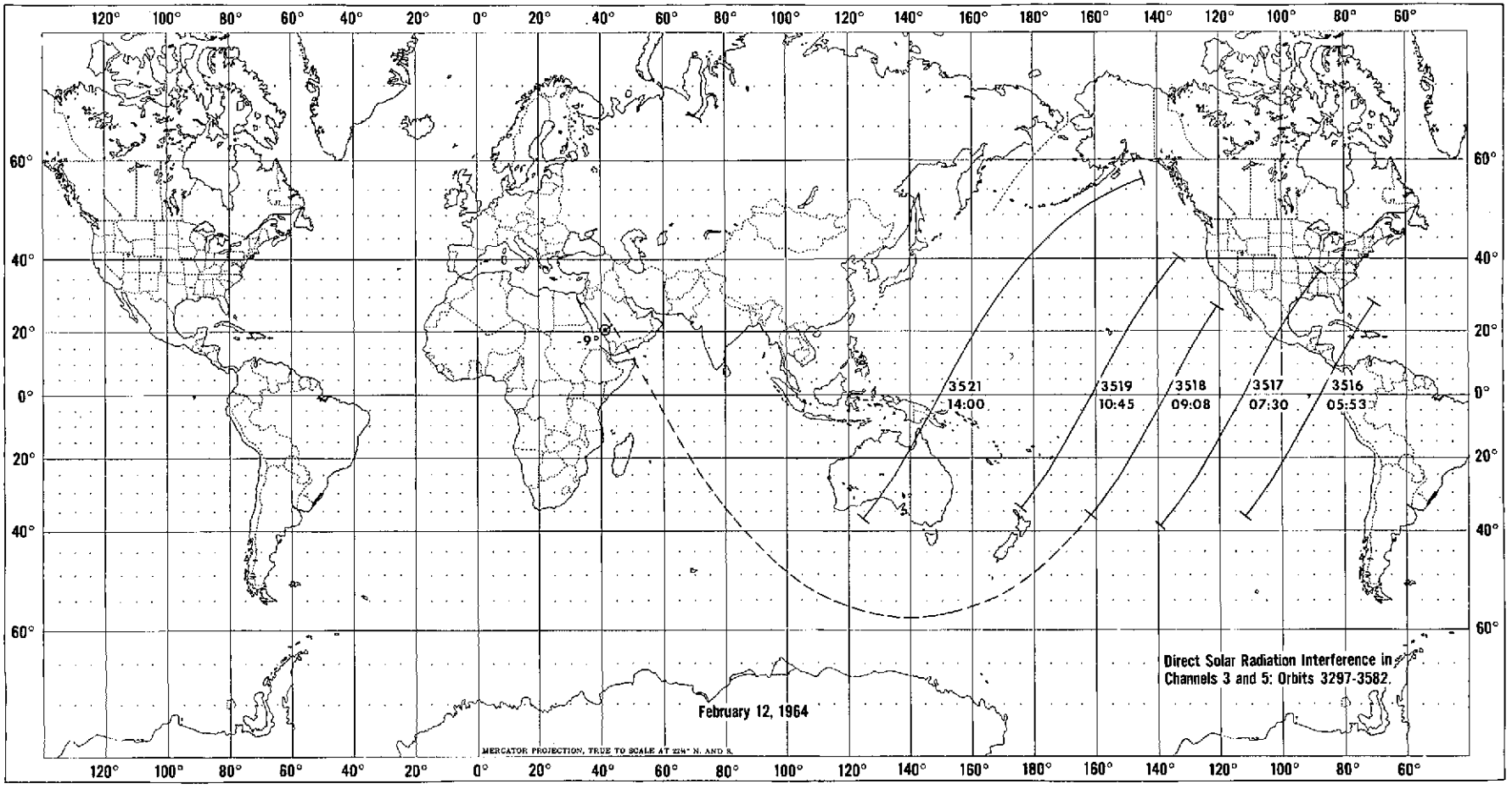

Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582
February 8, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.
3465
19:05
3464
17:28
3462
14:13
3461
12:36
3460
10:58
3459
09:21
3458
07:44
2°

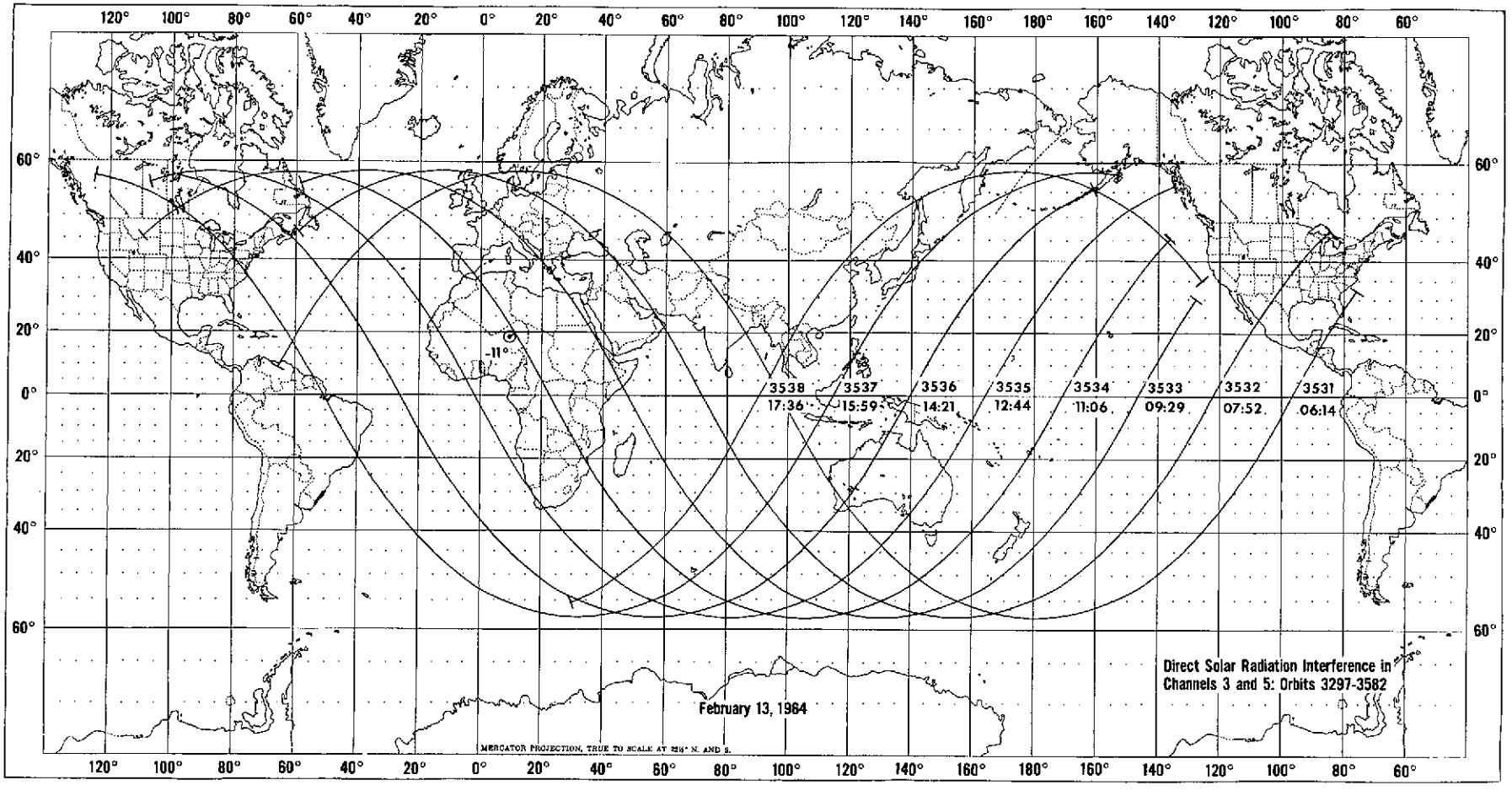

3475
11:19
3474
09:42
3473
08:05
3472
06:27
Direct Solar Radiation Interference
in Channels 3 and 5; Orbits 3297-3582.
February 9, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

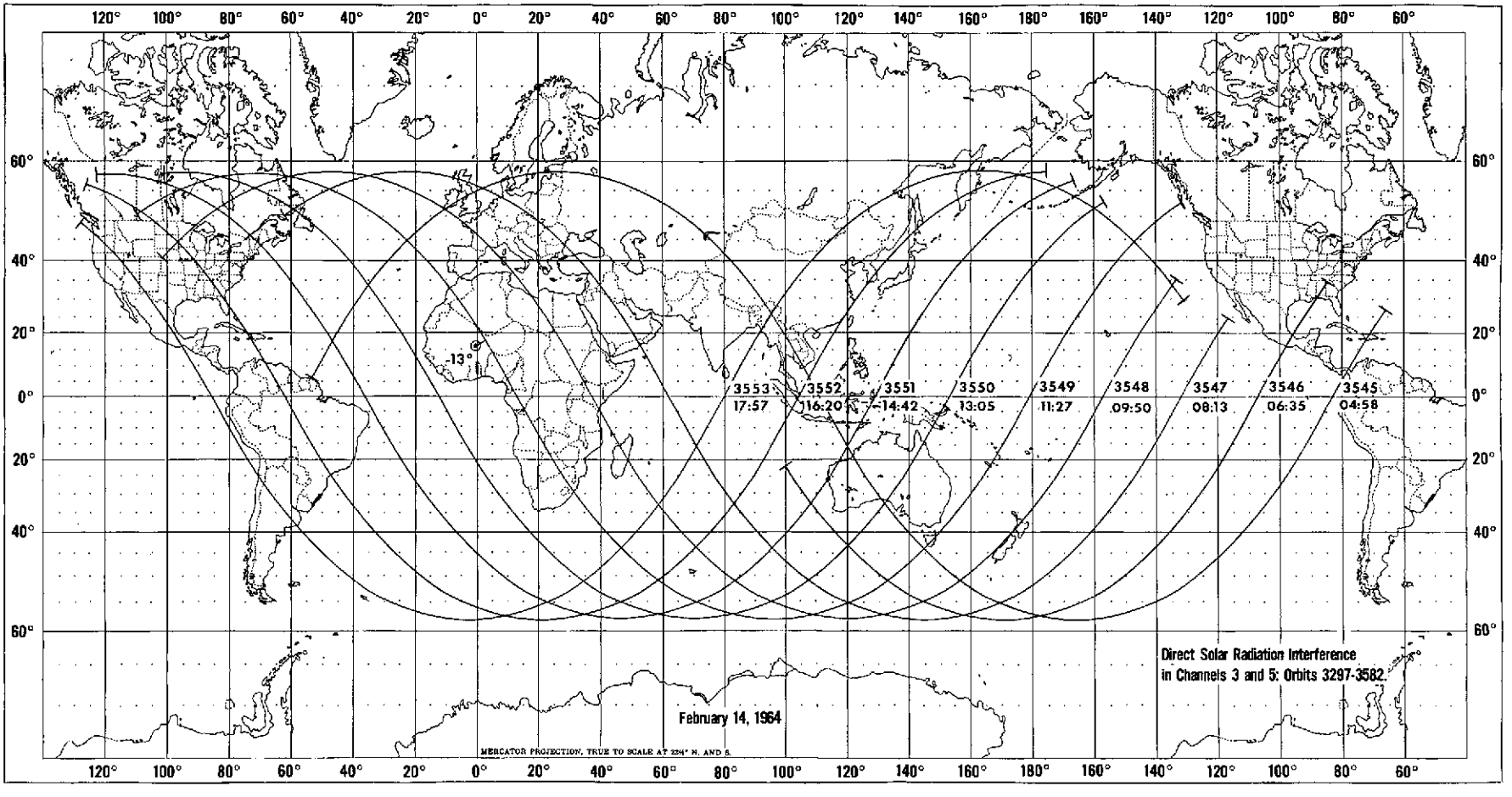

3492
14:55
3490
11:40
3489
10:03
3488
08:26
3487
06:48
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582.
February 10, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

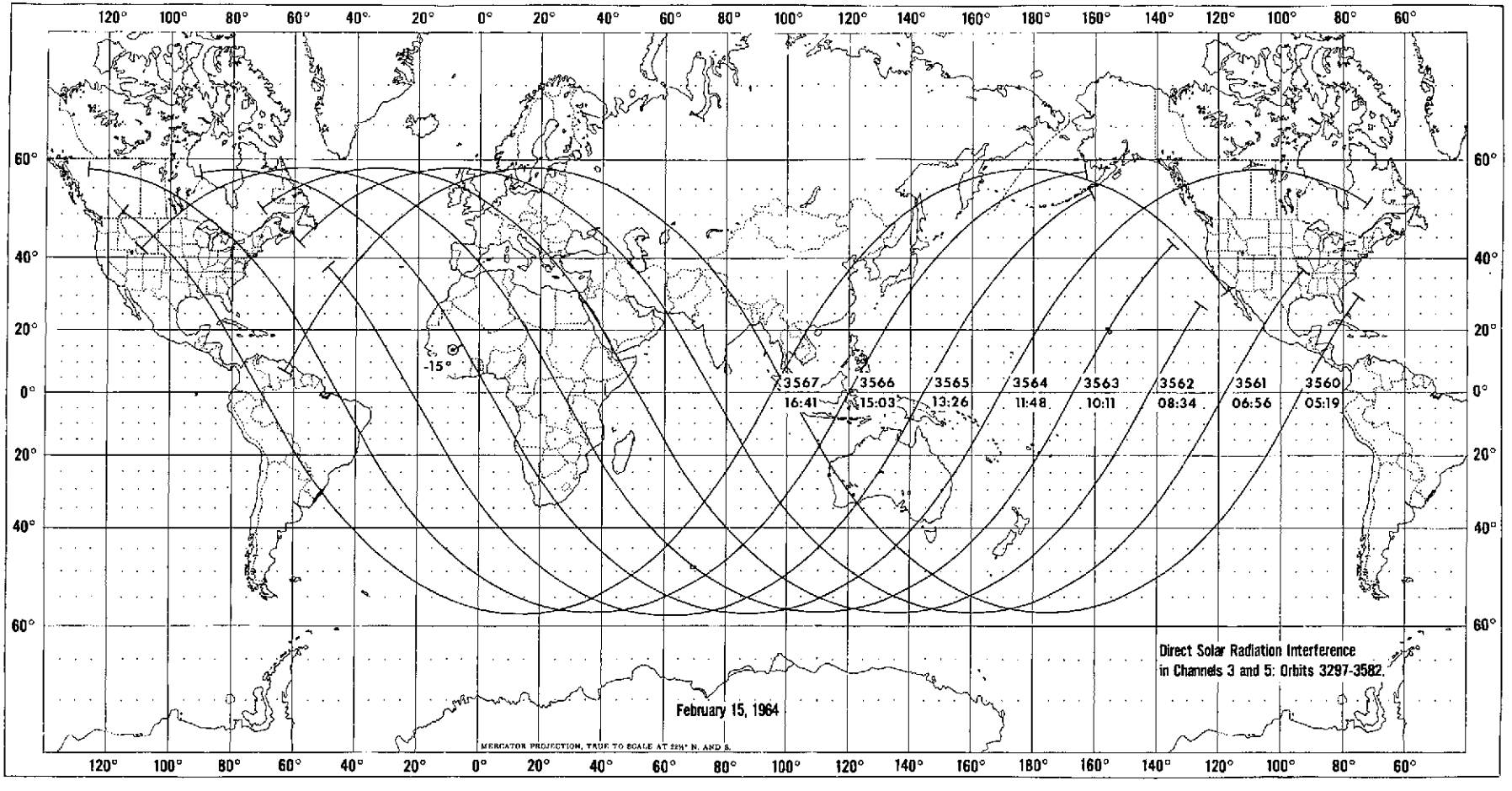


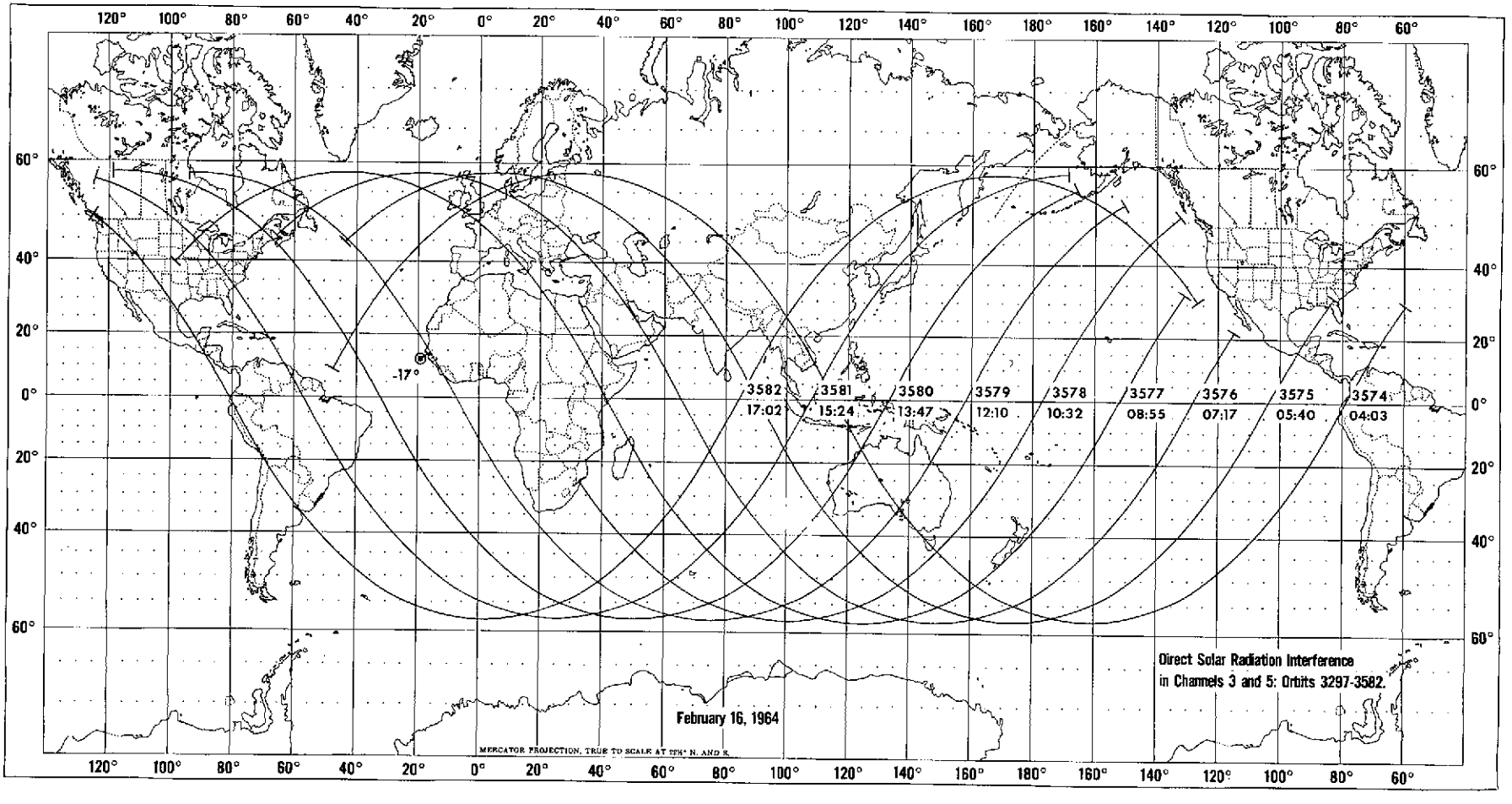
Direct Solar Radiation Interference in Channels 3 and 5: Orbits 3297-3582.

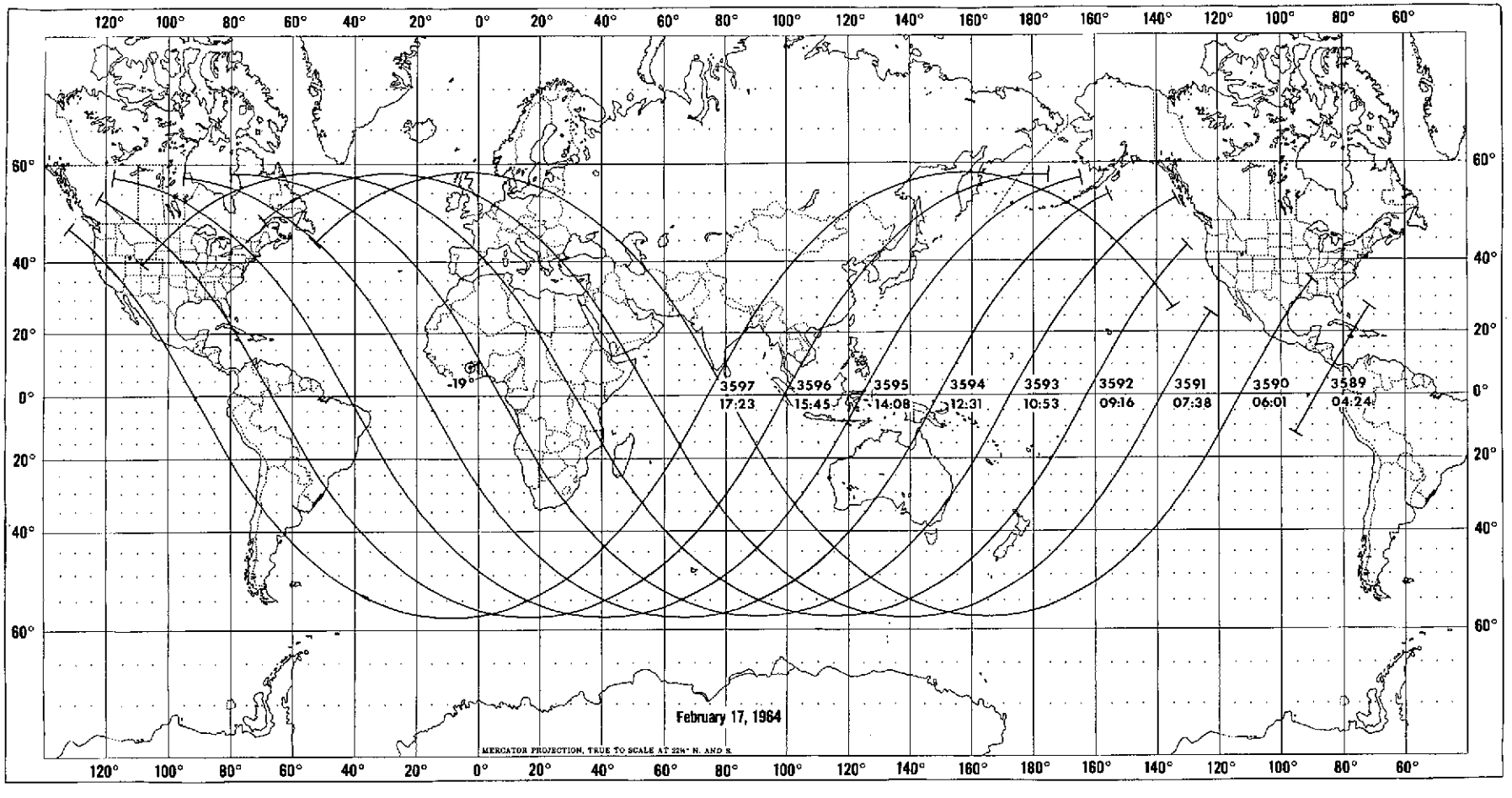

3521
14:00
3519
10:45
3518
09:08
3517
07:30
3516
05:53
Direct Solar Radiation Interference in Channels 3 and 5: Orbits 3297-3582.
February 12, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

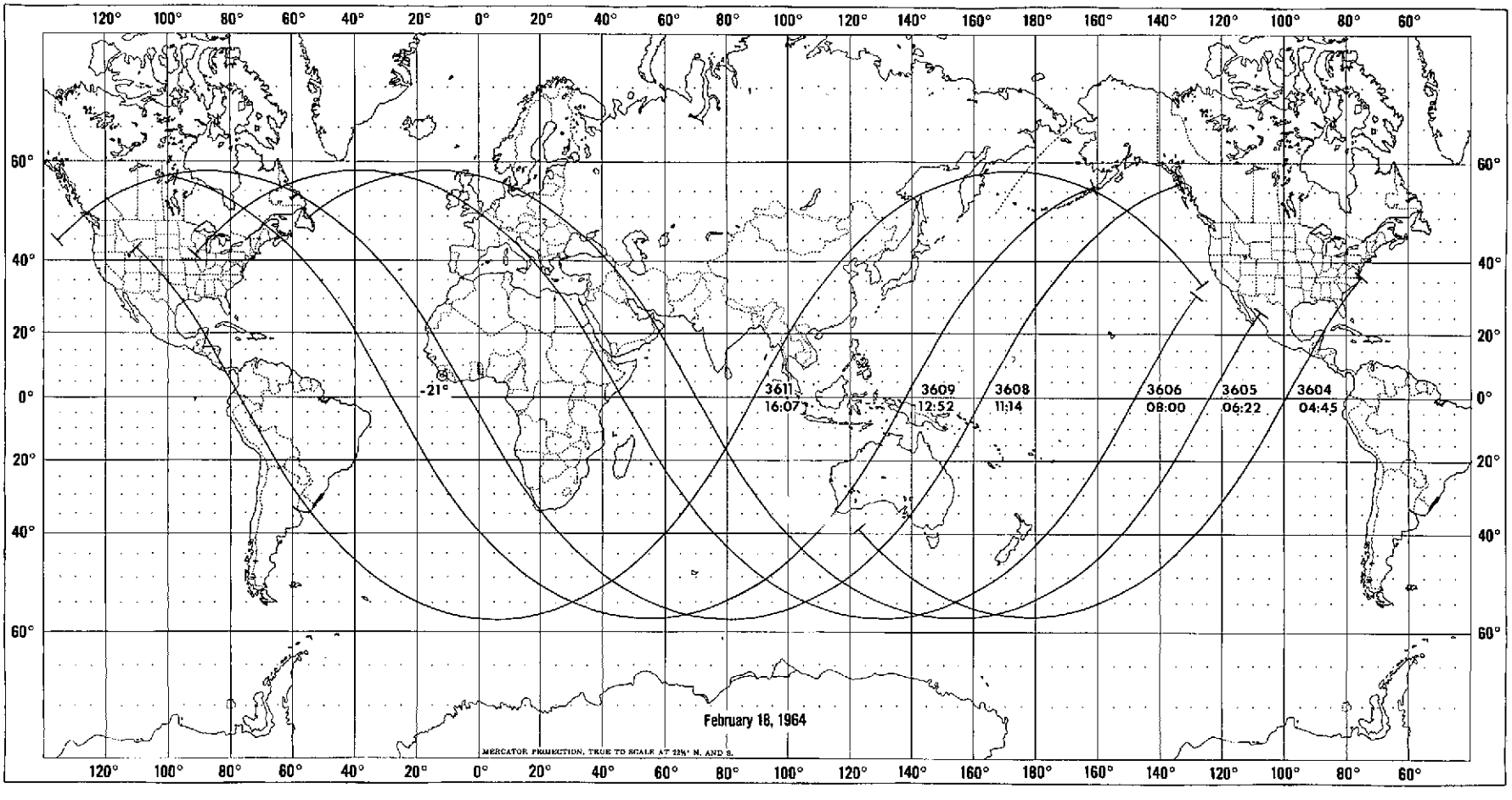

3538
17:36
3537
15:59
3536
14:21
3535
12:44
3534
11:06
3533
09:29
3532
07:52
3531
06:14
-11°
February 13, 1964
Direct Solar Radiation Interference in Channels 3 and 5: Orbits 3297-3582
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

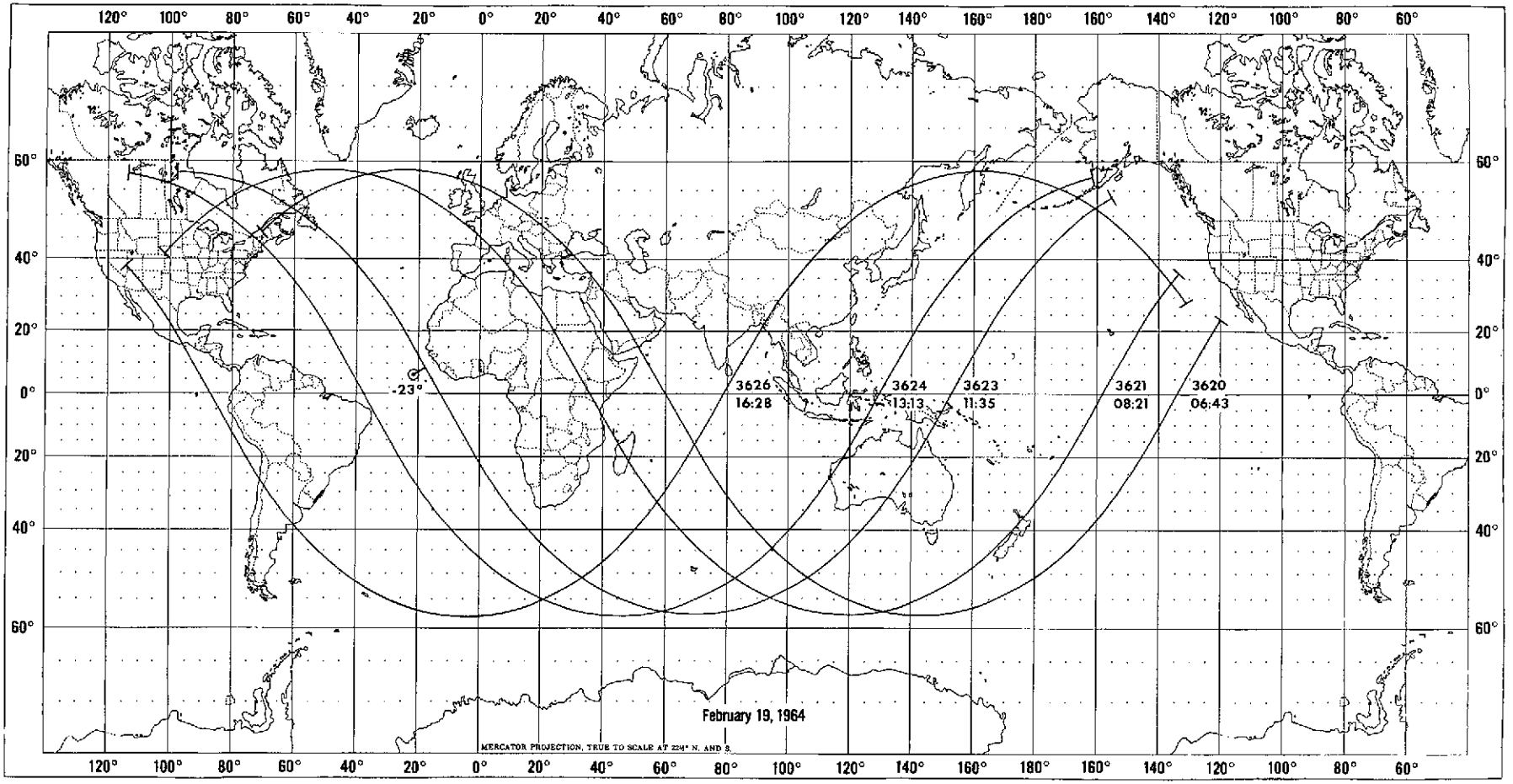

3553
17:57
3552
16:20
3551
14:42
3550
13:05
3549
11:27
3548
09:50
3547
08:13
3546
06:35
3545
04:58
-13°
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582
February 14, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.

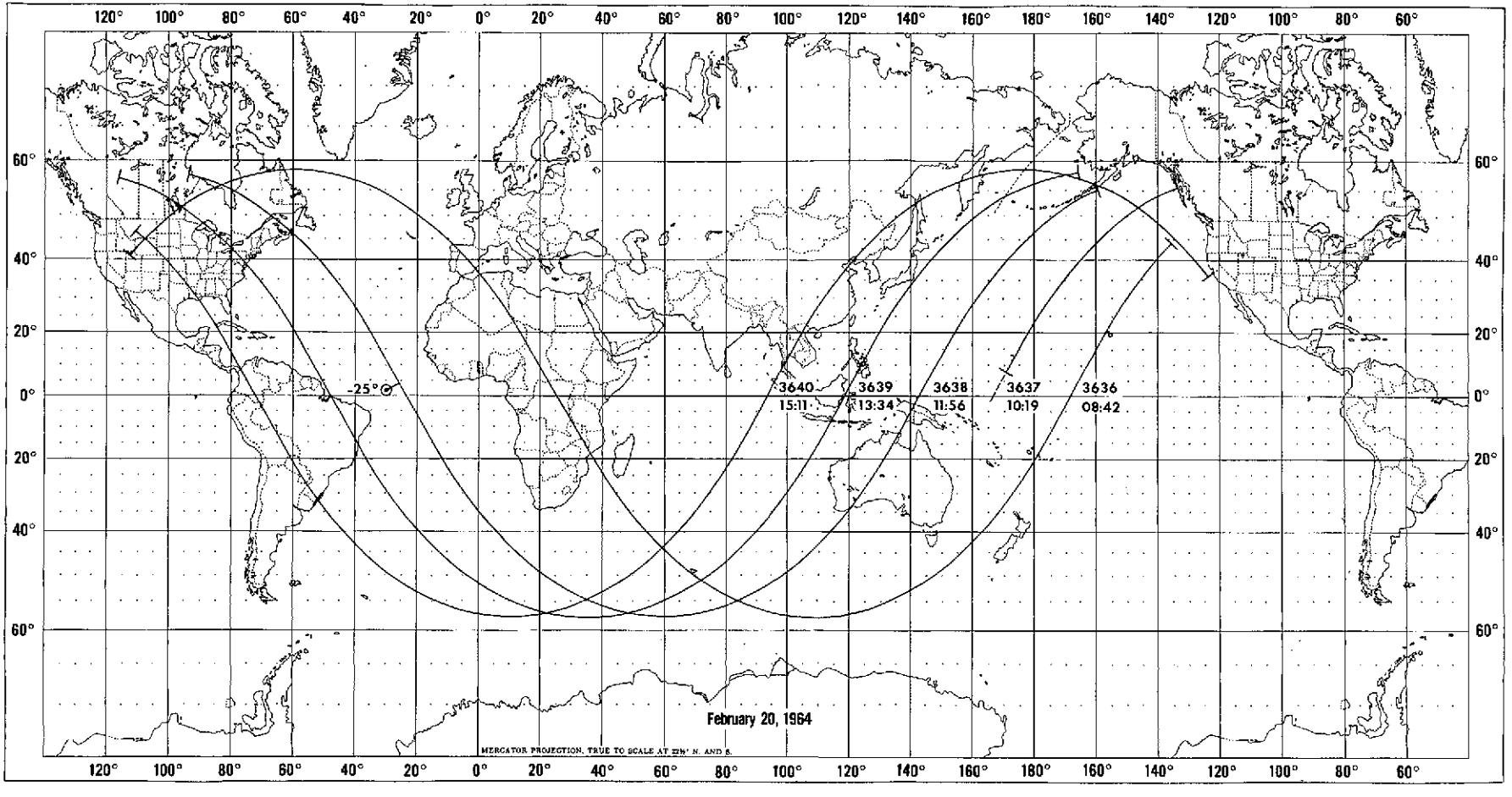

3567
16:41
3566
15:03
3565
13:26
3564
11:48
3563
10:11
3562
08:34
3561
06:56
3560
05:19
-15°
February 15, 1964
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582.
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

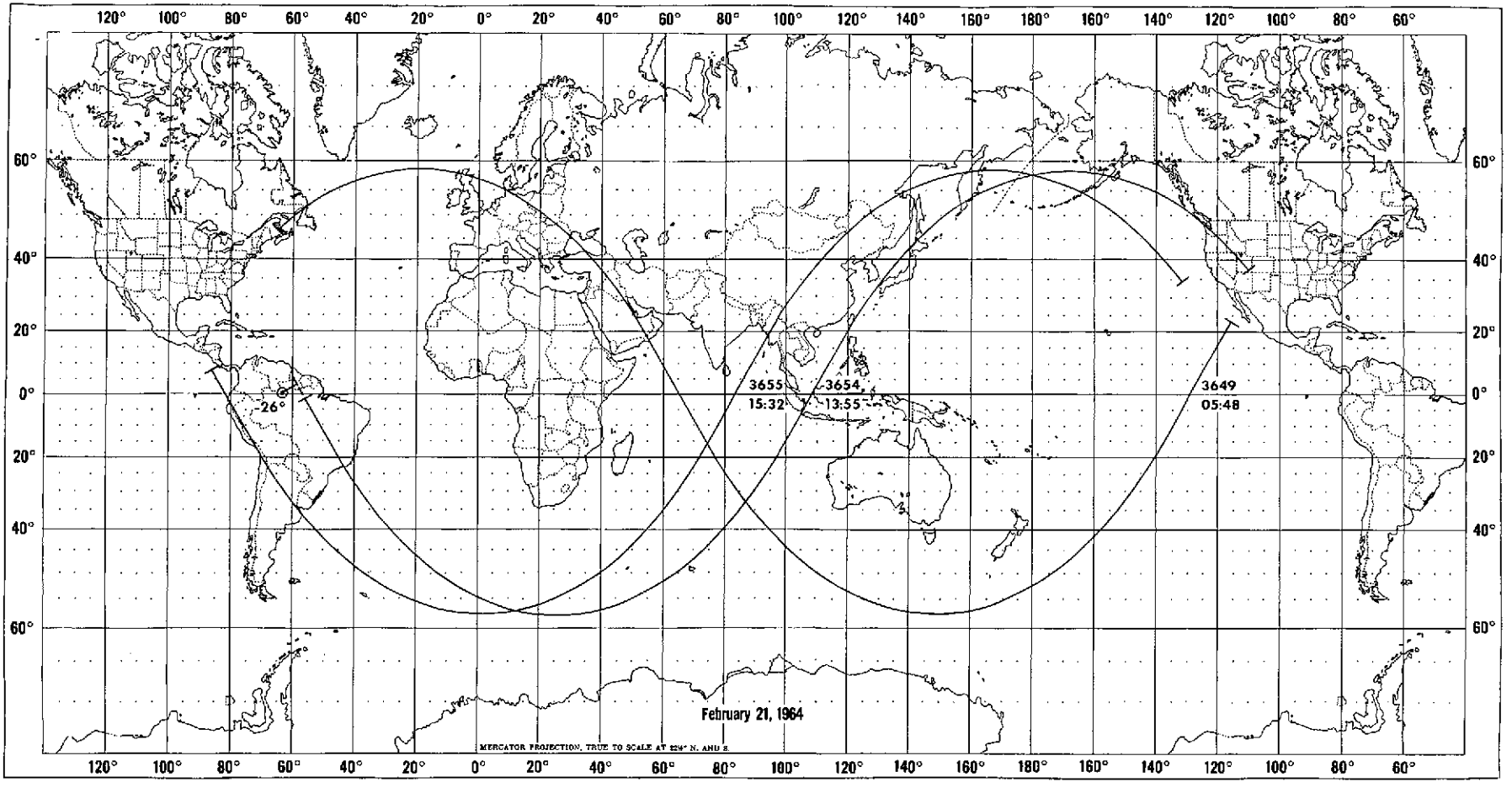

3582
17:02
3581
15:24
3580
13:47
3579
12:10
3578
10:32
3577
08:55
3576
07:17
3575
05:40
3574
04:03
-17°
February 16, 1964
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3297-3582.
MERCATOR PROJECTION, TRUE TO SCALE AT 72½° N. AND S.

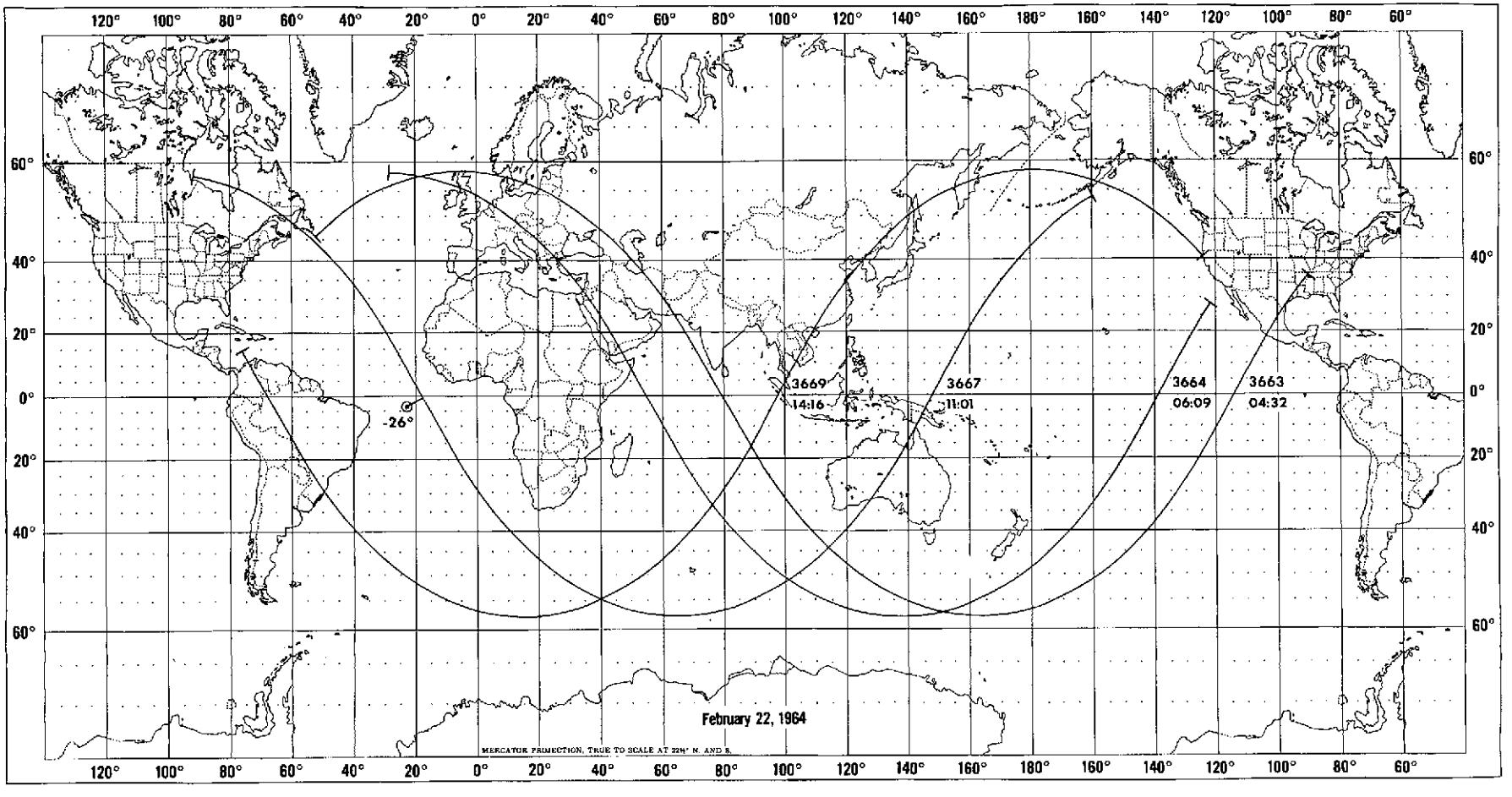

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
-19°
3597 17:23
3596 15:45
3595 14:08
3594 12:31
3593 10:53
3592 09:16
3591 07:38
3590 06:01
3589 04:24
February 17, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

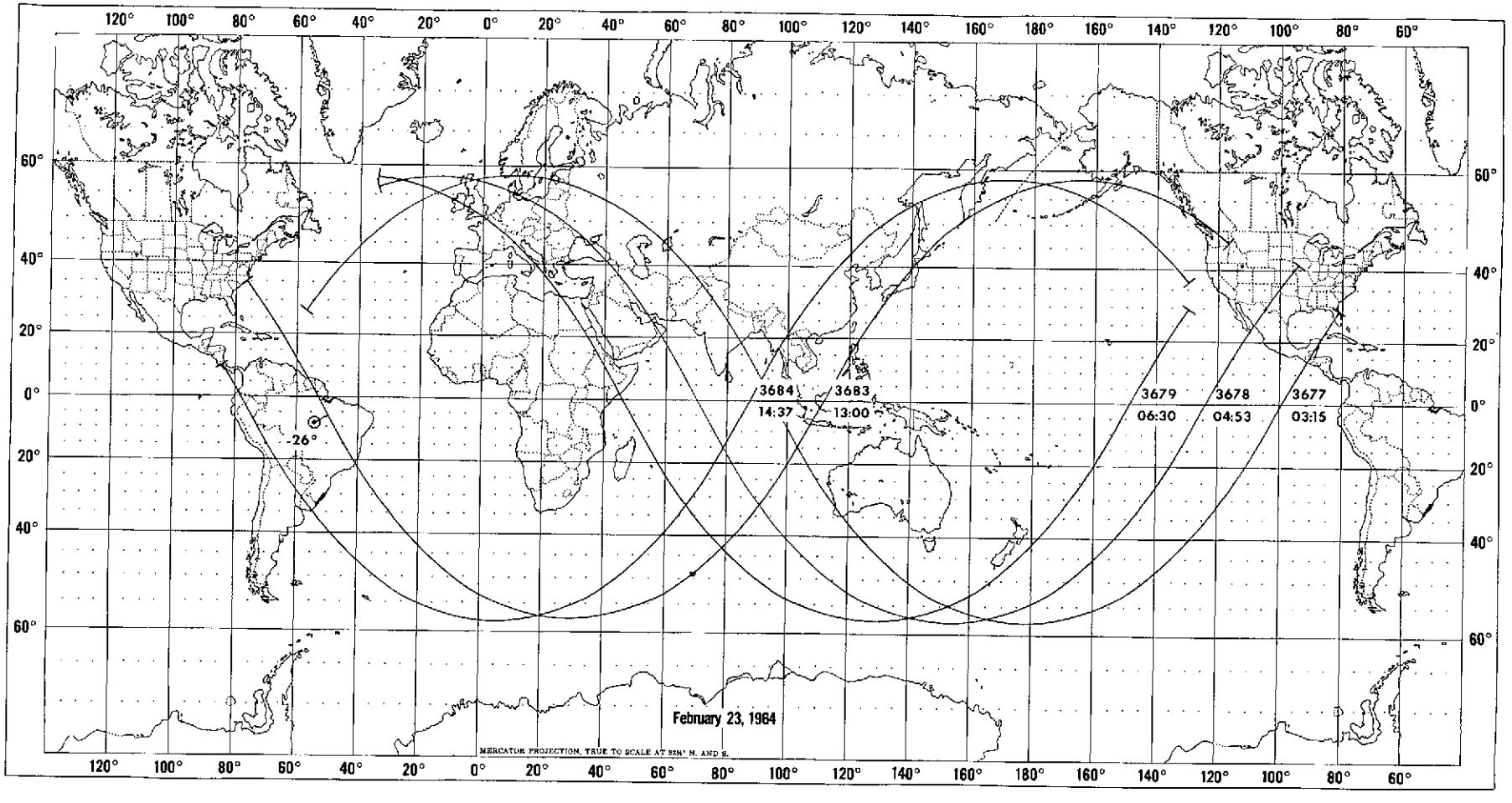

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
-21°
3611
16:07
3609
12:52
3608
11:14
3606
08:00
3605
06:22
3604
04:45
February 18, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

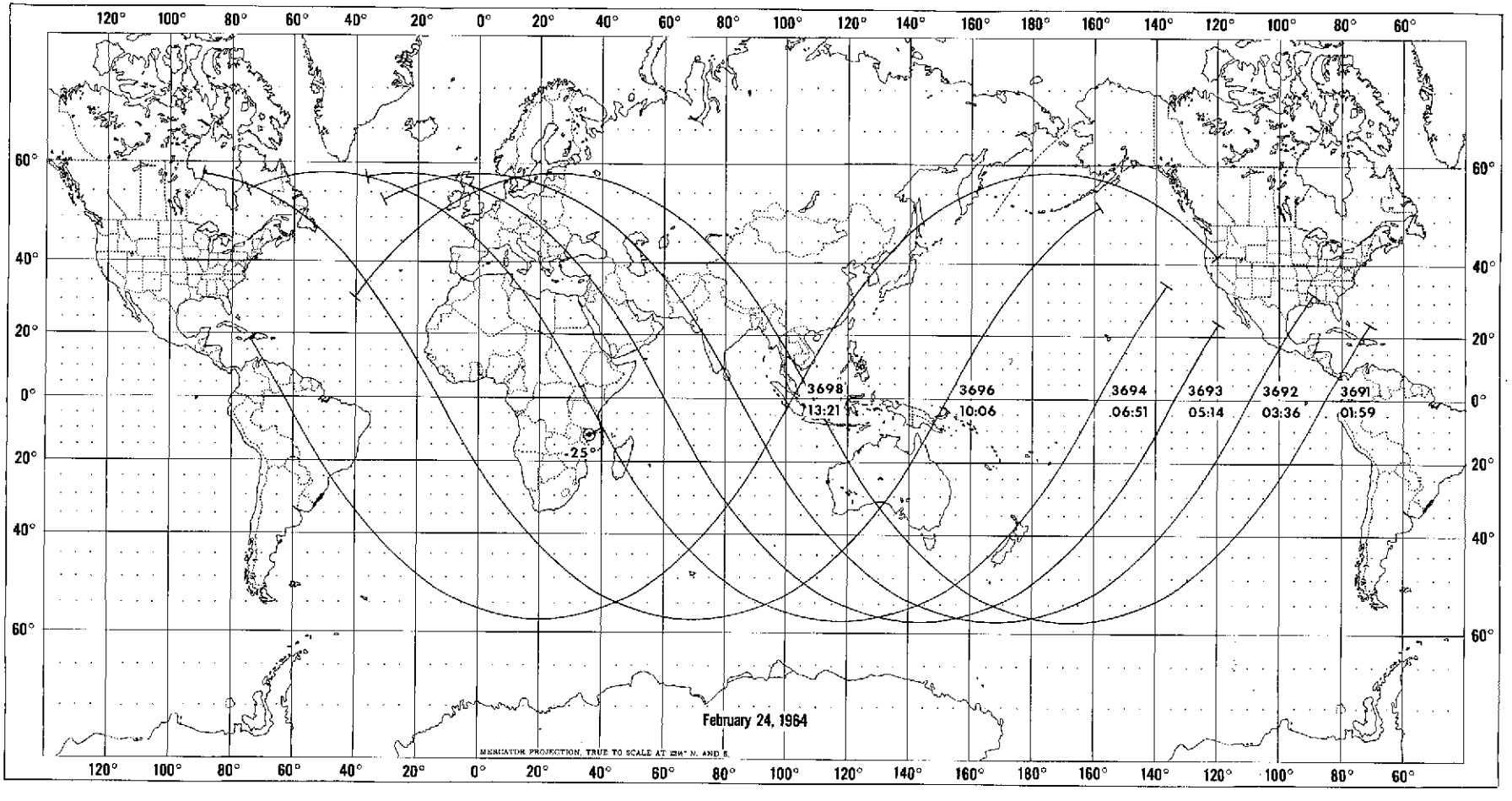

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
-23°
3626
16:28
3624
13:13
3623
11:35
3621
08:21
3620
06:43
February 19, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

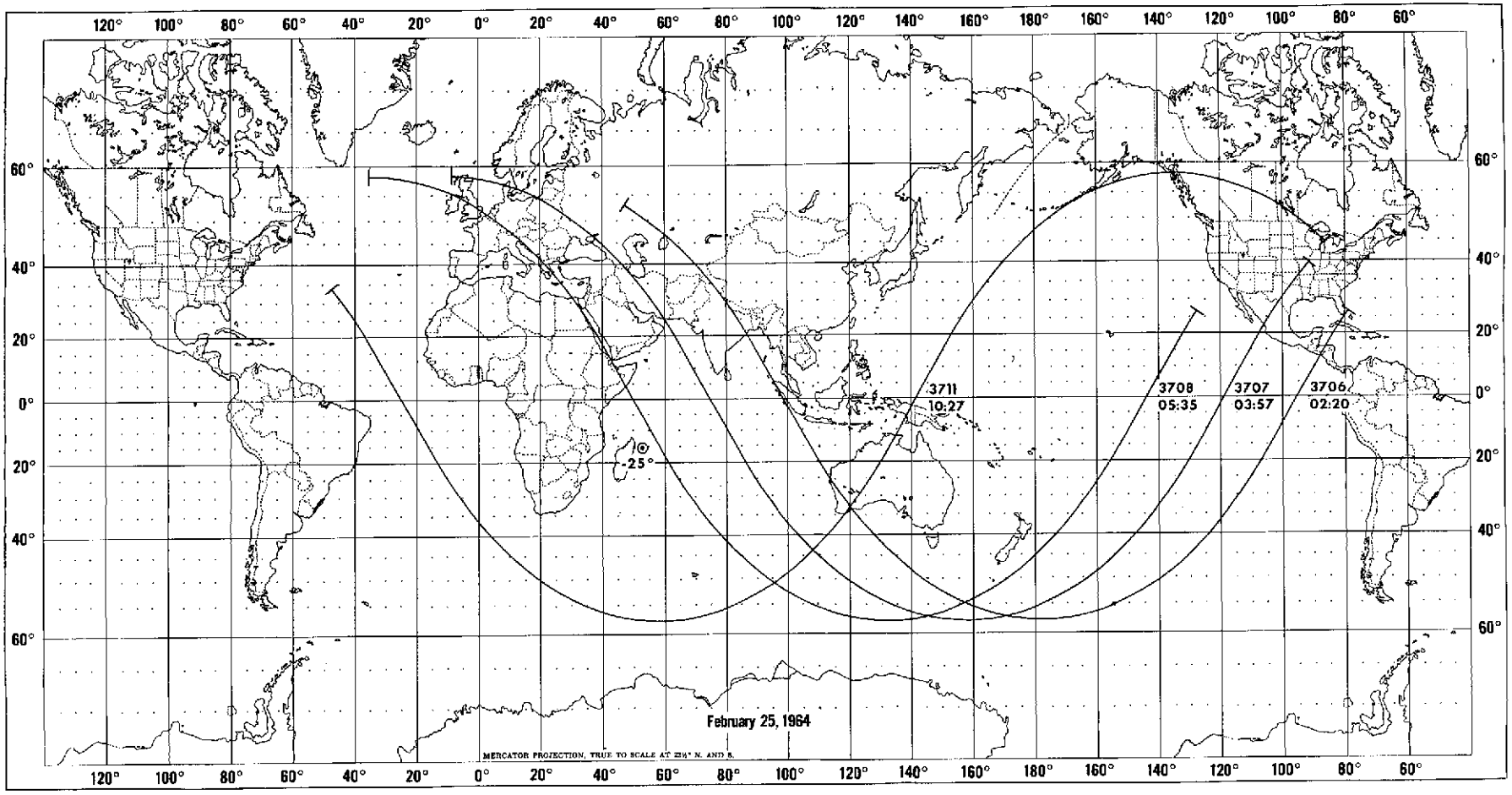

120° 100° 80° 60° 40° 20° 0° 20° 40° 60° 80° 100° 120° 140° 160° 180° 160° 140° 120° 100° 80° 60°
60° 40° 20° 0° 20° 40° 60°
-25°
3640 15:11
3639 13:34
3638 11:56
3637 10:19
3636 08:42
February 20, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

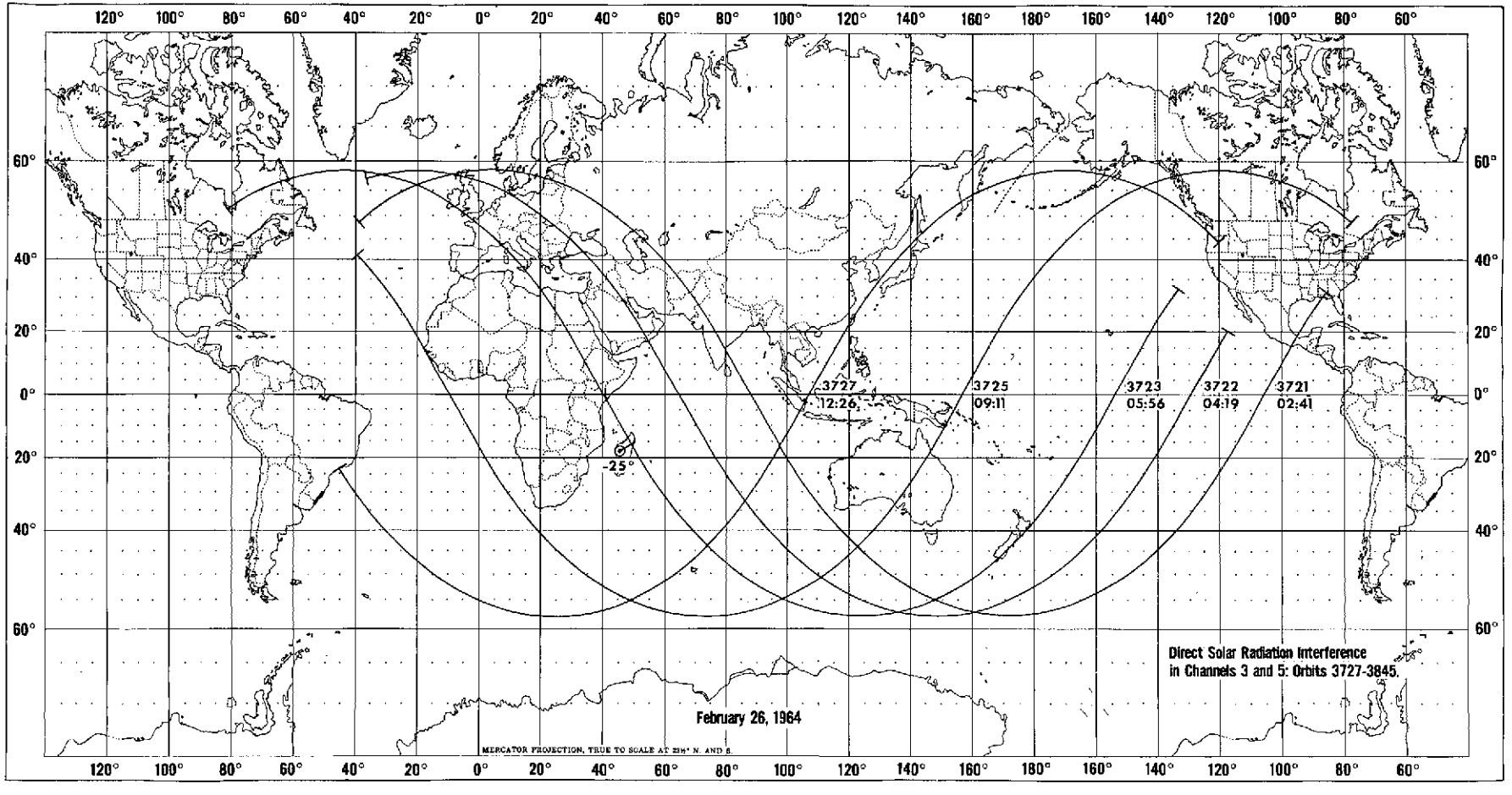

3655
15:32
3654
13:55
3649
05:48
-26°
February 21, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

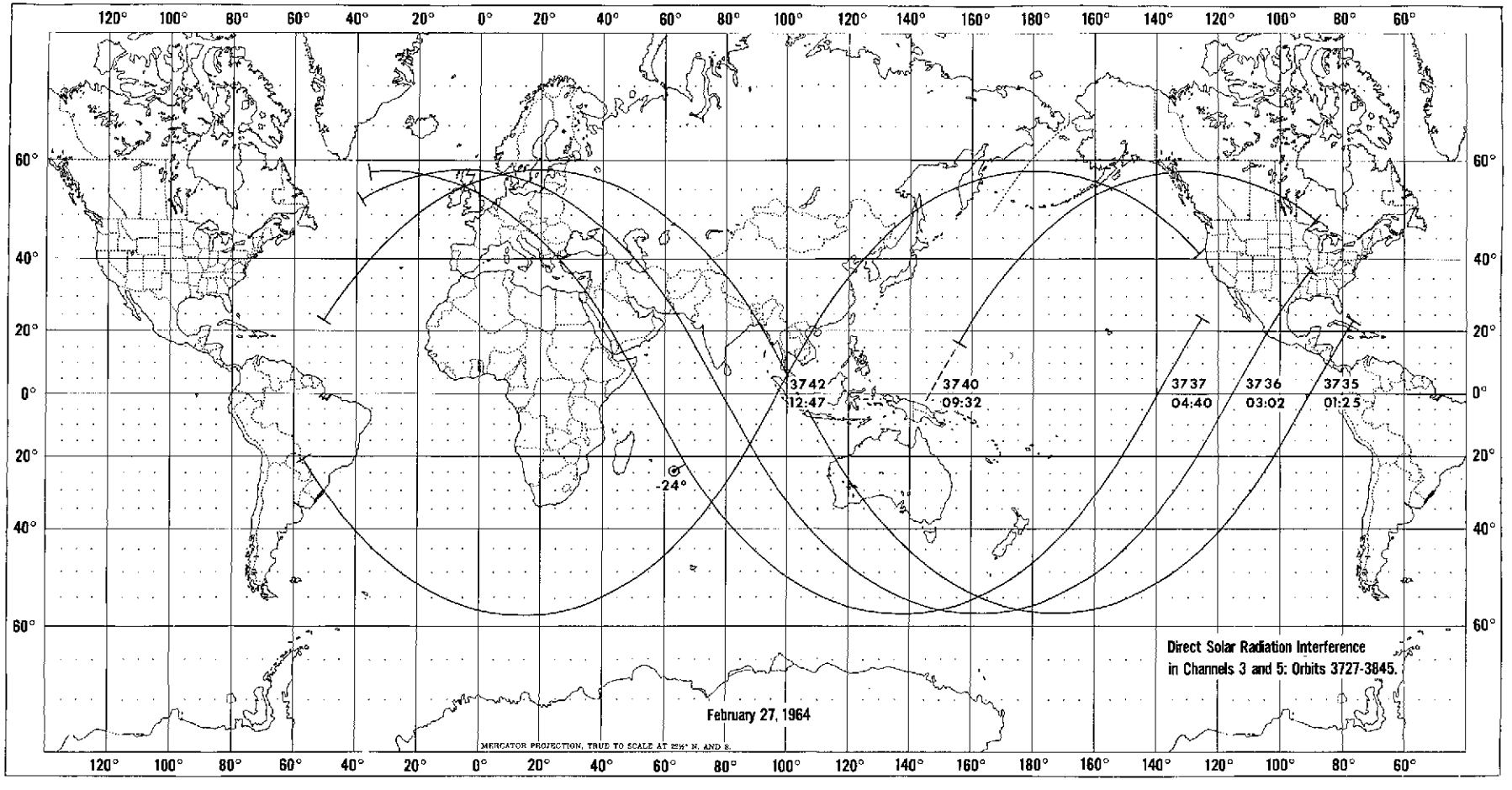

3669
14:16
3667
11:01
3664
06:09
3663
04:32
-26°
February 22, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.

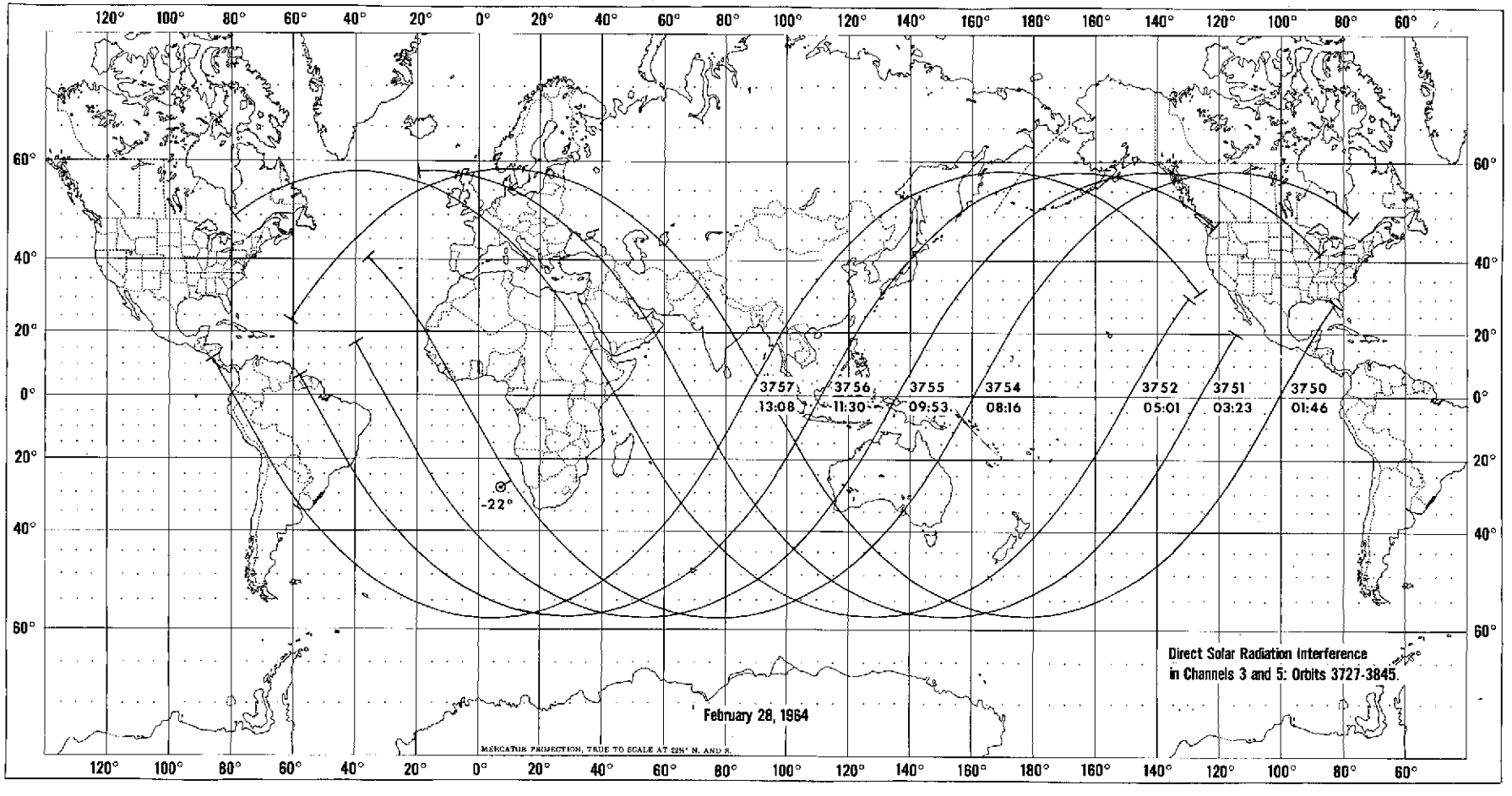

3684
14:37
3683
13:00
3679
06:30
3678
04:53
3677
03:15
-26°
February 23, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 52½° N. AND S.

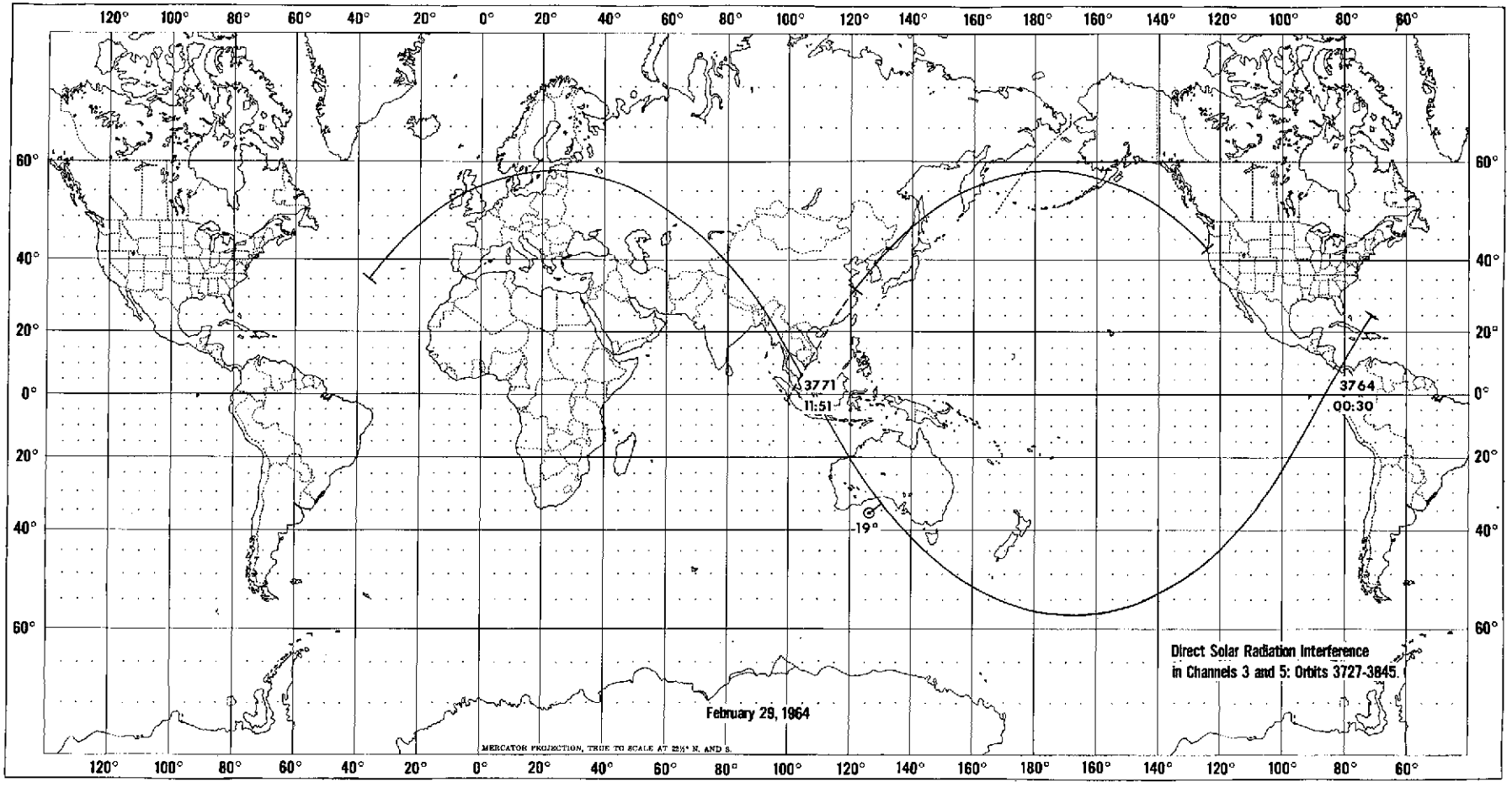

3698
13:21
3696
10:06
3694
06:51
3693
05:14
3692
03:36
3691
01:59
-25°
February 24, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.


3711
10:27
3708
05:35
3707
03:57
3706
02:20
-25°
February 25, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.


3727
12:26
3725
09:11
3723
05:56
3722
04:19
3721
02:41
-25°
February 26, 1964
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3727-3845.
MERCATOR PROJECTION, TRUE TO SCALE AT 23½° N. AND S.


3742
12:47
3740
09:32
3737
04:40
3736
03:02
3735
01:25
-24°
February 27, 1964
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3727-3845.
MERCATOR PROJECTION, TRUE TO SCALE AT 25½° N. AND S.


3757
13:08
3756
11:30
3755
09:53
3754
08:16
3752
05:01
3751
03:23
3750
01:46
-22°
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3727-3845.
February 28, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.


3771
11:51
3764
00:30
-19°
February 29, 1964
MERCATOR PROJECTION, TRUE TO SCALE AT 22½° N. AND S.
Direct Solar Radiation Interference
in Channels 3 and 5: Orbits 3727-3845.