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DENSITIES AND TEMPERATURES FROM THE ATMOSPHERIC DRAG ON SIX ARTIFICIAL SATELLITES

by

Luigi G. Jacchia and Jack Slowey

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DENSITIES AND TEMPERATURES FROM THE ATMOSPHERIC DRAG ON SIX ARTIFICIAL SATELLITES[1]

by

Luigi G. Jacchia[2] and Jack Slowey[3]

Summary.--Densities and temperatures derived from atmospheric drag have been recomputed for six of the satellites for which data were given in an earlier paper (Jacchia and Slowey, 1963a). The new results, obtained with an improved atmospheric model, supersede those given in that paper. In addition, the analysis has been extended to a considerably longer interval for all but one of the six satellites.

Introduction

In a previous paper (Jacchia and Slowey, 1963a), we presented atmospheric densities and temperatures derived from drag determinations on eight artificial satellites with perigee heights between 350 and 700 km. The densities and temperatures from six of these satellites have been recomputed using an improved atmospheric model and, for five of the six satellites, the drag analysis has been continued over intervals considerably beyond the terminal dates of the previous paper. The Vanguard I and Vanguard II rocket casings, 1958 β1 and 1959 α2, have been eliminated from the original list. These satellites had been included only to provide a check on results from their spherical payloads. Analysis of the drag on Vanguard I, 1958 β2, which has a relatively high perigee combined with a relatively low area/mass ratio, could not be continued because the drag became too small to measure with good resolution due to the approaching minimum in solar activity and the resulting contraction of the upper atmosphere. The continuation of the analysis on Vanguard III, 1959 ETA, had to be terminated earlier than those on the other satellites for the same reason and because the uncertainty in the effect of solar-radiation pressure, owing to the irregular shape of the satellite, becomes intolerable when the drag is small. It follows that data near the end of the intervals analyzed for 1958 β2 and 1959 ETA should be viewed with caution. In the case of 1958 β2, the last two years were analyzed using a larger time-step (5 days) in addition to the smaller time-step (2.5 days) used from the beginning. The results are tabulated separately.

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[1]This work was supported in part by Grant No. NsG 87-60 from the National Aeronautics and Space Administration.

[2]Physicist, Smithsonian Astrophysical Observatory.

[3]Astronomer, Smithsonian Astrophysical Observatory.

The six satellites, their area/mass ratios, and the intervals covered are listed with other basic information in Table 1. The quantity $\overline{z}_{\pi}$ is the standard height to which the atmospheric densities at perigee have been reduced in order to eliminate variations in density that are due only to variations in height. The tables summarizing results give the perigee density both at the actual height and at this standard height. The standard heights are the same as those we had used previously except that 350 km has been adopted in place of 355 km for Explorer I, 1958 ALPHA. Many different standard heights are required for Explorer IX, 1961 δ1, because of the very large variation in perigee height. A complete list of the values we have used is given in Table 2 in function of the time interval in Modified Julian Days (MJD = JD - 2,400,000.5). All of the perigee densities from this satellite were reduced to 600 km for plotting only; these densities are not given in tabular form.

As before, the results presented here are based mainly on field-reduced Baker-Nunn observations and, where they exist, on Minitrack observations. Both types of observation have a topocentric accuracy of a few minutes of arc.

The observational material presented here has been utilized in several papers (such as Jacchia, 1964a, b and Jacchia and Slowey, 1963b) to draw conclusions about upper-atmospheric structure and variations related to solar and geophysical parameters. No attempt is made to repeat any of those conclusions in this report.

Method of computation

The methods used to determine orbital accelerations and to compute densities were essentially the same as have been described before (Jacchia and Slowey, 1963a) and need not be repeated in detail. The contribution to the accelerations due to solar-radiation pressure was computed using Kozai's formulation of the effect (Kozai, 1959) assuming specular reflection from a spherical surface and a value of the solar constant of 2.00 cal cm^{-2} min^{-1}. The densities were computed by numerical integration of Sterne's integral--in the form including atmospheric rotation (Sterne, 1958, 1959)--assuming the drag coefficient to be 2.2 for all of the satellites.

The atmospheric model previously used in the integration was, however, replaced with a revised (though unpublished) version of Nicolet's (1961) model atmosphere that we have referred to as Nicolet II. This was used in combination with Jacchia's (1964a) model for the diurnal temperature variation. Since Nicolet's model is in function of the exospheric temperature, the computations were made by iteration. Initial values of the nighttime exospheric temperature were obtained from the relation between the temperature and the 10.7-cm solar flux (Jacchia, 1964a), taking mean values of the flux. In each computation, the density computed with this value was entered in Nicolet's model to obtain a better temperature and the integration was repeated. Only a single iteration of this kind is necessary.

Explanation of tables

The numerical results from each of the six satellites are given in Table 3. The time, in Modified Julian Days, is listed in the first column. The observed rate of change of the anomalistic period, or "acceleration," is given in the second column. The contribution to the acceleration due to solar-radiation pressure is in the third column, and the difference, the portion of the acceleration ascribed to atmospheric drag, is in the fourth column. For 1958 ALPHA, the third column is blank; the effect of radiation pressure on this satellite is quite small compared to that of the atmospheric drag and was not computed. The common logarithms of the perigee density, in gm/cm^3, at the actual perigee height and at the standard height are given in columns five and six. The reduction to standard height, made with the Nicolet II model, is given in column seven. The next three columns give, in order, the perigee height, the difference in right ascension between perigee and the sun, and the difference in declination between perigee and the sun. The last column gives the night-time temperature computed from the perigee value by use of Jacchia's model of the diurnal variation.

The logarithm of the perigee density at standard height and the exospheric temperature at perigee are plotted for each of the satellites in Figures 1-6. Normalized curves of the diurnal and semiannual temperature variations according to Jacchia's (1964a) model and plots of the 10.7-cm solar flux and the daily geomagnetic index, A_p, are shown for comparison in each case. The results obtained by differentiation at five-day intervals is plotted in the later portion for 1958 β2.

Acknowledgment

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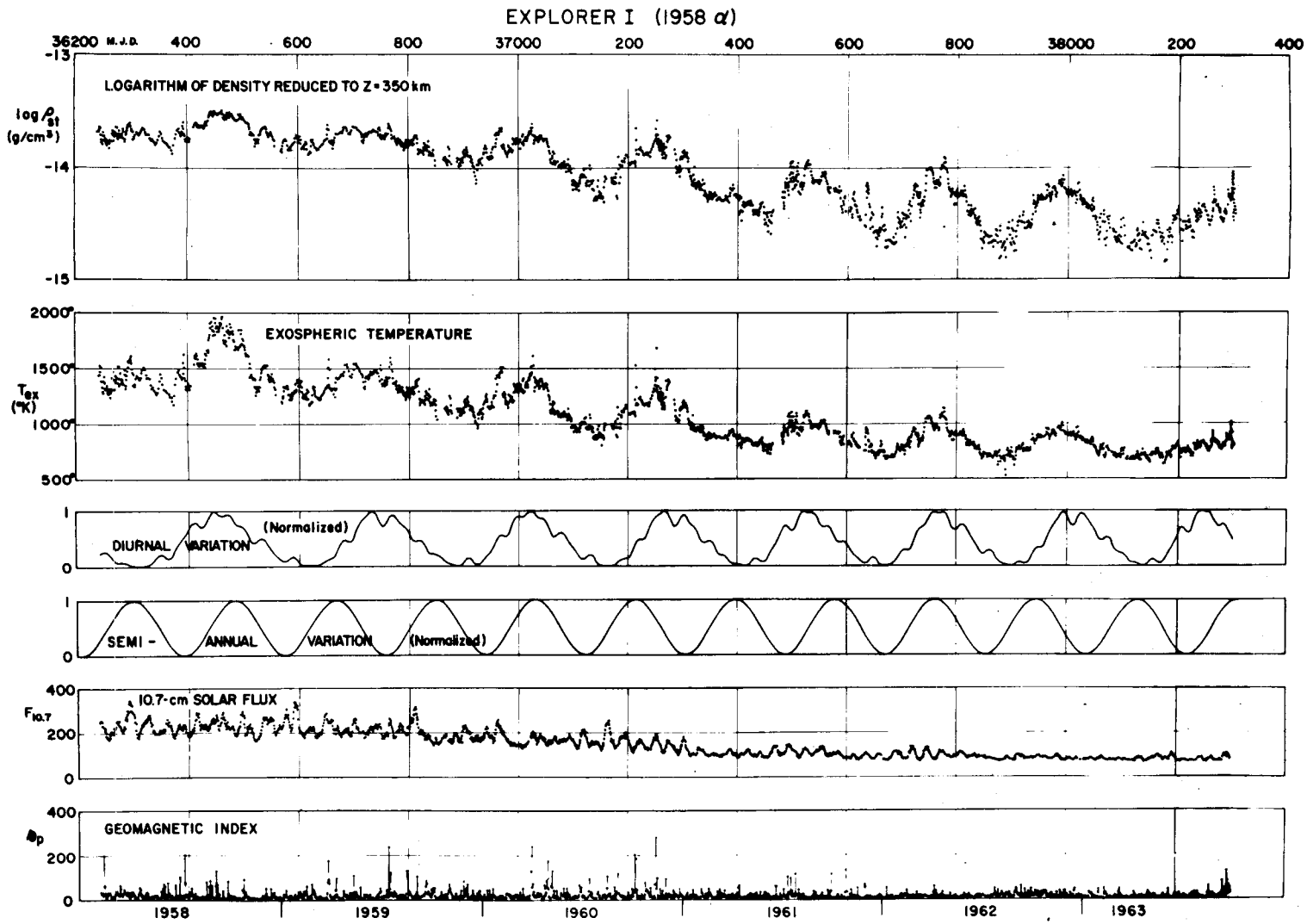
EXPLORER I (1958 α)
36200 M.J.D.
400
600
800
37000
200
400
600
800
38000
200
400
LOGARITHM OF DENSITY REDUCED TO Z = 350 km
log ρst (g/cm³)
-13
-14
-15
EXOSPHERIC TEMPERATURE
Tex (°K)
2000°
1500°
1000°
500°
DIURNAL VARIATION (Normalized)
SEMI - ANNUAL VARIATION (Normalized)
10.7-cm SOLAR FLUX
F10.7
400
200
0
GEOMAGNETIC INDEX
Ap
1958
1959
1960
1961
1962
1963

Figure 1.

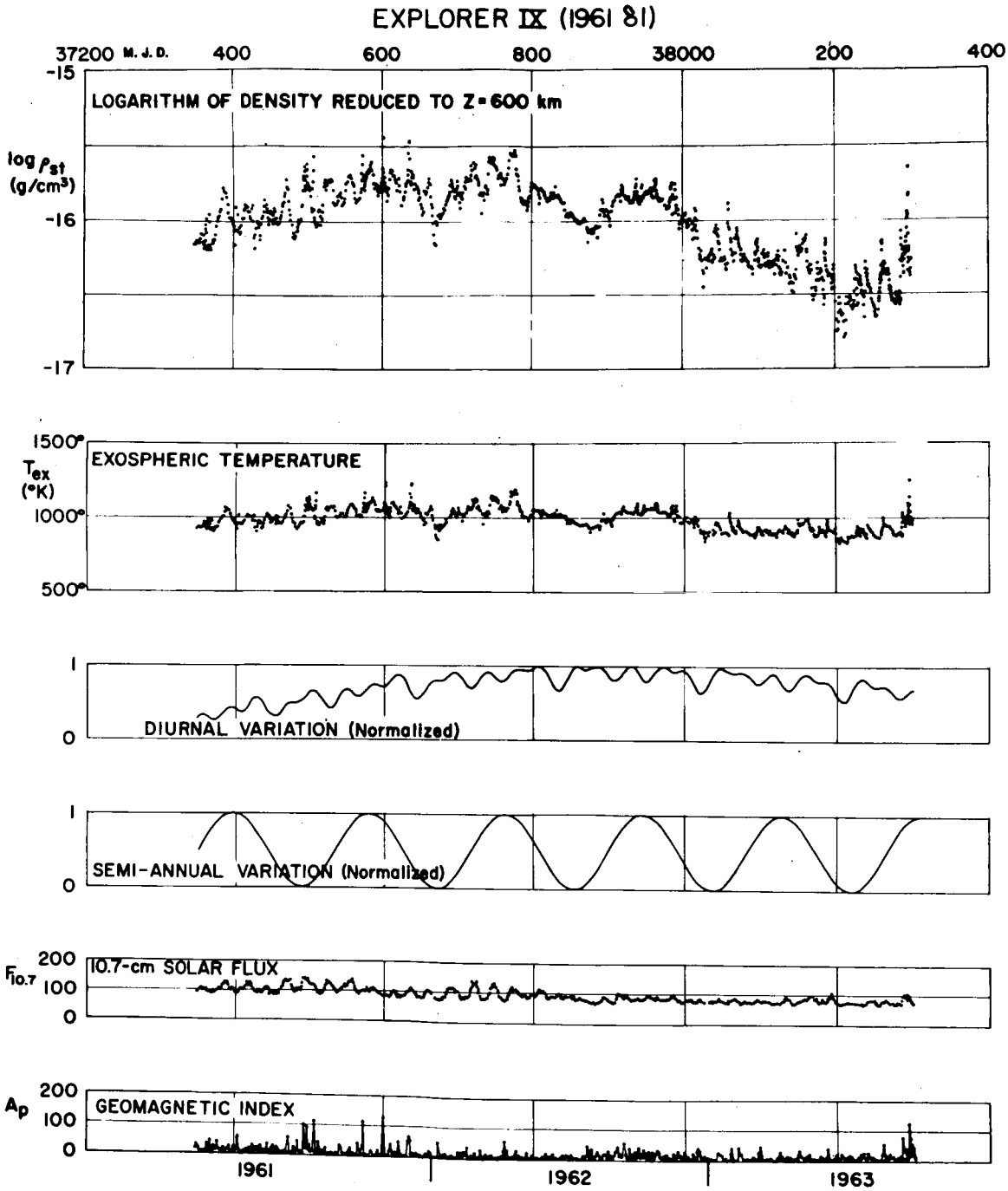
EXPLORER IX (1961 δ1)
37200 M. J. D.
400
600
800
38000
200
400
-15
LOGARITHM OF DENSITY REDUCED TO Z=600 km
log ρst (g/cm³)
-16
-17
1500°
EXOSPHERIC TEMPERATURE
Tex (°K)
1000°
500°
1
DIURNAL VARIATION (Normalized)
0
1
SEMI-ANNUAL VARIATION (Normalized)
0
200
10.7-cm SOLAR FLUX
F10.7
100
0
200
GEOMAGNETIC INDEX
Ap
100
0
1961
1962
1963

Figure 2.

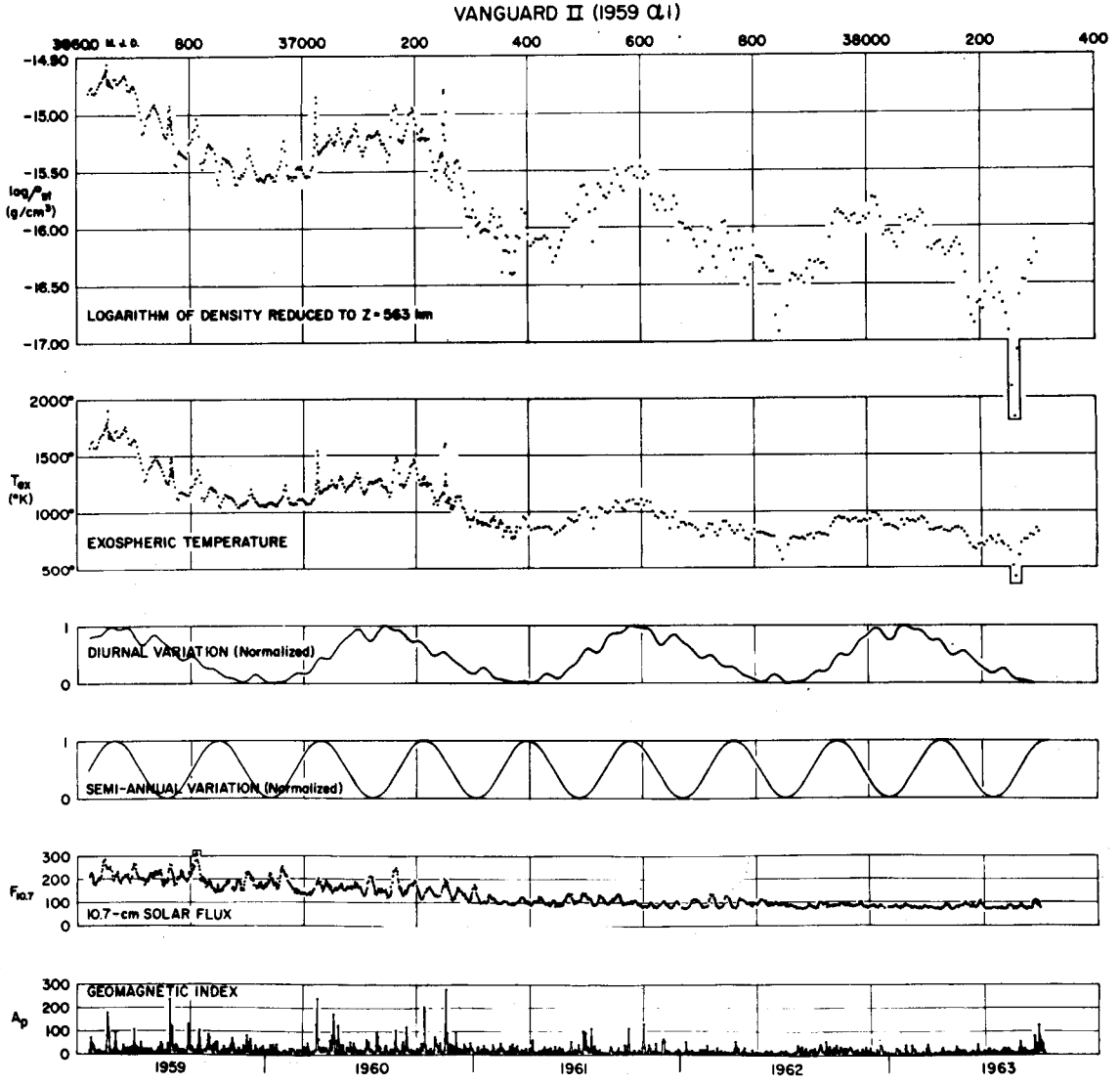
VANGUARD II (1959 α1)
36600 U.T.
800
37000
200
400
600
800
38000
200
400
-14.50
-15.00
-15.50
-16.00
-16.50
-17.00
log ρ_ST (g/cm³)
LOGARITHM OF DENSITY REDUCED TO Z = 563 km
2000°
1500°
1000°
500°
T_ex (°K)
EXOSPHERIC TEMPERATURE
1
0
DIURNAL VARIATION (Normalized)
1
0
SEMI-ANNUAL VARIATION (Normalized)
300
200
100
0
F10.7
10.7-cm SOLAR FLUX
300
200
100
0
Ap
GEOMAGNETIC INDEX
1959
1960
1961
1962
1963

Figure 3.

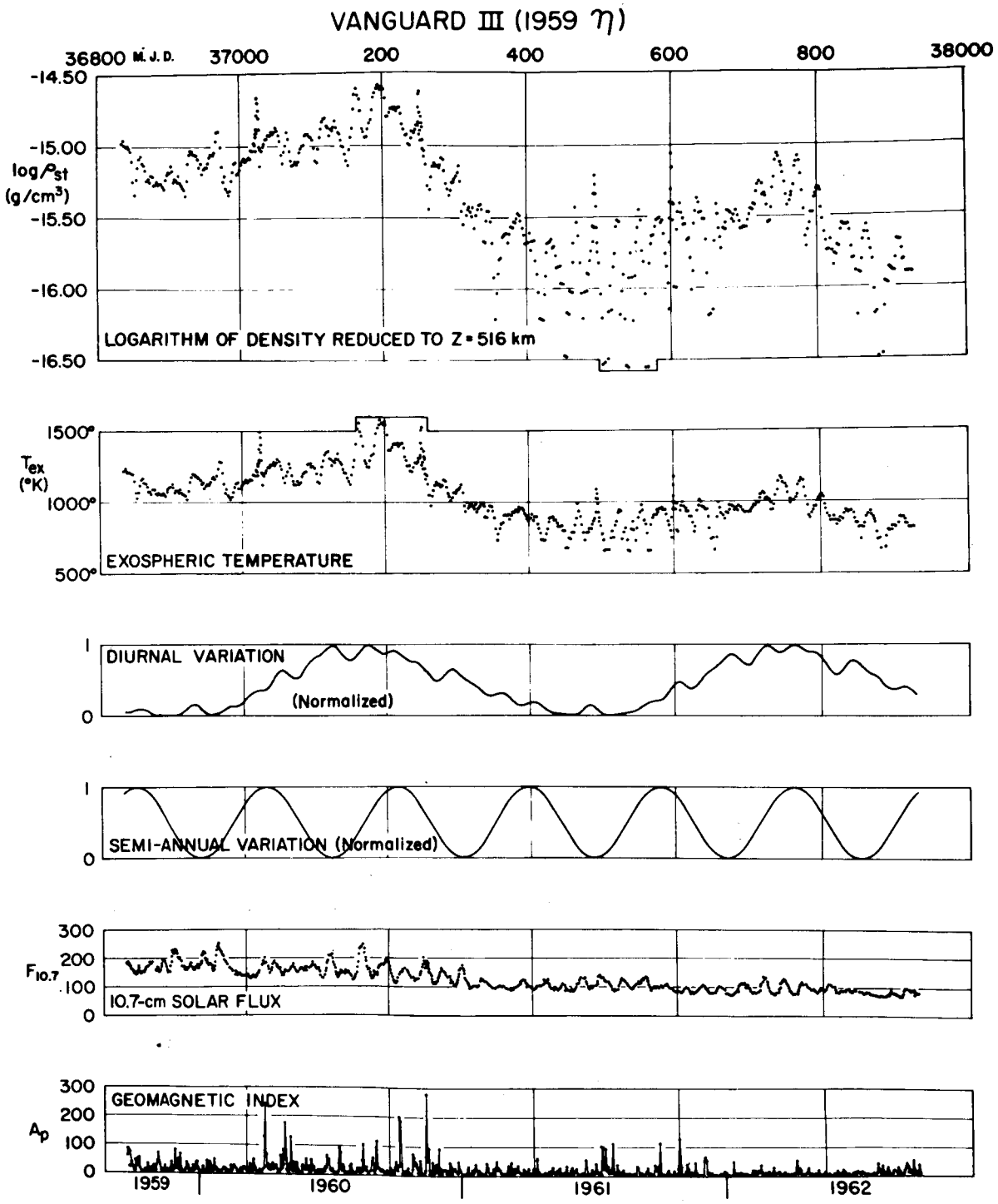
VANGUARD III (1959 η)
36800 M.J.D.
37000
200
400
600
800
38000
-14.50
-15.00
-15.50
-16.00
-16.50
log ρst (g/cm³)
LOGARITHM OF DENSITY REDUCED TO Z = 516 km
1500°
1000°
500°
Tex (°K)
EXOSPHERIC TEMPERATURE
1
0
DIURNAL VARIATION
(Normalized)
1
0
SEMI-ANNUAL VARIATION (Normalized)
300
200
100
0
F10.7
10.7-cm SOLAR FLUX
300
200
100
0
Ap
GEOMAGNETIC INDEX
1959
1960
1961
1962

Figure 4.

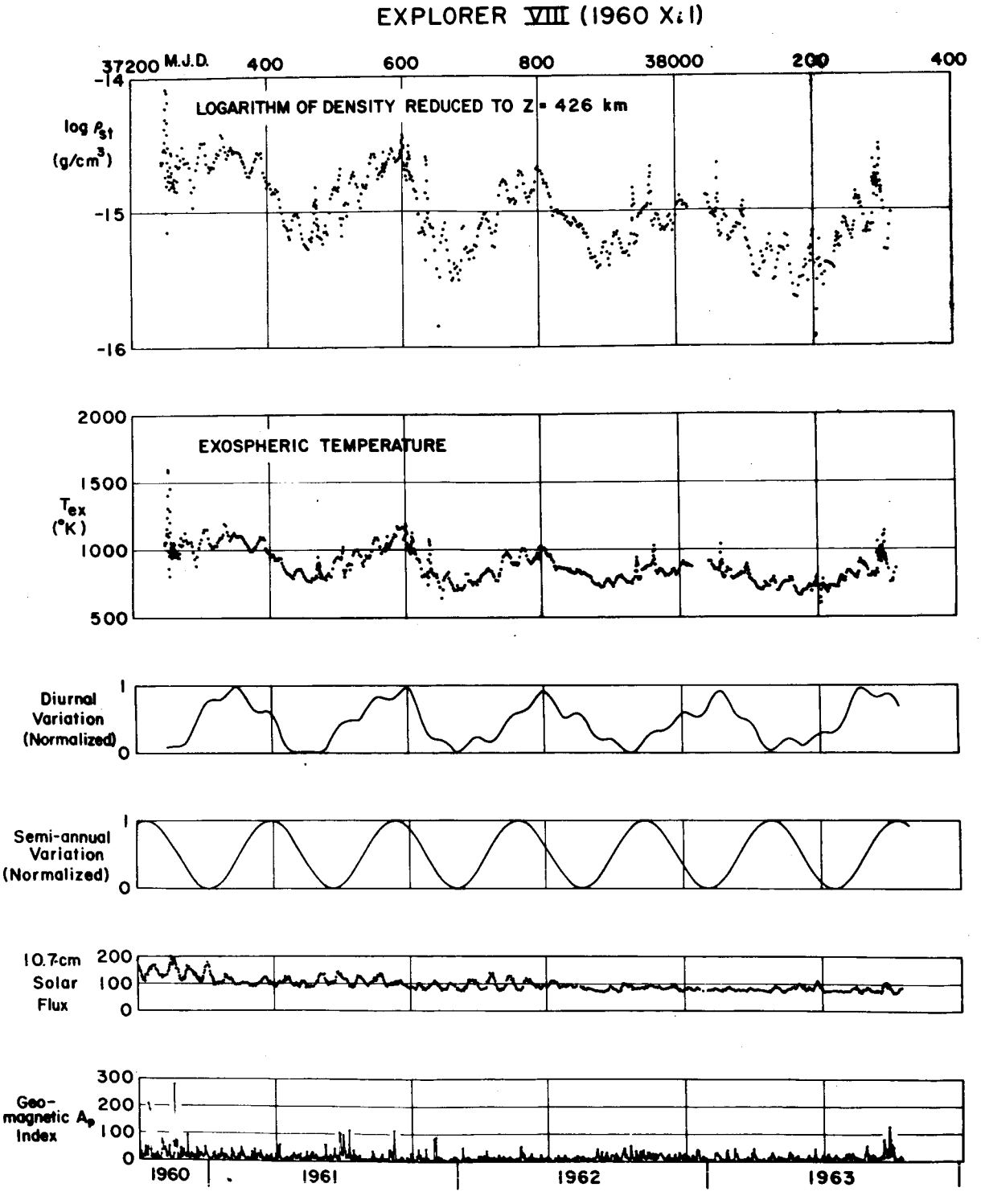
EXPLORER VIII (1960 Xi I)
37200 M.J.D.
400
600
800
38000
200
400
LOGARITHM OF DENSITY REDUCED TO Z = 426 km
log ρst (g/cm³)
-14
-15
-16
EXOSPHERIC TEMPERATURE
Tex (°K)
2000
1500
1000
500
Diurnal Variation (Normalized)
1
0
Semi-annual Variation (Normalized)
1
0
10.7-cm Solar Flux
200
100
0
Geo-magnetic Ap Index
300
200
100
0
1960
1961
1962
1963

Figure 5.

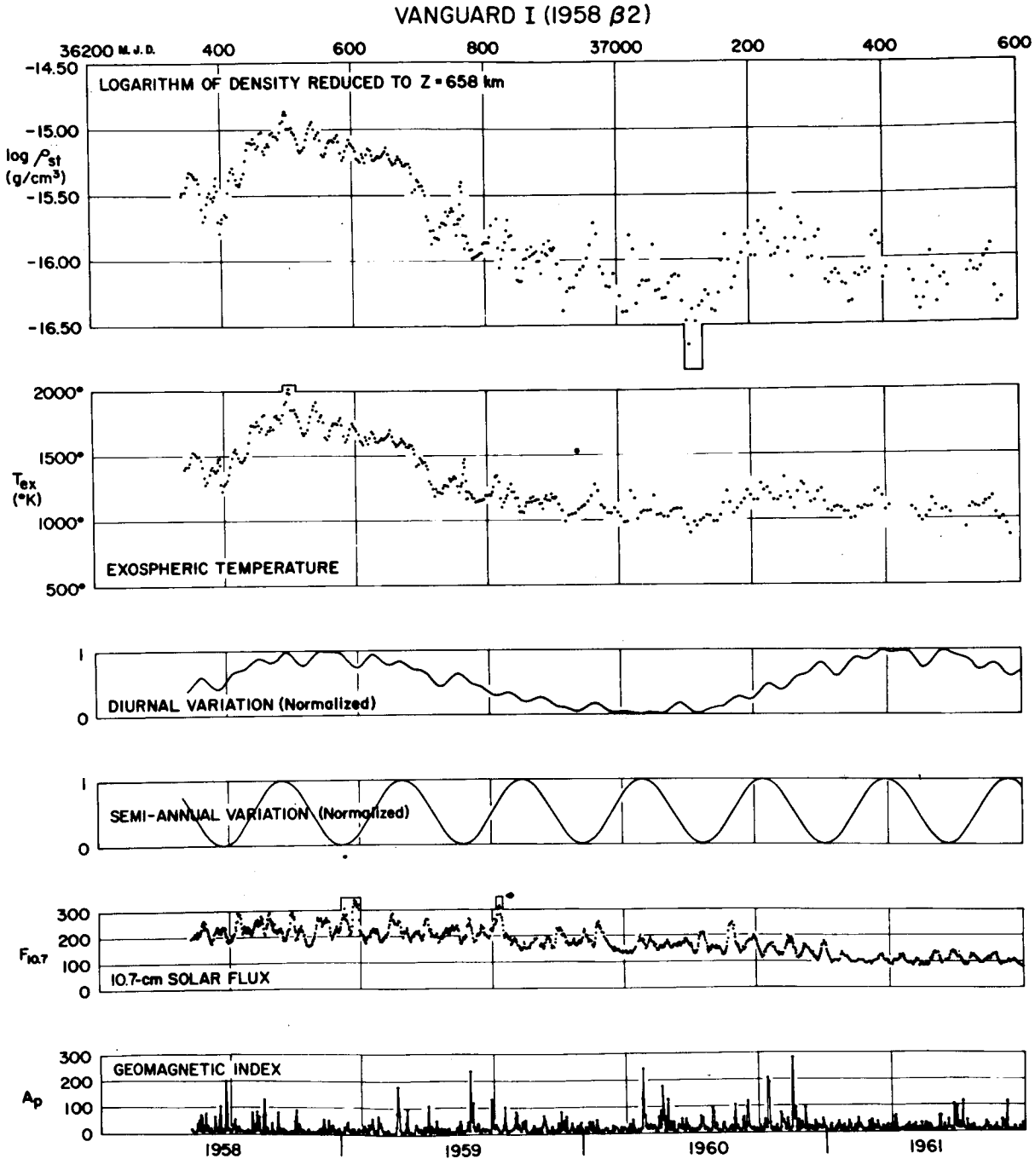
VANGUARD I (1958 β2)
36200 M.J.D.
400
600
800
37000
200
400
600
LOGARITHM OF DENSITY REDUCED TO Z = 658 km
-14.50
-15.00
-15.50
-16.00
-16.50
log ρst (g/cm³)
2000°
1500°
1000°
500°
Tex (°K)
EXOSPHERIC TEMPERATURE
1
0
DIURNAL VARIATION (Normalized)
1
0
SEMI-ANNUAL VARIATION (Normalized)
300
200
100
0
F10.7
10.7-cm SOLAR FLUX
300
200
100
0
Ap
GEOMAGNETIC INDEX
1958
1959
1960
1961

Figure 6.

Table 1.--Basic data on satellites

Satellite	$\bar{z}_{\pi}$ (km)	A/m (cm^2/g)	Eccentricity	Interval	Basic resolution (days)
1958 ALPHA (Explorer I)	350	0.170	0.14 - 0.09	1958 Feb. 8 - 1963 Sept. 28	1.0
1960 ξ1 (Explorer VIII)	426	0.110	0.12	1960 Nov. 8 - 1963 Sept. 28	2.0
1959 ETA (Vanguard III)	516	0.173	0.19	1959 Sept. 23 - 1962 Sept. 21	2.0
1959 α1 (Vanguard II)	563	0.236	0.165	1959 Feb. 23 - 1963 Sept. 28	2.5
1958 β2 (Vanguard I)	658	0.248	0.19	1958 May 17 - 1961 Oct. 23	2.5
1961 δ1 (Explorer IX)	600*	15.84	0.13 - 0.11	1961 Feb. 19 - 1963 Sept. 28	1.0

* This value was used only for plotting. See Table 2 for list of standard heights that apply to tabulated results.

Table 1.--Standard height for Satellite 1961 δ1(Explorer IX)

Interval (MJD)	Standard height (km)
37349.0 - 37393.0	660
394.0 - 430.0	680
431.0 - 462.0	700
463.0 - 504.0	720
505.0 - 562.0	740
563.0 - 629.0	750
630.0 - 780.0	760
781.0 - 830.0	750
831.0 - 880.0	740
881.0 - 915.0	720
916.0 - 960.0	700
961.0 - 38017.0	670
38017.5 - 069.0	640
070.0 - 125.5	600
126.0 - 185.0	550
186.0 - 244.5	510
245.0 - 284.0	470
284.5 - 300.0	450

[illegible] .--[illegible] [illegible], [illegible] [illegible], atmospheric temperatures, and geometric parameters

[illegible] EIJIRE [illegible]

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36242.00	6.03		6.0	-13.73	-13.69	1436	355.7	159.3	24.1	1340
43.00	6.03		6.0	.73	.68	1437	355.8	159.4	20.4	1339
44.00	6.29		6.3	.71	.67	1469	356.0	159.5	16.6	1367
45.00	6.79		6.8	.69	.64	1523	356.3	159.6	12.8	1415
46.00	6.60		6.6	.70	.65	1507	356.9	159.7	9.0	1399
47.00	5.27		5.3	.77	.72	1382	357.5	159.8	5.3	1282
48.00	4.70		4.7	.82	.75	1324	358.3	160.1	1.6	1227
49.00	4.25		4.3	.85	.78	1287	359.2	160.5	-2.0	1191
50.00	4.06		4.1	.87	.79	1273	360.2	161.1	-5.5	1178
51.00	5.02		5.0	.80	.72	1379	361.2	161.9	-8.7	1276
52.00	5.27		5.3	.79	.69	1420	362.2	162.9	-11.8	1315
53.00	4.70		4.7	.83	.73	1362	363.2	164.1	-14.6	1261
54.00	4.19		4.2	.87	.76	1312	364.1	165.7	-17.1	1216
55.00	4.13		4.1	.88	.77	1306	364.8	167.5	-19.3	1213
56.00	4.25		4.3	.87	.75	1334	365.5	169.5	-21.1	1242
57.00	4.06		4.1	.89	.76	1313	365.9	171.7	-22.5	1226
58.00	3.81		3.8	.92	.79	1281	366.2	174.1	-23.4	1200
59.00	3.62		3.6	.94	.80	1260	366.3	176.5	-23.9	1184
60.00	3.94		3.9	.91	.78	1291	366.1	178.9	-23.9	1218
61.00	4.06		4.1	.89	.76	1311	365.8	181.1	-23.5	1242
62.00	3.36		3.4	.96	.83	1229	365.3	183.3	-22.6	1169
63.00	3.87		3.9	.90	.79	1279	364.6	185.2	-21.4	1222
64.00	4.13		4.1	.88	.78	1295	363.8	186.9	-19.7	1242
65.00	4.32		4.3	.86	.76	1311	362.9	188.3	-17.8	1262
66.00	4.32		4.3	.86	.77	1303	362.0	189.4	-15.6	1259
67.00	5.40		5.4	.78	.70	1414	361.0	190.3	-13.1	1370
68.00	6.03		6.0	.74	.67	1465	360.0	191.0	-10.5	1422
69.00	5.27		5.3	.78	.71	1388	359.1	191.5	-7.7	1350
70.00	4.57		4.6	.83	.77	1307	358.2	191.9	-4.8	1273
71.00	5.33		5.3	.78	.72	1374	357.5	192.1	-1.8	1341
72.00	5.90		5.9	.74	.69	1430	356.8	192.3	1.3	1396
73.00	5.65		5.6	.76	.71	1397	356.4	192.5	4.4	1364
74.00	5.84		5.8	.74	.70	1413	356.1	192.6	7.4	1381
75.00	6.86		6.9	.68	.64	1518	355.9	192.8	10.5	1483
76.00	6.92		6.9	.68	.64	1517	355.9	193.1	13.5	1483
77.00	5.33		5.3	.78	.73	1359	356.0	193.4	16.3	1329
78.00	5.14		5.1	.79	.74	1339	356.2	194.0	19.1	1309
79.00	5.71		5.7	.75	.71	1403	356.5	194.7	21.7	1372
80.00	6.22		6.2	.72	.68	1454	356.9	195.7	24.1	1421
81.00	5.65		5.6	.76	.71	1399	357.3	196.9	26.2	1366
82.00	5.21		5.2	.79	.73	1359	357.6	198.3	28.0	1327
83.00	5.33		5.3	.78	.72	1372	358.0	200.0	29.6	1340
84.00	5.52		5.5	.77	.71	1396	358.3	202.0	30.7	1364
85.00	5.14		5.1	.80	.74	1354	358.5	204.1	31.5	1323
86.00	5.08		5.1	.80	.73	1355	358.6	206.4	31.8	1325
87.00	6.41		6.4	.72	.66	1484	358.6	208.8	31.7	1452
88.00	6.03		6.0	.74	.68	1445	358.4	211.2	31.1	1416
89.00	4.70		4.7	.83	.76	1311	358.2	213.6	30.1	1286
90.00	5.02		5.0	.80	.74	1339	357.9	215.8	28.6	1316
91.00	5.59		5.6	.76	.71	1399	357.4	217.7	26.7	1377
92.00	6.03		6.0	.74	.69	1433	356.9	219.5	24.5	1414
93.00	6.48		6.5	.71	.66	1476	356.4	221.0	21.9	1459
94.00	6.86		6.9	.69	.65	1511	355.9	222.2	19.0	1496
95.00	7.49		7.5	.66	.62	1566	355.4	223.2	15.8	1553
96.00	7.49		7.5	.66	.62	1562	355.0	224.0	12.5	1552
97.00	7.56		7.6	.65	.62	1569	354.6	224.6	9.0	1562
98.00	7.81		7.8	.64	.61	1586	354.4	225.0	5.3	1581
99.00	8.06		8.1	.63	.60	1613	354.3	225.3	1.6	1609
36300.00	7.36		7.4	.66	.63	1549	354.4	225.5	-2.2	1547
01.00	6.79		6.8	.69	.66	1493	354.6	225.7	-6.1	1491

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36302.00	6.41		6.4	-13.71	-13.67	1459	355.0	225.8	-9.9	1458
03.00	6.22		6.2	.72	.68	1445	355.6	226.0	-13.8	1444
04.00	5.14		5.1	.79	.74	1341	356.3	226.2	-17.6	1340
05.00	5.02		5.0	.80	.75	1337	357.2	226.6	-21.3	1336
36306.00	5.1		5.1	-13.80	-13.73	1356	358.4	227.1	-24.8	1355
08.00	5.3		5.3	.79	.71	1400	361.0	228.7	-31.5	1398
10.00	5.4		5.4	.79	.69	1427	363.3	231.3	-37.2	1423
12.00	5.1		5.1	.81	.70	1410	365.0	234.8	-41.6	1405
14.00	4.9		4.9	.83	.71	1396	365.9	239.3	-44.4	1389
16.00	5.1		5.1	.81	.70	1415	365.9	244.1	-45.4	1409
18.00	5.6		5.6	.78	.67	1456	365.0	248.8	-44.6	1450
20.00	6.0		6.0	.75	.66	1484	363.5	252.7	-42.0	1478
22.00	6.4		6.4	.73	.65	1508	361.5	255.5	-38.0	1502
24.00	6.4		6.4	.72	.66	1490	359.3	257.4	-32.9	1483
26.00	6.0		6.0	.74	.69	1436	357.3	258.4	-27.1	1429
28.00	5.8		5.8	.75	.71	1404	355.8	258.8	-20.9	1395
30.00	5.9		5.9	.74	.70	1406	354.9	259.0	-14.4	1393
32.00	5.9		5.9	.74	.71	1403	354.7	259.3	-8.1	1384
34.00	5.3		5.3	.78	.74	1345	355.0	260.0	-2.0	1319
36.00	5.0		5.0	.80	.76	1320	355.8	261.4	3.5	1285
38.00	5.0		5.0	.80	.75	1327	356.7	263.8	8.0	1280
40.00	4.7		4.7	.83	.77	1300	357.4	267.1	11.4	1244
42.00	4.5		4.5	.85	.79	1281	357.7	271.3	13.1	1215
44.00	4.4		4.4	.86	.80	1269	357.4	275.9	13.1	1196
46.00	4.6		4.6	.84	.79	1282	356.5	280.4	11.3	1202
48.00	5.1		5.1	.79	.76	1321	354.9	284.1	7.8	1236
50.00	5.6		5.6	.76	.72	1384	355.9	286.9	2.9	1295
52.00	6.3		6.3	.72	.68	1446	355.0	288.6	-3.0	1356
54.00	6.0		6.0	.73	.70	1413	354.5	289.5	-9.7	1330
56.00	5.4		5.4	.77	.73	1355	354.4	289.9	-16.8	1280
58.00	4.9		4.9	.80	.77	1308	355.0	290.0	-24.0	1242
60.00	4.7		4.7	.82	.77	1297	356.2	290.1	-31.2	1236
62.00	4.5		4.5	.84	.78	1289	358.0	290.7	-38.1	1231
64.00	4.3		4.3	.86	.79	1283	360.0	292.0	-44.3	1224
66.00	4.0		4.0	.90	.80	1265	362.0	294.3	-49.6	1205
68.00	3.7		3.7	.93	.82	1244	363.6	297.5	-53.6	1180
70.00	3.6		3.6	.94	.82	1240	364.7	301.7	-56.0	1168
72.00	3.3		3.3	.97	.85	1206	365.0	306.4	-56.6	1125
74.00	3.0		3.0	-14.01	.88	1169	364.5	310.9	-55.2	1079
76.00	3.9		3.9	-13.91	.80	1267	363.4	314.7	-52.1	1156
78.00	4.8		4.8	.82	.73	1357	361.7	317.5	-47.5	1225
80.00	5.4		5.4	.78	.70	1408	359.9	319.2	-41.8	1258
82.00	6.1		6.1	.73	.67	1467	358.2	320.1	-35.3	1301
84.00	6.4		6.4	.71	.66	1488	356.9	320.5	-28.3	1310
86.00	6.0		6.0	.73	.68	1441	356.2	320.6	-21.1	1261
88.00	5.8		5.8	.74	.69	1421	356.1	320.8	-14.0	1237
36389.00	5.58		5.6	-13.75	-13.71	1401	355.9	321.0	-10.5	1215
90.00	5.71		5.7	.75	.70	1412	356.2	321.4	-7.2	1221
91.00	6.02		6.0	.73	.68	1445	356.5	321.9	-4.0	1245
92.00	7.03		7.0	.68	.63	1554	357.0	322.7	-1.0	1334
93.00	7.65		7.7	.64	.60	1629	357.5	323.7	1.8	1392
94.00	6.47		6.5	.70	.65	1513	358.0	325.0	4.4	1287
95.00	5.52		5.5	.76	.70	1413	358.4	326.5	6.6	1197
96.00	5.22		5.2	.78	.72	1387	358.8	328.3	8.5	1169
97.00	4.66		4.7	.82	.75	1334	359.2	330.4	9.9	1118
98.00	4.47		4.5	.84	.76	1314	359.4	332.6	11.0	1095
99.00	4.60		4.6	.83	.75	1326	359.5	334.9	11.5	1100
36400.00	4.86		4.9	.80	.73	1358	358.9	337.4	11.6	1119

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36401.00	4.86		4.9	-13.80	-13.73	1358	358.9	339.7	11.3	1114
02.00	4.74		4.7	.82	.75	1333	358.7	341.8	10.5	1089
03.00	4.55		4.5	.83	.76	1310	358.5	343.8	9.3	1066
04.00	4.80		4.8	.81	.74	1342	358.2	345.6	7.6	1088
36412.00	6.73		6.7	-13.68	-13.63	1538	356.4	351.5	-14.4	1241
13.00	7.23		7.2	.66	.61	1593	356.6	351.6	-17.7	1288
14.00	7.35		7.4	.65	.60	1617	357.0	351.7	-21.0	1311
15.00	7.41		7.4	.65	.60	1623	357.5	351.8	-24.3	1318
16.00	7.35		7.4	.65	.59	1629	358.2	352.1	-27.5	1327
17.00	7.16		7.2	.66	.60	1616	359.0	352.4	-30.7	1320
18.00	6.79		6.8	.68	.61	1583	359.9	352.8	-33.7	1296
19.00	6.42		6.4	.71	.63	1548	360.8	353.5	-36.5	1271
20.00	6.23		6.2	.72	.64	1535	361.7	354.4	-39.2	1263
21.00	6.04		6.0	.73	.64	1522	362.7	355.5	-41.6	1254
22.00	6.17		6.2	.72	.63	1552	363.5	357.0	-43.7	1279
23.00	5.98		6.0	.74	.63	1537	364.3	358.7	-45.5	1267
24.00	5.98		6.0	.74	.63	1543	364.9	0.6	-46.9	1271
25.00	6.04		6.0	.74	.63	1548	365.4	2.8	-47.8	1274
26.00	5.98		6.0	.74	.63	1551	365.7	5.1	-48.4	1274
27.00	5.98		6.0	.74	.63	1553	365.8	7.6	-48.4	1271
28.00	5.85		5.8	.75	.64	1530	365.7	10.1	-48.0	1249
29.00	5.73		5.7	.76	.64	1517	365.4	12.5	-47.1	1233
30.00	5.71		5.7	.75	.65	1512	364.9	14.8	-45.7	1224
31.00	6.14		6.1	.73	.63	1551	364.3	16.9	-43.8	1249
32.00	6.52		6.5	.71	.61	1589	363.5	18.7	-41.6	1273
33.00	6.95		7.0	.68	.59	1634	362.6	20.3	-39.0	1303
34.00	6.95		7.0	.68	.60	1625	361.6	21.5	-36.2	1289
35.00	6.45		6.5	.70	.62	1561	360.6	22.6	-33.0	1233
36.00	6.58		6.6	.69	.62	1563	359.6	23.4	-29.6	1228
37.00	7.51		7.5	.65	.59	1650	358.6	24.0	-26.1	1290
38.00	8.56		8.6	.60	.55	1758	357.8	24.4	-22.4	1369
39.00	8.75		8.8	.59	.54	1772	357.0	24.7	-18.6	1375
40.00	9.12		9.1	.58	.54	1796	356.4	24.9	-14.7	1390
41.00	9.81		9.8	.55	.52	1863	355.9	25.1	-10.8	1439
42.00	10.30		10.3	.54	.50	1909	355.6	25.3	-6.9	1472
43.00	10.36		10.4	.53	.50	1917	355.5	25.5	-3.0	1477
44.00	9.99		10.0	.55	.51	1876	355.5	25.8	0.8	1445
45.00	9.68		9.7	.56	.52	1848	355.6	26.2	4.5	1424
46.00	9.25		9.2	.57	.54	1798	355.9	26.8	8.1	1386
47.00	9.18		9.2	.57	.54	1801	356.3	27.6	11.5	1390
48.00	9.50		9.5	.57	.53	1835	356.7	28.6	14.7	1419
49.00	10.67		10.7	.53	.49	1953	357.2	29.9	17.7	1513
50.00	10.60		10.6	.54	.49	1947	357.6	31.4	20.3	1511
51.00	10.07		10.1	.55	.51	1905	358.2	33.2	22.6	1482
52.00	9.70		9.7	.57	.52	1868	358.6	35.3	24.6	1456
53.00	9.76		9.8	.56	.51	1879	358.9	37.5	26.1	1467
54.00	9.33		9.3	.58	.53	1833	359.1	39.9	27.1	1434
55.00	9.33		9.3	.58	.53	1832	359.2	42.4	27.6	1435
56.00	9.46		9.5	.58	.52	1851	359.1	44.9	27.7	1451
57.00	9.70		9.7	.57	.52	1867	358.9	47.3	27.3	1465
58.00	9.83		9.8	.57	.51	1873	358.6	49.5	26.5	1470
59.00	10.01		10.0	.56	.51	1888	358.2	51.5	25.2	1482
60.00	10.25		10.2	.55	.51	1903	357.7	53.2	23.6	1494
61.00	10.28		10.2	.55	.51	1898	357.2	54.7	21.6	1489
62.00	10.82		10.8	.53	.49	1949	356.7	55.9	19.3	1528
63.00	11.19		11.1	.52	.49	1968	356.2	56.9	16.8	1541
64.00	10.07		10.0	.55	.52	1866	355.7	57.6	14.1	1460
65.00	8.92		8.9	.58	.55	1753	355.4	58.2	11.2	1370

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36466.00	8.71		8.7	-13.59	-13.56	1729	355.2	58.6	8.1	1350
67.00	8.71		8.7	.59	.56	1729	355.1	58.9	5.0	1350
68.00	9.44		9.4	.57	.53	1804	355.2	59.1	1.9	1408
69.00	8.84		8.8	.59	.55	1745	355.5	59.3	-1.3	1362
70.00	8.40		8.4	.60	.57	1708	355.9	59.5	-4.5	1334
71.00	9.52		9.5	.57	.53	1828	356.5	59.7	-7.7	1429
72.00	10.07		10.0	.55	.51	1882	357.3	60.1	-10.7	1474
73.00	9.52		9.5	.57	.52	1843	358.1	60.6	-13.7	1446
74.00	9.21		9.2	.59	.53	1822	359.1	61.3	-16.5	1433
75.00	8.73		8.7	.60	.54	1780	360.1	62.2	-19.1	1403
76.00	8.90		8.9	.60	.53	1809	361.1	63.4	-21.5	1431
77.00	9.83		9.8	.58	.51	1904	362.0	64.8	-23.6	1511
78.00	9.41		9.4	.59	.52	1868	362.9	66.5	-25.4	1488
79.00	8.90		8.9	.61	.53	1828	363.7	68.5	-26.8	1461
80.00	8.83		8.8	.61	.53	1823	364.3	70.7	-27.8	1462
81.00	9.01		9.0	.61	.52	1841	364.7	73.1	-28.3	1481
82.00	8.64		8.6	.62	.53	1807	364.9	75.7	-28.4	1459
83.00	8.09		8.1	.64	.55	1753	364.9	78.2	-27.9	1420
84.00	7.97		8.0	.65	.55	1740	364.7	80.7	-27.0	1413
85.00	7.72		7.7	.66	.57	1704	364.3	83.1	-25.6	1386
86.00	7.54		7.5	.66	.58	1678	363.6	85.3	-23.7	1367
87.00	7.66		7.7	.65	.57	1690	362.8	87.2	-21.5	1379
88.00	7.66		7.7	.65	.58	1680	361.9	88.8	-18.8	1372
89.00	7.85		7.8	.65	.58	1679	360.8	90.2	-15.9	1373
90.00	8.02		8.0	.64	.58	1678	359.3	91.3	-12.6	1373
91.00	8.14		8.1	.63	.58	1679	358.3	92.1	-9.2	1374
92.00	8.32		8.3	.62	.57	1690	357.4	92.7	-5.6	1384
93.00	9.98		10.0	.56	.52	1846	356.5	93.1	-1.8	1513
94.00	8.63		8.6	.60	.57	1702	355.6	93.4	2.0	1396
95.00	8.75		8.8	.59	.56	1713	354.9	93.7	6.0	1407
96.00	9.85		9.9	.56	.53	1810	354.2	93.8	9.9	1488
97.00	10.28		10.3	.54	.52	1842	353.7	94.0	13.9	1518
98.00	9.06		9.1	.58	.56	1721	353.3	94.1	17.8	1421
99.00	9.61		9.6	.57	.55	1762	353.0	94.4	21.7	1460
36500.00	9.55		9.5	.57	.55	1748	352.8	94.8	25.4	1453
01.00	9.14		9.1	.58	.57	1708	352.7	95.4	29.0	1426
02.00	9.01		9.0	.59	.57	1696	352.7	96.1	32.5	1422
03.00	8.77		8.8	.60	.58	1672	352.7	97.1	35.7	1409
04.00	8.47		8.5	.61	.59	1640	352.7	98.4	38.6	1390
05.00	8.40		8.4	.61	.60	1628	352.6	99.9	41.2	1387
06.00	8.40		8.4	.61	.60	1625	352.6	101.7	43.5	1392
07.00	8.47		8.5	.61	.59	1631	352.4	103.7	45.3	1405
08.00	8.47		8.5	.61	.60	1627	352.2	106.0	46.7	1408
09.00	8.53		8.5	.61	.60	1623	351.9	108.4	47.6	1411
10.00	8.40		8.4	.61	.60	1608	351.5	110.8	48.1	1405
11.00	7.84		7.8	.64	.63	1546	350.9	113.2	48.0	1355
12.00	7.48		7.5	.65	.65	1511	350.3	115.6	47.4	1329
13.00	6.63		6.6	.69	.70	1420	349.6	117.7	46.4	1252
14.00	6.93		6.9	.67	.68	1442	348.9	119.6	45.0	1273
15.00	6.81		6.8	.68	.69	1426	348.1	121.2	43.1	1261
16.00	6.69		6.7	.68	.70	1412	347.4	122.6	41.0	1249
17.00	6.69		6.7	.68	.70	1407	346.7	123.6	38.5	1244
18.00	6.75		6.7	.68	.71	1403	346.2	124.5	35.8	1240
19.00	6.81		6.8	.67	.70	1409	345.8	125.1	32.8	1243
20.00	6.75		6.7	.67	.71	1400	345.5	125.5	29.7	1233
21.00	5.96		6.0	.71	.75	1334	345.4	125.7	26.5	1173
22.00	5.23		5.2	.77	.80	1263	345.6	125.9	23.2	1108
23.00	5.35		5.4	.75	.78	1283	346.0	126.0	19.8	1124
24.00	5.72		5.7	.73	.76	1317	346.6	126.1	16.4	1151
25.00	5.84		5.8	.73	.75	1334	347.4	126.2	13.1	1163

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36526.00	5.72		5.7	-13.74	-13.75	1333	348.4	126.4	9.7	1161
27.00	5.35		5.3	.77	.77	1304	349.6	126.7	6.5	1133
28.00	5.11		5.1	.78	.78	1295	351.0	127.1	3.4	1124
29.00	5.29		5.3	.77	.75	1327	352.4	127.8	0.4	1151
30.00	5.84		5.8	.74	.71	1392	353.8	128.7	-2.3	1207
31.00	6.02		6.0	.73	.69	1422	355.3	129.9	-4.8	1234
32.00	6.32		6.3	.72	.67	1464	356.7	131.3	-7.0	1272
33.00	6.38		6.4	.72	.66	1485	358.0	133.0	-8.8	1292
34.00	6.38		6.4	.72	.65	1495	359.2	135.0	-10.2	1304
35.00	6.51		6.5	.72	.64	1514	360.2	137.3	-11.2	1324
36.00	6.51		6.5	.72	.64	1521	361.0	139.6	-11.7	1334
37.00	6.51		6.5	.72	.64	1526	361.5	142.1	-11.7	1343
38.00	6.44		6.4	.73	.64	1518	361.8	144.5	-11.2	1341
39.00	6.46		6.5	.72	.64	1529	361.9	146.8	-10.2	1356
40.00	6.44		6.4	.73	.64	1517	361.7	149.0	-8.8	1351
41.00	6.63		6.6	.71	.64	1534	361.4	150.9	-6.9	1373
42.00	6.63		6.6	.71	.64	1529	360.8	152.5	-4.6	1374
43.00	6.44		6.4	.72	.65	1501	360.1	153.8	-2.0	1354
44.00	5.90		5.9	.75	.68	1445	359.3	154.9	0.9	1309
45.00	5.84		5.8	.75	.69	1427	358.4	155.6	4.0	1298
46.00	5.59		5.6	.76	.71	1400	357.6	156.2	7.3	1278
47.00	5.53		5.5	.77	.72	1382	356.7	156.5	10.8	1266
48.00	5.65		5.6	.76	.72	1385	355.9	156.7	14.4	1273
49.00	5.96		5.9	.74	.70	1407	355.1	156.8	18.1	1297
50.00	6.09		6.1	.73	.70	1420	354.5	156.9	21.8	1313
51.00	6.48		6.5	.70	.68	1453	354.0	156.9	25.5	1347
52.00	6.06		6.1	.73	.70	1410	353.6	156.9	29.2	1310
53.00	6.00		6.0	.73	.71	1398	353.3	157.0	32.8	1302
54.00	5.88		5.9	.74	.72	1386	353.2	157.2	36.3	1294
55.00	5.76		5.8	.75	.72	1375	353.1	157.6	39.7	1287
56.00	5.39		5.4	.77	.75	1334	353.1	158.2	42.9	1252
57.00	5.27		5.2	.79	.76	1313	353.2	159.0	45.9	1236
58.00	4.67		4.7	.83	.80	1264	353.2	160.0	48.6	1193
36569.00	4.45		4.4	-13.84	-13.85	1204	349.3	181.7	50.1	1169
70.00	4.45		4.4	.84	.85	1199	348.5	183.1	47.6	1165
71.00	4.76		4.8	.81	.83	1234	347.9	184.1	44.7	1200
72.00	5.13		5.1	.79	.81	1257	347.3	184.9	41.6	1222
73.00	5.61		5.6	.75	.77	1299	346.9	185.4	38.3	1263
74.00	6.03		6.0	.72	.75	1334	346.6	185.8	34.8	1295
75.00	6.03		6.0	.72	.75	1334	346.6	186.0	31.2	1294
76.00	6.03		6.0	.72	.75	1335	346.7	186.1	27.5	1294
77.00	6.03		6.0	.72	.74	1339	347.1	186.1	23.7	1295
78.00	5.97		6.0	.72	.74	1344	347.7	186.2	19.9	1297
79.00	5.85		5.8	.74	.75	1333	348.5	186.2	16.1	1283
80.00	5.61		5.6	.75	.76	1322	349.5	186.4	12.4	1270
81.00	4.88		4.9	.80	.80	1265	350.7	186.6	8.7	1212
82.00	4.82		4.8	.81	.80	1266	352.0	187.1	5.2	1209
83.00	4.16		4.2	.87	.84	1219	353.4	187.7	1.8	1162
84.00	4.10		4.1	.88	.84	1219	354.9	188.6	-1.4	1160
85.00	4.22		4.2	.87	.82	1241	356.3	189.8	-4.3	1178
86.00	4.04		4.0	.89	.83	1230	357.8	191.2	-6.8	1166
87.00	4.10		4.1	.89	.81	1250	359.1	193.0	-9.1	1184
88.00	4.34		4.3	.87	.79	1277	360.2	195.0	-10.9	1210
89.00	4.22		4.2	.88	.79	1274	361.2	197.3	-12.3	1208
90.00	4.22		4.2	.88	.79	1279	361.9	199.7	-13.2	1214
91.00	4.16		4.2	.88	.79	1283	362.5	202.2	-13.5	1220
92.00	4.28		4.3	.87	.77	1296	362.7	204.6	-13.4	1236
93.00	4.34		4.3	.87	.77	1296	362.8	207.0	-12.8	1240

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36594.00	4.40		4.4	-13.87	-13.77	1306	362.6	209.2	-11.7	1254
95.00	5.00		5.0	.82	.73	1364	362.2	211.1	-10.2	1315
96.00	5.13		5.1	.81	.73	1371	361.6	212.8	-8.2	1327
97.00	5.37		5.4	.79	.71	1398	360.9	214.2	-6.0	1359
98.00	5.43		5.4	.79	.71	1390	360.0	215.3	-3.4	1358
99.00	5.54		5.5	.78	.71	1393	359.1	216.1	-0.6	1366
36600.00	5.09		5.1	.80	.74	1342	358.2	216.7	2.4	1321
01.00	4.74		4.7	.83	.77	1296	357.3	217.1	5.5	1280
02.00	5.19		5.2	.79	.74	1339	356.5	217.4	8.8	1326
03.00	5.73		5.7	.76	.72	1383	355.7	217.6	12.1	1373
04.00	5.83		5.8	.75	.72	1388	355.1	217.7	15.5	1380
05.00	5.29		5.3	.78	.75	1333	354.5	217.8	18.8	1327
06.00	4.87		4.9	.81	.78	1291	354.1	217.9	22.2	1286
07.00	4.45		4.4	.85	.82	1240	353.8	218.2	25.4	1236
08.00	4.45		4.4	.85	.82	1239	353.6	218.5	28.6	1235
09.00	4.57		4.6	.84	.81	1256	353.6	219.0	31.6	1252
10.00	4.67		4.7	.83	.80	1264	353.5	219.8	34.4	1261
11.00	4.85		4.8	.82	.80	1261	352.1	220.7	37.0	1258
12.00	4.55		4.6	.84	.82	1246	352.5	222.0	39.3	1242
13.00	4.35		4.4	.85	.83	1230	352.9	223.5	41.3	1226
14.00	4.86		4.9	.81	.79	1279	353.3	225.4	42.9	1274
15.00	5.23		5.2	.79	.76	1310	353.7	227.5	44.1	1305
16.00	4.94		4.9	.82	.79	1283	353.9	229.8	44.8	1278
17.00	4.30		4.3	.86	.83	1228	354.1	232.2	45.1	1222
18.00	3.85		3.8	.91	.88	1175	354.2	234.7	44.8	1169
19.00	3.86		3.9	.90	.87	1185	354.1	237.2	44.0	1179
20.00	3.89		3.9	.90	.87	1183	353.9	239.6	42.8	1178
21.00	3.97		4.0	.89	.86	1192	353.6	241.8	41.0	1187
22.00	4.06		4.1	.88	.85	1200	353.3	243.8	38.8	1196
23.00	4.07		4.1	.88	.86	1197	352.9	245.4	36.2	1194
24.00	4.82		4.8	.82	.80	1263	352.5	246.8	33.3	1260
25.00	5.44		5.4	.78	.76	1318	352.1	247.9	30.1	1315
26.00	5.59		5.6	.76	.75	1335	351.8	248.8	26.6	1332
27.00	5.55		5.6	.76	.75	1333	351.5	249.4	23.0	1331
28.00	5.17		5.2	.79	.78	1295	351.4	249.9	19.2	1293
29.00	4.95		5.0	.80	.79	1277	351.5	250.2	15.2	1275
30.00	4.70		4.7	.82	.81	1251	351.7	250.5	11.2	1249
36632.00	4.5		4.5	-13.84	-13.82	1239	352.6	250.9	3.1	1236
34.00	4.3		4.3	.86	.83	1230	354.1	251.4	-4.9	1225
36.00	4.1		4.1	.88	.83	1223	356.1	252.6	-12.5	1214
38.00	4.0		4.0	.90	.83	1227	358.3	254.6	-19.4	1213
40.00	4.1		4.1	.89	.81	1249	360.2	257.7	-25.0	1229
42.00	4.2		4.2	.89	.80	1267	361.5	262.0	-29.2	1240
44.00	4.3		4.3	.88	.79	1280	362.1	267.1	-31.5	1247
46.00	4.5		4.5	.86	.77	1298	361.7	272.4	-31.7	1260
48.00	4.8		4.8	.84	.76	1319	360.4	277.1	-29.9	1276
50.00	5.1		5.1	.81	.75	1335	358.5	280.8	-26.3	1287
36651.00	5.18		5.2	-13.80	-13.75	1337	357.4	282.2	-24.1	1288
52.00	5.39		5.4	.78	.74	1348	356.2	283.3	-21.5	1297
53.00	5.54		5.5	.78	.74	1350	355.1	284.2	-18.7	1298
36653.25	6.22		6.2	-13.73	-13.70	1415	354.8	284.4	-18.0	1360
53.50	6.22		6.2	.73	.70	1412	354.5	284.5	-17.2	1357
53.75	7.17		7.2	.68	.65	1506	354.3	284.7	-16.5	1447
54.00	8.13		8.1	.64	.61	1588	354.0	284.8	-15.7	1525
54.25	12.97		13.0	.47	.45	2103	353.7	285.0	-14.9	2020
54.50	11.06		11.1	.53	.51	1873	353.5	285.1	-14.2	1799
54.75	7.23		7.2	.68	.65	1498	353.2	285.2	-13.4	1438

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36655.00	7.23		7.2	-13.68	-13.66	1496	353.0	285.3	-12.6	1435
36656.0	5.44		5.4	-13.77	-13.76	1319	352.1	285.6	-9.4	1265
57.0	5.38		5.4	.77	.76	1313	351.4	285.9	-6.1	1259
58.0	5.38		5.4	.77	.77	1309	350.9	286.1	-2.8	1253
59.0	5.38		5.4	.77	.77	1305	350.6	286.3	0.5	1249
60.0	5.56		5.6	.76	.76	1323	350.4	286.6	3.8	1264
61.0	5.62		5.6	.76	.76	1322	350.4	287.0	6.9	1261
62.0	5.56		5.6	.76	.76	1323	350.6	287.6	10.0	1259
63.0	4.96		5.0	.80	.80	1267	350.9	288.3	12.9	1203
64.0	4.66		4.7	.83	.82	1243	351.3	289.3	15.6	1176
65.0	5.26		5.3	.78	.77	1301	351.7	290.5	18.0	1226
66.0	5.44		5.4	.78	.76	1314	352.2	292.0	20.1	1232
67.0	6.04		6.0	.74	.72	1376	352.7	293.8	21.9	1283
36668.0	6.4		6.4	-13.72	-13.70	1416	353.1	295.8	23.2	1313
70.0	6.3		6.3	.73	.70	1412	353.6	300.6	24.6	1293
72.0	6.3		6.3	.73	.70	1415	353.7	305.8	23.9	1279
74.0	6.4		6.4	.72	.69	1425	353.4	310.6	21.3	1271
76.0	6.6		6.6	.70	.68	1441	352.7	314.5	16.8	1274
78.0	6.7		6.7	.69	.68	1447	351.9	317.3	10.9	1270
80.0	6.6		6.6	.70	.69	1435	351.2	319.0	3.9	1254
82.0	7.0		7.0	.67	.66	1474	351.0	319.9	-3.7	1288
84.0	7.6		7.6	.64	.63	1538	351.4	320.4	-11.7	1345
86.0	7.5		7.5	.65	.63	1540	352.5	320.8	-19.7	1350
88.0	7.1		7.1	.67	.64	1517	354.2	321.5	-27.5	1333
90.0	6.5		6.5	.71	.66	1476	356.3	322.8	-34.8	1299
92.0	5.9		5.9	.75	.69	1434	358.3	325.2	-41.1	1261
94.0	5.6		5.6	.77	.70	1418	360.0	328.7	-46.1	1243
96.0	5.8		5.8	.76	.68	1447	361.0	333.3	-49.4	1260
98.0	6.2		6.2	.74	.66	1489	361.1	338.5	-50.6	1284
36700.0	6.8		6.8	.70	.63	1546	360.2	343.6	-49.7	1318
02.0	6.9		6.9	.69	.63	1543	358.5	347.8	-46.8	1299
04.0	7.0		7.0	.68	.64	1535	356.3	350.9	-42.4	1276
06.0	7.1		7.1	.67	.64	1524	353.9	352.9	-36.7	1253
08.0	7.0		7.0	.67	.66	1492	351.6	353.9	-30.3	1215
10.0	7.0		7.0	.66	.66	1476	349.8	354.4	-23.4	1192
12.0	6.9		6.9	.67	.67	1455	348.8	354.7	-16.3	1168
14.0	6.8		6.8	.67	.68	1442	348.4	355.2	-9.4	1152
36715.0	6.27		6.3	-13.70	-13.70	1420	350.9	355.4	-6.1	1131
16.0	5.85		5.8	.73	.72	1376	351.2	356.0	-3.0	1094
17.0	5.30		5.3	.77	.75	1326	351.6	356.9	-0.1	1052
18.0	5.23		5.2	.77	.76	1320	352.1	358.0	2.6	1045
19.0	5.34		5.3	.77	.75	1334	352.5	359.4	5.0	1054
20.0	5.68		5.7	.74	.72	1381	353.0	1.1	7.1	1089
21.0	5.97		6.0	.72	.70	1413	353.4	3.0	8.7	1111
22.0	6.13		6.1	.72	.69	1425	353.6	5.2	9.9	1117
23.0	6.13		6.1	.72	.69	1427	353.8	7.6	10.6	1116
24.0	5.76		5.8	.74	.71	1400	353.9	10.2	10.8	1092
25.0	5.87		5.9	.73	.70	1409	353.8	12.7	10.5	1096
26.0	6.10		6.1	.72	.69	1426	353.6	15.1	9.6	1107
27.0	6.26		6.3	.71	.68	1442	353.3	17.4	8.3	1117
28.0	6.38		6.4	.70	.68	1448	352.9	19.4	6.5	1119
29.0	6.49		6.5	.69	.68	1453	352.4	21.1	4.3	1122
30.0	6.71		6.7	.68	.67	1469	351.9	22.6	1.7	1133
31.0	6.71		6.7	.68	.67	1464	351.3	23.7	-1.2	1129
32.0	6.64		6.6	.68	.68	1450	350.9	24.6	-4.3	1118
33.0	6.75		6.7	.68	.67	1457	350.5	25.3	-7.7	1124
34.0	6.74		6.7	.68	.68	1455	350.3	25.7	-11.2	1124

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36735.0	6.91		6.9	-13.67	-13.66	1474	350.1	26.0	-14.8	1141
36.0	7.13		7.1	.66	.65	1495	350.2	26.2	-18.6	1160
37.0	6.94		6.9	.67	.66	1477	350.5	26.3	-22.3	1150
38.0	6.93		6.9	.67	.66	1481	350.9	26.5	-26.1	1157
39.0	6.68		6.7	.68	.67	1466	351.5	26.6	-29.9	1151
40.0	6.61		6.6	.69	.67	1463	352.3	26.8	-33.5	1154
41.0	6.54		6.5	.70	.67	1460	353.2	27.2	-37.1	1158
42.0	6.41		6.4	.70	.67	1459	354.2	27.8	-40.5	1163
43.0	6.28		6.3	.71	.67	1458	355.2	28.6	-43.7	1168
44.0	6.21		6.2	.72	.67	1456	356.3	29.6	-46.7	1173
45.0	5.90		5.9	.74	.69	1434	357.3	31.0	-49.4	1160
46.0	5.43		5.4	.77	.71	1392	358.3	32.6	-51.7	1131
47.0	6.42		6.4	.72	.65	1498	359.1	34.6	-53.6	1222
48.0	6.69		6.7	.70	.64	1534	359.8	36.8	-55.0	1256
49.0	6.15		6.2	.73	.66	1486	360.2	39.2	-56.0	1219
50.0	5.37		5.4	.78	.70	1406	360.4	41.8	-56.4	1155
51.0	4.96		5.0	.81	.73	1365	360.4	44.4	-56.2	1122
52.0	4.94		4.9	.81	.74	1352	360.2	47.0	-55.5	1111
53.0	4.94		4.9	.81	.74	1348	359.8	49.3	-54.3	1107
54.0	4.99		5.0	.81	.73	1354	359.1	51.5	-52.6	1109
55.0	4.99		5.0	.80	.74	1347	358.3	53.4	-50.5	1100
56.0	5.45		5.5	.77	.71	1393	357.4	54.9	-47.9	1134
57.0	5.44		5.4	.77	.72	1375	356.4	56.2	-45.1	1115
58.0	5.32		5.3	.77	.73	1357	355.4	57.2	-41.9	1095
59.0	5.61		5.6	.75	.72	1380	354.4	57.9	-38.5	1109
60.0	6.12		6.1	.72	.69	1421	353.5	58.4	-34.9	1136
61.0	6.11		6.1	.72	.70	1415	352.6	58.8	-31.2	1126
62.0	6.11		6.1	.72	.70	1410	352.0	59.0	-27.3	1117
63.0	6.23		6.2	.71	.70	1415	351.4	59.2	-23.5	1116
64.0	7.29		7.3	.65	.64	1518	351.1	59.3	-19.5	1194
65.0	8.23		8.2	.61	.61	1603	350.9	59.4	-15.6	1257
66.0	7.76		7.8	.63	.62	1565	351.0	59.7	-11.8	1225
67.0	7.48		7.5	.64	.63	1537	351.2	60.0	-8.1	1201
68.0	7.13		7.1	.66	.65	1500	351.5	60.6	-4.5	1171
69.0	6.78		6.8	.68	.67	1473	351.9	61.3	-1.0	1151
70.0	6.14		6.1	.72	.70	1411	352.4	62.3	2.2	1103
71.0	5.62		5.6	.75	.73	1365	353.0	63.6	5.1	1069
72.0	5.63		5.6	.75	.73	1368	353.5	65.2	7.7	1074
73.0	5.63		5.6	.76	.72	1372	354.0	67.1	9.9	1079
74.0	5.64		5.6	.76	.72	1374	354.4	69.2	11.6	1085
75.0	5.71		5.7	.75	.72	1386	354.7	71.6	12.9	1098
76.0	5.25		5.3	.78	.74	1344	354.9	74.1	13.7	1068
77.0	5.08		5.1	.79	.76	1323	354.9	76.7	14.0	1055
78.0	4.98		5.0	.80	.76	1311	354.8	79.3	13.7	1049
79.0	4.99		5.0	.80	.77	1309	354.6	81.7	12.9	1050
80.0	4.82		4.8	.82	.78	1287	354.3	83.9	11.6	1036
81.0	5.08		5.1	.79	.76	1313	353.9	85.8	9.9	1060
82.0	5.44		5.4	.77	.74	1341	353.4	87.5	7.8	1085
83.0	5.27		5.3	.78	.75	1327	353.0	88.8	5.4	1076
84.0	4.99		5.0	.80	.78	1293	352.5	89.9	2.6	1051
85.0	5.00		5.0	.80	.78	1291	352.2	90.7	-0.3	1051
86.0	5.14		5.1	.79	.78	1289	351.1	91.3	-3.5	1052
87.0	5.49		5.5	.76	.75	1326	350.8	91.8	-6.8	1084
88.0	5.19		5.2	.78	.77	1296	350.7	92.1	-10.2	1062
89.0	4.89		4.9	.80	.80	1268	350.8	92.3	-13.7	1041
90.0	4.89		4.9	.80	.80	1270	351.1	92.5	-17.2	1045
91.0	4.70		4.7	.82	.81	1256	351.6	92.8	-20.7	1036
92.0	4.29		4.3	.85	.84	1221	352.3	93.1	-24.1	1011
93.0	4.40		4.4	.85	.82	1238	353.1	93.5	-27.5	1028
94.0	4.68		4.7	.83	.79	1271	354.1	94.1	-30.7	1060

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36795.0	4.84		4.8	-13.82	-13.78	1288	355.2	94.9	-33.7	1079
96.0	5.07		5.1	.80	.75	1326	356.3	96.0	-36.4	1117
97.0	4.89		4.9	.82	.76	1314	357.5	97.4	-38.9	1112
98.0	4.46		4.5	.85	.79	1279	358.5	99.1	-41.1	1088
99.0	4.16		4.2	.88	.81	1256	359.5	101.1	-42.8	1074
36800.0	3.97		4.0	.90	.82	1241	360.3	103.3	-44.2	1066
01.0	4.18		4.2	.89	.80	1264	360.9	105.9	-45.0	1091
02.0	4.30		4.3	.88	.79	1277	361.3	108.5	-45.2	1107
03.0	4.46		4.5	.86	.77	1300	361.5	111.3	-45.0	1132
04.0	4.74		4.7	.85	.76	1320	361.5	114.0	-44.2	1153
05.0	4.78		4.8	.84	.75	1327	361.2	116.5	-42.8	1163
06.0	4.76		4.8	.84	.75	1325	360.7	118.9	-40.9	1163
07.0	4.51		4.5	.86	.78	1291	360.1	121.0	-38.6	1135
08.0	4.44		4.4	.86	.79	1275	359.3	122.7	-35.9	1122
09.0	4.48		4.5	.85	.79	1280	358.4	124.2	-32.8	1126
10.0	5.11		5.1	.80	.75	1333	357.5	125.3	-29.5	1173
11.0	5.39		5.4	.78	.73	1357	356.5	126.2	-25.8	1194
12.0	5.66		5.7	.76	.72	1380	355.7	126.9	-22.0	1214
13.0	5.71		5.7	.76	.72	1374	354.9	127.4	-18.1	1207
14.0	5.86		5.9	.75	.71	1388	354.2	127.8	-14.0	1219
15.0	6.03		6.0	.74	.71	1393	353.6	128.0	-9.9	1222
16.0	5.49		5.5	.77	.74	1341	353.2	128.3	-5.7	1176
17.0	4.96		5.0	.80	.78	1290	353.0	128.6	-1.6	1131
18.0	4.30		4.3	.86	.84	1223	352.9	128.9	2.5	1072
19.0	3.94		3.9	.90	.87	1179	353.0	129.3	6.5	1035
20.0	3.99		4.0	.89	.86	1190	353.2	129.9	10.4	1046
21.0	4.15		4.2	.87	.84	1213	353.5	130.8	14.0	1067
22.0	4.19		4.2	.87	.84	1214	353.8	131.9	17.5	1071
23.0	4.06		4.1	.88	.85	1205	354.2	133.2	20.6	1066
24.0	4.06		4.1	.89	.85	1207	354.5	134.9	23.5	1071
25.0	4.09		4.1	.89	.85	1208	354.8	136.8	25.9	1076
26.0	4.02		4.0	.90	.86	1197	355.0	139.1	27.9	1071
27.0	3.89		3.9	.91	.87	1186	355.1	141.6	29.5	1066
28.0	4.23		4.2	.88	.84	1218	355.0	144.2	30.5	1100
29.0	4.62		4.6	.85	.81	1254	354.8	146.9	30.9	1138
30.0	5.01		5.0	.81	.78	1289	354.4	149.6	30.9	1176
31.0	4.93		4.9	.82	.79	1276	353.9	152.1	30.3	1169
32.0	4.86		4.9	.82	.79	1271	353.3	154.5	29.2	1170
33.0	4.55		4.5	.85	.83	1229	352.6	156.5	27.6	1135
34.0	4.41		4.4	.86	.84	1215	351.8	158.3	25.6	1126
35.0	4.91		4.9	.82	.81	1256	351.0	159.8	23.3	1168
36.0	5.59		5.6	.76	.76	1315	350.3	160.9	20.7	1226
37.0	4.93		4.9	.81	.81	1248	349.7	161.8	17.9	1165
38.0	4.38		4.4	.85	.86	1197	349.1	162.5	14.8	1119
39.0	4.24		4.2	.87	.88	1175	348.7	163.0	11.6	1100
40.0	4.21		4.2	.87	.88	1175	348.5	163.4	8.3	1100
41.0	4.24		4.2	.87	.88	1175	348.6	163.7	4.9	1100
42.0	4.26		4.3	.86	.87	1186	348.8	164.0	1.5	1111
43.0	4.29		4.3	.86	.86	1189	349.2	164.2	-1.9	1114
44.0	4.32		4.3	.86	.86	1193	349.8	164.6	-5.3	1118
45.0	4.47		4.5	.84	.84	1218	350.6	165.1	-8.6	1141
46.0	4.44		4.4	.85	.84	1214	351.5	165.7	-11.7	1138
47.0	3.93		3.9	.90	.88	1170	352.5	166.6	-14.6	1097
48.0	3.44		3.4	.96	.93	1127	353.6	167.7	-17.4	1057
49.0	2.93		2.9	-14.02	.98	1077	354.6	169.1	-19.8	1012
50.0	2.55		2.5	.08	-14.03	1037	355.6	170.8	-21.9	974
36865.0	3.70		3.7	-13.92	-13.91	1140	351.1	199.1	2.1	1117
66.0	3.66		3.7	.92	.92	1135	350.4	199.4	6.2	1114

Table 9.--Continued

SATELLITE 1962 ALPHA

MJD	$-10^6\,\dot{P}$	$\dot{P}_R$	$-10^6\,\dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
36867.0	3.87		3.9	-13.90	-13.90	1151	349.8	199.6	10.4	1131
68.0	3.77		3.8	.91	.91	1139	349.4	199.8	14.5	1120
69.0	3.57		3.6	.93	.94	1118	349.2	200.0	18.7	1101
70.0	3.48		3.5	.94	.95	1107	349.1	200.3	22.7	1091
71.0	3.45		3.4	.95	.96	1096	349.2	200.8	26.7	1081
72.0	3.70		3.7	.92	.93	1127	349.4	201.4	30.5	1112
73.0	5.02		5.0	.81	.81	1251	349.7	202.2	34.1	1235
74.0	4.76		4.8	.83	.83	1233	350.0	203.3	37.5	1219
75.0	4.10		4.1	.89	.89	1166	350.0	204.7	40.5	1154
76.0	3.63		3.6	.94	.93	1119	350.3	206.4	43.2	1108
77.0	3.37		3.4	.96	.95	1101	350.6	208.4	45.5	1091
36887.0	3.09		3.1	-13.99	-14.00	1061	348.8	230.2	40.6	1061
88.0	3.88		3.9	.90	-13.91	1140	348.5	231.1	37.8	1140
89.0	3.70		3.7	.92	.93	1119	348.2	231.8	34.7	1119
90.0	3.86		3.9	.90	.92	1138	348.0	232.3	31.4	1138
91.0	3.86		3.9	.90	.91	1139	348.1	232.6	28.0	1138
92.0	3.32		3.3	.96	.98	1081	348.3	232.8	24.5	1079
93.0	3.38		3.4	.95	.96	1093	348.7	232.9	21.0	1090
94.0	3.32		3.3	.96	.97	1087	349.3	233.0	17.4	1081
95.0	3.66		3.7	.92	.92	1132	350.0	233.2	13.8	1123
96.0	3.41		3.4	.95	.95	1108	351.0	233.4	10.3	1096
97.0	3.52		3.5	.95	.93	1125	352.1	233.7	6.9	1109
98.0	3.29		3.3	.97	.94	1111	353.2	234.3	3.6	1092
99.0	3.63		3.6	.94	.90	1150	354.5	235.1	0.5	1125
36900.0	4.02		4.0	.90	.86	1198	355.7	236.1	-2.3	1167
01.0	4.07		4.1	.90	.84	1215	356.8	237.5	-4.8	1179
02.0	3.66		3.7	.94	.87	1182	357.9	239.1	-7.0	1142
03.0	3.48		3.5	.96	.89	1166	358.8	241.1	-8.8	1123
04.0	3.60		3.6	.95	.87	1181	359.5	243.3	-10.1	1134
05.0	4.00		4.0	.91	.83	1225	359.9	245.8	-10.8	1174
06.0	4.23		4.2	.89	.81	1248	360.1	248.4	-11.1	1194
07.0	3.70		3.7	.94	.86	1194	360.1	251.0	-10.8	1142
08.0	3.53		3.5	.96	.88	1171	359.8	253.5	-9.9	1120
09.0	3.52		3.5	.96	.89	1167	359.2	255.8	-8.6	1118
10.0	3.24		3.2	.99	.92	1131	358.5	257.9	-6.7	1085
11.0	3.45		3.5	.96	.90	1156	357.5	259.7	-4.4	1111
12.0	3.57		3.6	.95	.89	1159	356.4	261.2	-1.7	1117
13.0	3.58		3.6	.95	.90	1152	355.3	262.3	1.3	1114
14.0	3.58		3.6	.94	.91	1144	354.1	263.2	4.6	1110
15.0	3.36		3.4	.96	.94	1117	352.9	263.8	8.0	1087
16.0	3.41		3.4	.96	.94	1110	351.8	264.2	11.7	1084
17.0	3.25		3.2	.98	.97	1083	350.8	264.5	15.5	1061
18.0	3.19		3.2	.98	.98	1078	349.9	264.6	19.3	1059
19.0	3.09		3.1	.99	-14.00	1063	349.3	264.7	23.2	1047
20.0	2.81		2.8	-14.03	.04	1028	348.8	264.7	27.1	1015
21.0	2.60		2.6	.06	.07	1005	348.5	264.9	30.9	993
22.0	2.61		2.6	.06	.07	1004	348.3	265.1	34.6	993
23.0	2.23		2.2	.12	.14	958	348.4	265.4	38.2	948
24.0	2.42		2.4	.09	.10	981	348.6	266.0	41.7	971
25.0	3.02		3.0	.01	.02	1047	348.9	266.8	44.9	1036
26.0	3.39		3.4	-13.96	-13.97	1089	349.2	267.9	47.8	1077
27.0	3.41		3.4	.96	.97	1090	349.6	269.3	50.4	1077
28.0	3.61		3.6	.94	.94	1111	349.9	271.0	52.6	1097
29.0	3.81		3.8	.92	.92	1132	350.2	273.0	54.3	1114
30.0	3.84		3.8	.92	.92	1132	350.4	275.2	55.6	1112
31.0	3.47		3.5	.96	.95	1103	350.5	277.7	56.3	1080
32.0	3.04		3.0	-14.02	-14.01	1051	350.5	280.2	56.5	1027
33.0	3.07		3.1	.00	.00	1061	350.4	282.7	56.1	1032

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36934.0	3.40		3.4	-13.97	-13.97	1090	350.1	285.1	55.1	1057
35.0	4.01		4.0	.90	.91	1147	349.8	287.3	53.7	1108
36.0	4.39		4.4	.87	.87	1182	349.4	289.2	51.7	1137
37.0	4.60		4.6	.85	.86	1198	348.9	290.9	49.3	1148
38.0	4.70		4.7	.84	.85	1205	348.4	292.2	46.6	1151
39.0	5.21		5.2	.80	.81	1249	348.0	293.2	43.5	1188
40.0	5.43		5.4	.78	.80	1265	347.6	294.0	40.1	1200
41.0	5.01		5.0	.81	.83	1228	347.4	294.5	36.6	1162
42.0	4.70		4.7	.83	.85	1201	347.3	294.9	32.8	1134
43.0	4.23		4.2	.87	.90	1157	347.3	295.1	29.0	1089
44.0	4.22		4.2	.87	.89	1159	347.6	295.2	25.0	1088
45.0	4.14		4.1	.88	.90	1153	348.1	295.3	21.0	1080
46.0	3.95		4.0	.89	.90	1148	348.7	295.4	17.1	1073
47.0	3.88		3.9	.90	.91	1144	349.5	295.5	13.1	1066
48.0	3.93		3.9	.91	.90	1151	350.5	295.8	9.2	1068
49.0	3.86		3.9	.91	.90	1157	351.6	296.3	5.5	1070
50.0	3.73		3.7	.93	.91	1145	352.7	297.0	1.9	1054
51.0	4.23		4.2	.88	.85	1203	353.9	298.0	-1.4	1101
52.0	3.82		3.8	.92	.88	1169	355.0	299.2	-4.5	1065
53.0	3.58		3.6	.95	.90	1156	356.0	300.8	-7.2	1047
54.0	4.26		4.3	.88	.83	1234	356.9	302.8	-9.5	1111
55.0	4.46		4.5	.86	.80	1259	357.6	305.0	-11.4	1126
56.0	4.36		4.4	.88	.81	1255	358.6	307.4	-12.8	1115
57.0	4.36		4.4	.87	.81	1257	358.8	310.0	-13.6	1110
58.0	5.92		5.9	.77	.71	1403	358.7	312.7	-13.9	1231
59.0	4.84		4.8	.84	.78	1295	358.3	315.3	-13.6	1130
60.0	5.49		5.5	.79	.73	1359	357.8	317.8	-12.8	1179
61.0	6.36		6.4	.73	.68	1440	357.0	320.1	-11.5	1243
62.0	6.33		6.3	.74	.69	1426	356.1	322.0	-9.7	1226
63.0	6.46		6.5	.72	.69	1437	355.1	323.7	-7.5	1231
64.0	6.42		6.4	.72	.69	1421	354.0	325.0	-5.0	1215
65.0	7.01		7.0	.69	.67	1465	352.8	326.1	-2.2	1251
66.0	7.09		7.1	.68	.67	1466	351.7	326.9	0.9	1251
67.0	7.69		7.7	.65	.65	1511	350.7	327.4	4.2	1289
68.0	7.54		7.5	.66	.66	1486	349.8	327.8	7.6	1268
69.0	7.34		7.3	.66	.67	1463	349.1	328.1	11.1	1250
70.0	7.94		7.9	.64	.65	1511	348.5	328.3	14.6	1293
71.0	5.18		5.2	.78	.80	1268	348.2	328.5	18.2	1086
72.0	4.99		5.0	.80	.81	1249	348.0	328.7	21.7	1072
73.0	5.37		5.4	.77	.78	1284	348.0	329.0	25.1	1104
74.0	5.18		5.2	.78	.80	1267	348.3	329.4	28.5	1091
75.0	4.77		4.8	.82	.83	1233	348.6	330.1	31.6	1062
76.0	4.47		4.5	.84	.85	1208	349.1	330.9	34.6	1041
77.0	4.34		4.3	.86	.86	1191	349.6	332.1	37.3	1026
78.0	4.33		4.3	.86	.86	1194	350.2	333.6	39.7	1027
79.0	4.14		4.1	.88	.87	1178	350.8	335.3	41.7	1011
80.0	3.84		3.8	.91	.90	1152	351.3	337.4	43.2	986
81.0	4.24		4.2	.87	.86	1194	351.7	339.8	44.3	1018
82.0	4.87		4.9	.82	.80	1263	351.9	342.3	44.9	1071
83.0	4.75		4.8	.82	.81	1255	352.1	345.0	44.9	1059
84.0	4.41		4.4	.85	.84	1219	352.1	347.7	44.3	1022
85.0	4.52		4.5	.85	.83	1228	351.9	350.4	43.2	1022
86.0	4.59		4.6	.84	.82	1236	351.6	352.8	41.6	1022
87.0	4.42		4.4	.85	.84	1215	351.2	355.0	39.4	998
88.0	4.31		4.3	.86	.85	1202	350.8	356.9	36.8	981
89.0	4.37		4.4	.85	.85	1210	350.3	358.4	33.8	981
90.0	5.18		5.2	.78	.79	1282	349.8	359.7	30.5	1034
91.0	5.99		6.0	.73	.73	1356	349.3	0.7	26.9	1087
92.0	5.88		5.9	.73	.74	1344	349.0	1.4	23.1	1073
93.0	5.77		5.8	.74	.75	1334	348.7	2.0	19.1	1060

Table [illegible].--Continued

[illegible]

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36994.0	5.50		5.5	-13.76	-13.77	1307	348.7	2.3	15.0	1035
95.0	5.34		5.3	.77	.78	1290	348.8	2.6	10.8	1019
96.0	5.52		5.5	.76	.76	1312	349.1	2.9	6.5	1034
97.0	5.63		5.6	.75	.75	1326	349.5	3.1	2.3	1044
98.0	5.87		5.9	.73	.73	1361	350.2	3.5	-1.9	1071
99.0	5.37		5.4	.77	.76	1319	351.0	3.9	-6.0	1038
37000.0	5.10		5.1	.79	.77	1297	352.0	4.5	-10.0	1021
01.0	5.23		5.2	.78	.76	1315	353.0	5.3	-13.8	1035
02.0	5.19		5.2	.79	.76	1323	354.0	6.4	-17.4	1042
03.0	5.44		5.4	.78	.74	1350	355.1	7.8	-20.7	1064
04.0	5.00		5.0	.80	.76	1318	356.0	9.5	-23.7	1040
05.0	4.74		4.7	.83	.78	1294	356.8	11.6	-26.2	1021
06.0	4.70		4.7	.83	.77	1299	357.5	13.9	-28.3	1025
07.0	5.57		5.6	.77	.71	1394	358.0	16.5	-29.9	1100
08.0	5.71		5.7	.77	.70	1405	358.2	19.3	-30.9	1108
09.0	4.54		4.5	.85	.79	1283	358.2	22.1	-31.4	1011
10.0	4.62		4.6	.84	.78	1291	358.0	24.9	-31.2	1016
11.0	5.05		5.0	.81	.75	1328	357.5	27.6	-30.6	1043
12.0	5.51		5.1	.80	.75	1333	356.8	30.0	-29.4	1045
13.0	5.48		5.5	.77	.73	1366	356.0	32.1	-27.7	1069
14.0	5.48		5.5	.77	.73	1359	355.0	33.9	-25.6	1060
15.0	5.34		5.3	.78	.75	1331	354.0	35.4	-23.1	1036
16.0	5.60		5.6	.76	.74	1352	352.9	36.6	-20.4	1050
17.0	6.14		6.1	.73	.71	1392	351.8	37.5	-17.4	1078
18.0	6.24		6.2	.72	.71	1394	350.9	38.1	-14.2	1077
19.0	6.56		6.6	.69	.69	1423	350.0	38.6	-10.9	1098
20.0	6.71		6.7	.69	.69	1426	349.3	39.0	-7.4	1099
21.0	7.04		7.0	.67	.68	1449	348.8	39.3	-3.9	1116
22.0	6.92		6.9	.67	.69	1437	348.5	39.6	-0.4	1106
23.0	7.24		7.2	.66	.67	1461	348.4	39.9	3.0	1126
24.0	7.87		7.9	.63	.64	1525	348.4	40.3	6.4	1175
25.0	8.94		8.9	.59	.60	1616	348.7	40.9	9.7	1247
26.0	7.91		7.9	.63	.64	1528	349.0	41.7	12.8	1181
27.0	6.60		6.6	.70	.70	1413	349.5	42.7	15.7	1095
28.0	5.33		5.3	.78	.78	1295	350.1	43.9	18.3	1006
29.0	5.56		5.6	.76	.75	1327	350.6	45.5	20.6	1033
30.0	6.30		6.3	.72	.71	1396	351.1	47.4	22.6	1090
31.0	6.08		6.1	.73	.72	1380	351.6	49.7	24.0	1081
32.0	6.09		6.1	.73	.72	1382	351.9	52.1	25.0	1085
33.0	5.97		6.0	.74	.72	1374	352.1	54.8	25.5	1081
34.0	5.81		5.8	.75	.73	1354	352.2	57.6	25.3	1068
35.0	5.88		5.9	.75	.73	1363	352.1	60.4	24.7	1077
36.0	5.72		5.7	.76	.74	1341	351.8	63.0	23.4	1061
37.0	5.51		5.5	.77	.76	1319	351.5	65.5	21.6	1045
38.0	5.74		5.7	.75	.75	1334	351.0	67.6	19.4	1058
39.0	6.33		6.3	.72	.72	1386	350.4	69.5	16.7	1100
40.0	6.46		6.5	.71	.71	1400	349.8	71.0	13.6	1111
41.0	6.48		6.5	.70	.71	1396	349.3	72.3	10.2	1108
42.0	6.38		6.4	.71	.72	1383	348.8	73.2	6.6	1098
43.0	6.17		6.2	.72	.73	1362	348.4	73.9	2.7	1082
44.0	5.96		6.0	.73	.74	1341	348.1	74.4	-1.3	1066
45.0	5.75		5.7	.75	.76	1321	349.1	74.6	-5.3	1051
46.0	5.68		5.7	.75	.75	1326	349.7	74.9	-9.6	1057
47.0	5.89		5.9	.74	.74	1350	350.4	75.2	-13.8	1079
48.0	5.82		5.8	.75	.74	1347	351.3	75.4	-18.0	1080
49.0	5.88		5.9	.75	.73	1364	352.3	75.8	-22.2	1097
50.0	5.77		5.8	.76	.73	1362	353.4	76.3	-26.3	1101
51.0	5.55		5.6	.77	.74	1350	354.6	77.0	-30.2	1096
52.0	5.17		5.2	.80	.76	1319	355.7	77.9	-33.9	1078
53.0	4.86		4.9	.83	.77	1298	356.8	79.1	-37.3	1066

Table 3.--Continued

SATELLITE 1962 ALPHA

MJD	$-10^6\ \dot{P}$	$\dot{P}_R$	$-10^6\ \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37054.0	4.44		4.4	-13.87	-13.81	1254	357.8	80.6	-40.5	1037
55.0	4.32		4.3	.88	.81	1249	358.6	82.4	-43.2	1040
56.0	3.86		3.9	.92	.84	1212	359.2	84.5	-45.6	1015
57.0	3.58		3.6	.95	.87	1181	359.6	87.0	-47.4	995
58.0	3.08		3.1	-14.01	.92	1129	359.8	89.7	-48.7	957
59.0	2.88		2.9	.03	.95	1105	359.6	92.5	-49.4	941
60.0	2.90		2.9	.03	.95	1102	359.2	95.3	-49.5	942
61.0	3.28		3.3	-13.98	.91	1142	358.5	98.0	-49.1	980
62.0	3.56		3.6	.95	.89	1167	357.6	100.6	-48.0	1004
63.0	3.95		4.0	.91	.85	1201	356.4	102.8	-46.5	1035
64.0	3.96		4.0	.90	.86	1193	355.1	104.8	-44.5	1028
65.0	3.41		3.4	.96	.93	1124	353.7	106.4	-42.1	969
66.0	3.21		3.2	.98	.96	1094	352.2	107.7	-39.3	942
67.0	3.41		3.4	.95	.95	1107	350.7	108.7	-36.3	952
68.0	3.51		3.5	.94	.95	1109	349.3	109.4	-33.0	952
69.0	3.57		3.6	.93	.94	1111	348.0	109.9	-29.5	952
70.0	3.68		3.7	.91	.94	1114	346.9	110.3	-26.0	952
71.0	3.82		3.8	.90	.94	1118	346.0	110.6	-22.3	953
72.0	3.79		3.8	.90	.94	1114	345.3	110.8	-18.6	947
73.0	3.49		3.5	.93	.98	1081	344.9	111.0	-14.9	917
74.0	3.36		3.4	.94	.99	1069	344.7	111.3	-11.3	906
75.0	3.20		3.2	.98	.98	1081	350.0	111.6	-7.8	915
76.0	3.01		3.0	-14.00	-14.00	1063	350.6	112.2	-4.4	898
77.0	3.25		3.2	-13.98	-13.97	1087	351.3	113.0	-1.2	919
78.0	3.09		3.1	.99	.98	1080	352.0	114.0	1.8	913
79.0	3.25		3.2	.98	.96	1094	352.6	115.4	4.5	926
80.0	3.23		3.2	.99	.96	1098	353.3	117.0	6.8	930
81.0	3.10		3.1	-14.00	.97	1089	353.8	119.0	8.7	925
82.0	2.97		3.0	.01	.98	1080	354.2	121.3	10.1	920
83.0	3.29		3.3	-13.98	.94	1114	354.4	123.8	11.1	952
84.0	2.98		3.0	-14.01	.98	1081	354.4	126.4	11.4	927
85.0	3.02		3.0	.01	.98	1079	354.2	129.1	11.2	930
86.0	3.10		3.1	.00	.97	1088	353.8	131.8	10.5	941
87.0	3.08		3.1	.00	.97	1084	353.2	134.2	9.1	942
88.0	2.66		2.7	.05	-14.03	1036	352.4	136.4	7.3	905
89.0	2.97		3.0	.01	.00	1063	351.5	138.3	5.0	933
90.0	3.79		3.8	-13.92	-13.91	1139	350.5	139.9	2.3	1004
91.0	3.36		3.4	.96	.96	1093	349.4	141.2	-0.7	968
92.0	3.05		3.0	-14.00	-14.02	1046	348.3	142.1	-4.0	930
93.0	3.24		3.2	-13.98	.00	1060	347.3	142.8	-7.6	946
94.0	3.37		3.4	.95	-13.98	1075	346.4	143.3	-11.3	963
95.0	3.16		3.2	.97	-14.01	1050	345.7	143.7	-15.1	944
96.0	3.01		3.0	-14.00	.04	1026	345.1	143.9	-19.1	926
97.0	2.40		2.4	.09	.14	960	344.6	144.1	-23.1	869
98.0	2.41		2.4	.09	.14	959	344.4	144.2	-27.0	870
99.0	2.65		2.6	.05	.11	980	344.3	144.4	-31.0	892
37100.0	2.06		2.1	.14	.19	924	344.4	144.8	-34.8	844
01.0	2.39		2.4	.09	.12	974	347.6	145.2	-38.5	893
02.0	2.27		2.3	.11	.12	970	349.0	145.9	-42.0	893
03.0	2.20		2.2	.13	.13	966	350.6	146.9	-45.3	892
04.0	1.96		2.0	.17	.15	948	352.0	148.2	-48.2	879
05.0	1.82		1.8	.22	.18	929	353.5	149.9	-50.9	865
06.0	1.90		1.9	.20	.15	948	354.7	151.9	-53.1	887
07.0	1.92		1.9	.20	.15	953	355.8	154.2	-54.8	895
08.0	1.83		1.8	.22	.16	943	356.6	156.7	-55.9	890
09.0	1.84		1.8	.22	.16	946	357.2	159.4	-56.5	896
10.0	1.56		1.6	.27	.20	920	357.4	162.2	-56.6	874
11.0	1.90		1.9	.20	.13	961	357.4	164.9	-56.0	917
12.0	2.01		2.0	.18	.12	973	357.1	167.5	-54.8	931
13.0	2.17		2.2	.14	.08	996	356.6	169.8	-53.1	955

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37114.0	2.33		2.3	-14.12	-14.07	1005	355.8	171.8	-50.9	965
15.0	2.37		2.4	.10	.06	1012	354.9	173.5	-48.2	973
16.0	2.40		2.4	.10	.07	1007	353.8	174.8	-45.3	969
17.0	2.37		2.4	.10	.08	1002	352.7	175.9	-42.0	964
18.0	2.51		2.5	.08	.07	1008	351.6	176.6	-38.4	969
19.0	2.65		2.6	.06	.06	1013	350.5	177.2	-34.7	974
20.0	3.00		3.0	.01	.01	1051	349.5	177.5	-30.8	1008
21.0	3.13		3.1	-13.99	.01	1056	348.6	177.8	-26.8	1012
22.0	2.58		2.6	-14.06	.08	999	347.9	178.0	-22.8	955
23.0	2.30		2.3	.11	.13	963	347.3	178.1	-18.7	918
24.0	2.19		2.2	.12	.15	949	346.9	178.4	-14.8	903
25.0	2.41		2.4	.09	.12	970	346.7	178.7	-10.8	921
26.0	2.41		2.4	.09	.12	970	346.7	179.2	-7.1	918
27.0	2.40		2.4	.09	.12	970	346.7	179.9	-3.5	915
28.0	2.16		2.2	.13	.16	947	346.9	180.9	-0.1	892
29.0	2.25		2.2	.13	.15	948	347.1	182.1	3.0	892
30.0	3.47		3.5	-13.95	-13.97	1085	347.3	183.7	5.8	1020
31.0	3.21		3.2	.98	-14.01	1056	347.5	185.6	8.1	992
32.0	2.39		2.4	-14.10	.12	972	347.6	187.9	10.0	913
33.0	2.36		2.4	.10	.12	972	347.7	190.3	11.4	914
34.0	2.31		2.3	.11	.14	961	347.6	193.0	12.2	905
35.0	2.04		2.0	.17	.19	924	347.4	195.7	12.5	873
36.0	1.99		2.0	.17	.19	923	347.2	198.4	12.1	875
37.0	1.59		1.6	.25	.29	870	346.8	200.9	11.3	828
38.0	1.64		1.6	.25	.29	868	346.3	203.2	9.9	830
39.0	1.69		1.7	.23	.27	879	345.8	205.2	8.0	844
40.0	1.73		1.7	.23	.27	877	345.3	206.9	5.7	846
41.0	1.76		1.8	.20	.26	887	344.8	208.3	3.1	860
42.0	1.68		1.7	.23	.28	873	344.4	209.4	0.1	850
43.0	1.70		1.7	.23	.28	872	344.1	210.2	-3.1	853
44.0	1.83		1.8	.20	.26	884	344.0	210.8	-6.5	869
45.0	2.28		2.3	.11	.16	944	344.1	211.2	-10.0	930
46.0	2.61		2.6	.06	.11	978	344.5	211.5	-13.6	967
47.0	2.01		2.0	.16	.21	914	345.0	211.8	-17.3	905
48.0	1.76		1.8	.20	.25	893	345.8	212.0	-21.0	886
49.0	1.73		1.7	.23	.26	885	346.8	212.3	-24.6	879
50.0	1.75		1.8	.21	.23	903	348.0	212.7	-28.2	898
51.0	1.55		1.6	.26	.26	883	349.3	213.2	-31.6	878
52.0	1.06		1.1	.41	.40	813	350.7	214.0	-34.9	810
53.0	1.54		1.5	.29	.27	881	352.2	215.1	-37.9	878
54.0	1.50		1.5	.29	.26	888	353.7	216.4	-40.6	884
55.0	1.31		1.3	.35	.30	864	355.1	218.1	-43.0	861
56.0	1.78		1.8	.22	.17	941	356.4	220.2	-45.0	938
57.0	2.03		2.0	.19	.12	972	357.5	222.5	-46.5	969
58.0	2.16		2.2	.15	.08	1002	358.3	225.1	-47.4	998
59.0	2.13		2.1	.17	.09	992	358.9	227.9	-47.8	989
37170.0	2.42		2.4	-14.10	-14.09	993	351.6	247.5	-19.5	993
71.0	2.29		2.3	.12	.11	977	350.7	247.9	-15.3	976
72.0	2.16		2.2	.13	.13	962	349.9	248.2	-11.0	960
73.0	2.21		2.2	.13	.14	958	349.4	248.5	-6.7	956
74.0	2.31		2.3	.11	.12	968	349.0	248.8	-2.5	964
75.0	2.64		2.6	.07	.08	999	348.7	249.2	1.7	994
76.0	2.57		2.6	.07	.08	998	348.6	249.8	5.7	991
77.0	2.79		2.8	.04	.05	1019	348.7	250.6	9.6	1009
78.0	2.28		2.3	.12	.13	964	348.8	251.7	13.2	953
79.0	1.66		1.7	.24	.25	892	349.0	253.1	16.5	878
80.0	1.55		1.6	.26	.27	878	349.1	254.7	19.5	863
81.0	3.07		3.1	.01	.01	1050	349.3	256.7	22.1	1029

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37182.0	4.19		4.2	-13.89	-13.90	1156	349.3	259.1	24.3	1129
83.0	3.46		3.5	.96	.97	1088	349.3	261.6	25.9	1060
84.0	2.34		2.3	-14.13	-14.13	962	349.2	264.4	26.9	935
85.0	2.29		2.3	.13	.14	960	348.9	267.2	27.4	932
86.0	2.69		2.7	.06	.08	1002	348.5	270.0	27.3	970
87.0	3.43		3.4	-13.97	-13.99	1069	348.0	272.6	26.6	1034
88.0	3.54		3.5	.96	.98	1076	347.4	275.1	25.4	1039
89.0	4.05		4.0	.91	.93	1119	346.8	277.2	23.8	1080
90.0	4.00		4.0	.91	.94	1116	346.1	279.0	21.7	1075
37192.0	4.0		4.0	-13.90	-13.94	1116	345.9	281.7	16.4	1074
94.0	4.3		4.3	.87	.91	1143	345.5	283.3	10.1	1100
96.0	4.6		4.6	.85	.88	1172	345.8	284.2	3.2	1126
98.0	4.3		4.3	.87	.90	1153	346.8	284.8	-3.9	1107
37200.0	3.8		3.8	.93	.94	1116	348.5	285.6	-10.8	1070
02.0	3.5		3.5	.96	.96	1098	350.7	287.1	-17.3	1048
04.0	3.3		3.3	.99	.97	1090	353.0	289.6	-22.9	1033
06.0	3.3		3.3	-14.00	.95	1101	355.0	293.4	-27.0	1033
08.0	3.3		3.3	.00	.95	1109	356.3	298.5	-29.3	1026
10.0	3.2		3.2	.01	.95	1101	356.6	304.3	-29.3	1005
12.0	3.2		3.2	.01	.96	1099	355.8	309.9	-26.9	988
37212.5	3.38		3.4	-13.98	-13.94	1118	355.5	311.1	-26.0	1002
13.0	2.95		3.0	-14.03	.98	1075	355.1	312.4	-24.9	960
13.5	4.54		4.5	-13.87	.84	1222	354.7	313.5	-23.7	1088
14.0	8.13		8.1	.67	.64	1527	354.2	314.5	-22.4	1355
14.5	5.68		5.7	.78	.76	1323	353.7	315.5	-21.0	1171
15.0	4.14		4.1	.90	.88	1176	353.1	316.4	-19.5	1039
15.5	4.15		4.2	.89	.87	1183	352.6	317.2	-17.9	1042
16.0	4.20		4.2	.89	.87	1180	352.0	317.9	-16.2	1037
37218.0	4.3		4.3	-13.87	-13.87	1177	349.7	319.9	-8.7	1029
20.0	5.0		5.0	.81	.83	1230	347.6	321.1	-0.4	1072
22.0	5.2		5.2	.79	.82	1240	346.3	321.7	8.2	1080
24.0	5.0		5.0	.81	.84	1217	345.8	322.4	16.8	1061
26.0	4.8		4.8	.82	.85	1199	346.0	323.4	25.0	1047
28.0	4.5		4.5	.85	.87	1178	346.9	325.3	32.5	1028
30.0	4.4		4.4	.86	.88	1175	348.0	328.3	38.8	1023
32.0	4.4		4.4	.86	.87	1180	348.9	332.7	43.4	1021
34.0	4.4		4.4	.86	.87	1184	349.4	338.0	45.8	1015
36.0	4.3		4.3	.87	.88	1176	349.4	343.5	46.0	997
38.0	4.2		4.2	.88	.89	1165	348.9	348.4	43.8	975
40.0	4.6		4.6	.84	.86	1197	348.0	352.1	39.7	989
42.0	5.0		5.0	.81	.83	1231	347.2	354.5	34.2	1005
44.0	5.3		5.3	.78	.81	1257	346.7	355.9	27.6	1017
46.0	5.6		5.6	.76	.78	1286	346.8	356.5	20.4	1032
48.0	5.9		5.9	.74	.76	1319	347.7	357.0	13.1	1053
37250.0	6.09		6.1	-13.73	-13.74	1350	349.4	357.6	5.9	1072
50.5	6.54		6.5	.71	.71	1393	349.9	357.9	4.1	1106
51.0	7.67		7.7	.66	.65	1497	350.4	358.2	2.4	1187
51.5	9.92		9.9	.58	.57	1683	351.0	358.6	0.8	1333
52.0	6.59		6.6	.71	.70	1414	351.6	359.0	-0.8	1119
52.5	5.27		5.3	.79	.77	1300	352.1	359.5	-2.3	1028
53.0	5.28		5.3	.79	.77	1304	352.7	0.1	-3.8	1030
53.5	5.74		5.7	.77	.74	1343	353.2	0.7	-5.2	1060
54.0	6.43		6.4	.73	.70	1412	353.8	1.5	-6.5	1113
54.5	5.55		5.6	.77	.74	1341	354.3	2.3	-7.7	1056
55.0	4.90		4.9	.82	.79	1282	354.8	3.2	-8.8	1009
55.5	4.68		4.7	.84	.80	1267	355.2	4.2	-9.9	996

Table 2.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^{[illegible]}$ i	[illegible]	$-10^{[illegible]}$		T_n (°K)	(km)		Θ	T_N (°K)
37256.0	4.48	4.5	-13.86	-13.81	1251	355.6	5.3	-10.8	982
56.5	4.26	4.3	.87	.83	1233	356.0	6.4	-11.5	967
57.0	4.28	4.3	.87	.82	1236	356.3	7.7	-12.2	967
57.5	4.07	4.1	.89	.84	1217	356.5	8.9	-12.7	951
58.0	4.30	4.3	.87	.82	1239	356.7	10.3	-13.0	967
58.5	4.32	4.3	.87	.82	1240	356.8	11.7	-13.2	967
59.0	4.56	4.6	.85	.80	1269	356.9	13.1	-13.3	989
59.5	5.23	5.2	.81	.76	1323	356.9	14.5	-13.2	1029
60.0	4.80	4.8	.83	.78	1286	356.8	15.9	-13.0	1000
60.5	4.81	4.8	.83	.78	1285	356.6	17.3	-12.6	998
61.0	4.38	4.4	.86	.81	1247	356.4	18.6	-12.1	967
61.5	4.16	4.2	.88	.83	1225	356.1	19.9	-11.4	948
62.0	3.96	4.0	.90	.85	1202	355.8	21.1	-10.6	930
62.5	3.75	3.8	.92	.87	1180	355.4	22.3	-9.6	912
63.0	3.54	3.5	.95	.91	1147	355.0	23.4	-8.6	885
63.5	4.67	4.7	.84	.80	1263	354.5	24.4	-7.4	974
64.0	4.90	4.9	.82	.79	1278	354.0	25.3	-6.1	985
37265.0	4.36	4.4	-13.86	-13.83	1225	353.2	26.9	-3.2	943
66.0	4.12	4.1	.88	.86	1189	352.0	28.1	0.1	915
67.0	3.72	3.7	.92	.91	1142	350.9	29.0	3.6	879
68.0	3.96	4.0	.89	.89	1164	349.7	29.7	7.3	897
69.0	4.86	4.9	.81	.82	1242	348.7	30.1	11.2	958
70.0	6.62	6.6	.70	.72	1387	347.8	30.4	15.3	1072
71.0	5.88	5.9	.74	.76	1316	347.1	30.6	19.4	1021
72.0	6.18	6.2	.72	.75	1337	346.5	30.7	23.5	1041
73.0	6.41	6.4	.71	.74	1351	346.2	30.9	27.6	1057
74.0	6.91	6.9	.68	.71	1395	346.1	31.1	31.6	1096
75.0	6.67	6.7	.69	.72	1376	346.1	31.4	35.6	1087
37284.0	4.84	4.8	-13.83	-13.84	1219	348.9	46.5	56.5	1003
85.0	4.45	4.4	.86	.87	1182	348.8	49.2	56.3	974
86.0	3.82	3.8	.92	.93	1125	348.6	51.7	55.5	927
87.0	3.34	3.3	.97	.98	1074	348.2	54.1	54.1	883
88.0	2.91	2.9	-14.02	-14.04	1031	347.8	56.2	52.1	846
89.0	3.24	3.2	-13.98	.00	1059	347.3	57.9	49.7	867
90.0	3.06	3.1	.99	.02	1048	346.9	59.3	46.9	854
91.0	2.98	3.0	-14.00	.03	1035	346.4	60.4	43.8	840
92.0	2.70	2.7	.04	.07	1003	346.0	61.2	40.4	810
93.0	3.03	3.0	.00	.03	1033	345.6	61.8	36.7	830
94.0	3.47	3.5	-13.93	-13.97	1083	345.5	62.2	32.9	866
95.0	4.01	4.0	.88	.92	1132	345.5	62.4	28.9	901
96.0	4.06	4.1	.87	.91	1143	345.8	62.5	24.9	907
97.0	4.22	4.2	.87	.90	1156	346.3	62.6	20.8	913
98.0	3.96	4.0	.89	.91	1142	347.0	62.8	16.8	899
99.0	4.10	4.1	.88	.90	1156	347.8	63.1	12.8	909
37300.0	4.48	4.5	.84	.85	1200	348.8	63.5	9.0	941
01.0	4.53	4.5	.85	.85	1207	350.0	64.1	5.3	946
02.0	4.20	4.2	.88	.87	1186	351.2	65.0	1.8	930
03.0	3.97	4.0	.90	.88	1174	352.4	66.2	-1.4	921
04.0	3.85	3.8	.92	.89	1160	353.5	67.8	-4.2	912
05.0	3.95	4.0	.90	.87	1186	354.5	69.7	-6.7	935
06.0	3.78	3.8	.93	.88	1171	355.4	71.9	-8.6	926
07.0	3.61	3.6	.95	.90	1154	356.0	74.4	-10.1	915
08.0	3.50	3.5	.96	.91	1146	356.5	77.1	-10.9	912
09.0	3.21	3.2	-14.00	.94	1115	356.6	79.9	-11.2	891
10.0	2.65	2.6	.07	-14.02	1046	356.5	82.6	-10.8	839
11.0	2.48	2.5	.09	.03	1033	356.2	85.2	-9.9	831
12.0	2.32	2.3	.12	.07	1006	355.6	87.5	-8.4	813

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37313.0	2.20		2.2	-14.14	-14.09	990	354.8	89.6	-6.4	802
14.0	2.26		2.3	.12	.08	998	353.9	91.3	-4.0	811
15.0	2.14		2.1	.15	.12	969	353.0	92.6	-1.2	789
16.0	1.98		2.0	.17	.15	951	352.0	93.6	1.9	777
17.0	2.03		2.0	.17	.16	947	351.0	94.4	5.3	776
18.0	2.65		2.6	.06	.06	1012	350.1	94.9	8.8	832
19.0	3.26		3.3	-13.97	-13.97	1082	349.4	95.3	12.5	891
20.0	2.43		2.4	-14.09	-14.10	983	348.8	95.5	16.2	812
21.0	2.16		2.2	.13	.14	957	348.4	95.7	20.0	793
22.0	2.11		2.1	.14	.16	944	348.2	95.8	23.7	784
23.0	2.01		2.0	.16	.18	931	348.3	96.1	27.5	777
24.0	2.06		2.1	.15	.16	943	348.5	96.5	31.1	790
25.0	2.16		2.2	.13	.14	956	348.9	97.0	34.5	805
26.0	2.34		2.3	.11	.15	953	346.4	97.8	37.8	806
27.0	2.32		2.3	.11	.14	954	346.8	98.8	40.8	811
28.0	2.40		2.4	.10	.13	967	347.2	100.2	43.4	827
29.0	2.31		2.3	.12	.14	957	347.7	101.9	45.7	823
30.0	2.16		2.2	.14	.16	947	348.1	104.0	47.6	819
31.0	2.12		2.1	.16	.17	937	348.4	106.4	48.9	814
32.0	2.02		2.0	.18	.19	925	348.6	109.0	49.7	808
33.0	1.97		2.0	.18	.19	926	348.6	111.7	49.8	812
34.0	2.20		2.2	.14	.15	949	348.5	114.5	49.4	835
35.0	2.53		2.5	.09	.10	982	348.3	117.2	48.4	867
36.0	2.52		2.5	.09	.11	980	347.9	119.7	46.7	867
37.0	2.29		2.3	.12	.14	956	347.4	122.0	44.6	848
38.0	2.00		2.0	.17	.20	919	346.9	123.9	41.9	816
39.0	1.82		1.8	.21	.25	893	346.3	125.5	38.9	792
40.0	1.90		1.9	.19	.23	904	345.7	126.8	35.5	801
41.0	1.76		1.8	.21	.25	890	345.3	127.8	31.8	788
42.0	1.78		1.8	.20	.25	889	344.9	128.5	27.8	786
43.0	1.58		1.6	.25	.30	862	344.7	129.0	23.7	762
44.0	1.64		1.6	.25	.30	862	344.7	129.4	19.4	761
45.0	1.60		1.6	.25	.30	863	344.9	129.7	15.1	761
46.0	1.70		1.7	.23	.27	878	345.3	129.9	10.8	773
47.0	1.81		1.8	.20	.24	894	346.0	130.2	6.4	786
48.0	1.86		1.9	.19	.22	910	346.8	130.6	2.1	800
49.0	1.73		1.7	.23	.25	889	347.8	131.2	-2.1	781
50.0	1.77		1.8	.21	.22	906	348.9	131.9	-6.1	797
51.0	1.69		1.7	.24	.24	898	350.1	132.9	-9.9	791
52.0	1.54		1.5	.29	.28	876	351.3	134.2	-13.4	772
53.0	1.62		1.6	.27	.24	894	352.5	135.9	-16.5	791
54.0	1.47		1.5	.30	.26	885	353.6	137.9	-19.3	785
55.0	1.48		1.5	.30	.25	888	354.5	140.3	-21.6	791
56.0	1.49		1.5	.30	.25	891	355.2	142.9	-23.3	797
37358.0	1.6		1.6	-14.28	-14.22	908	355.7	148.7	-25.1	820
60.0	1.5		1.5	.30	.25	891	355.3	154.4	-24.3	814
62.0	1.4		1.4	.32	.29	871	353.9	159.2	-21.4	804
64.0	1.5		1.5	.29	.27	877	352.0	162.6	-16.6	816
66.0	1.6		1.6	.26	.26	883	349.9	164.8	-10.6	826
68.0	1.6		1.6	.26	.28	875	348.1	166.0	-3.8	822
70.0	1.6		1.6	.26	.29	870	347.0	166.7	3.4	819
72.0	1.6		1.6	.26	.29	869	346.7	167.3	10.6	819
74.0	1.6		1.6	.26	.29	869	347.2	168.5	17.4	821
76.0	1.6		1.6	.26	.28	873	348.2	170.5	23.4	826
78.0	1.7		1.7	.24	.25	890	349.4	173.8	28.2	845
80.0	1.6		1.6	.27	.27	881	350.3	178.4	31.1	839
37381.0	1.50		1.5	-14.30	-14.29	868	350.7	181.1	31.8	829
82.0	1.47		1.5	.29	.31	858	348.5	184.0	31.9	822

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37383.0	1.48		1.5	-14.29	-14.31	858	348.5	186.9	31.4	824
84.0	1.77		1.8	.22	.24	897	348.4	189.8	30.3	865
85.0	1.92		1.9	.20	.22	908	348.1	192.4	28.6	878
86.0	2.14		2.1	.16	.18	931	347.6	194.7	26.4	902
87.0	2.15		2.1	.16	.19	928	347.1	196.8	23.7	903
88.0	2.14		2.1	.16	.19	926	346.6	198.5	20.6	904
89.0	2.15		2.1	.16	.19	924	346.0	199.8	17.1	904
90.0	2.13		2.1	.15	.20	922	345.6	200.9	13.3	905
91.0	2.26		2.3	.12	.16	943	345.2	201.7	9.3	927
92.0	2.23		2.2	.13	.18	931	344.9	202.3	5.2	917
93.0	1.91		1.9	.19	.24	896	344.8	202.7	0.9	884
94.0	1.86		1.9	.19	.24	897	345.0	203.1	-3.5	885
95.0	1.87		1.9	.19	.24	899	345.3	203.4	-7.9	887
96.0	1.91		1.9	.19	.23	901	345.8	203.7	-12.3	890
97.0	1.85		1.8	.21	.25	892	346.5	204.2	-16.6	881
98.0	1.75		1.7	.24	.26	882	347.4	204.8	-20.8	873
99.0	1.67		1.7	.24	.26	886	348.3	205.5	-24.9	877
37400.0	1.49		1.5	.29	.30	863	349.4	206.6	-28.7	854
01.0	1.07		1.1	.42	.41	807	350.4	207.9	-32.2	799
02.0	1.09		1.1	.42	.41	810	351.4	209.6	-35.4	803
03.0	1.46		1.5	.30	.28	875	352.2	211.7	-38.1	867
04.0	1.64		1.6	.28	.25	891	352.9	214.1	-40.4	884
05.0	1.55		1.5	.30	.27	880	353.4	216.7	-42.2	873
06.0	1.13		1.1	.43	.39	820	353.8	219.6	-43.3	814
07.0	0.93		0.9	.51	.47	784	353.8	222.6	-43.9	779
08.0	1.10		1.1	.42	.39	819	353.5	225.5	-43.8	814
09.0	1.31		1.3	.36	.33	849	353.0	228.3	-43.1	845
10.0	1.36		1.4	.33	.30	861	352.2	230.8	-41.8	858
11.0	1.34		1.3	.35	.34	842	351.3	233.1	-40.0	840
12.0	1.41		1.4	.32	.32	853	350.2	235.0	-37.8	852
13.0	1.43		1.4	.32	.33	848	349.1	236.5	-35.2	848
14.0	1.47		1.5	.29	.31	858	347.9	237.7	-32.2	858
15.0	1.53		1.5	.29	.32	853	346.8	238.6	-29.0	853
16.0	1.63		1.6	.26	.30	862	345.7	239.3	-25.6	862
17.0	1.63		1.6	.26	.31	859	344.8	239.8	-22.0	858
18.0	1.65		1.6	.26	.31	855	344.1	240.1	-18.3	855
19.0	1.66		1.7	.23	.29	866	343.6	240.4	-14.6	864
20.0	1.67		1.7	.23	.30	865	343.3	240.7	-10.9	862
21.0	1.71		1.7	.23	.30	864	343.3	241.0	-7.2	859
22.0	1.65		1.6	.26	.32	852	343.4	241.5	-3.7	845
23.0	1.63		1.6	.26	.32	853	343.8	242.1	-0.2	843
24.0	1.62		1.6	.26	.32	854	344.2	243.0	3.0	841
25.0	1.58		1.6	.26	.31	856	344.8	244.1	6.0	840
26.0	1.49		1.5	.29	.33	845	345.4	245.5	8.7	826
27.0	1.35		1.3	.35	.39	819	346.0	247.3	11.0	797
28.0	1.28		1.3	.35	.38	821	346.6	249.4	12.8	796
29.0	1.16		1.2	.38	.41	808	347.1	251.9	14.2	780
30.0	1.16		1.2	.38	.41	809	347.4	254.5	15.0	779
31.0	1.22		1.2	.38	.41	809	347.7	257.3	15.2	778
32.0	1.29		1.3	.35	.38	824	347.7	260.2	14.8	791
33.0	1.34		1.3	.35	.38	824	347.6	262.9	13.8	789
34.0	1.24		1.2	.38	.41	808	347.3	265.4	12.2	773
35.0	1.22		1.2	.38	.42	806	347.0	267.7	10.1	772
36.0	1.23		1.2	.38	.42	805	346.5	269.7	7.5	771
37.0	1.27		1.3	.35	.39	818	346.0	271.3	4.6	785
38.0	1.33		1.3	.35	.39	816	345.6	272.5	1.2	785
39.0	1.44		1.4	.32	.37	829	345.2	273.5	-2.4	799
40.0	1.53		1.5	.29	.34	842	344.8	274.2	-6.2	814
41.0	1.59		1.6	.26	.32	855	344.7	274.7	-10.2	828
42.0	1.59		1.6	.26	.31	855	344.7	275.0	-14.4	830

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37443.0	1.60		1.6	-14.26	-14.31	856	344.9	275.3	-18.6	833
44.0	1.62		1.6	.26	.31	858	345.3	275.5	-22.8	836
45.0	1.69		1.7	.24	.28	874	345.9	275.8	-27.0	853
46.0	1.41		1.4	.32	.35	837	346.6	276.1	-31.1	817
47.0	1.19		1.2	.38	.41	811	347.5	276.6	-35.1	792
48.0	1.02		1.0	.46	.47	782	348.6	277.3	-38.9	764
49.0	0.93		0.9	.50	.50	768	349.7	278.3	-42.5	750
50.0	0.93		0.9	.50	.50	771	350.8	279.6	-45.8	752
51.0	1.07		1.1	.43	.41	810	351.8	281.2	-48.7	788
52.0	1.12		1.1	.43	.40	813	352.8	283.2	-51.2	789
53.0	0.95		1.0	.47	.43	798	353.5	285.5	-53.2	773
54.0	0.82		0.8	.56	.52	762	354.1	288.1	-54.7	735
55.0	0.71		0.7	.62	.57	742	354.4	290.9	-55.6	713
56.0	0.72		0.7	.62	.57	742	354.4	293.8	-55.8	709
57.0	0.93		0.9	.52	.47	781	354.2	296.6	-55.4	743
58.0	1.05		1.1	.44	.40	815	353.7	299.3	-54.4	770
59.0	0.94		0.9	.51	.48	777	353.0	301.7	-52.8	730
60.0	0.73		0.7	.61	.59	734	352.1	303.8	-50.7	686
61.0	0.86		0.9	.51	.50	771	351.1	305.6	-48.2	716
62.0	1.09		1.1	.42	.42	802	350.0	307.0	-45.2	741
63.0	1.21		1.2	.39	.40	814	348.9	308.1	-42.0	749
64.0	1.32		1.3	.35	.37	826	347.8	308.9	-38.4	756
37481.5	1.92		1.9	-14.19	-14.21	911	347.8	330.9	9.5	761
82.0	1.70		1.7	.24	.26	885	347.7	332.2	9.0	738
82.5	1.46		1.5	.29	.31	858	347.6	333.5	8.4	713
83.0	1.32		1.3	.34	.37	829	347.4	334.7	7.7	687
83.5	1.41		1.4	.31	.34	843	347.2	335.8	6.8	697
84.0	1.73		1.7	.23	.26	884	347.0	336.9	5.8	729
84.5	1.95		1.9	.19	.22	908	346.8	337.8	4.7	748
85.0	2.12		2.1	.15	.18	932	346.5	338.7	3.5	766
85.5	2.44		2.4	.09	.13	965	346.3	339.5	2.2	793
86.0	2.59		2.6	.06	.10	986	346.0	340.2	0.8	809
86.5	2.29		2.3	.11	.15	952	345.8	340.9	-0.7	781
87.0	2.29		2.3	.11	.15	952	345.6	341.4	-2.3	780
87.5	2.26		2.3	.11	.15	951	345.4	341.9	-3.9	779
88.0	2.25		2.2	.12	.17	939	345.2	342.3	-5.6	769
88.5	2.17		2.2	.12	.17	939	345.0	342.7	-7.4	769
89.0	2.31		2.3	.10	.15	950	344.9	342.9	-9.2	778
89.5	2.32		2.3	.10	.15	950	344.9	343.2	-11.0	778
90.0	2.33		2.3	.10	.15	950	344.8	343.4	-12.9	779
90.5	2.32		2.3	.10	.15	951	344.8	343.6	-14.8	780
91.0	2.22		2.2	.12	.17	940	344.9	343.7	-16.7	772
91.5	2.16		2.2	.12	.17	940	345.0	343.8	-18.7	774
92.0	1.95		2.0	.16	.20	918	345.2	343.9	-20.6	756
92.5	1.85		1.8	.20	.24	895	345.4	344.0	-22.6	738
93.0	2.40		2.4	.09	.13	967	345.7	344.2	-24.5	798
93.5	2.85		2.8	.03	.06	1011	346.0	344.3	-26.5	837
94.0	3.42		3.4	-13.95	-13.98	1074	346.4	344.4	-28.4	890
94.5	3.62		3.6	.93	.96	1095	346.8	344.6	-30.3	909
95.0	3.28		3.3	.97	.99	1069	347.3	344.8	-32.2	888
95.5	2.90		2.9	-14.02	-14.04	1031	347.8	345.0	-34.0	858
96.0	2.51		2.5	.08	.09	991	348.3	345.3	-35.8	826
96.5	2.27		2.3	.11	.12	971	348.9	345.7	-37.6	810
97.0	2.32		2.3	.11	.12	973	349.4	346.1	-39.3	814
97.5	2.51		2.5	.08	.08	999	350.0	346.6	-41.0	836
98.0	2.71		2.7	.05	.05	1024	350.6	347.2	-42.5	858
98.5	3.12		3.1	.00	-13.99	1069	351.2	347.8	-44.0	896
99.0	3.54		3.5	-13.96	.94	1112	351.8	348.5	-45.4	933

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37499.5	2.24		2.2	-14.13	-14.11	975	352.3	349.3	-46.8	818
37500.0	1.78		1.8	.21	.19	927	352.8	350.2	-48.0	778
00.5	2.24		2.2	.14	.11	979	353.3	351.2	-49.1	822
01.0	2.97		3.0	.02	-13.99	1071	353.8	352.3	-50.1	899
01.5	2.29		2.3	.12	-14.08	995	354.2	353.5	-50.9	835
02.0	2.16		2.2	.14	.10	985	354.5	354.7	-51.7	825
02.5	1.93		1.9	.20	.15	949	354.8	356.1	-52.2	794
03.0	1.84		1.8	.22	.17	937	355.1	357.4	-52.7	783
03.5	1.85		1.9	.20	.15	951	355.2	358.8	-53.0	794
04.0	2.11		2.1	.16	.11	977	355.3	0.3	-53.1	814
04.5	2.25		2.3	.12	.08	1001	355.4	1.8	-53.1	832
05.0	2.31		2.3	.12	.08	1001	355.3	3.2	-52.9	830
05.5	2.37		2.4	.11	.06	1012	355.2	4.7	-52.5	838
06.0	2.40		2.4	.11	.06	1011	355.1	6.1	-52.0	835
06.5	2.41		2.4	.11	.06	1010	354.8	7.5	-51.4	832
07.0	2.67		2.7	.06	.02	1043	354.5	8.8	-50.6	857
07.5	3.01		3.0	.02	-13.98	1074	354.2	10.0	-49.6	879
08.0	3.35		3.3	-13.98	.95	1103	353.8	11.2	-48.6	900
08.5	2.53		2.5	-14.09	-14.06	1015	353.3	12.3	-47.4	826
09.0	2.08		2.1	.15	.13	966	352.8	13.3	-46.0	783
37510.0	1.68		1.7	-14.23	-14.22	910	351.8	15.1	-43.1	733
11.0	1.71		1.7	.23	.22	905	350.6	16.4	-39.7	724
12.0	1.69		1.7	.23	.23	900	349.5	17.5	-36.1	716
13.0	2.06		2.1	.14	.16	946	348.4	18.3	-32.2	748
14.0	2.16		2.2	.12	.15	954	347.4	18.9	-28.1	750
15.0	2.25		2.3	.10	.13	962	346.6	19.3	-23.9	753
16.0	2.20		2.2	.12	.16	947	345.8	19.6	-19.6	738
17.0	2.12		2.1	.13	.18	933	345.3	19.9	-15.3	725
18.0	2.19		2.2	.11	.16	943	345.0	20.2	-11.0	731
19.0	2.40		2.4	.08	.13	966	344.9	20.6	-6.8	746
20.0	2.82		2.8	.02	.07	1009	345.0	21.1	-2.7	779
21.0	3.33		3.3	-13.96	.00	1060	345.3	21.9	1.3	818
22.0	3.45		3.5	.94	-13.98	1082	345.7	22.8	5.1	835
23.0	3.50		3.5	.94	.97	1084	346.1	24.1	8.5	837
24.0	3.57		3.6	.93	.96	1095	346.6	25.7	11.6	846
25.0	3.84		3.8	.91	.94	1117	347.1	27.7	14.3	864
26.0	3.75		3.8	.91	.94	1119	347.5	30.0	16.6	866
27.0	3.52		3.5	.95	.96	1091	347.8	32.6	18.3	845
28.0	3.47		3.5	.95	.96	1091	348.0	35.4	19.4	846
29.0	3.53		3.5	.95	.96	1091	348.0	38.3	19.9	847
30.0	3.49		3.5	.95	.97	1090	347.8	41.2	19.9	847
31.0	3.16		3.2	.98	-14.00	1059	347.6	43.9	19.2	823
32.0	3.05		3.0	-14.00	.03	1036	347.2	46.4	17.9	806
33.0	2.84		2.8	.03	.06	1013	346.7	48.7	16.1	788
34.0	2.70		2.7	.04	.08	1000	346.1	50.5	13.9	778
35.0	2.44		2.4	.09	.13	965	345.6	52.1	11.3	750
36.0	2.46		2.5	.07	.12	974	345.1	53.3	8.4	757
37.0	2.44		2.4	.08	.13	961	344.7	54.2	5.2	747
38.0	2.50		2.5	.07	.12	971	344.4	54.9	1.8	755
39.0	2.55		2.6	.05	.10	982	344.3	55.4	-1.8	763
40.0	2.56		2.6	.05	.10	982	344.4	55.8	-5.4	764
41.0	2.52		2.5	.07	.12	973	344.7	56.1	-9.1	758
42.0	2.50		2.5	.07	.11	975	345.3	56.5	-12.8	762
43.0	2.47		2.5	.07	.11	979	346.0	56.9	-16.5	766
44.0	2.42		2.4	.09	.12	972	346.9	57.4	-20.0	763
45.0	2.39		2.4	.09	.11	976	348.0	58.2	-23.4	770
46.0	2.28		2.3	.11	.12	970	349.1	59.1	-26.6	768
47.0	2.26		2.3	.12	.11	975	350.3	60.4	-29.5	776
48.0	2.10		2.1	.15	.14	956	351.4	62.0	-32.2	764

Table 3.--Continued

SATELLITE 1968 ALPHA

MJD	$-10^6\,\dot{P}$	$\dot{P}_R$	$-10^6\,\dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37549.0	2.17		2.2	-14.14	-14.12	972	352.4	64.0	-34.4	781
50.0	2.15		2.2	.14	.11	976	353.3	66.3	-36.1	788
51.0	2.24		2.2	.14	.11	979	354.0	68.9	-37.3	793
52.0	2.39		2.4	.11	.07	1004	354.4	71.8	-37.9	817
53.0	2.56		2.6	.08	.04	1028	354.6	74.8	-37.9	839
54.0	2.48		2.5	.10	.06	1016	354.5	77.9	-37.3	832
55.0	2.52		2.5	.10	.06	1014	354.1	80.8	-36.1	833
56.0	2.57		2.5	.09	.06	1011	353.5	83.5	-34.2	831
57.0	2.64		2.6	.08	.05	1018	352.6	85.9	-31.8	838
58.0	2.84		2.8	.05	.03	1034	351.6	87.9	-29.0	852
59.0	2.83		2.8	.04	.04	1029	350.4	89.6	-25.7	848
60.0	2.55		2.5	.08	.09	991	349.2	91.0	-22.1	816
61.0	2.42		2.4	.10	.11	974	348.1	92.0	-18.2	802
62.0	2.32		2.3	.11	.14	958	347.0	92.8	-14.0	788
63.0	2.22		2.2	.13	.16	942	346.0	93.4	-9.8	774
64.0	2.07		2.1	.14	.19	926	345.2	93.8	-5.4	761
65.0	2.01		2.0	.16	.21	912	344.6	94.2	-0.9	749
66.0	2.02		2.0	.16	.22	909	344.2	94.5	3.5	748
67.0	2.18		2.2	.12	.18	931	344.0	94.9	7.9	767
37576.0	2.07		2.1	-14.16	-14.19	928	347.2	108.8	36.8	796
77.0	2.04		2.0	.18	.20	917	347.4	111.7	37.7	791
78.0	2.05		2.1	.16	.19	928	347.4	114.6	38.0	805
79.0	2.03		2.0	.18	.21	916	347.2	117.5	37.7	798
80.0	2.04		2.0	.18	.21	915	346.9	120.2	36.8	801
81.0	2.01		2.0	.18	.21	914	346.5	122.5	35.3	802
82.0	1.97		2.0	.17	.21	912	346.0	124.6	33.4	803
83.0	1.99		2.0	.17	.22	910	345.5	126.3	31.0	803
84.0	2.14		2.1	.15	.20	920	345.0	127.7	28.3	812
85.0	2.25		2.3	.11	.16	941	344.6	128.8	25.2	832
86.0	2.09		2.1	.15	.20	918	344.3	129.6	21.9	811
87.0	1.81		1.8	.21	.27	878	343.3	130.2	18.4	776
88.0	1.52		1.5	.28	.35	840	343.3	130.6	14.8	741
89.0	1.40		1.4	.31	.37	827	343.6	130.9	11.2	730
90.0	1.27		1.3	.34	.40	815	344.1	131.2	7.5	718
91.0	1.48		1.5	.28	.33	846	344.8	131.6	3.8	746
92.0	1.61		1.6	.26	.30	863	345.8	132.0	0.2	761
93.0	1.68		1.7	.24	.27	881	346.9	132.6	-3.3	776
94.0	1.68		1.7	.24	.26	886	348.1	133.4	-6.7	781
95.0	1.19		1.2	.38	.39	819	349.4	134.5	-9.7	723
37603.0	1.13		1.1	-14.43	-14.38	824	355.1	153.7	-18.6	746
04.0	1.08		1.1	.43	.38	822	354.7	156.4	-17.1	748
05.0	1.20		1.2	.39	.35	836	354.0	158.9	-15.0	764
06.0	1.17		1.2	.39	.36	833	353.1	161.1	-12.4	765
07.0	0.97		1.0	.46	.44	796	352.1	162.8	-9.4	734
08.0	1.07		1.1	.42	.41	808	350.9	164.3	-6.0	749
09.0	1.63		1.6	.27	.27	878	349.8	165.3	-2.2	816
10.0	1.83		1.8	.22	.23	899	348.6	166.2	1.7	839
11.0	1.87		1.9	.20	.22	907	347.5	166.7	5.9	849
12.0	1.65		1.6	.26	.30	864	346.6	167.1	10.1	811
13.0	1.52		1.5	.29	.33	847	345.8	167.4	14.5	797
14.0	1.49		1.5	.29	.34	845	345.2	167.7	18.8	796
15.0	1.47		1.5	.29	.34	843	344.8	167.9	23.2	796
16.0	1.43		1.4	.31	.37	828	344.6	168.3	27.4	784
17.0	1.34		1.3	.35	.40	813	344.6	168.7	31.6	771
18.0	1.30		1.3	.35	.40	813	344.7	169.4	35.5	773
19.0	1.23		1.2	.38	.43	799	344.9	170.4	39.2	762

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37620.0	1.18		1.2	-14.38	-14.43	799	345.2	171.6	42.7	764
21.0	1.18		1.2	.38	.43	800	345.6	173.2	45.7	768
22.0	1.13		1.1	.42	.46	785	345.9	175.1	48.3	756
23.0	1.10		1.1	.42	.46	786	346.1	177.3	50.5	759
37631.0	1.01		1.0	-14.45	-14.52	761	343.6	196.9	46.5	750
32.0	1.04		1.0	.45	.52	760	343.0	198.2	43.6	749
33.0	1.25		1.3	.34	.42	804	342.5	199.2	40.5	793
37633.5	1.90		1.9	-14.19	-14.27	881	342.3	199.6	38.8	869
34.0	1.94		1.9	.19	.27	880	342.1	200.0	37.1	868
34.5	2.20		2.2	.13	.21	914	342.0	200.2	35.3	901
35.0	2.51		2.5	.08	.16	945	341.9	200.5	33.4	932
35.5	2.58		2.6	.07	.14	956	341.8	200.6	31.6	942
36.0	2.52		2.5	.08	.16	946	341.8	200.8	29.7	931
36.5	2.36		2.4	.10	.17	935	341.9	200.9	27.7	921
37.0	2.33		2.3	.12	.19	926	342.0	201.0	25.8	910
37.5	2.15		2.1	.15	.23	905	342.2	201.1	23.8	889
38.0	2.15		2.1	.15	.22	906	342.5	201.1	21.8	889
37639.0	1.60		1.6	-14.26	-14.33	848	343.1	201.3	17.9	830
40.0	1.53		1.5	.29	.35	839	344.0	201.5	14.0	819
41.0	0.90		0.9	.49	.55	751	345.1	201.9	10.2	730
42.0	1.10		1.1	.41	.45	789	346.3	202.5	6.6	765
43.0	1.15		1.1	.42	.44	794	347.6	203.3	3.1	767
44.0	1.16		1.2	.38	.40	815	348.9	204.4	-0.1	784
45.0	1.08		1.1	.42	.42	806	350.6	205.9	-2.9	773
46.0	0.76		0.8	.55	.53	756	351.6	207.7	-5.3	723
47.0	0.66		0.7	.61	.58	738	352.5	209.9	-7.3	704
48.0	0.68		0.7	.61	.57	740	353.1	212.4	-8.8	706
49.0	0.68		0.7	.61	.57	742	353.5	215.1	-9.6	707
50.0	0.65		0.7	.61	.57	742	353.6	217.9	-9.9	708
51.0	0.59		0.6	.67	.63	719	353.5	220.8	-9.5	686
52.0	0.54		0.5	.74	.71	692	353.0	223.4	-8.5	662
53.0	0.58		0.6	.67	.64	715	352.4	225.9	-6.9	686
54.0	0.65		0.7	.60	.59	735	351.5	228.0	-4.7	708
55.0	0.68		0.7	.60	.60	731	350.5	229.8	-2.2	708
56.0	0.71		0.7	.60	.61	727	349.4	231.2	0.8	707
57.0	0.79		0.8	.54	.56	744	348.2	232.3	4.1	726
58.0	0.83		0.8	.54	.57	740	347.1	233.1	7.7	726
59.0	0.90		0.9	.49	.54	755	346.0	233.6	11.5	743
60.0	0.94		0.9	.49	.54	751	345.1	234.0	15.4	743
61.0	1.23		1.2	.38	.43	798	344.3	234.2	19.4	791
62.0	1.51		1.5	.29	.35	838	343.8	234.4	23.4	833
63.0	1.32		1.3	.34	.41	809	343.4	234.5	27.4	806
64.0	1.04		1.0	.45	.52	762	343.3	234.7	31.3	760
65.0	0.98		1.0	.45	.52	762	343.3	235.0	35.2	761
66.0	0.96		1.0	.45	.52	762	343.6	235.6	38.9	762
67.0	0.91		0.9	.49	.56	746	343.9	236.3	42.3	746
68.0	0.87		0.9	.49	.55	748	344.4	237.4	45.5	748
69.0	0.68		0.7	.60	.65	710	344.9	238.8	48.4	710
70.0	0.58		0.6	.66	.71	689	345.4	240.5	50.8	689
71.0	0.57		0.6	.66	.71	690	345.8	242.6	52.8	690
72.0	0.61		0.6	.66	.71	691	346.1	244.9	54.2	690
73.0	0.69		0.7	.60	.64	713	346.3	247.6	55.0	712
74.0	0.68		0.7	.60	.64	713	346.4	250.3	55.3	712
75.0	0.66		0.7	.61	.65	713	346.3	253.1	54.9	711
76.0	0.65		0.7	.61	.65	711	346.0	255.7	53.8	709
77.0	0.71		0.7	.60	.65	710	345.7	258.2	52.2	707

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37[illegible].0	0.68		0.7	-14.60	-14.66	708	345.2	260.3	50.0	704
[illegible].0	0.68		0.7	.60	.66	707	344.7	262.1	47.4	702
[illegible].0	0.73		0.7	.60	.67	705	344.1	263.6	44.3	700
[illegible].0	0.74		0.7	.60	.67	704	343.6	264.7	40.9	697
[illegible].0	0.75		0.7	.60	.68	702	343.1	265.5	37.2	695
[illegible].0	0.78		0.8	.54	.62	721	342.8	266.1	33.3	713
[illegible].0	0.74		0.7	.60	.68	701	342.7	266.5	29.2	693
[illegible].0	0.74		0.7	.60	.68	702	342.8	266.8	25.0	692
[illegible].0	0.73		0.7	.60	.67	703	343.0	267.0	20.7	692
[illegible].0	0.69		0.7	.60	.67	704	343.6	267.2	16.4	692
[illegible].0	0.74		0.7	.60	.66	707	344.3	267.4	12.1	693
[illegible].0	0.80		0.8	.55	.60	730	345.2	267.8	7.9	713
[illegible].0	0.88		0.9	.50	.54	752	346.2	268.4	3.8	732
91.0	1.02		1.0	.46	.49	774	347.4	269.2	0.0	750
92.0	1.12		1.1	.43	.44	795	348.6	270.3	-3.7	767
93.0	1.15		1.2	.40	.40	815	349.8	271.7	-7.0	782
94.0	1.03		1.0	.47	.46	786	350.9	273.5	-9.9	751
95.0	0.91		0.9	.52	.50	771	351.8	275.6	-12.4	733
96.0	0.94		0.9	.52	.49	774	352.6	278.1	-14.3	731
97.0	0.85		0.8	.57	.53	756	353.1	280.9	-15.7	711
[illegible].0	0.84		0.8	.57	.53	757	353.4	283.8	-16.5	709
99.0	0.90		0.9	.52	.48	776	353.3	286.7	-16.6	723
37[illegible].0	1.08		1.1	.44	.41	810	353.1	289.6	-16.1	752
[illegible].0	1.15		1.1	.44	.41	809	352.5	292.2	-15.0	748
02.0	1.05		1.0	.47	.45	789	351.8	294.6	-13.3	728
03.0	1.06		1.1	.43	.42	803	350.9	296.6	-11.2	739
04.0	0.88		0.9	.51	.51	765	349.8	298.2	-8.6	703
05.0	0.70		0.7	.61	.62	722	348.7	299.5	-5.7	663
06.0	0.87		0.9	.50	.53	758	347.6	300.5	-2.5	696
07.0	1.13		1.1	.42	.45	789	346.6	301.2	0.9	725
08.0	1.16		1.2	.38	.43	802	345.7	301.8	4.4	737
09.0	1.21		1.2	.38	.43	799	344.9	302.1	8.1	735
10.0	1.22		1.2	.38	.44	797	344.3	302.4	11.9	734
11.0	1.40		1.4	.31	.38	825	344.0	302.7	15.6	760
12.0	1.61		1.6	.26	.32	851	343.8	303.0	19.3	784
13.0	1.70		1.7	.24	.30	864	343.9	303.5	22.9	796
14.0	1.32		1.3	.35	.41	810	344.1	304.1	26.4	747
15.0	1.06		1.1	.41	.47	781	344.5	304.9	29.6	719
16.0	1.49		1.5	.29	.34	840	344.9	306.0	32.6	772
17.0	1.79		1.8	.22	.27	881	345.4	307.5	35.3	807
18.0	1.86		1.9	.20	.24	895	345.9	309.2	37.6	817
19.0	1.93		1.9	.20	.24	897	346.4	311.4	39.5	815
20.0	2.09		2.1	.17	.20	921	346.8	313.8	40.8	832
21.0	2.20		2.2	.15	.18	934	347.0	316.5	41.6	838
22.0	2.28		2.3	.13	.16	946	347.1	319.4	41.8	843
23.0	2.36		2.4	.11	.14	957	347.1	322.4	41.3	846
24.0	2.31		2.3	.13	.16	946	346.9	325.2	40.2	829
25.0	2.27		2.3	.13	.16	945	346.6	327.9	38.5	822
26.0	2.02		2.0	.18	.22	909	346.1	330.2	36.3	785
27.0	1.90		1.9	.20	.24	896	345.6	332.3	33.5	768
37728.0	1.80		1.8	-14.22	-14.26	882	345.0	334.0	30.3	751
28.5	1.87		1.9	.19	.24	894	344.8	334.7	28.6	758
29.0	2.01		2.0	.17	.22	905	344.5	335.3	26.8	766
29.5	2.03		2.0	.17	.23	905	344.3	335.9	24.9	763
30.0	2.04		2.0	.17	.23	904	344.1	336.4	23.0	761
30.5	1.91		1.9	.19	.25	892	343.9	336.8	21.0	749
31.0	1.59		1.6	.26	.32	854	343.7	337.2	18.9	715
31.5	1.19		1.2	.37	.44	797	343.6	337.5	16.8	666
32.0	1.26		1.3	.34	.40	812	343.6	337.8	14.6	678

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37732.5	1.38		1.4	-14.31	-14.37	827	343.5	338.0	12.5	689
33.0	1.45		1.5	.28	.34	841	343.6	338.2	10.3	700
33.5	1.59		1.6	.25	.31	856	343.7	338.4	8.0	711
34.0	1.60		1.6	.25	.31	857	343.8	338.6	5.8	711
34.5	1.64		1.6	.25	.31	858	344.0	338.7	3.6	712
35.0	1.62		1.6	.25	.31	859	344.3	338.9	1.3	712
35.5	1.61		1.6	.25	.30	861	344.6	339.1	-0.9	713
36.0	1.65		1.6	.25	.30	862	345.0	339.3	-3.1	714
36.5	1.64		1.6	.25	.30	864	345.4	339.5	-5.3	716
37.0	1.59		1.6	.25	.29	866	345.9	339.7	-7.5	717
37738.0	1.44		1.4	-14.31	-14.33	847	347.8	340.4	-11.8	701
39.0	1.54		1.5	.28	.29	866	348.9	341.2	-15.8	716
40.0	1.63		1.6	.26	.26	885	350.0	342.4	-19.7	731
41.0	1.82		1.8	.22	.20	917	351.2	343.9	-23.2	756
42.0	2.10		2.1	.16	.14	959	352.2	345.7	-26.4	790
43.0	2.45		2.5	.09	.06	1010	353.1	347.9	-29.1	830
44.0	2.79		2.8	.05	.02	1047	353.8	350.5	-31.3	857
45.0	2.84		2.8	.05	.01	1049	354.2	353.3	-32.9	856
46.0	2.78		2.8	.05	.01	1051	354.4	356.3	-33.9	854
47.0	2.79		2.8	.05	.01	1050	354.3	359.4	-34.3	850
48.0	2.93		2.9	.04	.00	1059	354.0	2.3	-34.0	853
49.0	3.00		3.0	.02	-13.99	1067	353.3	5.1	-33.1	855
50.0	3.02		3.0	.02	-14.00	1063	352.5	7.7	-31.6	848
51.0	3.02		3.0	.02	.00	1057	351.4	9.8	-29.7	840
52.0	3.03		3.0	.01	.01	1052	350.2	11.7	-27.2	831
53.0	3.04		3.0	.01	.02	1046	349.0	13.1	-24.5	823
54.0	2.94		2.9	.02	.04	1029	347.8	14.2	-21.4	807
55.0	2.77		2.8	.03	.06	1013	346.6	15.1	-18.0	791
56.0	2.64		2.6	.06	.10	987	345.5	15.7	-14.5	769
57.0	2.47		2.5	.07	.12	972	344.7	16.2	-10.9	755
58.0	2.35		2.4	.08	.14	958	344.0	16.6	-7.2	743
59.0	2.15		2.2	.12	.18	933	343.5	16.9	-3.5	723
60.0	2.21		2.2	.12	.18	932	343.3	17.3	0.2	722
61.0	2.44		2.4	.08	.14	954	343.3	17.8	3.8	739
62.0	2.61		2.6	.05	.11	976	343.5	18.4	7.3	756
63.0	2.56		2.6	.05	.11	978	343.8	19.2	10.6	757
64.0	2.51		2.5	.07	.12	969	344.3	20.3	13.6	751
65.0	2.41		2.4	.09	.13	961	345.0	21.8	16.4	746
66.0	2.35		2.4	.09	.13	963	345.5	23.5	18.7	748
67.0	2.20		2.2	.13	.16	943	346.0	25.7	20.7	733
68.0	2.30		2.3	.11	.14	956	346.5	28.1	22.1	744
69.0	2.69		2.7	.05	.08	1001	346.8	30.8	23.0	779
70.0	3.18		3.2	-13.98	.01	1052	347.0	33.7	23.2	819
71.0	3.48		3.5	.95	-13.98	1081	347.0	36.7	22.9	841
72.0	3.47		3.5	.95	.98	1080	346.9	39.6	21.9	840
73.0	3.37		3.4	.96	.99	1069	346.6	42.3	20.3	831
74.0	3.36		3.4	.96	.99	1067	346.2	44.7	18.2	829
75.0	3.80		3.8	.92	.95	1102	345.7	46.8	15.5	856
76.0	4.34		4.3	.87	.91	1146	345.2	48.6	12.4	889
77.0	4.31		4.3	.87	.91	1144	344.7	50.0	9.0	886
78.0	3.93		3.9	.90	.95	1104	344.2	51.1	5.2	856
79.0	3.42		3.4	.95	-14.01	1056	343.9	51.9	1.2	818
80.0	3.28		3.3	.96	.02	1046	343.7	52.5	-3.0	811
81.0	3.07		3.1	.99	.04	1026	343.7	52.9	-7.3	797
82.0	2.68		2.7	-14.04	.10	987	343.9	53.3	-11.7	768
83.0	2.43		2.4	.09	.14	957	344.3	53.6	-16.1	747
84.0	2.24		2.2	.12	.17	937	344.9	53.9	-20.5	734
85.0	2.08		2.1	.14	.19	929	345.7	54.3	-24.8	731
86.0	2.03		2.0	.17	.20	921	346.6	54.9	-29.0	728

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37787.0	1.95		1.9	-14.19	-14.21	913	347.7	55.7	-33.0	726
88.0	1.72		1.7	.24	.25	891	348.8	56.8	-36.8	713
89.0	1.68		1.7	.24	.24	896	349.9	58.2	-40.3	721
90.0	1.83		1.8	.22	.21	912	350.9	60.0	-43.4	740
91.0	1.95		1.9	.20	.19	929	351.8	62.2	-46.0	758
92.0	1.67		1.7	.25	.22	905	352.6	64.6	-48.1	743
93.0	1.34		1.3	.36	.32	850	353.0	67.4	-49.6	702
94.0	1.33		1.3	.36	.32	851	353.3	70.3	-50.6	706
95.0	1.28		1.3	.36	.32	851	353.2	73.3	-50.8	708
96.0	1.57		1.6	.27	.25	893	352.9	76.3	-50.4	745
97.0	1.62		1.6	.27	.25	891	352.4	79.0	-49.4	745
98.0	1.78		1.8	.22	.21	914	351.6	81.5	-47.8	765
99.0	1.86		1.9	.20	.19	923	350.6	83.6	-45.7	772
37800.0	1.73		1.7	.24	.25	893	349.5	85.4	-43.2	746
01.0	1.72		1.7	.24	.26	888	348.3	86.8	-40.2	740
02.0	1.77		1.8	.21	.24	896	347.0	87.8	-37.0	745
03.0	1.79		1.8	.21	.25	891	345.9	88.6	-33.5	739
04.0	1.89		1.9	.19	.24	899	344.9	89.2	-29.8	743
05.0	2.04		2.0	.16	.22	907	344.0	89.6	-26.0	748
06.0	2.13		2.1	.14	.21	915	343.3	89.8	-22.1	752
07.0	2.08		2.1	.14	.21	913	342.9	90.1	-18.2	748
08.0	2.00		2.0	.16	.23	901	342.7	90.4	-14.3	736
09.0	1.98		2.0	.16	.23	900	342.7	90.8	-10.5	735
10.0	1.86		1.9	.18	.25	889	342.9	91.3	-6.8	725
11.0	1.92		1.9	.19	.25	890	343.3	92.0	-3.3	725
12.0	2.34		2.3	.11	.17	937	343.7	93.1	0.0	764
13.0	2.14		2.1	.15	.21	916	344.3	94.4	2.9	748
14.0	1.94		1.9	.19	.24	895	344.9	96.1	5.5	732
15.0	1.80		1.8	.22	.26	885	345.5	98.1	7.7	726
16.0	1.76		1.8	.22	.26	886	345.9	100.5	9.3	730
17.0	1.61		1.6	.27	.30	862	346.3	103.1	10.4	712
18.0	1.28		1.3	.35	.38	821	346.5	105.9	10.9	681
19.0	1.18		1.2	.38	.42	806	346.6	108.8	10.8	672
20.0	1.33		1.3	.35	.38	821	346.5	111.6	10.0	687
21.0	1.47		1.5	.29	.33	848	346.3	114.2	8.6	713
22.0	1.34		1.3	.35	.39	819	345.9	116.6	6.7	692
23.0	1.24		1.2	.38	.42	802	345.5	118.6	4.3	681
24.0	1.33		1.3	.34	.40	815	345.0	120.2	1.4	695
25.0	1.46		1.5	.29	.34	842	344.6	121.5	-1.8	721
26.0	1.41		1.4	.31	.37	827	344.2	122.5	-5.3	710
27.0	1.27		1.3	.34	.40	811	343.9	123.2	-9.1	700
28.0	1.32		1.3	.34	.41	811	343.8	123.7	-13.0	702
29.0	1.36		1.4	.31	.37	825	343.8	124.0	-17.1	717
30.0	1.40		1.4	.31	.37	826	344.1	124.3	-21.2	720
31.0	1.37		1.4	.31	.37	828	344.5	124.5	-25.4	725
32.0	1.23		1.2	.38	.43	801	345.2	124.7	-29.5	704
33.0	1.11		1.1	.41	.46	788	346.1	125.1	-33.6	696
34.0	1.05		1.0	.46	.49	775	347.1	125.6	-37.5	687
35.0	1.00		1.0	.46	.48	779	348.2	126.4	-41.2	693
36.0	0.96		1.0	.46	.47	783	349.4	127.4	-44.7	700
37.0	0.91		0.9	.51	.50	769	350.5	128.8	-47.9	691
38.0	0.95		0.9	.51	.49	772	351.6	130.5	-50.6	698
39.0	1.02		1.0	.47	.44	793	352.5	132.6	-53.0	721
40.0	1.01		1.0	.47	.44	796	353.2	135.1	-54.7	728
41.0	0.93		0.9	.51	.48	779	353.6	137.8	-55.9	716
42.0	0.82		0.8	.56	.52	761	353.8	140.7	-56.5	702
43.0	0.72		0.7	.61	.57	740	353.7	143.6	-56.4	686
44.0	0.64		0.6	.67	.64	716	353.3	146.5	-55.7	666
45.0	0.58		0.6	.67	.64	714	352.7	149.2	-54.3	666
46.0	0.55		0.5	.74	.72	686	351.8	151.6	-52.3	642

[illegible]

MJD	$-10^6\,\dot{P}$	$\dot{P}_R$	$-10^6\,\dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37847.0	0.56	0.6	-14.67	-14.66	708	350.7	153.6	-49.9	663
48.0	0.63	0.6	.66	.67	705	349.5	155.3	-47.0	660
49.0	0.73	0.7	.60	.62	723	348.3	156.6	-43.7	677
50.0	0.81	0.8	.54	.57	739	347.0	157.6	-40.1	692
51.0	0.83	0.8	.54	.59	735	345.8	158.4	-36.2	688
52.0	0.82	0.8	.54	.60	732	344.8	158.9	-32.2	683
53.0	0.82	0.8	.54	.60	728	343.8	159.2	-28.1	679
54.0	0.80	0.8	.53	.61	726	343.1	159.5	-23.9	675
55.0	0.78	0.8	.53	.62	724	342.7	159.7	-19.6	672
56.0	0.73	0.7	.59	.67	703	342.4	160.0	-15.4	650
57.0	0.84	0.8	.54	.62	722	342.4	160.4	-11.3	667
58.0	0.77	0.8	.54	.62	723	342.5	160.9	-7.3	666
59.0	0.84	0.8	.54	.62	723	342.9	161.7	-3.5	665
60.0	0.76	0.8	.54	.61	725	343.3	162.8	0.1	665
61.0	0.71	0.7	.60	.66	706	343.8	164.1	3.3	648
62.0	0.67	0.7	.60	.66	708	344.4	165.9	6.2	649
63.0	0.71	0.7	.60	.66	709	344.9	168.0	8.6	651
64.0	0.69	0.7	.60	.65	710	345.3	170.4	10.5	653
65.0	0.70	0.7	.60	.65	711	345.6	173.1	11.8	656
66.0	0.64	0.6	.66	.71	690	345.8	175.9	12.6	638
67.0	0.66	0.7	.60	.65	712	345.8	178.8	12.6	661
68.0	0.68	0.7	.60	.65	711	345.6	181.6	12.1	664
69.0	0.71	0.7	.60	.65	710	345.4	184.2	11.0	666
70.0	0.77	0.8	.55	.60	729	345.0	186.6	9.3	688
71.0	0.95	0.9	.50	.56	746	344.5	188.6	7.1	708
72.0	0.92	0.9	.50	.56	745	344.1	190.2	4.5	710
73.0	0.81	0.8	.54	.61	725	343.6	191.6	1.6	694
74.0	0.69	0.7	.60	.67	703	343.2	192.6	-1.7	677
75.0	0.53	0.5	.73	.81	657	343.0	193.3	-5.2	636
76.0	0.43	0.4	.82	.91	630	342.9	193.8	-8.9	611
77.0	0.89	0.9	.49	.57	742	343.0	194.2	-12.6	722
78.0	0.97	1.0	.45	.52	760	343.4	194.5	-16.5	742
79.0	0.71	0.7	.60	.66	706	343.9	194.8	-20.3	691
80.0	0.52	0.5	.73	.80	663	344.7	195.2	-24.2	650
81.0	0.57	0.6	.66	.71	690	345.6	195.6	-27.9	677
82.0	0.59	0.6	.66	.70	694	346.7	196.2	-31.5	681
83.0	0.59	0.6	.67	.69	697	347.9	197.1	-34.9	686
84.0	0.62	0.6	.67	.68	701	349.1	198.3	-38.1	691
85.0	0.62	0.6	.67	.67	705	350.2	199.8	-40.9	695
86.0	0.53	0.5	.75	.73	683	351.3	201.7	-43.3	675
87.0	0.46	0.5	.75	.72	686	352.2	203.9	-45.3	678
88.0	0.38	0.4	.84	.81	660	352.9	206.5	-46.7	653
89.0	0.21	0.2	-15.12	-15.08	585	353.4	209.4	-47.6	579
90.0	0.12	0.1	.41	.36	526	353.6	212.4	-47.8	522
91.0	0.57	0.6	-14.68	-14.64	716	353.5	215.4	-47.3	711
92.0	0.83	0.8	.56	.53	758	353.1	218.4	-46.2	754
93.0	0.91	0.9	.51	.49	775	352.5	221.2	-44.5	772
94.0	0.83	0.8	.56	.54	753	351.6	223.6	-42.2	751
95.0	0.72	0.7	.61	.60	729	350.5	225.7	-39.4	727
96.0	0.58	0.6	.67	.67	703	349.3	227.4	-36.1	702
97.0	0.58	0.6	.66	.69	699	348.1	228.8	-32.5	698
98.0	0.73	0.7	.60	.63	717	346.8	229.9	-28.7	717
99.0	0.93	0.9	.50	.54	752	345.7	230.7	-24.5	752
37900.0	1.06	1.1	.41	.47	782	344.6	231.3	-20.3	782
01.0	0.87	0.9	.49	.56	745	343.8	231.7	-15.9	745
02.0	0.73	0.7	.59	.67	704	343.1	232.1	-11.4	704
03.0	0.66	0.7	.59	.67	703	342.6	232.4	-6.9	701
04.0	0.57	0.6	.65	.74	680	342.4	232.8	-2.5	678
05.0	0.39	0.4	.82	.91	629	342.4	233.3	1.8	626
06.0	0.55	0.6	.66	.74	680	342.6	234.0	6.0	676

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37907.0	0.84		0.8	-14.54	-14.62	723	342.9	234.9	10.0	716
08.0	0.95		0.9	.49	.57	742	343.4	236.2	13.7	734
09.0	1.03		1.0	.45	.52	761	343.9	237.7	17.1	751
10.0	1.06		1.1	.42	.48	779	344.4	239.6	20.1	767
11.0	1.12		1.1	.42	.47	780	344.8	241.9	22.6	766
12.0	1.20		1.2	.39	.44	797	345.2	244.4	24.6	781
13.0	1.12		1.1	.42	.47	782	345.5	247.3	26.1	766
14.0	1.12		1.1	.42	.47	782	345.6	250.2	26.9	765
15.0	1.13		1.1	.43	.47	781	345.5	253.2	27.0	764
16.0	1.09		1.1	.43	.48	779	345.1	256.0	26.6	763
17.0	1.07		1.1	.43	.48	778	344.8	258.7	25.5	762
18.0	1.05		1.1	.42	.48	776	344.5	261.1	23.9	761
19.0	1.34		1.3	.36	.42	804	344.0	263.1	21.8	789
20.0	1.37		1.4	.33	.39	817	343.5	264.8	19.3	802
21.0	1.06		1.1	.42	.49	772	343.1	266.1	16.4	758
22.0	1.03		1.0	.46	.54	755	342.7	267.2	13.3	742
23.0	0.99		1.0	.46	.54	754	342.5	268.0	9.9	742
24.0	1.00		1.0	.46	.54	754	342.5	268.5	6.4	743
25.0	1.00		1.0	.45	.53	755	342.6	269.0	2.7	744
26.0	1.00		1.0	.45	.53	757	342.9	269.4	-1.0	745
27.0	1.06		1.1	.42	.49	775	343.5	269.7	-4.8	763
28.0	1.12		1.1	.42	.48	778	344.3	270.2	-8.5	765
29.0	1.02		1.0	.46	.51	765	345.2	270.7	-12.1	751
30.0	0.99		1.0	.46	.50	768	346.3	271.5	-15.5	754
31.0	0.93		0.9	.51	.54	755	347.5	272.4	-18.8	738
32.0	0.86		0.9	.51	.53	759	348.7	273.7	-21.8	740
33.0	0.86		0.9	.52	.52	762	349.9	275.4	-24.4	741
34.0	0.85		0.9	.52	.51	766	351.0	277.4	-26.7	740
35.0	0.98		1.0	.48	.46	787	351.9	279.7	-28.4	757
36.0	1.09		1.1	.44	.42	806	352.6	282.4	-29.7	771
37.0	1.40		1.4	.35	.32	853	353.1	285.4	-30.3	811
38.0	1.67		1.7	.27	.24	895	353.2	288.4	-30.3	846
39.0	1.47		1.5	.32	.29	868	353.1	291.5	-29.6	815
40.0	1.37		1.4	.35	.32	852	352.7	294.5	-28.3	795
41.0	1.30		1.3	.37	.35	836	352.1	297.2	-26.4	775
42.0	1.25		1.2	.40	.39	818	351.2	299.6	-23.9	755
43.0	1.38		1.4	.34	.34	844	350.2	301.7	-21.0	776
44.0	1.47		1.5	.31	.32	854	349.1	303.3	-17.6	782
45.0	1.60		1.6	.28	.30	864	347.9	304.7	-13.9	788
46.0	1.80		1.8	.23	.26	885	346.7	305.7	-9.9	806
47.0	1.90		1.9	.20	.24	894	345.7	306.4	-5.7	812
48.0	1.80		1.8	.22	.27	878	344.7	307.0	-1.3	797
49.0	1.77		1.8	.22	.28	875	343.9	307.4	3.1	794
50.0	1.78		1.8	.22	.28	873	343.3	307.7	7.6	792
51.0	1.88		1.9	.19	.26	883	343.0	308.1	12.1	801
52.0	2.00		2.0	.17	.24	894	342.8	308.5	16.5	811
53.0	1.87		1.9	.20	.26	883	342.9	309.0	20.9	801
54.0	1.84		1.8	.22	.29	871	343.2	309.7	25.0	790
55.0	1.84		1.8	.22	.28	872	343.6	310.7	29.0	790
56.0	1.85		1.8	.22	.28	874	344.0	312.0	32.7	790
57.0	1.83		1.8	.22	.28	876	344.5	313.5	36.0	790
58.0	1.77		1.8	.23	.27	877	345.0	315.5	38.9	789
59.0	1.78		1.8	.23	.27	879	345.5	317.8	41.3	787
60.0	1.83		1.8	.23	.27	880	345.8	320.4	43.2	784
61.0	1.89		1.9	.21	.24	894	346.0	323.2	44.4	791
62.0	2.07		2.1	.17	.20	917	346.1	326.2	45.1	807
63.0	2.36		2.4	.11	.15	950	345.9	329.1	45.1	831
64.0	2.38		2.4	.11	.15	950	345.7	331.9	44.4	824
65.0	2.32		2.3	.13	.17	938	345.3	334.5	43.2	808
66.0	2.00		2.0	.18	.23	902	344.8	336.7	41.4	772

MJD	$-10^6 \dot{\rho}$	$\dot{\rho}_R$	$-10^6 \dot{\rho}_A$	$\log \rho_T$	$\log \rho_B$	T_T (°K)	$\dot{z}$ (km)	$\alpha_T - \alpha_0$	$\delta_T - \delta_0$	T_N (°K)
37967.0	1.86	1.9	-14.20	-14.25		889	344.2	338.6	39.1	755
68.0	1.68	1.7	.24	.30		862	343.7	340.1	35.5	726
69.0	1.81	1.8	.21	.28		874	343.1	341.3	33.4	733
70.0	1.93	1.9	.19	.26		885	342.7	342.2	30.2	738
71.0	2.01	2.0	.17	.24		896	342.5	342.9	26.7	744
72.0	2.13	2.1	.15	.22		908	342.4	343.3	23.0	751
73.0	2.35	2.3	.11	.18		932	342.5	343.7	19.2	768
74.0	2.30	2.3	.11	.18		934	342.9	243.9	15.4	768
75.0	2.28	2.3	.11	.17		938	343.5	344.2	11.6	768
76.0	2.23	2.2	.13	.18		931	344.3	344.6	7.8	761
77.0	1.96	2.0	.17	.21		913	345.3	345.1	4.1	744
78.0	1.76	1.8	.21	.24		894	346.4	345.6	0.6	726
79.0	1.65	1.7	.23	.26		886	347.6	346.7	-2.7	718
80.0	1.75	1.6	.21	.22		905	348.8	348.0	-5.7	731
37983.0	2.10	2.1	-14.16	-14.14		957	351.9	354.0	-12.4	765
84.0	2.20	2.2	.14	.12		973	352.6	356.6	-13.6	774
85.0	2.12	2.1	.16	.13		963	353.0	359.5	-14.2	763
86.0	2.04	2.0	.18	.15		952	353.2	2.5	-14.1	751
87.0	1.99	2.0	.18	.15		951	353.0	5.4	-13.4	747
88.0	1.93	1.9	.20	.17		937	352.6	8.2	-12.1	733
89.0	2.08	2.1	.16	.14		959	351.9	10.7	-10.1	748
90.0	2.30	2.3	.12	.11		979	351.1	12.9	-7.7	761
91.0	2.57	2.6	.07	.07		1008	350.1	14.7	-4.7	782
92.0	2.37	2.4	.10	.11		980	349.0	16.1	-1.4	759
93.0	2.05	2.0	.16	.19		929	347.8	17.2	2.2	719
94.0	1.99	2.0	.16	.19		924	346.7	18.0	6.1	715
95.0	1.96	2.0	.16	.20		919	345.7	18.5	10.2	712
96.0	1.94	1.9	.18	.23		903	344.8	18.9	14.4	701
97.0	1.90	1.9	.18	.23		900	344.2	19.1	18.7	701
98.0	1.85	1.9	.18	.24		897	343.7	19.3	23.0	701
99.0	1.92	1.9	.18	.24		896	343.4	19.6	27.3	703
38000.0	1.92	1.9	.18	.24		895	343.4	19.9	31.5	706
01.0	1.92	1.9	.18	.24		895	343.5	20.3	35.6	710
02.0	1.92	1.9	.18	.24		895	343.8	21.0	39.5	714
03.0	1.99	2.0	.16	.22		908	344.2	21.9	43.1	728
04.0	2.08	2.1	.15	.20		921	344.7	23.1	46.4	743
05.0	2.00	2.0	.17	.21		911	345.2	24.7	49.4	738
06.0	1.88	1.9	.19	.23		901	345.6	26.6	51.9	733
07.0	1.81	1.8	.21	.25		890	346.0	28.9	53.9	726
08.0	1.76	1.8	.21	.25		890	346.2	31.5	55.3	729
09.0	1.89	1.9	.19	.23		903	346.3	34.2	56.0	740
10.0	2.04	2.0	.17	.21		914	346.2	37.0	56.2	750
11.0	2.00	2.0	.17	.21		913	346.0	39.8	55.7	748
12.0	1.93	1.9	.19	.23		899	345.6	42.4	54.5	736
13.0	1.81	1.8	.21	.26		885	345.1	44.7	52.8	723
14.0	1.61	1.6	.26	.31		857	344.6	46.7	50.5	697
15.0	1.68	1.7	.23	.29		868	344.0	48.3	47.8	703
16.0	2.03	2.0	.17	.22		905	343.9	49.5	44.7	730
17.0	2.48	2.5	.08	.14		961	343.7	50.4	41.3	770
18.0	2.51	2.5	.08	.13		961	343.7	51.1	37.6	767
19.0	2.45	2.5	.07	.13		962	343.7	51.6	33.7	763
20.0	2.13	2.1	.14	.20		920	343.9	51.8	29.7	726
21.0	1.81	1.8	.20	.26		886	344.3	52.0	25.6	696
22.0	1.75	1.7	.23	.28		876	344.9	52.2	21.4	686
23.0	1.70	1.7	.23	.27		880	345.6	52.4	17.2	686
24.0	1.65	1.6	.25	.29		870	346.5	52.7	13.2	677
25.0	1.52	1.5	.28	.30		861	347.5	53.2	9.2	669
26.0	1.45	1.4	.31	.32		851	348.6	53.9	5.4	661

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
38027.0	1.45		1.5	-14.28	-14.29	870	349.7	54.9	1.9	675
28.0	1.40		1.4	.31	.31	859	350.8	56.2	-1.3	668
29.0	1.36		1.4	.32	.30	863	351.7	57.9	-4.2	672
30.0	1.28		1.3	.35	.32	851	352.5	60.0	-6.6	664
31.0	1.27		1.3	.35	.32	853	353.1	62.4	-8.4	667
32.0	1.24		1.2	.38	.35	838	353.4	65.1	-9.7	657
33.0	1.25		1.3	.35	.32	853	353.5	68.0	-10.4	672
34.0	1.25		1.3	.35	.32	852	353.2	70.9	-10.3	673
35.0	1.24		1.2	.38	.36	834	352.7	73.8	-9.7	661
36.0	1.27		1.3	.35	.33	846	351.9	76.4	-8.4	673
37.0	1.28		1.3	.35	.34	842	350.8	78.7	-6.6	671
38.0	1.27		1.3	.35	.35	837	349.6	80.7	-4.3	669
39.0	1.27		1.3	.35	.36	831	348.4	82.3	-1.5	667
40.0	1.25		1.3	.34	.37	826	347.0	83.5	1.6	664
41.0	1.34		1.3	.34	.38	821	345.7	84.4	5.1	661
42.0	1.55		1.5	.28	.34	844	344.5	85.1	8.7	682
43.0	1.71		1.7	.23	.30	865	343.5	85.5	12.5	701
44.0	1.82		1.8	.21	.28	874	342.6	85.8	16.4	710
45.0	1.73		1.7	.23	.31	858	342.0	86.0	20.4	700
46.0	1.49		1.5	.28	.36	830	341.6	86.2	24.3	679
47.0	1.29		1.3	.34	.43	802	341.5	86.5	28.2	659
48.0	1.28		1.3	.34	.43	801	341.7	86.8	32.0	662
49.0	1.21		1.2	.37	.46	787	342.0	87.4	35.7	653
50.0	1.18		1.2	.38	.46	789	342.5	88.2	39.1	658
51.0	1.09		1.1	.41	.49	775	343.1	89.2	42.2	650
52.0	1.02		1.0	.45	.52	761	343.9	90.7	45.0	642
53.0	0.91		0.9	.50	.56	746	344.6	92.4	47.4	634
54.0	0.81		0.8	.55	.60	730	345.4	94.6	49.4	623
55.0	0.72		0.7	.60	.65	712	346.0	97.1	50.7	611
56.0	0.77		0.8	.55	.59	734	346.5	99.8	51.5	634
57.0	0.85		0.8	.55	.59	735	346.9	102.6	51.6	638
58.0	0.93		0.9	.50	.54	755	347.1	105.5	51.1	657
59.0	1.11		1.1	.42	.45	790	347.2	108.3	50.0	689
60.0	1.18		1.2	.39	.42	806	347.1	110.8	48.2	704
61.0	1.04		1.0	.46	.49	773	346.9	113.1	45.9	677
62.0	1.05		1.0	.46	.49	773	346.7	115.0	43.0	676
63.0	1.19		1.2	.38	.42	805	346.4	116.5	39.8	704
64.0	1.33		1.3	.35	.39	819	346.1	117.7	36.2	716
65.0	1.05		1.0	.45	.49	772	345.9	118.6	32.3	673
66.0	0.70		0.7	.59	.64	715	345.8	119.3	28.2	622
67.0	0.59		0.6	.65	.70	694	345.9	119.7	23.9	602
68.0	0.67		0.7	.59	.63	717	346.1	120.1	19.5	621
69.0	0.81		0.8	.54	.58	739	346.6	120.3	15.0	639
70.0	1.07		1.1	.41	.44	794	347.2	120.6	10.6	686
71.0	1.10		1.1	.41	.44	797	348.0	121.0	6.1	688
72.0	1.00		1.0	.46	.47	784	348.9	121.5	1.8	676
73.0	0.90		0.9	.50	.50	769	350.0	122.2	-2.4	664
74.0	0.84		0.8	.55	.54	754	351.1	123.2	-6.3	651
38081.0	0.70		0.7	-14.62	-14.56	746	355.4	139.3	-22.3	662
82.0	0.65		0.7	.62	.56	744	354.9	142.3	-22.2	664
83.0	0.62		0.6	.68	.63	719	354.3	145.2	-21.5	645
84.0	0.58		0.6	.67	.64	716	353.3	147.8	-20.2	646
85.0	0.67		0.7	.61	.59	735	352.2	150.1	-18.3	666
86.0	0.63		0.6	.67	.66	708	350.9	152.1	-16.0	645
87.0	0.63		0.6	.67	.67	703	349.5	153.6	-13.2	643
88.0	0.66		0.7	.60	.62	721	348.1	154.8	-10.2	662
89.0	0.70		0.7	.60	.64	716	346.7	155.8	-6.8	659
90.0	0.73		0.7	.60	.65	712	345.5	156.4	-3.3	657

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
38091.0	0.73		0.7	-14.60	-14.66	708	344.4	156.9	0.4	655
92.0	0.76		0.8	.54	.61	725	343.5	157.3	4.1	671
93.0	0.74		0.7	.59	.67	703	342.9	157.7	7.9	651
94.0	0.68		0.7	.59	.68	701	342.5	158.0	11.6	651
95.0	0.79		0.8	.54	.63	720	342.4	158.5	15.3	669
96.0	1.03		1.0	.45	.53	756	342.4	159.1	18.8	703
97.0	1.21		1.2	.38	.46	787	342.7	159.9	22.2	734
98.0	1.22		1.2	.38	.46	788	343.1	161.0	25.3	736
99.0	1.22		1.2	.39	.45	790	343.6	162.4	28.1	739
38100.0	0.99		1.0	.46	.52	760	344.1	164.2	30.6	713
01.0	0.81		0.8	.55	.61	726	344.7	166.3	32.6	683
38106.0	0.58		0.6	-14.67	-14.72	687	345.7	180.5	33.8	657
07.0	0.58		0.6	.67	.72	687	345.5	183.3	32.2	659
08.0	0.74		0.7	.61	.66	708	345.1	185.8	30.0	682
38112.0	0.57		0.6	-14.66	-14.74	681	343.4	192.3	16.6	663
13.0	0.65		0.6	.66	.74	680	343.1	193.2	12.5	664
14.0	0.69		0.7	.60	.68	702	342.9	193.8	8.2	686
15.0	0.70		0.7	.60	.68	702	343.0	194.3	3.7	687
16.0	0.69		0.7	.60	.67	703	343.2	194.7	-0.8	688
17.0	0.69		0.7	.60	.67	705	343.7	195.0	-5.3	690
18.0	0.68		0.7	.60	.66	707	344.3	195.4	-9.9	693
19.0	0.67		0.7	.60	.65	710	345.2	195.9	-14.3	696
20.0	0.65		0.6	.67	.71	691	346.1	196.6	-18.6	677
21.0	0.61		0.6	.67	.70	694	347.2	197.5	-22.7	681
22.0	0.59		0.6	.67	.69	697	348.3	198.8	-26.6	685
23.0	0.60		0.6	.67	.69	698	348.5	200.3	-30.1	686
24.0	0.77		0.8	.56	.56	744	349.6	202.2	-33.2	732
25.0	0.71		0.7	.61	.61	726	350.5	204.5	-35.9	715
26.0	0.70		0.7	.62	.60	729	351.2	207.2	-38.0	718
27.0	0.66		0.7	.62	.60	731	351.7	210.1	-39.5	721
28.0	0.56		0.6	.68	.66	709	351.9	213.2	-40.4	700
29.0	0.55		0.6	.68	.66	709	351.8	216.3	-40.6	701
30.0	0.53		0.5	.75	.73	683	351.4	219.3	-40.2	677
31.0	0.52		0.5	.75	.74	681	350.8	222.1	-39.1	676
32.0	0.68		0.7	.61	.61	725	349.9	224.6	-37.4	722
33.0	0.84		0.8	.56	.57	742	348.9	226.7	-35.3	740
34.0	0.99		1.0	.46	.49	775	347.7	228.4	-32.7	773
35.0	0.80		0.8	.55	.59	734	346.5	229.8	-29.7	734
36.0	0.77		0.8	.55	.60	730	345.3	230.8	-26.5	730
37.0	0.80		0.8	.54	.61	727	344.2	231.6	-23.0	727
38.0	0.84		0.8	.54	.62	723	343.2	232.2	-19.4	723
39.0	0.89		0.9	.49	.58	739	342.4	232.6	-15.6	739
40.0	0.81		0.8	.54	.63	718	341.8	233.0	-11.8	717
41.0	0.78		0.8	.54	.64	717	341.4	233.3	-8.0	715
42.0	0.75		0.7	.59	.69	696	341.2	233.7	-4.2	693
43.0	0.76		0.8	.54	.64	716	341.3	234.2	-0.6	711
44.0	0.72		0.7	.60	.69	697	341.6	234.9	2.9	690
45.0	0.61		0.6	.66	.75	676	342.0	235.9	6.2	668
46.0	0.62		0.6	.66	.75	678	342.4	237.1	9.3	667
47.0	0.57		0.6	.66	.74	679	343.0	238.7	11.9	666
48.0	0.53		0.5	.74	.81	657	343.5	240.7	14.2	642
49.0	0.75		0.8	.55	.62	724	344.0	243.0	16.0	705
50.0	0.83		0.8	.55	.61	725	344.4	245.6	17.2	704
51.0	0.83		0.8	.55	.61	725	344.6	248.5	17.8	702
52.0	0.95		0.9	.51	.56	744	344.7	251.4	17.8	719
53.0	0.95		0.9	.51	.57	743	344.6	254.4	17.1	718

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
38154.0	0.86		0.9	-14.51	-14.57	742	344.4	257.2	15.9	717
55.0	0.86		0.9	.51	.57	741	344.1	259.8	14.0	716
56.0	0.87		0.9	.51	.58	739	343.6	262.0	11.6	715
57.0	0.90		0.9	.50	.58	737	343.1	263.9	8.7	714
58.0	0.92		0.9	.50	.58	736	342.6	265.5	5.4	714
59.0	1.06		1.1	.42	.51	767	342.1	266.6	1.7	746
60.0	1.18		1.2	.39	.47	781	341.8	267.5	-2.2	761
61.0	1.18		1.2	.38	.47	781	341.6	268.2	-6.3	763
62.0	1.14		1.1	.42	.51	766	341.5	268.7	-10.6	750
63.0	1.02		1.0	.46	.55	751	341.7	269.0	-14.9	737
64.0	0.91		0.9	.50	.59	735	342.1	269.3	-19.3	723
65.0	0.81		0.8	.55	.63	719	342.7	269.6	-23.7	708
66.0	0.78		0.8	.55	.62	722	343.6	270.0	-28.0	711
67.0	0.72		0.7	.60	.67	706	344.6	270.5	-32.2	695
68.0	0.66		0.7	.61	.65	710	345.8	271.2	-36.3	698
69.0	0.77		0.8	.56	.59	734	347.0	272.3	-40.1	722
70.0	0.65		0.7	.61	.63	717	348.2	273.6	-43.6	705
71.0	0.59		0.6	.68	.69	698	349.3	275.3	-46.7	685
72.0	0.37		0.4	.85	.84	649	350.4	277.4	-49.4	635
73.0	0.42		0.4	.85	.84	651	351.2	279.8	-51.5	635
74.0	0.40		0.4	.85	.83	652	351.8	282.5	-53.1	634
75.0	0.42		0.4	.85	.83	653	352.1	285.5	-54.0	632
76.0	0.52		0.5	.76	.74	681	352.2	288.5	-54.3	656
77.0	0.64		0.6	.69	.67	705	351.9	291.5	-53.9	675
78.0	0.76		0.8	.57	.56	746	351.4	294.3	-52.8	711
79.0	0.67		0.7	.63	.62	723	350.6	296.8	-51.2	685
80.0	0.67		0.7	.62	.63	720	349.6	298.9	-49.0	679
81.0	0.83		0.8	.57	.58	737	348.5	300.7	-46.3	691
82.0	0.86		0.9	.51	.54	752	347.3	302.1	-43.3	702
83.0	0.88		0.9	.51	.55	748	346.1	303.2	-39.9	695
84.0	0.81		0.8	.56	.61	725	345.0	304.0	-36.3	672
85.0	0.74		0.7	.61	.68	702	343.9	304.5	-32.4	648
86.0	0.79		0.8	.55	.63	719	343.1	304.9	-28.5	661
87.0	1.12		1.1	.42	.50	769	342.4	305.2	-24.4	704
88.0	1.29		1.3	.35	.44	797	341.9	305.4	-20.4	727
89.0	1.22		1.2	.38	.47	782	341.7	305.7	-16.3	711
90.0	1.28		1.3	.35	.44	796	341.7	306.1	-12.4	721
91.0	1.23		1.2	.38	.47	783	341.9	306.6	-8.6	705
92.0	1.21		1.2	.38	.47	784	342.2	307.4	-4.9	702
93.0	1.17		1.2	.38	.46	786	342.7	308.4	-1.5	700
94.0	1.21		1.2	.39	.46	788	343.2	309.8	1.5	697
95.0	1.29		1.3	.36	.42	804	343.8	311.5	4.2	708
96.0	1.38		1.4	.33	.38	820	344.3	313.6	6.4	717
97.0	1.31		1.3	.36	.41	808	344.7	316.1	8.1	701
98.0	1.39		1.4	.33	.38	824	345.0	318.8	9.3	709
99.0	1.53		1.5	.30	.35	839	345.2	321.6	9.8	716
38200.0	1.33		1.3	.35	.40	811	345.2	324.5	9.6	688
01.0	1.05		1.1	.42	.47	781	345.0	327.3	8.8	658
02.0	0.88		0.9	.50	.56	747	344.7	329.9	7.4	626
03.0	0.86		0.9	.50	.56	746	344.3	332.2	5.5	622
04.0	0.74		0.7	.59	.66	706	343.8	334.2	3.0	587
05.0	0.91		0.9	.49	.56	744	343.3	335.8	0.1	616
06.0	1.07		1.1	.41	.48	776	342.8	337.0	-3.1	642
07.0	1.11		1.1	.41	.49	775	342.4	337.9	-6.6	641
08.0	1.10		1.1	.40	.49	775	342.2	338.6	-10.4	641
09.0	1.11		1.1	.40	.49	775	342.1	339.1	-14.3	643
10.0	1.06		1.1	.40	.48	776	342.2	339.4	-18.4	645
11.0	0.99		1.0	.44	.52	762	342.8	339.7	-22.5	635
12.0	0.89		0.9	.48	.55	748	343.4	339.9	-26.6	625
13.0	0.85		0.9	.48	.55	751	344.2	340.2	-30.6	629

Table 3.--Continued

SATELLITE 1958 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
38214.0	0.91		0.9	-14.48	-14.54	754	345.2	340.6	-34.6	635
15.0	1.02		1.0	.45	.48	776	346.3	341.3	-38.4	655
16.0	1.09		1.1	.41	.44	797	347.5	342.2	-41.9	674
17.0	1.02		1.0	.45	.46	785	348.8	343.4	-45.2	665
18.0	0.86		0.9	.50	.50	771	350.0	344.9	-48.2	654
19.0	0.78		0.8	.55	.53	756	351.0	346.8	-50.7	641
20.0	0.78		0.8	.55	.53	759	351.9	349.2	-52.7	643
21.0	0.74		0.7	.60	.57	740	352.6	351.8	-54.2	626
22.0	0.63		0.6	.66	.63	718	353.0	354.7	-55.0	605
23.0	0.68		0.7	.60	.57	742	353.1	357.7	-55.2	622
24.0	0.66		0.7	.60	.57	741	352.9	0.7	-54.7	619
25.0	0.60		0.6	.66	.64	716	352.4	3.6	-53.5	595
26.0	0.75		0.7	.60	.58	737	351.7	6.2	-51.7	608
27.0	1.17		1.2	.38	.38	825	350.7	8.5	-49.4	676
28.0	1.21		1.2	.38	.38	821	349.6	10.4	-46.5	668
29.0	1.19		1.2	.38	.39	816	348.3	11.9	-43.3	659
30.0	1.13		1.1	.41	.44	796	347.1	13.1	-39.6	638
38230.5	1.04		1.0	-14.44	-14.48	777	346.4	13.6	-37.7	621
31.0	1.02		1.0	.44	.49	775	345.8	14.0	-35.8	617
31.5	1.20		1.2	.37	.42	805	345.2	14.4	-33.7	640
32.0	1.29		1.3	.34	.39	818	344.7	14.6	-31.7	648
32.5	1.24		1.2	.37	.43	801	344.2	14.9	-29.6	633
33.0	1.09		1.1	.40	.47	784	343.7	15.1	-27.4	618
33.5	1.14		1.1	.40	.47	782	343.3	15.3	-25.3	615
34.0	1.36		1.4	.30	.37	826	342.9	15.4	-23.1	648
34.5	1.58		1.6	.25	.32	852	342.6	15.6	-20.9	667
35.0	1.63		1.6	.25	.32	851	342.3	15.7	-18.7	664
35.5	1.45		1.4	.30	.38	823	342.1	15.9	-16.5	642
36.0	1.39		1.4	.30	.38	822	342.0	16.0	-14.4	640
36.5	1.38		1.4	.30	.38	822	341.9	16.2	-12.2	639
38237.0	1.34		1.3	-14.33	-14.41	808	341.8	16.4	-10.1	627
38.0	1.22		1.2	.36	.44	793	341.9	17.0	-5.9	615
39.0	1.25		1.2	.36	.44	794	342.2	17.7	-1.9	615
40.0	1.34		1.3	.33	.41	810	342.6	18.7	1.9	627
41.0	1.55		1.5	.27	.34	840	343.1	20.1	5.4	649
42.0	1.52		1.5	.28	.34	842	343.6	21.8	8.5	651
43.0	1.51		1.5	.28	.34	844	344.1	23.8	11.1	652
44.0	1.51		1.5	.28	.33	846	344.5	26.2	13.3	654
45.0	1.46		1.5	.28	.33	847	344.8	28.9	14.9	655
46.0	1.36		1.4	.31	.36	833	345.0	31.9	15.9	645
47.0	1.33		1.3	.34	.39	819	345.1	34.8	16.2	634
48.0	1.33		1.3	.34	.39	818	344.9	37.8	15.9	633
49.0	1.25		1.3	.34	.39	817	344.7	40.5	14.9	632
50.0	1.24		1.2	.37	.43	801	344.3	43.0	13.4	620
51.0	1.19		1.2	.37	.43	799	343.9	45.2	11.3	618
52.0	1.14		1.1	.40	.47	782	343.4	46.9	8.8	605
53.0	1.05		1.1	.40	.47	780	342.9	48.4	6.0	604
54.0	1.01		1.0	.44	.52	763	342.6	49.5	2.8	590
55.0	1.03		1.0	.43	.52	762	342.3	50.3	-0.7	590
56.0	1.08		1.1	.40	.48	778	342.2	50.9	-4.3	603
57.0	1.13		1.1	.40	.48	779	342.3	51.4	-8.1	604
58.0	1.17		1.2	.36	.44	795	342.6	51.7	-11.9	618
38258.5	1.23		1.2	-14.36	-14.44	796	342.9	51.9	-13.8	620
59.0	1.60		1.6	.25	.32	854	343.2	52.1	-15.8	665
59.5	1.65		1.6	.25	.32	855	343.6	52.3	-17.7	667
60.0	1.42		1.4	.30	.37	829	344.0	52.5	-19.6	648
60.5	1.29		1.3	.34	.39	817	344.4	52.7	-21.5	640

Table 3.--Continued

SATELLITE 1965 ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
38261.0	1.61		1.6	-14.25	-14.31	860	344.9	53.0	-23.3	675
61.5	2.21		2.2	.13	.17	935	345.5	53.3	-25.2	736
62.0	1.96		2.0	.17	.21	915	346.0	53.7	-26.9	721
62.5	1.81		1.8	.21	.25	893	346.6	54.1	-28.7	705
63.0	1.56		1.6	.26	.29	869	347.2	54.6	-30.3	688
63.5	1.52		1.5	.29	.31	858	347.8	55.2	-32.0	681
38264.0	1.51		1.5	-14.29	-14.31	860	348.5	55.8	-33.5	685
65.0	1.51		1.5	.29	.30	865	349.7	57.4	-36.3	692
66.0	1.34		1.3	.35	.35	840	350.8	59.3	-38.7	675
67.0	1.30		1.3	.36	.34	843	351.7	61.7	-40.6	682
68.0	1.33		1.3	.36	.33	846	352.5	64.3	-42.0	687
69.0	1.33		1.3	.36	.33	847	352.9	67.3	-42.8	691
70.0	1.21		1.2	.39	.36	832	353.1	70.4	-42.9	681
71.0	1.14		1.1	.43	.40	816	353.0	73.5	-42.3	670
72.0	1.17		1.2	.39	.36	830	352.6	76.6	-41.1	683
73.0	1.09		1.1	.42	.40	812	352.0	79.4	-39.3	668
74.0	1.01		1.0	.46	.45	791	351.1	81.8	-36.8	652
75.0	1.04		1.0	.46	.46	788	350.0	84.0	-33.9	649
76.0	1.00		1.0	.45	.47	783	348.8	85.7	-30.5	644
77.0	0.99		1.0	.45	.48	779	347.5	87.1	-26.8	640
78.0	1.03		1.0	.45	.49	774	346.3	88.1	-22.8	635
79.0	1.13		1.1	.41	.46	787	345.1	88.9	-18.5	644
80.0	1.27		1.3	.34	.40	813	344.1	89.5	-14.1	665
81.0	1.39		1.4	.31	.38	824	343.3	90.0	-9.6	673
82.0	1.34		1.3	.34	.41	807	342.7	90.4	-5.1	659
83.0	1.28		1.3	.34	.42	805	342.3	90.7	-0.5	658
84.0	1.42		1.4	.31	.39	818	342.1	91.2	4.0	669
85.0	1.55		1.6	.26	.34	844	342.2	91.8	8.3	691
38286.0	1.57		1.6	-14.26	-14.34	844	342.4	92.6	12.6	693
86.5	2.17		2.2	.14	.21	916	342.6	93.1	14.6	753
87.0	2.04		2.0	.17	.24	894	342.8	93.6	16.5	736
87.5	1.94		1.9	.20	.26	883	343.1	94.3	18.4	729
88.0	1.89		1.9	.20	.26	884	343.3	95.0	20.2	731
38289.0	1.89		1.9	-14.20	-14.26	885	343.8	96.7	23.6	735
90.0	1.81		1.8	.22	.28	875	344.3	98.8	26.5	731
91.0	1.69		1.7	.25	.30	863	344.8	101.2	28.9	725
92.0	1.81		1.8	.23	.27	877	345.2	103.9	30.7	741
93.0	1.82		1.8	.23	.27	878	345.4	106.9	31.9	746
38293.2	1.90		1.9	-14.21	-14.25	890	345.4	107.5	32.1	757
93.4	1.78		1.8	.23	.27	878	345.4	108.1	32.2	748
93.6	2.05		2.0	.19	.23	902	345.4	108.7	32.3	769
93.8	2.19		2.2	.15	.19	924	345.4	109.3	32.4	789
94.0	2.06		2.1	.17	.21	913	345.4	109.9	32.5	781
94.2	2.06		2.1	.17	.21	913	345.4	110.5	32.5	781
94.4	2.47		2.5	.10	.14	957	345.4	111.1	32.5	820
94.6	2.74		2.7	.07	.11	977	345.4	111.7	32.5	838
94.8	2.88		2.9	.04	.08	997	345.4	112.3	32.5	856
95.0	3.15		3.1	.02	.06	1016	345.4	112.9	32.4	873
95.2	3.15		3.2	.00	.04	1026	345.3	113.5	32.3	882
95.4	3.03		3.0	.03	.07	1006	345.3	114.1	32.2	867
95.6	2.77		2.8	.05	.10	987	345.2	114.7	32.1	850
95.8	2.37		2.4	.11	.16	945	345.2	115.2	31.9	815
96.0	1.98		2.0	.19	.23	901	345.1	115.8	31.7	778
96.2	1.72		1.7	.25	.30	864	345.1	116.3	31.5	747
96.4	1.59		1.6	.27	.32	851	345.0	116.9	31.2	736
96.6	1.33		1.3	.35	.41	810	344.9	117.4	31.0	701

Table 3.--Continued

SATELLITE 19[illegible] ALPHA

MJD	$-10^6 \dot{P}$	$\dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
38296.8	1.21		1.2	-14.39	-14.44	795	344.9	117.9	30.7	689
97.0	1.08		1.1	.42	.48	780	344.8	118.4	30.4	676
97.2	1.48		1.5	.30	.35	837	344.7	118.9	30.1	726
97.4	2.15		2.2	.15	.20	922	344.6	119.4	29.7	800
97.6	1.49		1.5	.30	.35	837	344.5	119.8	29.3	727
97.8	1.37		1.4	.32	.38	823	344.4	120.2	28.9	715
98.0	1.37		1.4	.32	.38	822	344.3	120.7	28.5	715
38299.0	1.42		1.4	-14.32	-14.38	821	343.9	122.6	26.2	716
38300.0	1.32		1.3	.35	.42	806	343.4	124.1	23.5	704

Table 3.--Continued

SATELLITE 1958 β2 (2.5 day)

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
36340.0	1.69	0.20	1.9	-15.47	-15.50	1398	653.0	308.1	-0.5	1253
42.5	1.74	0.21	2.0	.46	.48	1414	653.9	308.6	4.0	1261
45.0	1.82	0.21	2.0	.46	.47	1417	654.8	309.8	7.8	1255
47.5	1.94	0.21	2.2	.42	.43	1447	655.7	311.8	10.6	1272
50.0	2.40	0.20	2.6	.35	.36	1501	656.4	314.5	12.3	1308
52.5	2.56	0.20	2.8	.32	.32	1527	656.8	317.6	12.6	1319
55.0	2.52	0.19	2.7	.33	.34	1517	656.8	320.8	11.6	1301
57.5	2.41	0.17	2.6	.34	.35	1506	656.6	323.5	9.3	1283
60.0	2.38	0.15	2.5	.36	.37	1494	656.1	325.5	5.8	1269
62.5	2.36	0.13	2.5	.35	.37	1494	655.4	326.7	1.3	1267
65.0	2.17	0.11	2.3	.38	.40	1468	654.9	327.1	-3.9	1247
67.5	1.79	0.09	1.9	.46	.48	1413	654.6	326.9	-9.7	1205
70.0	1.34	0.06	1.4	.58	.60	1333	654.7	326.1	-15.7	1144
72.5	1.03	0.04	1.1	.68	.70	1277	655.2	325.2	-22.0	1105
75.0	1.15	0.01	1.2	.65	.66	1300	656.1	324.2	-28.2	1133
77.5	1.49	0.00	1.5	.56	.56	1358	657.6	323.3	-34.2	1193
80.0	1.68	0.00	1.7	.51	.50	1395	659.3	322.8	-40.0	1234
82.5	1.83	0.00	1.8	.49	.47	1415	661.2	323.0	-45.2	1257
85.0	1.63	0.00	1.6	.54	.52	1387	663.0	323.8	-49.7	1236
87.5	1.50	0.00	1.5	.57	.54	1373	664.5	325.5	-53.2	1224
36390.0	1.60	0.00	1.6	-15.55	-15.51	1392	665.7	328.0	-55.6	1237
91.0	2.00	0.00	2.0	.46	.42	1455	665.9	329.2	-56.2	1290
92.0	2.30	0.00	2.3	.40	.36	1497	666.1	330.4	-56.6	1325
93.0	2.30	0.00	2.3	.40	.36	1497	666.2	331.7	-56.7	1322
94.0	1.80	0.00	1.8	.50	.46	1425	666.2	333.0	-56.6	1254
95.0	1.00	0.00	1.0	.74	.70	1278	666.1	334.3	-56.2	1121
36397.5	0.73	0.04	0.8	-15.83	-15.79	1228	665.3	337.3	-54.3	1067
36400.0	0.86	0.09	1.0	.74	.71	1273	664.0	339.6	-51.1	1096
02.5	0.93	0.14	1.1	.70	.67	1292	662.3	341.2	-46.7	1102
05.0	1.06	0.16	1.2	.66	.64	1308	660.4	342.0	-41.5	1106
07.5	1.31	0.16	1.5	.56	.56	1359	658.5	342.1	-35.6	1141
10.0	1.76	0.15	1.9	.46	.47	1419	656.9	341.6	-29.2	1185
12.5	2.22	0.14	2.4	.37	.38	1485	655.6	340.9	-22.5	1235
15.0	2.66	0.13	2.8	.30	.32	1532	654.8	340.0	-15.7	1271
17.5	2.87	0.12	3.0	.28	.29	1555	654.5	339.2	-9.0	1287
20.0	2.56	0.10	2.7	.32	.33	1521	654.7	338.8	-2.5	1258
22.5	2.28	0.09	2.4	.36	.38	1485	655.3	338.8	3.7	1227
25.0	2.16	0.08	2.2	.40	.41	1461	656.1	339.6	9.3	1205
27.5	2.02	0.07	2.1	.42	.42	1450	656.9	341.1	14.0	1192
30.0	2.13	0.06	2.2	.40	.40	1467	657.7	343.5	17.8	1201
32.5	2.35	0.05	2.4	.36	.36	1496	658.2	346.6	20.3	1218
35.0	2.60	0.05	2.6	.33	.33	1522	658.3	350.0	21.5	1233
37.5	3.26	0.04	3.3	.24	.23	1603	658.2	353.2	21.3	1291
40.0	4.06	0.04	4.1	.15	.15	1683	657.5	356.1	19.7	1348
42.5	4.70	0.03	4.7	.09	.10	1737	656.8	358.1	17.1	1384
45.0	4.66	0.02	4.7	.09	.10	1735	656.0	359.4	13.5	1378
47.5	4.72	0.01	4.7	.09	.10	1734	655.4	359.9	9.2	1374
50.0	5.12	0.00	5.1	.06	.07	1768	655.0	359.9	4.4	1400
52.5	4.73	-0.01	4.7	.09	.10	1735	655.1	359.4	-0.7	1374
55.0	4.23	-0.02	4.2	.13	.14	1691	655.6	358.7	-6.0	1342
57.5	4.46	-0.03	4.4	.11	.12	1714	656.7	358.1	-11.2	1364
60.0	5.54	-0.04	5.5	.03	.03	1813	658.1	357.7	-16.2	1448
62.5	5.56	-0.05	5.5	.03	.02	1819	659.9	357.7	-20.9	1458
65.0	3.90	-0.06	3.8	.18	.16	1673	661.8	358.4	-25.1	1343
67.5	3.59	-0.06	3.5	.21	.19	1648	663.6	359.9	-28.5	1324
70.0	4.06	-0.06	4.0	.16	.13	1704	665.1	2.1	-31.0	1368
72.5	4.28	-0.06	4.2	.14	.11	1727	666.1	5.1	-32.2	1383
75.0	4.06	-0.05	4.0	.16	.12	1709	666.6	8.6	-32.1	1363

Table 3.--Continued

SATELLITE 1958 α2 (2.5 day)

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
36477.5	5.15	-0.04	5.1	-15.06	-15.03	1810	666.4	12.1	-30.6	1435
80.0	5.23	-0.04	5.2	.06	.03	1816	665.6	15.2	-27.7	1431
82.5	4.91	-0.05	4.9	.08	.05	1787	664.3	17.6	-23.5	1399
85.0	4.98	-0.06	4.9	.08	.06	1782	662.6	19.2	-18.3	1387
87.5	4.80	-0.07	4.7	.09	.08	1759	660.8	19.9	-12.4	1363
90.0	5.57	-0.08	5.5	.03	.02	1821	659.1	20.0	-5.9	1408
92.5	6.66	-0.09	6.6	-14.95	-14.96	1902	657.7	19.6	1.0	1470
95.0	7.01	-0.11	6.9	.94	.94	1919	656.6	18.9	8.1	1486
97.5	8.15	-0.13	8.0	.88	.89	1988	656.0	18.1	15.1	1546
36499.0	8.65	-0.15	8.5	-14.86	-14.87	2018	655.9	17.7	19.3	1574
36500.0	8.00	-0.15	7.9	.88	.89	1980	655.9	17.5	22.1	1549
36502.5	6.28	-0.16	6.1	-14.99	-14.99	1855	656.2	17.2	28.7	1461
05.0	6.23	-0.16	6.1	.99	.99	1855	656.8	17.4	34.9	1473
07.5	6.23	-0.15	6.1	.99	.99	1857	657.5	18.4	40.4	1485
10.0	5.79	-0.13	5.7	-15.02	-15.02	1827	658.3	20.1	44.9	1471
12.5	5.46	-0.09	5.4	.04	.04	1804	658.8	22.6	48.4	1460
15.0	5.00	-0.03	5.0	.07	.07	1770	659.1	25.7	50.5	1437
17.5	4.49	0.00	4.5	.11	.11	1726	659.0	28.9	51.1	1401
20.0	4.00	0.00	4.0	.16	.16	1677	658.5	31.8	50.3	1359
22.5	3.90	0.00	3.9	.17	.17	1665	657.8	34.2	48.2	1344
25.0	4.13	0.00	4.1	.15	.15	1682	656.8	35.7	45.0	1350
27.5	4.28	0.00	4.3	.13	.14	1699	655.9	36.5	40.8	1354
30.0	5.00	0.00	5.0	.07	.08	1759	655.2	36.4	36.0	1392
32.5	5.62	0.00	5.6	.02	.03	1809	654.8	35.8	30.7	1420
35.0	6.26	-0.02	6.2	-14.98	-14.99	1857	654.8	34.9	25.1	1448
37.5	6.69	-0.05	6.6	.95	.97	1891	655.3	33.8	19.3	1466
40.0	6.89	-0.08	6.8	.94	.95	1910	656.4	32.8	13.6	1475
42.5	5.96	-0.10	5.9	-15.00	-15.00	1847	657.8	32.0	8.0	1423
45.0	4.98	-0.12	4.9	.07	.07	1771	659.4	31.7	2.8	1363
47.5	5.31	-0.14	5.2	.05	.04	1803	661.1	32.1	-1.9	1387
50.0	5.48	-0.16	5.3	.04	.03	1817	662.7	33.3	-5.8	1399
52.5	4.77	-0.17	4.6	.10	.08	1760	663.9	35.4	-8.7	1356
55.0	3.62	-0.19	3.4	.22	.19	1643	664.6	38.0	-10.4	1268
57.5	3.52	-0.20	3.3	.23	.20	1632	664.6	41.0	-10.8	1260
60.0	3.69	-0.20	3.5	.21	.18	1651	664.1	43.9	-9.7	1276
62.5	4.25	-0.21	4.0	.16	.14	1698	662.9	46.3	-7.4	1312
65.0	4.68	-0.21	4.5	.11	.10	1740	661.3	48.0	-3.9	1345
67.5	4.95	-0.22	4.7	.09	.08	1751	659.4	48.8	0.4	1354
70.0	4.98	-0.22	4.8	.08	.08	1753	657.5	48.9	5.4	1356
72.5	5.06	-0.22	4.8	.08	.09	1746	655.6	48.3	10.9	1353
75.0	5.38	-0.23	5.2	.05	.06	1774	654.1	47.4	16.7	1379
77.5	5.70	-0.23	5.5	.03	.05	1793	653.0	46.2	22.5	1400
80.0	5.15	-0.24	4.9	.07	.10	1740	652.4	45.1	28.3	1366
82.5	4.23	-0.25	4.0	.15	.18	1657	652.3	44.2	33.9	1310
85.0	3.79	-0.26	3.5	.21	.23	1607	652.5	43.8	39.1	1279
87.5	4.00	-0.26	3.7	.19	.21	1628	653.4	44.0	43.8	1306
90.0	4.40	-0.26	4.1	.15	.17	1668	654.2	45.0	47.6	1348
92.5	4.79	-0.25	4.5	.12	.13	1705	654.8	46.9	50.4	1387
95.0	5.26	-0.24	5.0	.08	.09	1750	655.3	49.5	52.1	1430
97.5	4.92	-0.21	4.7	.10	.11	1724	655.5	52.5	52.3	1412
36600.0	4.72	-0.17	4.6	.11	.12	1715	655.3	55.7	51.1	1404
02.5	4.53	-0.11	4.4	.12	.14	1696	654.8	58.4	48.4	1385
05.0	4.10	-0.01	4.1	.15	.17	1666	654.0	60.6	44.5	1354
07.5	3.56	0.00	3.6	.20	.22	1616	653.1	61.9	39.6	1305
10.0	3.52	0.00	3.5	.21	.23	1605	652.3	62.5	33.8	1286
12.5	3.43	0.00	3.4	.22	.25	1594	651.7	62.4	27.4	1267
15.0	3.88	-0.02	3.9	.16	.19	1644	651.5	61.9	20.6	1298
17.5	3.82	-0.08	3.7	.18	.21	1626	651.7	61.1	13.6	1277

Table 3.--Continued

SATELLITE 1958 β2 (2.5 day)

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
36620.0	3.40	-0.13	3.3	-15.23	-15.25	1588	652.4	60.2	6.5	1241
22.5	4.03	-0.18	3.8	.17	.19	1643	653.6	59.6	-0.5	1282
25.0	4.40	-0.21	4.2	.14	.15	1686	655.2	59.3	-7.2	1317
27.5	4.28	-0.24	4.0	.16	.16	1671	656.9	59.6	-13.5	1309
30.0	3.89	-0.25	3.6	.20	.20	1636	658.6	60.7	-19.1	1288
32.5	3.55	-0.26	3.3	.24	.23	1608	660.1	62.6	-23.9	1273
35.0	3.60	-0.27	3.3	.24	.23	1610	661.2	65.3	-27.5	1283
37.5	3.69	-0.28	3.4	.23	.21	1621	661.7	68.7	-29.8	1300
40.0	3.77	-0.28	3.5	.22	.20	1631	661.6	72.2	-30.7	1315
42.5	3.74	-0.27	3.5	.22	.21	1628	660.9	75.4	-30.2	1318
45.0	3.80	-0.26	3.6	.21	.20	1635	659.6	78.1	-28.4	1325
47.5	4.00	-0.25	3.8	.18	.18	1650	657.9	79.9	-25.4	1338
50.0	4.24	-0.24	4.0	.16	.17	1664	656.1	81.0	-21.7	1348
52.5	4.58	-0.23	4.4	.12	.14	1696	654.2	81.3	-17.2	1370
55.0	4.16	-0.22	3.9	.17	.19	1644	652.6	81.1	-12.3	1325
57.5	3.82	-0.22	3.6	.20	.23	1611	651.3	80.5	-7.2	1295
60.0	3.71	-0.22	3.5	.21	.24	1598	650.5	79.8	-2.0	1282
62.5	3.54	-0.22	3.3	.23	.27	1575	650.3	79.2	3.2	1262
65.0	3.64	-0.23	3.4	.22	.25	1585	650.4	78.8	8.1	1271
67.5	3.84	-0.24	3.6	.20	.23	1606	651.0	79.0	12.7	1289
70.0	4.08	-0.25	3.8	.18	.21	1627	651.7	79.9	16.7	1309
72.5	3.89	-0.26	3.6	.21	.23	1609	652.5	81.5	19.8	1299
75.0	3.64	-0.27	3.4	.23	.25	1589	653.2	83.9	21.9	1289
77.5	3.47	-0.28	3.2	.25	.27	1569	653.6	87.0	22.8	1278
80.0	3.44	-0.28	3.2	.26	.27	1568	653.7	90.4	22.3	1284
82.5	3.59	-0.29	3.3	.24	.26	1578	653.4	93.7	20.4	1296
85.0	3.56	-0.29	3.3	.24	.27	1577	652.8	96.4	17.2	1299
87.5	3.40	-0.29	3.1	.27	.29	1553	652.0	98.4	12.9	1282
90.0	3.08	-0.28	2.8	.30	.34	1518	651.2	99.6	7.6	1255
92.5	2.27	-0.28	2.0	.44	.47	1415	650.5	100.0	1.7	1171
95.0	2.41	-0.28	2.1	.42	.46	1428	650.0	99.8	-4.8	1182
97.5	2.74	-0.27	2.5	.35	.39	1479	650.0	99.1	-11.5	1227
36700.0	2.71	-0.27	2.4	.36	.40	1468	650.5	98.3	-18.3	1221
02.5	2.50	-0.27	2.2	.40	.43	1444	651.4	97.4	-25.1	1205
05.0	2.43	-0.26	2.2	.40	.43	1447	652.8	96.8	-31.7	1214
07.5	2.26	-0.26	2.0	.45	.46	1423	654.5	96.6	-38.0	1202
10.0	2.02	-0.27	1.8	.49	.50	1398	656.3	97.0	-43.6	1189
12.5	1.43	-0.27	1.2	.66	.66	1299	658.0	98.2	-48.5	1114
15.0	1.32	-0.26	1.1	.70	.69	1282	659.4	100.3	-52.3	1109
17.5	1.11	-0.20	0.9	.78	.77	1239	660.3	103.0	-55.0	1081
20.0	0.80	-0.11	0.7	.89	.87	1188	660.6	106.2	-56.2	1042
22.5	0.99	-0.12	0.9	.78	.77	1241	660.3	109.4	-55.9	1093
25.0	0.92	-0.14	0.8	.82	.82	1215	659.4	112.2	-54.2	1072
27.5	0.96	-0.18	0.8	.82	.82	1212	658.1	114.3	-51.2	1070
30.0	1.02	-0.19	0.8	.82	.83	1209	656.3	115.5	-47.1	1064
32.5	1.20	-0.17	1.0	.72	.74	1253	654.5	115.9	-42.3	1098
35.0	1.21	-0.12	1.1	.68	.71	1271	652.8	115.7	-36.8	1106
37.5	1.20	-0.08	1.1	.68	.72	1268	651.3	115.0	-30.9	1096
40.0	1.17	-0.07	1.1	.68	.72	1265	650.2	114.0	-24.8	1086
42.5	1.43	-0.08	1.4	.58	.62	1320	649.7	113.0	-18.6	1125
45.0	1.35	-0.06	1.3	.61	.65	1302	649.6	112.2	-12.5	1103
47.5	1.41	-0.03	1.4	.58	.62	1320	650.0	111.7	-6.6	1113
50.0	1.55	-0.04	1.5	.56	.59	1338	650.6	111.8	-1.2	1125
52.5	1.46	-0.09	1.4	.59	.62	1322	651.5	112.6	3.6	1111
55.0	1.27	-0.15	1.1	.69	.72	1267	652.3	114.3	7.5	1066
57.5	1.09	-0.19	0.9	.77	.80	1224	652.9	116.7	10.3	1033
36760.0	1.34	-0.22	1.1	-15.69	-15.71	1268	653.5	119.7	11.9	1075
61.0	1.43	-0.23	1.2	.65	.68	1288	653.5	121.0	12.1	1095
62.0	1.47	-0.24	1.2	.66	.68	1288	653.5	122.3	12.1	1097

Table 3.--Continued

SATELLITE 1958 β2 (2.5 day)

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	$\bar{T}_N$ (°K)
36763.0	1.82	-0.24	1.6	-15.54	-15.56	1358	653.4	123.6	11.9	1159
64.0	2.43	-0.24	2.2	.41	.43	1445	653.3	124.8	11.5	1237
65.0	2.60	-0.24	2.4	.37	.40	1470	653.2	125.9	10.9	1261
66.0	2.25	-0.23	2.0	.45	.47	1417	653.0	126.9	10.0	1218
67.0	1.56	-0.22	1.3	.62	.65	1305	652.7	127.8	9.0	1124
68.0	1.13	-0.21	0.9	.77	.80	1222	652.5	128.6	7.8	1055
69.0	0.87	-0.19	0.7	.88	.91	1170	652.2	129.3	6.5	1013
70.0	0.87	-0.17	0.7	.88	.91	1169	652.0	129.8	5.0	1014
36772.5	1.01	-0.15	0.9	-15.77	-15.81	1219	651.3	130.5	0.7	1062
75.0	0.93	-0.15	0.8	.82	.86	1194	650.9	130.6	-4.2	1044
77.5	0.90	-0.18	0.7	.88	.92	1168	650.8	130.2	-9.5	1024
80.0	0.87	-0.21	0.7	.88	.91	1168	651.2	129.4	-15.1	1027
82.5	0.85	-0.21	0.6	.94	.98	1141	652.1	128.6	-20.7	1005
85.0	0.81	-0.20	0.6	.94	.97	1144	653.4	127.8	-26.1	1010
87.5	0.83	-0.19	0.6	.95	.96	1147	655.2	127.4	-31.4	1015
90.0	0.75	-0.18	0.6	.95	.95	1151	657.1	127.6	-36.2	1022
92.5	0.73	-0.18	0.6	.95	.95	1154	659.0	128.4	-40.3	1030
95.0	0.80	-0.18	0.6	.95	.94	1157	660.7	130.1	-43.6	1038
97.5	0.84	-0.18	0.7	.89	.87	1190	662.1	132.6	-45.8	1073
36800.0	0.83	-0.17	0.7	.89	.86	1192	662.8	135.7	-46.7	1080
02.5	0.86	-0.17	0.7	.89	.86	1192	662.9	139.2	-46.1	1086
05.0	0.89	-0.16	0.7	.89	.86	1192	662.3	142.6	-44.1	1089
07.5	0.99	-0.15	0.8	.83	.81	1217	661.2	145.4	-40.8	1115
10.0	1.17	-0.14	1.0	.74	.73	1261	659.5	147.5	-36.2	1158
12.5	1.53	-0.14	1.4	.59	.60	1336	657.6	148.7	-30.7	1226
15.0	1.62	-0.12	1.5	.56	.58	1348	655.6	149.2	-24.6	1236
17.5	1.25	-0.10	1.2	.65	.67	1290	653.7	149.2	-17.9	1180
20.0	0.82	-0.10	0.7	.87	.91	1172	652.2	148.7	-10.9	1069
22.5	0.62	-0.10	0.5	-16.02	-16.06	1106	651.1	148.0	-3.7	1007
25.0	0.68	-0.09	0.6	-15.94	-15.98	1138	650.5	147.4	3.4	1035
27.5	0.79	-0.09	0.7	.88	.92	1166	650.4	147.0	10.4	1059
30.0	0.94	-0.09	0.8	.82	.86	1192	650.7	147.1	16.9	1083
32.5	1.10	-0.09	1.0	.73	.77	1240	651.3	147.8	23.0	1129
35.0	1.31	-0.09	1.2	.66	.69	1282	652.0	149.3	28.2	1171
37.5	0.97	-0.09	0.9	.78	.81	1219	652.7	151.6	32.5	1119
40.0	0.96	-0.10	0.9	.78	.81	1220	653.1	154.6	35.6	1126
42.5	0.78	-0.09	0.7	.88	.91	1169	653.3	158.1	37.2	1086
45.0	0.81	-0.09	0.7	.88	.91	1169	653.1	161.5	37.5	1092
47.5	0.55	-0.09	0.5	-16.03	-16.06	1106	652.6	164.5	36.4	1039
50.0	0.46	-0.09	0.4	.12	.16	1066	652.0	166.8	34.0	1006
52.5	0.42	-0.07	0.4	.12	.16	1066	651.3	168.2	30.7	1008
55.0	0.50	-0.06	0.4	.11	.16	1065	650.7	168.9	26.6	1009
57.5	0.55	-0.05	0.5	.02	.06	1104	650.3	168.9	21.9	1045
60.0	0.63	-0.04	0.6	-15.94	-15.98	1138	650.4	168.4	16.8	1075
62.5	0.62	-0.03	0.6	.94	.98	1139	650.9	167.7	11.6	1074
65.0	0.75	-0.02	0.7	.88	.91	1170	651.9	166.9	6.2	1100
67.5	0.55	0.00	0.6	.94	.97	1144	653.4	166.3	1.0	1072
70.0	0.68	0.01	0.7	.88	.89	1177	655.2	166.1	-3.9	1098
72.5	0.62	0.00	0.6	.95	.95	1152	657.1	166.4	-8.3	1071
75.0	0.57	0.00	0.6	.95	.94	1156	659.0	167.5	-12.1	1072
77.5	0.64	0.02	0.6	.95	.94	1159	660.5	169.4	-15.0	1073
80.0	0.49	0.02	0.5	-16.03	-16.01	1127	661.6	172.0	-16.7	1044
82.5	0.50	0.00	0.5	.03	.00	1128	662.1	175.2	-17.2	1047
85.0	0.42	-0.04	0.4	.12	.10	1088	661.9	178.4	-16.2	1013
87.5	0.65	-0.08	0.6	-15.95	-15.93	1159	661.1	181.4	-13.8	1084
90.0	0.71	-0.05	0.7	.88	.88	1186	659.6	183.7	-10.2	1115
92.5	0.66	-0.04	0.6	.95	.95	1152	657.8	185.1	-5.6	1089
95.0	0.59	-0.04	0.6	.95	.96	1147	655.8	185.7	-0.2	1091
97.5	0.87	-0.04	0.8	.83	.85	1199	653.8	185.5	5.9	1146

Table 3.--Continued

SATELLITE 1958 β2 (2.5 day)

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36900.0	0.72	-0.07	0.7	-15.88	-15.91	1168	652.0	184.9	12.2	1120
02.5	0.75	-0.06	0.7	.88	.92	1165	650.6	183.9	18.8	1121
05.0	0.76	-0.04	0.7	.88	.93	1163	649.7	182.7	25.4	1121
07.5	0.72	-0.02	0.7	.88	.93	1162	649.3	181.7	31.9	1122
10.0	0.77	-0.01	0.7	.88	.93	1162	649.3	181.0	38.0	1123
12.5	0.49	0.00	0.5	-16.02	-16.06	1103	651.2	180.7	43.7	1068
15.0	0.40	0.02	0.4	.12	.16	1066	652.0	181.2	48.7	1034
17.5	0.27	0.02	0.3	.25	.28	1021	652.9	182.5	52.8	993
20.0	0.19	0.02	0.2	.43	.46	960	653.6	184.6	55.8	936
22.5	0.16	0.03	0.2	.43	.45	961	654.0	187.3	57.4	940
25.0	0.32	0.04	0.4	.12	.15	1070	654.0	190.3	57.6	1049
27.5	0.29	0.04	0.3	.25	.27	1023	653.7	193.1	56.3	1005
30.0	0.31	0.05	0.4	.12	.15	1069	653.1	195.4	53.6	1052
32.5	0.23	0.06	0.3	.24	.28	1021	652.3	196.9	49.8	1006
35.0	0.27	0.07	0.3	.24	.28	1020	651.4	197.5	45.0	1005
37.5	0.24	0.08	0.3	.24	.28	1019	650.7	197.5	39.4	1003
40.0	0.26	0.09	0.4	.11	.16	1064	650.2	196.8	33.4	1046
42.5	0.29	0.10	0.4	.11	.16	1064	650.2	195.9	27.0	1042
45.0	0.29	0.10	0.4	.11	.16	1066	650.7	194.7	20.4	1039
47.5	0.37	0.12	0.4	.11	.15	1068	651.7	193.7	13.8	1036
50.0	0.37	0.13	0.4	.12	.14	1070	653.1	192.9	7.4	1033
52.5	0.37	0.13	0.5	.02	.04	1113	654.7	192.6	1.3	1068
55.0	0.41	0.12	0.5	.02	.03	1116	656.5	193.0	-4.3	1066
57.5	0.52	0.12	0.6	-15.95	-15.95	1154	658.1	194.2	-9.1	1098
60.0	0.54	0.12	0.7	.88	.87	1186	659.4	196.3	-12.9	1127
62.5	0.65	0.12	0.8	.83	.82	1215	660.2	199.1	-15.5	1155
65.0	0.94	0.11	0.9	.78	.77	1240	660.4	202.3	-16.8	1182
67.5	1.11	0.09	1.2	.66	.65	1303	660.0	205.5	-16.7	1247
70.0	0.73	0.08	0.8	.83	.82	1211	659.0	208.2	-15.2	1167
72.5	0.48	0.06	0.5	-16.03	-16.03	1118	657.6	210.2	-12.5	1084
75.0	0.42	0.06	0.5	.03	.04	1114	655.9	211.4	-9.0	1088
77.5	0.32	0.06	0.4	.12	.14	1071	654.1	211.9	-4.6	1052
80.0	0.40	0.07	0.5	.02	.06	1107	652.4	211.7	0.2	1092
82.5	0.38	0.08	0.5	.02	.06	1104	651.1	211.1	5.3	1093
85.0	0.23	0.09	0.3	.24	.29	1017	650.1	210.3	10.6	1009
87.5	0.24	0.10	0.3	.24	.29	1017	649.7	209.5	15.9	1009
90.0	0.26	0.11	0.4	.12	.16	1063	649.8	208.9	21.0	1055
92.5	0.25	0.12	0.4	.12	.16	1064	650.3	208.8	25.8	1055
95.0	0.34	0.14	0.5	.02	.06	1103	651.1	209.2	30.1	1093
97.5	0.29	0.15	0.4	.12	.16	1066	652.0	210.4	33.6	1055
37000.0	0.17	0.16	0.3	.25	.28	1021	652.8	212.5	36.1	1009
02.5	0.13	0.17	0.3	.25	.27	1023	653.4	215.3	37.5	1010
05.0	0.12	0.18	0.3	.25	.27	1024	653.7	218.6	37.6	1010
07.5	0.03	0.18	0.2	.43	.45	962	653.7	222.1	36.2	949
10.0	0.04	0.18	0.2	.42	.45	961	653.3	225.2	33.4	950
12.5	0.06	0.17	0.2	.42	.46	960	652.6	227.6	29.4	951
15.0	0.05	0.16	0.2	.42	.46	959	651.7	229.3	24.3	952
17.5	0.10	0.16	0.3	.24	.28	1019	650.9	230.1	18.4	1014
20.0	0.18	0.16	0.3	.24	.29	1018	650.4	230.3	11.9	1015
37021.0	0.34	0.16	0.5	-16.02	-16.06	1103	650.2	230.2	9.2	1101
22.0	0.42	0.16	0.6	-15.94	-15.99	1136	650.1	230.1	6.4	1135
23.0	0.51	0.16	0.7	.88	.92	1165	650.1	229.9	3.6	1164
24.0	1.03	0.16	1.2	.65	.69	1279	650.2	229.6	0.8	1278
25.0	1.20	0.16	1.4	.59	.63	1316	650.3	229.4	-2.1	1315
26.0	0.59	0.16	0.8	.82	.86	1193	650.6	229.1	-4.9	1192
27.0	0.33	0.16	0.5	-16.02	-16.06	1105	650.9	228.8	-7.8	1104
28.0	0.15	0.16	0.3	.24	.28	1021	651.2	228.6	-10.7	1020
29.0	0.14	0.17	0.3	.24	.28	1022	651.7	228.3	-13.5	1021
30.0	0.00	0.17	0.2	.42	.46	961	652.2	228.1	-16.3	960

Table 3.--Continued

SATELLITE 1958 β2 (2.5 day)

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37032.5	0.09	0.18	0.3	-16.24	-16.27	1025	653.8	227.9	-23.1	1024
35.0	0.17	0.19	0.4	.12	.13	1075	655.5	228.2	-29.4	1073
37.5	0.16	0.20	0.4	.12	.12	1079	657.3	229.3	-35.1	1076
40.0	0.12	0.21	0.3	.25	.24	1034	658.8	231.1	-39.9	1030
42.5	0.12	0.22	0.3	.25	.24	1036	659.9	233.8	-43.5	1032
45.0	0.13	0.23	0.4	.12	.11	1085	660.4	237.0	-45.9	1079
47.5	0.11	0.23	0.3	.25	.23	1037	660.3	240.5	-46.7	1032
50.0	0.09	0.23	0.3	.25	.24	1035	659.6	243.7	-46.1	1031
37052.0	0.07	0.23	0.3	-16.25	-16.25	1033	658.6	245.9	-44.7	1030
53.0	0.31	0.23	0.5	.03	.03	1118	658.0	246.8	-43.7	1115
54.0	0.67	0.23	0.9	-15.78	-15.79	1231	657.3	247.6	-42.5	1228
55.0	0.92	0.23	1.2	.66	.67	1293	656.6	248.2	-41.2	1290
56.0	0.74	0.23	1.0	.74	.75	1250	655.9	248.7	-39.7	1248
57.0	0.39	0.23	0.6	.95	.97	1146	655.1	249.1	-38.1	1144
58.0	0.12	0.23	0.4	-16.12	-16.14	1072	654.3	249.3	-36.3	1070
37060.0	0.00	0.24	0.2	-16.42	-16.46	961	652.8	249.4	-32.5	959
62.5	0.10	0.24	0.3	.24	.28	1019	651.1	249.1	-27.4	1018
65.0	0.13	0.24	0.4	.12	.17	1063	649.8	248.4	-22.0	1060
67.5	0.07	0.25	0.3	.24	.30	1015	649.0	247.5	-16.4	1010
70.0	0.03	0.26	0.3	.24	.30	1014	648.7	246.7	-10.8	1005
72.5	0.05	0.26	0.3	.24	.30	1014	648.9	246.1	-5.5	1000
75.0	0.02	0.27	0.3	.24	.29	1015	649.4	246.0	-0.5	995
77.5	0.04	0.28	0.3	.24	.29	1017	650.3	246.6	4.0	989
80.0	0.10	0.28	0.4	.12	.16	1065	651.1	248.0	7.7	1028
82.5	0.16	0.28	0.4	.12	.16	1066	651.9	250.1	10.4	1023
85.0	0.14	0.27	0.4	.12	.15	1067	652.5	253.0	11.9	1019
87.5	0.14	0.25	0.4	.12	.15	1067	652.7	256.1	12.0	1017
90.0	0.20	0.23	0.4	.12	.15	1067	652.6	259.2	10.7	1016
92.5	0.28	0.20	0.5	.03	.06	1104	652.1	261.8	8.2	1054
95.0	0.29	0.14	0.4	.12	.16	1064	651.5	263.6	4.5	1019
97.5	0.28	0.08	0.4	.12	.16	1063	650.8	264.7	-0.1	1024
37100.0	0.23	0.02	0.3	.25	.29	1016	650.2	264.9	-5.5	984
02.5	0.30	0.00	0.3	.24	.29	1015	649.8	264.5	-11.2	990
05.0	0.19	0.00	0.2	.42	.47	954	649.9	263.7	-17.3	937
07.5	0.10	0.01	0.1	.75	.79	858	650.4	262.7	-23.5	846
10.0	0.07	0.05	0.1	.75	.79	859	651.5	261.7	-29.6	851
12.5	0.09	0.11	0.2	.43	.46	960	652.9	261.0	-35.6	953
15.0	0.08	0.15	0.2	.43	.45	963	654.6	260.6	-41.2	957
17.5	0.04	0.18	0.2	.43	.44	966	656.5	260.9	-46.2	960
20.0	-0.07	0.21	0.1	.76	.76	868	658.2	262.0	-50.4	863
22.5	-0.02	0.23	0.2	.44	.43	970	659.7	263.9	-53.6	962
25.0	-0.02	0.25	0.2	.44	.42	971	660.6	266.6	-55.6	961
27.5	-0.02	0.26	0.3	.26	.24	1033	661.0	269.8	-56.2	1020
30.0	-0.03	0.27	0.2	.44	.43	970	660.8	273.0	-55.3	954
32.5	-0.02	0.27	0.2	.44	.43	968	659.9	275.9	-52.9	950
35.0	0.07	0.28	0.3	.26	.26	1028	658.5	278.1	-49.3	1005
37.5	0.04	0.28	0.3	.26	.27	1025	656.8	279.5	-44.6	1000
40.0	0.02	0.29	0.3	.26	.27	1022	655.0	280.1	-39.1	995
42.5	-0.05	0.29	0.2	.44	.46	958	653.3	280.1	-33.0	931
45.0	-0.05	0.29	0.2	.43	.47	955	651.8	279.5	-26.4	928
47.5	-0.05	0.29	0.2	.43	.48	953	650.7	278.7	-19.6	925
50.0	-0.03	0.28	0.2	.43	.48	952	650.1	277.9	-12.8	923
52.5	-0.03	0.28	0.2	.43	.48	952	650.0	277.2	-6.0	920
55.0	0.04	0.28	0.3	.25	.30	1013	650.4	276.9	0.5	976
57.5	0.14	0.28	0.4	.13	.17	1060	651.1	277.2	6.5	1017
60.0	0.14	0.28	0.4	.13	.17	1061	651.9	278.2	11.9	1013
62.5	0.72	0.28	1.0	-15.75	-15.78	1236	652.8	280.1	16.5	1172
65.0	0.68	0.28	1.0	.75	.77	1237	653.5	282.8	19.9	1166

Table 3.--Continued

SATELLITE 1958 β2 (2.5 day)

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37167.5	0.45	0.27	0.7	-15.90	-15.92	1165	653.9	286.0	22.1	1092
70.0	0.30	0.27	0.6	.96	.99	1136	653.9	289.4	22.8	1060
72.5	0.14	0.26	0.4	-16.14	-16.16	1064	653.7	292.6	22.2	989
75.0	0.07	0.26	0.3	.26	.29	1017	653.1	295.3	20.3	943
77.5	0.05	0.25	0.3	.26	.29	1017	652.4	297.1	17.3	941
80.0	0.20	0.24	0.4	.13	.17	1062	651.7	298.1	13.5	984
82.5	0.31	0.22	0.5	.03	.07	1101	651.2	298.4	9.0	1021
85.0	0.28	0.21	0.5	.03	.07	1101	651.0	298.2	4.1	1024
87.5	0.43	0.19	0.6	-15.95	-15.99	1135	651.3	297.7	-1.1	1058
90.0	0.58	0.18	0.8	.83	.86	1193	652.1	297.0	-6.4	1114
92.5	0.63	0.18	0.8	.83	.86	1195	653.4	296.4	-11.5	1118
95.0	0.75	0.18	0.9	.78	.80	1223	655.0	296.2	-16.5	1145
97.5	0.65	0.19	0.8	.84	.84	1201	656.9	296.4	-21.0	1124
37200.0	0.49	0.20	0.7	.90	.89	1178	658.8	297.3	-25.0	1099
02.5	0.44	0.22	0.7	.90	.88	1181	660.6	299.1	-28.1	1095
05.0	0.29	0.23	0.5	-16.05	-16.02	1121	662.0	301.6	-30.2	1031
07.5	0.27	0.24	0.5	.05	.02	1122	662.9	304.8	-30.9	1023
10.0	0.23	0.24	0.5	.05	.02	1123	663.1	308.4	-30.3	1014
12.5	0.61	0.24	0.8	-15.84	-15.82	1214	662.8	311.8	-28.3	1086
15.0	0.93	0.23	1.2	.67	.65	1303	661.9	314.7	-24.9	1155
17.5	0.68	0.22	0.9	.79	.77	1236	660.5	316.8	-20.3	1090
20.0	0.62	0.21	0.8	.83	.83	1209	658.9	318.0	-14.8	1062
22.5	0.63	0.19	0.8	.83	.83	1206	657.1	318.5	-8.6	1058
25.0	0.86	0.17	1.0	.73	.75	1251	655.5	318.3	-2.0	1098
27.5	0.78	0.14	0.9	.77	.79	1226	654.1	317.8	5.0	1079
30.0	0.64	0.10	0.7	.88	.90	1173	653.2	317.0	12.1	1036
32.5	0.61	0.05	0.7	.88	.91	1172	652.7	316.2	19.1	1041
35.0	0.55	0.02	0.6	.94	.97	1142	652.8	315.7	25.9	1020
37.5	0.59	0.00	0.6	.95	.97	1142	653.2	315.5	32.4	1024
40.0	0.62	0.00	0.6	.95	.97	1143	653.8	316.0	38.3	1027
42.5	0.57	0.00	0.6	.95	.97	1144	654.6	317.3	43.4	1028
45.0	0.72	0.00	0.7	.89	.90	1174	655.3	319.3	47.5	1054
47.5	0.68	0.00	0.7	.89	.90	1174	655.8	322.0	50.4	1050
37249.0	0.69	0.01	0.7	-15.89	-15.90	1174	656.0	323.9	51.5	1047
49.5	1.02	0.02	1.0	.74	.75	1248	656.0	324.6	51.7	1112
50.0	1.04	0.03	1.1	.70	.71	1270	656.0	325.2	51.9	1129
50.5	2.08	0.04	2.1	.44	.45	1434	656.0	325.8	52.0	1274
51.0	3.12	0.05	3.2	.27	.28	1565	656.0	326.5	52.1	1388
51.5	3.81	0.06	3.9	.19	.20	1635	655.9	327.1	52.1	1449
52.0	2.08	0.07	2.2	.42	.43	1447	655.9	327.7	52.0	1280
52.5	0.69	0.08	0.8	.83	.84	1201	655.8	328.4	51.9	1061
53.0	0.69	0.09	0.8	.83	.84	1201	655.8	328.9	51.7	1059
53.5	0.35	0.10	0.5	-16.03	-16.04	1111	655.7	329.5	51.5	978
54.0	1.39	0.11	1.5	-15.57	-15.58	1343	655.6	330.1	51.2	1181
54.5	0.69	0.12	0.8	.83	.85	1200	655.5	330.6	50.9	1054
55.0	0.35	0.13	0.5	-16.03	-16.05	1111	655.4	331.1	50.5	973
55.5	0.35	0.14	0.5	.03	.05	1110	655.3	331.5	50.1	972
56.0	0.35	0.15	0.5	.03	.05	1110	655.1	332.0	49.6	970
37257.5	0.16	0.17	0.3	-16.25	-16.27	1024	654.7	333.1	47.8	890
60.0	0.71	0.19	0.9	-15.78	-15.80	1223	654.0	334.3	44.1	1056
62.5	0.19	0.20	0.4	-16.12	-16.15	1069	653.4	334.6	39.6	918
65.0	0.12	0.20	0.3	.24	.27	1023	653.0	334.3	34.5	874
67.5	0.38	0.19	0.6	-15.94	-15.97	1143	653.0	333.5	29.0	973
70.0	0.62	0.18	0.8	.82	.85	1200	653.5	332.4	23.2	1019
72.5	0.82	0.18	1.0	.73	.75	1251	654.6	331.3	17.4	1061
75.0	0.97	0.17	1.1	.69	.70	1276	656.1	330.4	11.6	1080
77.5	1.06	0.16	1.2	.66	.66	1301	657.9	329.8	6.1	1099
80.0	0.78	0.15	0.9	.78	.77	1241	659.9	329.7	1.0	1045

Table 3.--Continued

[illegible] (C [illegible])

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37282.5	0.69	0.14	0.8	-15.83	-15.80	1221	661.8	330.5	-3.5	1024
85.0	0.52	0.13	0.7	.88	.85	1197	663.4	332.0	-7.1	999
87.5	0.47	0.12	0.6	.95	.91	1170	664.6	334.3	-9.5	970
90.0	0.36	0.11	0.5	-16.02	.98	1138	665.1	337.2	-10.7	937
92.5	0.41	0.10	0.5	.02	.98	1138	665.1	340.2	-10.5	931
95.0	0.29	0.09	0.4	.11	-16.08	1098	664.4	343.0	-9.0	893
97.5	0.62	0.08	0.7	-15.87	-15.84	1201	663.3	345.1	-6.2	973
37300.0	0.60	0.07	0.7	.87	.85	1198	661.7	346.4	-2.2	69
02.5	0.81	0.05	0.9	.76	.75	1247	659.9	346.9	2.3	1009
05.0	0.89	0.04	0.9	.76	.76	1243	658.1	346.7	7.5	1009
07.5	0.64	0.02	0.7	.86	.87	1188	656.5	346.0	13.1	968
10.0	0.50	0.01	0.5	-16.01	-16.02	1121	655.3	344.9	18.8	920
12.5	0.39	0.00	0.4	.10	.12	1080	654.6	343.8	24.7	893
15.0	0.35	0.00	0.4	.10	.12	1079	654.4	342.8	30.3	900
17.5	0.38	0.00	0.4	.10	.12	1079	654.6	342.1	35.7	906
20.0	0.33	0.00	0.3	.23	.25	1033	655.1	342.0	40.6	872
22.5	0.30	0.00	0.3	.23	.24	1033	655.9	342.6	44.9	877
25.0	0.42	0.00	0.4	.11	.12	1082	656.6	344.0	48.2	919
27.5	0.45	0.00	0.4	.11	.11	1082	657.2	346.3	50.5	919
30.0	0.42	0.00	0.4	.11	.11	1083	657.6	349.2	51.4	915
32.5	0.40	0.00	0.4	.11	.11	1083	657.6	352.4	50.9	909
35.0	0.42	0.00	0.4	.11	.11	1082	657.3	355.4	49.0	902
37.5	0.30	0.02	0.3	.24	.24	1034	656.7	358.0	45.7	853
40.0	0.32	0.04	0.4	.11	.12	1080	655.9	359.8	41.2	883
42.5	0.27	0.05	0.3	.23	.25	1032	655.1	0.8	35.8	836
45.0	0.27	0.06	0.3	.23	.25	1031	654.5	1.0	29.7	829
47.5	0.25	0.06	0.3	.23	.25	1031	654.2	0.8	23.1	824
50.0	0.17	0.05	0.2	.40	.43	970	654.3	0.1	16.1	771
52.5	0.14	0.03	0.2	.40	.42	972	654.9	359.3	9.0	771
55.0	0.22	0.01	0.2	.40	.41	974	656.0	358.6	1.9	773
57.5	0.35	0.00	0.3	.22	.23	1040	657.6	358.1	-5.0	826
60.0	0.42	-0.02	0.4	.10	.09	1092	659.4	358.1	-11.6	868
62.5	0.34	-0.03	0.3	.23	.21	1048	661.3	358.8	-17.6	835
65.0	0.38	-0.04	0.3	.23	.20	1051	663.1	0.3	-22.8	839
67.5	0.41	-0.04	0.4	.10	.06	1102	664.5	2.6	-27.1	880
70.0	0.42	-0.04	0.4	.10	.06	1104	665.5	5.7	-30.1	881
72.5	0.41	-0.04	0.4	.10	.06	1105	665.8	9.2	-31.7	880
75.0	0.38	-0.04	0.3	.23	.18	1056	665.5	12.6	-31.9	838
77.5	0.36	-0.04	0.3	.23	.19	1054	664.5	15.6	-30.8	833
80.0	0.36	-0.04	0.3	.23	.20	1051	663.1	17.9	-28.4	827
82.5	0.57	-0.04	0.5	.01	-15.99	1136	661.3	19.4	-25.0	890
85.0	0.77	-0.04	0.7	-15.86	.85	1197	659.4	20.0	-20.8	933
87.5	0.96	-0.05	0.9	.76	.76	1246	657.6	20.1	-16.1	968
90.0	0.87	-0.06	0.8	.80	.81	1217	656.1	19.6	-11.1	943
92.5	0.81	-0.07	0.7	.85	.87	1188	655.0	19.0	-5.9	919
95.0	0.80	-0.08	0.7	.85	.87	1186	654.4	18.3	-0.6	918
97.5	0.61	-0.09	0.5	-16.00	-16.02	1122	654.2	17.8	4.5	869
37400.0	0.49	-0.10	0.4	.09	.11	1083	654.5	17.7	9.3	840
02.5	0.27	-0.11	0.2	.40	.42	974	655.1	18.2	13.6	756
05.0	0.59	-0.12	0.5	.00	.01	1125	655.8	19.4	17.2	875
07.5	0.75	-0.12	0.6	-15.92	-15.93	1160	656.4	21.5	19.9	903
37432.5	0.54	-0.20	0.34	-16.16	-16.19	1054	653.6	37.4	-15.8	815
35.0	0.55	-0.20	0.35	.15	.17	1059	654.2	36.5	-22.7	824
37.5	0.55	-0.21	0.34	.17	.18	1056	655.4	35.8	-29.3	828
40.0	0.62	-0.22	0.40	.10	.11	1086	656.9	35.3	-35.7	859
42.5	0.62	-0.23	0.39	.11	.11	1085	658.6	35.4	-41.6	865
45.0	0.55	-0.23	0.32	.20	.19	1055	660.3	36.2	-46.9	849
47.5	0.50	-0.21	0.29	.25	.22	1041	661.9	37.8	-51.2	846

Table 3.--Continued

SATELLITE 1958 β2 (2.5 day)

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37450.0	0.46	-0.20	0.26	-16.30	-16.27	1026	663.0	40.2	-54.4	839
52.5	0.35	-0.15	0.20	.41	.38	986	663.6	43.3	-56.2	810
55.0	0.29	-0.08	0.21	.39	.36	993	663.6	46.5	-56.6	818
57.5	0.21	-0.03	0.18	.46	.43	969	663.0	49.5	-55.5	797
60.0	0.23	0.00	0.23	.35	.33	1004	661.8	52.0	-53.0	823
62.5	0.23	0.01	0.24	.33	.31	1008	660.2	53.6	-49.4	822
65.0	0.26	0.02	0.28	.26	.26	1029	658.4	54.4	-44.9	833
67.5	0.42	0.03	0.45	.05	.06	1106	656.6	54.5	-39.6	887
70.0	0.62	0.02	0.64	-15.90	-15.92	1168	655.0	54.0	-33.8	928
72.5	0.60	0.01	0.61	.92	.94	1156	653.7	53.1	-27.7	912
75.0	0.43	-0.01	0.42	-16.07	-16.10	1087	652.8	52.1	-21.5	851
77.5	0.36	-0.04	0.32	.19	.22	1041	652.5	51.2	-15.2	810
80.0	0.26	-0.09	0.17	.47	.51	944	652.6	50.5	-9.2	732
82.5	0.46	-0.14	0.32	.19	.22	1042	653.1	50.3	-3.5	806
85.0	0.51	-0.17	0.34	.17	.19	1052	653.8	50.8	1.7	815
87.5	0.67	-0.20	0.47	.03	.05	1109	654.5	52.1	6.1	859
90.0	0.56	-0.21	0.35	.16	.18	1059	655.2	54.2	9.5	823
92.5	0.55	-0.23	0.32	.20	.21	1045	655.5	57.0	11.7	814
95.0	0.54	-0.24	0.30	.23	.24	1034	655.6	60.2	12.6	809
97.5	0.55	-0.25	0.30	.23	.24	1033	655.2	63.4	12.1	810
37520.0	0.47	-0.28	0.19	-16.43	-16.46	958	653.0	66.5	-28.2	766
22.5	0.56	-0.28	0.28	.26	.28	1019	654.6	66.4	-33.1	819
25.0	0.68	-0.28	0.40	.11	.12	1080	656.3	66.9	-37.6	874
27.5	0.76	-0.28	0.48	.03	.03	1115	658.0	68.2	-41.2	909
30.0	0.75	-0.28	0.47	.05	.04	1114	659.4	70.3	-43.9	914
32.5	0.71	-0.28	0.43	.08	.07	1100	660.4	73.2	-45.4	907
35.0	0.65	-0.28	0.37	.15	.13	1075	660.8	76.7	-45.5	890
37.5	0.65	-0.27	0.38	.14	.12	1079	660.5	80.1	-44.1	896
40.0	0.65	-0.26	0.39	.12	.11	1082	659.7	83.3	-41.3	899
42.5	0.62	-0.25	0.37	.15	.14	1071	658.3	85.7	-37.3	888
45.0	0.65	-0.24	0.41	.10	.11	1086	656.6	87.3	-32.2	897
47.5	0.74	-0.23	0.51	.00	.02	1121	654.8	88.2	-26.3	922
50.0	0.74	-0.21	0.53	-15.98	.01	1125	653.0	88.3	-19.8	921
52.5	0.77	-0.20	0.57	.95	-15.99	1135	651.5	88.0	-12.9	926
55.0	0.78	-0.21	0.57	.95	.99	1133	650.4	87.4	-5.7	921
57.5	0.93	-0.22	0.71	.86	.90	1172	649.8	86.7	1.4	951
60.0	1.03	-0.23	0.80	.81	.86	1195	649.6	86.2	8.5	969
62.5	0.81	-0.24	0.57	.96	-16.00	1130	649.9	86.1	15.2	919
65.0	0.57	-0.25	0.32	-16.21	.25	1031	650.5	86.5	21.6	842
67.5	0.37	-0.27	0.10	.74	.78	861	651.3	87.6	27.2	707
70.0	0.55	-0.28	0.27	.29	.32	1005	652.0	89.6	31.9	832
72.5	0.61	-0.28	0.33	.20	.23	1037	652.6	92.3	35.6	866
75.0	0.53	-0.28	0.25	.32	.36	994	652.8	95.6	37.9	836
77.5	0.50	-0.28	0.22	.38	.41	974	652.7	99.1	38.8	825
80.0	0.46	-0.27	0.19	.45	.48	952	652.2	102.3	38.2	810

Table 3.--Continued

[[illegible]]

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36905.0	0.76	-0.04	0.72	-15.87	-15.91	1170	650.4	182.7	25.4	1128
10.0	0.55	-0.01	0.54	.99	-16.03	1116	650.5	181.0	38.0	1079
15.0	0.39	0.02	0.41	-16.11	.15	1070	652.0	181.2	48.7	1038
20.0	0.21	0.02	0.23	.37	.39	981	653.6	184.6	55.8	957
25.0	0.28	0.04	0.32	.22	.24	1033	654.0	190.3	57.6	1013
30.0	0.29	0.05	0.34	.19	.22	1042	653.1	195.4	53.6	1026
35.0	0.28	0.07	0.35	.17	.21	1044	651.4	197.5	45.0	1029
40.0	0.35	0.09	0.44	.07	.12	1080	650.2	196.8	33.4	1061
45.0	0.38	0.10	0.48	.04	.08	1097	650.7	194.7	20.4	1069
50.0	0.37	0.13	0.50	.02	.05	1109	653.1	192.9	7.4	1070
55.0	0.43	0.12	0.55	-15.98	-15.99	1134	656.5	193.0	-4.3	1083
60.0	0.56	0.12	0.68	.89	.89	1180	659.4	196.3	-12.9	1121
65.0	0.91	0.11	1.02	.73	.72	1267	660.4	202.3	-16.8	1208
70.0	0.76	0.08	0.84	.81	.80	1221	659.0	208.2	-15.2	1177
75.0	0.42	0.06	0.48	-16.04	-16.06	1107	655.9	211.4	-9.0	1081
80.0	0.37	0.07	0.44	.08	.11	1084	652.4	211.7	0.2	1070
85.0	0.27	0.09	0.36	.16	.21	1046	650.1	210.3	10.6	1038
90.0	0.25	0.11	0.36	.16	.21	1046	649.8	208.9	21.0	1038
95.0	0.31	0.14	0.45	.07	.11	1085	651.1	209.2	30.1	1075
37000.0	0.20	0.16	0.36	.17	.20	1051	652.8	212.5	36.1	1038
05.0	0.11	0.18	0.29	.26	.29	1018	653.7	218.6	37.6	1005
10.0	0.04	0.18	0.22	.38	.41	975	653.3	225.2	33.4	964
15.0	0.07	0.16	0.23	.36	.40	980	651.7	229.3	24.3	973
20.0	0.75	0.16	0.91	-15.77	-15.81	1218	650.4	230.3	11.9	1215
25.0	0.53	0.16	0.69	.88	.92	1163	650.3	229.4	-2.1	1163
30.0	0.09	0.17	0.26	-16.30	-16.34	1000	652.2	228.1	-16.3	1000
35.0	0.15	0.19	0.34	.19	.20	1048	655.5	228.2	-29.4	1047
40.0	0.15	0.21	0.36	.17	.16	1064	658.8	231.1	-39.9	1060
45.0	0.12	0.23	0.35	.18	.17	1062	660.4	237.0	-45.9	1057
50.0	0.13	0.23	0.36	.17	.16	1065	659.6	243.7	-46.1	1061
55.0	0.48	0.23	0.71	-15.88	-15.89	1181	656.6	248.2	-41.2	1179
60.0	0.08	0.24	0.32	-16.21	-16.25	1033	652.8	249.4	-32.5	1031
65.0	0.10	0.24	0.34	.19	.24	1036	649.8	248.4	-22.0	1034
70.0	0.04	0.26	0.30	.24	.30	1014	648.7	246.7	-10.8	1005
75.0	0.03	0.27	0.30	.24	.29	1015	649.4	246.0	-0.5	995
80.0	0.10	0.28	0.38	.14	.18	1056	651.1	248.0	7.7	1020
85.0	0.15	0.27	0.42	.10	.13	1075	652.5	253.0	11.9	1027
90.0	0.20	0.23	0.43	.09	.12	1079	652.6	259.2	10.7	1028
95.0	0.29	0.14	0.43	.09	.13	1077	651.5	263.6	4.5	1031
37100.0	0.26	0.02	0.28	.28	.32	1005	650.2	264.9	-5.5	974
05.0	0.20	0.00	0.20	.42	.47	954	649.9	263.7	-17.3	937
10.0	0.08	0.05	0.13	.62	.66	896	651.5	261.7	-29.6	887
15.0	0.08	0.15	0.23	.37	.39	984	654.6	260.6	-41.2	978
20.0	-0.03	0.21	0.18	.48	.48	953	658.2	262.0	-50.4	946
25.0	-0.02	0.25	0.23	.38	.36	992	660.6	266.6	-55.6	982
30.0	-0.02	0.27	0.25	.34	.33	1004	660.8	273.0	-55.3	988
35.0	0.03	0.28	0.31	.25	.24	1033	658.5	278.1	-49.3	1010
40.0	0.01	0.29	0.30	.26	.27	1022	655.0	280.1	39.1	995
45.0	-0.05	0.29	0.24	.35	.39	982	651.8	279.5	26.4	954
50.0	-0.04	0.28	0.24	.35	.40	979	650.1	277.9	-12.8	949
55.0	0.05	0.28	0.33	.21	.26	1028	650.4	276.9	0.5	991
60.0	0.29	0.28	0.57	-15.98	.02	1123	651.9	278.2	11.9	1072
65.0	0.63	0.28	0.91	.79	-15.81	1217	653.5	282.8	19.9	1147
70.0	0.30	0.27	0.57	.99	-16.01	1126	653.9	289.4	22.8	1051
75.0	0.09	0.26	0.35	-16.19	.22	1042	653.1	295.3	20.3	966
80.0	0.19	0.24	0.43	.10	.13	1074	651.7	298.1	13.5	995
85.0	0.33	0.21	0.54	.00	.04	1115	651.0	298.2	4.1	1036
90.0	0.56	0.18	0.64	-15.92	-15.96	1149	652.1	297.0	-6.4	1074
95.0	0.69	0.18	0.87	.80	.82	1215	655.0	296.2	-16.5	1138
37200.0	0.52	0.20	0.72	.88	.88	1184	658.8	297.3	-25.0	1104

Table 3.--Continued

SATELLITE 1958 β2 (5 day)

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37205.00	0.33	0.23	0.56	-16.00	-15.97	1142	662.0	301.6	-30.2	1050
10.00	0.31	0.24	0.55	.00	.98	1141	663.1	308.4	-30.3	1030
15.00	0.80	0.23	1.03	-15.74	.72	1268	661.9	314.7	-24.9	1124
20.00	0.63	0.21	0.84	.81	.81	1219	658.9	318.0	-14.8	1070
25.00	0.78	0.17	0.95	.75	.77	1240	655.5	318.3	-2.0	1088
30.00	0.66	0.10	0.76	.84	.87	1189	653.2	317.0	12.1	1051
35.00	0.57	0.02	0.59	.95	.98	1139	652.8	315.7	25.9	1017
40.00	0.60	0.00	0.60	.95	.97	1143	653.8	316.0	38.3	1027
45.00	0.67	0.00	0.67	.91	.92	1165	655.3	319.3	47.5	1046
50.00	1.34	0.03	1.37	.61	.62	1321	656.0	325.2	51.9	1175
55.00	0.66	0.13	0.79	.84	.85	1198	655.4	331.1	50.5	1050
60.00	0.44	0.19	0.63	.93	.95	1152	654.0	334.3	44.1	994
65.00	0.21	0.20	0.41	-16.11	-16.14	1074	653.0	334.3	34.5	917
70.00	0.62	0.18	0.80	-15.82	-15.85	1200	653.5	332.4	23.2	1019
75.00	0.95	0.17	1.12	.68	.69	1280	656.1	330.4	11.6	1084
80.00	0.82	0.15	0.97	.74	.73	1257	659.9	329.7	1.0	1059
85.00	0.55	0.13	0.68	.89	.86	1192	663.4	332.0	-7.1	994
90.00	0.36	0.11	0.47	-16.05	-16.01	1127	665.3	337.2	-10.7	928
95.00	0.40	0.09	0.49	.03	-15.99	1134	664.4	343.0	-9.0	923
37300.00	0.65	0.07	0.72	-15.86	.84	1204	661.7	346.4	-2.3	973
05.00	0.81	0.04	0.85	.79	.78	1231	658.1	346.7	7.5	999
10.00	0.50	0.01	0.51	-16.00	-16.01	1125	655.3	344.9	18.8	923
15.00	0.36	0.00	0.36	.15	.17	1062	654.4	342.8	30.3	885
20.00	0.34	0.00	0.34	.17	.19	1053	655.1	342.0	40.6	889
25.00	0.40	0.00	0.40	.11	.12	1082	656.6	344.0	48.2	919
30.00	0.42	0.00	0.42	.09	.09	1091	657.6	349.2	51.4	923
35.00	0.39	0.00	0.39	.12	.13	1078	657.3	355.4	49.0	898
40.00	0.30	0.04	0.34	.19	.19	1053	655.9	359.8	41.2	861
45.00	0.27	0.06	0.33	.19	.21	1047	654.5	1.0	29.7	841
50.00	0.19	0.05	0.24	.32	.35	998	654.3	0.1	16.1	793
55.00	0.23	0.01	0.24	.32	.33	1002	656.0	358.6	1.9	795
60.00	0.39	-0.02	0.37	.13	.12	1078	659.4	358.1	-11.6	858
65.00	0.38	-0.04	0.34	.17	.14	1072	663.1	0.3	-22.8	855
70.00	0.42	-0.04	0.38	.13	.08	1096	665.5	5.7	-30.1	874
75.00	0.39	-0.04	0.35	.16	.12	1081	665.5	12.6	-31.9	858
80.00	0.42	-0.04	0.38	.12	.09	1091	663.1	17.9	-28.4	858
85.00	0.77	-0.04	0.73	-15.84	-15.84	1205	659.4	20.0	-20.8	940
90.00	0.87	-0.06	0.81	.80	.81	1220	656.1	19.6	-11.1	945
95.00	0.74	-0.08	0.66	.88	.90	1175	654.4	18.3	-0.6	909
37400.00	0.46	-0.10	0.36	-16.14	-16.16	1065	654.5	17.7	9.3	826
05.00	0.55	-0.12	0.43	.06	.08	1098	655.8	19.4	17.2	854
37440.00	0.62	-0.22	0.40	-16.10	-16.11	1086	656.9	35.3	-35.7	859
45.00	0.55	-0.23	0.32	.20	.19	1055	660.3	36.2	-46.9	849
50.00	0.43	-0.20	0.23	.35	.32	1006	663.0	40.2	-54.4	823
55.00	0.27	-0.08	0.19	.44	.40	978	663.6	46.5	-56.6	805
60.00	0.23	0.00	0.23	.35	.33	1004	661.8	52.0	-53.0	823
65.00	0.29	0.02	0.31	.21	.21	1046	658.4	54.4	-44.9	846
70.00	0.56	0.02	0.58	-15.94	-15.96	1149	655.0	54.0	-33.8	914
75.00	0.45	-0.01	0.44	-16.05	-16.08	1095	652.8	52.1	-21.5	857
80.00	0.33	-0.09	0.24	.32	.35	996	652.6	50.5	-9.2	772
85.00	0.53	-0.17	0.36	.14	.17	1062	653.8	50.8	1.7	822
90.00	0.59	-0.21	0.39	.12	.14	1073	655.2	54.2	9.5	834
95.00	0.55	-0.24	0.31	.21	.23	1039	655.6	60.2	12.6	813
37520.00	0.44	-0.28	0.16	-16.51	-16.54	933	653.0	66.5	-28.2	746
25.00	0.68	-0.28	0.40	.11	.12	1080	656.3	66.9	-37.6	874
30.00	0.74	-0.28	0.46	.05	.05	1110	659.4	70.3	-43.9	911

Table 3.--Continued

SATELLITE 1958 β2 (5 day)

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37535.00	0.67	-0.28	0.39	-16.13	-16.11	1084	660.8	76.7	-45.5	898
40.00	0.65	-0.26	0.39	.12	.11	1082	659.7	83.3	-41.3	899
45.00	0.67	-0.24	0.43	.08	.09	1094	656.6	87.3	-32.2	904
50.00	0.74	-0.21	0.53	-15.98	.01	1125	653.0	88.3	-19.8	921
55.00	0.81	-0.21	0.60	.93	-15.97	1143	650.4	87.4	-5.7	928
60.00	0.94	-0.23	0.71	.86	.91	1171	649.6	86.2	8.5	950
65.00	0.58	-0.25	0.33	-16.13	-16.24	1036	650.5	86.5	21.6	846
70.00	0.53	-0.28	0.25	.32	.36	993	652.0	89.6	31.9	822
75.00	0.55	-0.28	0.27	.29	.32	1006	652.8	95.6	37.9	846
80.00	0.46	-0.27	0.19	.45	.48	952	652.2	102.3	38.2	810
85.00	0.35	-0.24	0.11	.70	.74	873	650.6	106.7	33.5	745
90.00	0.22	-0.22	0.00				648.9	107.9	25.2	

Table 3.--Continued

SATELLITE 1959 α1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
36622.5	8.05	0.06	8.1	-14.80	-14.82	1583	559.8	354.1	17.6	1274
25.0	8.87	0.04	8.9	.76	.78	1626	560.2	354.1	9.6	1304
27.5	8.99	0.03	9.0	.76	.77	1637	561.2	354.1	1.5	1309
30.0	7.82	0.01	7.8	.82	.82	1583	562.8	354.5	-6.3	1266
32.5	7.66	-0.01	7.6	.83	.82	1580	564.7	355.5	-13.6	1264
35.0	7.65	-0.02	7.6	.83	.81	1588	566.7	357.4	-20.0	1271
37.5	8.23	-0.03	8.2	.80	.78	1628	568.4	0.5	-25.2	1302
40.0	8.69	-0.03	8.7	.78	.75	1659	569.6	4.5	-28.8	1324
42.5	9.31	-0.04	9.3	.75	.72	1691	569.9	9.1	-30.6	1345
45.0	9.65	-0.04	9.6	.74	.71	1704	569.4	13.6	-30.4	1349
47.5	10.52	-0.04	10.5	.71	.68	1741	568.2	17.5	-28.4	1371
50.0	11.18	-0.04	11.1	.68	.67	1762	566.4	20.3	-24.9	1379
36651.0	11.84	-0.04	11.8	-14.66	-14.65	1790	565.6	21.1	-23.1	1398
52.0	11.94	-0.04	11.9	.65	.65	1791	564.8	21.8	-21.2	1395
36652.5	11.54	-0.04	11.5	-14.67	-14.66	1771	564.4	22.1	-20.2	1379
53.0	12.54	-0.04	12.5	.63	.63	1813	564.0	22.3	-19.2	1410
53.5	13.14	-0.04	13.1	.62	.61	1837	563.6	22.5	-18.1	1427
54.0	15.05	-0.05	15.0	.56	.56	1912	563.2	22.7	-17.0	1484
54.5	15.05	-0.05	15.0	.56	.56	1910	562.8	22.8	-15.9	1481
55.0	13.25	-0.05	13.2	.61	.61	1836	562.4	22.9	-14.7	1423
55.5	10.85	-0.05	10.8	.69	.69	1730	562.1	23.0	-13.6	1340
56.0	10.25	-0.05	10.2	.71	.71	1702	561.8	23.1	-12.4	1317
56.5	9.76	-0.06	9.7	.73	.73	1677	561.4	23.2	-11.2	1297
57.0	9.96	-0.06	9.9	.72	.73	1685	561.2	23.2	-10.0	1302
36658.0	10.66	-0.06	10.6	-14.69	-14.70	1715	560.6	23.3	-7.5	1324
59.0	9.77	-0.07	9.7	.73	.74	1672	560.2	23.3	-5.1	1290
36660.0	10.08	-0.07	10.0	-14.71	-14.73	1685	559.9	23.3	-2.6	1299
62.5	9.44	-0.09	9.4	.74	.75	1654	559.6	23.4	3.5	1276
65.0	9.42	-0.10	9.3	.74	.76	1650	559.9	23.9	9.2	1274
67.5	10.99	-0.12	10.9	.68	.69	1726	560.5	25.2	14.3	1336
70.0	11.09	-0.13	11.0	.68	.69	1733	561.3	27.5	18.5	1344
72.5	9.96	-0.14	9.8	.73	.73	1681	562.0	30.8	21.3	1306
75.0	9.97	-0.14	9.8	.73	.73	1681	562.4	34.9	22.4	1308
77.5	10.45	-0.15	10.3	.71	.71	1704	562.3	39.5	21.7	1325
80.0	10.77	-0.16	10.6	.70	.70	1714	561.7	43.7	19.1	1332
82.5	11.53	-0.16	11.4	.67	.68	1746	560.8	47.1	14.8	1355
85.0	12.21	-0.16	12.0	.65	.66	1768	559.8	49.5	9.1	1370
87.5	11.34	-0.16	11.2	.67	.69	1729	558.9	50.9	2.4	1339
90.0	10.05	-0.17	9.9	.72	.74	1669	558.4	51.4	-5.0	1293
92.5	8.96	-0.18	8.8	.76	.79	1615	558.5	51.5	-12.8	1256
95.0	8.75	-0.19	8.6	.77	.79	1608	559.2	51.4	-20.6	1257
97.5	9.29	-0.20	9.1	.76	.77	1637	560.6	51.5	-28.3	1290
36700.0	9.50	-0.21	9.3	.75	.75	1653	562.4	52.1	-35.5	1316
02.5	9.01	-0.22	8.8	.78	.77	1635	564.4	53.6	-42.0	1315
05.0	7.99	-0.22	7.8	.83	.81	1589	566.3	56.1	-47.2	1293
07.5	6.92	-0.22	6.7	.89	.87	1532	567.6	59.6	-51.0	1258
10.0	6.12	-0.21	5.9	.94	.91	1489	568.5	63.8	-53.0	1232
12.5	5.44	-0.19	5.2	.99	.96	1444	568.4	68.2	-53.0	1200
15.0	4.57	-0.17	4.4	-15.05	-15.03	1386	567.4	72.1	-51.1	1153
17.5	3.36	-0.12	3.2	.18	.16	1280	565.8	75.1	-47.5	1070
20.0	3.50	-0.07	3.4	.15	.15	1300	563.8	76.9	-42.5	1073
22.5	4.07	-0.01	4.1	.07	.08	1348	561.7	77.8	-36.7	1105
25.0	4.82	0.00	4.8	.01	.02	1391	559.9	78.0	-30.1	1131
27.5	5.14	0.00	5.1	-14.98	.00	1406	558.7	77.8	-23.3	1135
30.0	5.29	0.00	5.3	.97	-14.99	1417	558.0	77.6	-16.4	1137
32.5	5.95	-0.05	5.9	.93	.95	1453	558.0	77.6	-9.7	1161

Table 3.--Continued

[illegible]	$-10^7 \dot{P}$	$10^7 \dot{P}_K$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	ϑ_π (°K)
[illegible]35.0	6.35	-0.12	6.2	-14.91	-14.93	1472	558.4	78.3	-3.5	1174
37.5	6.70	-0.16	6.5	.89	.91	1490	559.1	79.9	1.8	1189
40.0	6.19	-0.19	6.0	.93	.94	1462	559.8	82.6	6.0	1171
42.5	5.90	-0.21	5.7	.95	.96	1444	560.3	86.2	8.6	115[illegible]
45.0	5.61	-0.22	5.4	.97	.98	1425	560.3	90.4	9.5	115[illegible]
47.5	5.25	-0.23	5.0	-15.00	-15.02	1397	559.9	94.6	8.4	113[illegible]
50.0	4.87	-0.23	4.6	.03	.05	1367	559.1	98.1	5.6	112[illegible]
52.5	4.31	-0.23	4.1	.08	.10	1330	558.2	100.6	1.3	109[illegible]
55.0	3.79	-0.22	3.6	.13	.16	1291	557.3	102.0	[illegible].1	108[illegible]
57.5	3.58	-0.22	3.4	.15	.19	1273	556.8	102.6	10.2	1060
[illegible]769.0	3.56	-0.22	3.3	-15.16	-15.20	1265	556.8	102.6	-16.9	1058
61.0	3.81	-0.22	3.6	.13	.16	1289	557.0	102.5	-19.6	1080
62.0	4.34	-0.22	4.1	.08	.11	1327	557.3	102.4	-22.3	1114
63.0	4.34	-0.22	4.1	.08	.11	1328	557.7	102.3	-25.0	1117
[illegible]763.5	4.64	-0.22	4.4	-15.05	-15.08	1350	558.0	102.3	-26.4	1137
64.0	5.18	-0.22	5.0	.00	.02	1389	558.2	102.3	-27.7	1172
64.5	6.09	-0.22	5.9	-14.94	-14.96	1447	558.5	102.3	-29.0	1221
65.0	6.62	-0.22	6.4	.90	.93	1477	558.9	102.3	-30.3	1249
65.5	6.24	-0.22	6.0	.93	.95	1455	559.2	102.3	-31.7	1231
66.0	5.33	-0.22	5.1	.99	-15.01	1400	559.6	102.3	-32.9	1187
66.5	4.95	-0.21	4.7	-15.03	.04	1375	559.9	102.4	-34.[illegible]	1167
67.0	4.26	-0.21	4.1	.08	.10	1335	560.3	102.5	-35.4	1135
67.5	4.87	-0.21	4.6	.04	.05	1370	560.7	102.6	-36.7	1167
[illegible]768.0	4.49	-0.21	4.3	-15.06	-15.07	1351	561.2	102.7	-37.9	1152
69.0	3.96	-0.20	3.8	.12	.12	1318	562.0	103.1	-40.2	1128
[illegible]770.0	3.55	-0.19	3.4	-15.16	-15.16	1289	562.9	103.7	-42.3	1107
72.5	2.78	0.10	2.7	.26	.25	1235	565.0	105.0	-46.9	1069
75.0	1.82	-0.08	1.7	.45	.42	1134	566.6	109.0	-50.2	991
77.5	1.69	-0.14	1.6	.47	.44	1124	567.7	113.1	-51.7	980
80.0	2.25	-0.17	2.1	.36	.33	1183	567.8	117.5	-51.2	1049
82.5	2.38	-0.16	2.2	.34	.32	1193	567.1	121.8	-48.8	1062
85.0	2.22	-0.16	2.1	.36	.34	1179	565.7	125.2	-44.6	1051
87.5	2.22	-0.15	2.1	.35	.35	117[illegible]	563.9	127.5	-39.0	1046
90.0	2.33	-0.14	2.1	.35	.36	1170	561.8	128.9	-32.4	1039
92.5	2.22	-0.13	2.1	.35	.37	1164	559.7	129.4	-25.0	1030
95.0	2.26	-0.12	2.1	.35	.37	1160	558.3	129.5	-17.2	1022
97.5	2.56	-0.11	2.4	.29	.33	1188	557.5	129.5	-9.2	1043
30800.0	2.98	-0.11	2.9	.22	.25	1232	557.3	129.7	-1.4	1080
02.5	3.16	-0.11	3.0	.21	.24	1241	557.7	130.5	5.9	1087
05.0	3.31	-0.12	3.2	.18	.21	1258	558.4	132.1	12.5	1105
07.5	3.89	-0.12	3.[illegible]	.12	.14	1306	559.2	134.7	18.0	1152
10.0	4.07	-0.13	3.[illegible]	.11	.12	1315	559.9	138.4	22.1	1167
12.5	4.99	-0.13	4.[illegible]	.02	.03	1384	560.2	142.8	24.4	1238
15.0	4.41	-0.13	4.3	.07	.09	1343	560.1	147.4	24.7	1212
17.5	3.48	-0.12	3.4	.16	.18	1275	559.5	151.4	23.3	1161
20.0	2.06	-0.12	1.9	.40	.42	1135	558.7	154.6	20.2	1041
22.5	1.80	-0.12	1.7	.44	.47	1110	557.9	156.7	15.8	1024
25.0	2.05	-0.10	2.0	.37	.41	1143	557.3	157.9	10.6	1058
27.5	2.18	-0.08	2.1	.35	.39	1154	557.1	158.4	4.7	1070
30.0	2.52	-0.07	2.4	.30	.33	1186	557.6	158.5	-1.4	1100
32.5	2.80	-0.06	2.7	.25	.27	1217	558.8	158.6	-7.6	1130
35.0	2.89	-0.04	2.8	.24	.25	1230	560.6	159.0	-13.5	1143
37.5	2.64	-0.03	2.6	.27	.27	1218	562.6	160.1	-18.8	1133
40.0	2.40	-0.02	2.4	.31	.30	1204	564.7	162.2	-23.3	1122
42.5	2.41	-0.02	2.4	.31	.29	1209	566.4	165.3	-26.5	1129
45.0	2.12	-0.02	2.1	.36	.34	1181	567.6	169.3	-28.2	1108

Table 3.--Continued

SATELLITE 1959 α1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
36847.5	1.80	-0.03	1.8	-15.43	-15.40	1149	567.9	174.0	-27.9	1082
50.0	1.28	-0.04	1.2	.59	.56	1067	567.4	178.5	-25.8	1011
52.5	1.13	-0.03	1.1	.63	.61	1048	566.1	182.3	-21.8	999
55.0	1.49	-0.02	1.5	.50	.49	1101	564.2	185.1	-16.3	1056
57.5	1.83	-0.02	1.8	.42	.43	1133	562.1	186.8	-9.7	1092
60.0	2.10	-0.02	2.1	.36	.37	1161	560.1	187.6	-2.3	1122
62.5	2.08	-0.01	2.1	.35	.38	1156	558.5	187.9	5.6	1121
65.0	2.09	0.00	2.1	.35	.39	1154	557.5	187.8	13.6	1120
67.5	1.96	0.02	2.0	.37	.41	1142	557.2	187.9	21.5	1110
70.0	1.92	0.03	2.0	.37	.41	1142	557.4	188.3	29.1	1112
72.5	1.89	0.04	1.9	.40	.43	1132	558.1	189.5	35.9	1105
75.0	1.74	0.06	1.8	.42	.45	1122	558.9	191.7	41.8	1098
77.5	1.51	0.06	1.6	.47	.49	1100	559.7	194.9	46.2	1080
80.0	1.33	0.06	1.4	.53	.55	1075	560.1	198.9	48.9	1059
82.5	1.11	0.07	1.2	.59	.61	1047	560.1	203.2	49.7	1035
85.0	1.13	0.08	1.2	.59	.61	1046	559.7	207.3	48.5	1037
87.5	1.32	0.08	1.4	.52	.55	1073	558.9	210.4	45.6	1066
90.0	1.33	0.09	1.4	.52	.55	1072	558.1	212.5	41.3	1066
92.5	1.40	0.10	1.5	.49	.53	1084	557.4	213.6	35.9	1079
95.0	1.35	0.12	1.5	.49	.53	1083	557.1	213.9	29.8	1077
97.5	1.45	0.13	1.6	.46	.50	1097	557.5	213.7	23.3	1088
36900.0	1.59	0.14	1.7	.44	.47	1112	558.5	213.3	16.6	1098
02.5	1.95	0.15	2.1	.36	.37	1161	560.1	213.2	10.1	1140
05.0	2.32	0.16	2.5	.29	.29	1207	562.1	213.6	3.9	1177
07.5	1.96	0.16	2.1	.36	.35	1173	564.2	214.8	-1.5	1136
10.0	1.63	0.16	1.8	.42	.40	1146	566.1	217.1	-5.8	1102
12.5	1.42	0.16	1.6	.47	.44	1126	567.8	220.4	-8.6	1078
15.0	1.27	0.15	1.4	.52	.49	1101	568.3	224.5	-9.8	1052
17.5	1.15	0.14	1.3	.55	.52	1086	567.9	228.6	-9.0	1039
20.0	1.13	0.12	1.2	.59	.56	1067	566.8	232.2	-6.3	1026
22.5	1.13	0.10	1.2	.59	.57	1062	564.9	234.9	-2.1	1028
25.0	1.21	0.08	1.3	.55	.55	1071	562.8	236.5	3.3	1045
27.5	1.21	0.08	1.3	.55	.57	1066	560.6	237.1	9.5	1048
30.0	1.23	0.08	1.3	.55	.58	1061	558.8	237.0	16.3	1050
32.5	1.25	0.09	1.3	.55	.58	1058	557.6	236.6	23.3	1052
35.0	1.35	0.10	1.4	.52	.56	1070	557.0	236.2	30.2	1068
37.5	1.38	0.11	1.5	.49	.53	1083	557.0	236.2	36.8	1083
40.0	1.37	0.13	1.5	.49	.53	1084	557.6	236.8	42.8	1084
42.5	1.35	0.15	1.5	.49	.52	1086	558.5	238.4	47.9	1086
45.0	1.19	0.16	1.4	.52	.55	1074	559.3	241.0	51.6	1074
47.5	1.21	0.18	1.4	.53	.55	1075	559.9	244.6	53.7	1074
50.0	1.13	0.19	1.3	.56	.58	1061	560.1	248.7	53.8	1059
52.5	1.09	0.20	1.3	.56	.58	1060	559.9	252.8	52.0	1057
55.0	1.32	0.20	1.5	.50	.52	1085	559.3	256.1	48.4	1081
57.5	1.51	0.21	1.7	.45	.48	1108	558.6	258.5	43.3	1103
60.0	1.61	0.22	1.8	.42	.46	1119	557.9	259.8	36.9	1112
62.5	1.83	0.22	2.0	.38	.41	1140	557.5	260.3	29.8	1133
65.0	2.50	0.22	2.7	.26	.29	1208	557.7	260.3	22.2	1199
67.5	2.88	0.22	3.1	.20	.23	1245	558.5	260.0	14.3	1233
70.0	2.29	0.22	2.5	.29	.31	1196	559.9	259.9	6.5	1181
72.5	1.62	0.23	1.8	.43	.43	1129	561.8	260.3	-1.0	1109
75.0	1.22	0.23	1.4	.53	.53	1084	563.9	261.5	-7.8	1058
77.5	1.16	0.23	1.3	.57	.55	1074	565.9	263.8	-13.6	1042
80.0	1.13	0.23	1.3	.57	.54	1077	567.3	267.1	-18.0	1039
82.5	1.00	0.23	1.2	.60	.57	1064	568.1	271.3	-20.8	1020
85.0	1.08	0.23	1.3	.57	.54	1078	568.0	275.9	-21.6	1030
87.5	1.10	0.22	1.3	.57	.54	1075	567.0	280.1	-20.6	1024
90.0	1.39	0.21	1.6	.48	.47	1112	565.4	283.4	-17.8	1058
92.5	1.48	0.20	1.7	.46	.45	1119	563.3	285.7	-13.7	1065
95.0	1.52	0.19	1.7	.45	.46	1114	561.1	287.0	-8.6	1061

Table 3.--Continued

SATELLITE 1969 01

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36997.5	1.58	0.19	1.8	-15.43	-15.45	1121	559.1	287.6	-2.8	1069
37000.0	1.51	0.19	1.7	.45	.48	1106	557.7	287.7	3.3	1056
02.5	1.38	0.19	1.6	.47	.51	1092	556.9	287.7	9.5	1043
05.0	1.35	0.18	1.5	.50	.54	1078	556.8	288.0	15.4	1029
07.5	1.31	0.18	1.5	.50	.54	1078	557.2	288.8	20.9	1027
10.0	1.32	0.18	1.5	.50	.54	1078	557.8	290.5	25.6	1022
12.5	1.34	0.18	1.5	.51	.54	1080	558.7	293.2	29.1	1016
15.0	1.49	0.19	1.7	.46	.48	1106	559.4	297.0	31.1	1030
17.5	1.61	0.20	1.8	.44	.45	1119	559.9	301.5	31.3	1030
37020.0	2.06	0.20	2.3	-15.33	-15.35	1173	559.9	306.0	29.6	1067
21.0	2.13	0.20	2.3	.33	.35	1173	559.9	307.7	28.4	1062
22.0	2.51	0.20	2.7	.27	.29	1211	559.7	309.3	26.9	1092
23.0	2.97	0.20	3.2	.20	.22	1253	559.6	310.7	25.1	1126
37023.5	3.35	0.20	3.6	-15.15	-15.17	1285	559.5	311.4	24.1	1152
24.0	4.26	0.20	4.5	.06	.08	1349	559.4	312.0	23.1	1208
24.5	5.56	0.20	5.8	-14.96	-14.98	1430	559.2	312.5	22.0	1278
25.0	7.69	0.20	7.9	.83	.85	1544	559.1	313.0	20.9	1377
25.5	6.77	0.20	7.0	.88	.90	1500	559.0	313.5	19.7	1336
26.0	5.02	0.20	5.2	-15.00	-15.02	1394	558.9	314.0	18.4	1240
26.5	3.20	0.20	3.4	.17	.19	1270	558.8	314.4	17.2	1129
27.0	2.66	0.20	2.9	.23	.25	1229	558.7	314.7	15.8	1091
37028.0	2.28	0.20	2.5	-15.29	-15.31	1193	558.5	315.3	13.1	1057
29.0	2.13	0.20	2.3	.32	.35	1175	558.4	315.7	10.2	1039
30.0	2.13	0.20	2.3	.32	.35	1175	558.4	316.1	7.2	1039
37032.5	2.29	0.13	2.4	-15.30	-15.33	1187	558.8	316.5	-0.6	1049
35.0	2.37	0.11	2.5	.28	.30	1199	559.3	316.5	-8.6	1061
37.5	2.46	0.09	2.6	.27	.28	1213	560.6	316.6	-16.6	1075
40.0	2.56	0.06	2.6	.27	.27	1218	562.3	317.1	-24.4	1082
42.5	2.62	0.03	2.6	.27	.27	1223	564.4	318.2	-31.5	1087
45.0	2.66	0.00	2.7	.26	.24	1237	566.4	320.3	-37.7	1099
47.5	2.75	-0.01	2.7	.26	.23	1242	568.1	323.4	-42.6	1098
50.0	3.07	0.02	3.1	.21	.17	1281	569.1	327.5	-45.8	1125
52.5	2.79	0.06	2.8	.25	.21	1255	569.3	332.1	-47.1	1092
55.0	2.51	0.09	2.6	.28	.24	1236	568.6	336.4	-46.4	1064
57.5	2.39	0.10	2.5	.29	.26	1223	567.2	340.1	-43.9	1042
60.0	2.66	0.12	2.8	.24	.23	1247	565.3	342.6	-39.9	1051
62.5	3.20	0.12	3.3	.17	.17	1284	563.2	344.1	-34.8	1072
65.0	3.71	0.11	3.8	.11	.12	1318	561.2	344.7	-28.9	1093
67.5	3.52	0.10	3.6	.13	.15	1299	559.7	344.8	-22.5	1070
70.0	3.05	0.09	3.1	.19	.21	1257	558.8	344.6	-16.0	1031
72.5	2.70	0.08	2.8	.23	.25	1231	558.6	344.6	-9.5	1005
75.0	2.39	0.06	2.4	.29	.31	1195	558.9	345.0	-3.4	972
77.5	2.59	0.05	2.6	.26	.28	1216	559.6	346.2	2.0	986
80.0	2.72	0.04	2.7	.24	.26	1229	560.5	348.4	6.4	990
82.5	2.31	0.03	2.8	.23	.24	1241	561.3	351.7	9.5	993
85.0	2.82	0.02	2.8	.23	.23	1243	561.7	355.8	10.6	988
87.5	3.06	0.00	3.1	.18	.19	1270	561.7	0.1	10.3	1003
90.0	3.21	-0.01	3.2	.17	.18	1277	561.2	4.0	7.9	1003
92.5	3.70	-0.02	3.7	.11	.12	1316	560.4	7.0	3.9	1028
95.0	4.18	-0.04	4.1	.07	.09	1343	559.6	9.0	-1.4	1048
97.5	3.69	-0.05	3.6	.12	.14	1304	558.9	10.0	-7.7	1018
37100.0	3.26	-0.07	3.2	.16	.19	1272	558.7	10.2	-14.5	996
02.5	2.68	-0.09	2.6	.25	.27	1221	559.1	10.0	-21.8	961
05.0	2.37	-0.10	2.3	.30	.31	1194	560.1	9.8	-29.0	948
07.5	2.15	-0.10	2.0	.36	.36	1167	561.7	9.8	-35.9	934
10.0	2.29	-0.10	2.2	.32	.32	1193	563.7	10.4	-42.3	964

Table 3.--Continued

SATELLITE 1959 α1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37112.5	2.40	-0.07	2.3	-15.30	-15.29	1209	565.8	11.9	-47.8	985
15.0	2.76	-0.04	2.7	.24	.22	1253	567.6	14.6	-52.1	1026
17.5	2.95	-0.01	2.9	.22	.18	1274	568.8	18.2	-54.9	1047
20.0	2.91	0.00	2.9	.22	.18	1275	569.3	22.5	-55.7	1047
22.5	2.85	0.00	2.8	.23	.20	1264	568.8	26.8	-54.5	1034
25.0	2.92	0.00	2.9	.22	.19	1270	567.6	30.5	-51.4	1032
27.5	2.99	0.00	3.0	.20	.18	1274	565.8	33.2	-46.8	1025
30.0	3.10	0.00	3.1	.18	.18	1277	563.8	34.8	-40.8	1017
32.5	3.26	0.00	3.3	.16	.16	1288	561.7	35.6	-34.0	1016
35.0	3.48	-0.02	3.5	.13	.15	1300	560.1	35.7	-26.7	1015
37.5	3.32	-0.05	3.3	.15	.17	1281	559.0	35.5	-19.0	993
40.0	2.97	-0.08	2.9	.20	.23	1246	558.5	35.4	-11.4	961
42.5	2.84	-0.10	2.7	.23	.26	1228	558.8	35.8	-4.1	945
45.0	2.86	-0.13	2.7	.23	.25	1230	559.4	36.8	2.6	946
47.5	2.52	-0.15	2.4	.28	.30	1203	560.3	38.8	8.4	928
50.0	2.39	-0.17	2.2	.32	.33	1185	561.1	42.0	13.0	916
52.5	2.01	-0.18	1.8	.40	.41	1141	561.6	46.0	15.8	886
55.0	2.29	-0.19	2.1	.34	.35	1175	561.7	50.5	16.9	914
57.5	3.29	-0.19	3.1	.18	.19	1268	561.3	54.8	16.0	989
60.0	4.74	-0.19	4.5	.04	.05	1371	560.6	58.3	13.4	1072
62.5	5.89	-0.19	5.7	-14.94	-14.96	1441	558.9	60.7	9.4	1128
65.0	6.48	-0.19	6.3	.90	.93	1475	558.1	62.2	4.3	1155
67.5	6.06	-0.19	5.9	.93	.95	1450	557.7	62.9	-1.5	1136
70.0	4.47	-0.20	4.3	-15.05	-15.08	1349	557.8	63.0	-7.7	1058
72.5	3.22	-0.20	3.0	.20	.22	1251	558.7	63.1	-14.0	984
75.0	3.11	-0.21	2.9	.21	.23	1245	560.1	63.3	-20.1	984
77.5	2.90	-0.22	2.7	.24	.25	1232	561.9	64.0	-25.8	980
80.0	3.06	-0.22	2.8	.23	.23	1246	563.9	65.6	-30.8	998
82.5	3.28	-0.22	3.1	.20	.18	1277	565.7	68.3	-34.6	1030
85.0	3.61	-0.22	3.4	.16	.14	1305	567.1	72.0	-37.0	1061
87.5	4.10	-0.22	3.9	.11	.08	1345	567.7	76.5	-37.6	1101
90.0	5.02	-0.22	4.8	.03	.00	1406	567.4	81.1	-36.3	1156
92.5	5.29	-0.22	5.1	.00	-14.99	1423	566.4	85.4	-33.0	1172
95.0	5.91	-0.22	5.7	-14.96	.95	1455	564.7	88.7	-28.1	1199
97.5	5.74	-0.22	5.5	.97	.97	1436	562.6	90.9	-21.8	1182
37200.0	4.92	-0.21	4.7	-15.02	-15.04	1380	560.5	92.1	-14.6	1133
02.5	4.35	-0.20	4.2	.07	.09	1340	558.8	92.7	-6.9	1099
05.0	3.69	-0.20	3.5	.14	.17	1284	557.5	92.8	1.2	1052
07.5	3.26	-0.20	3.1	.19	.22	1250	557.0	92.9	9.4	1026
10.0	3.32	-0.20	3.1	.19	.22	1249	557.1	93.3	17.2	1029
37211.0	3.41	-0.21	3.2	-15.18	-15.21	1257	557.2	93.6	20.2	1038
12.0	3.91	-0.21	3.7	.12	.15	1296	557.5	94.0	23.1	1073
13.0	4.01	-0.21	3.8	.11	.14	1303	557.8	94.6	25.9	1083
14.0	4.11	-0.21	3.9	.10	.13	1311	558.2	95.3	28.5	1093
15.0	3.46	-0.21	3.2	.18	.21	1258	558.5	96.2	30.9	1053
37217.5	3.37	-0.22	3.2	-15.19	-15.21	1259	559.4	99.2	36.1	1064
20.0	3.20	-0.22	3.0	.21	.23	1244	560.1	103.1	39.7	1062
22.5	3.28	-0.17	3.1	.20	.22	1252	560.3	107.6	41.5	1079
25.0	3.24	-0.13	3.1	.20	.22	1252	560.0	112.1	41.3	1087
27.5	2.50	-0.13	2.4	.30	.32	1189	559.4	115.8	39.2	1037
30.0	1.50	-0.15	1.4	.52	.55	1075	558.6	118.5	35.7	939
32.5	2.07	-0.16	1.9	.39	.42	1135	557.8	120.2	30.9	991
35.0	1.76	-0.16	1.6	.46	.49	1099	557.2	120.9	25.3	958
37.5	1.46	-0.14	1.3	.54	.58	1060	557.3	121.1	19.2	920
40.0	1.67	-0.12	1.6	.46	.49	1102	557.9	121.0	12.8	953
42.5	2.00	-0.09	1.9	.39	.41	1140	559.2	120.9	6.5	983
45.0	2.03	-0.08	2.0	.37	.38	1156	561.0	121.3	0.5	994
47.5	2.22	-0.10	2.1	.35	.35	1171	563.1	122.4	-4.8	1007

Table 3.--Continued

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37248.0	2.31	-0.11	2.2	-15.34	-15.35	1176	561.3	122.8	-5.8	1012
49.0	2.32	-0.12	2.2	.34	.34	1178	562.1	123.6	-7.6	1014
50.0	2.20	-0.13	2.1	.36	.36	1170	562.9	124.5	-9.2	1007
37250.5	4.26	-0.13	4.1	-15.09	-15.09	1342	563.3	125.1	-9.9	1156
51.0	8.21	-0.14	8.1	-14.82	-14.82	1576	563.6	125.7	-10.6	1359
51.5	8.74	-0.14	8.6	.80	.80	1602	564.0	126.3	-11.2	1382
52.0	4.10	-0.14	4.0	-15.10	-15.09	1338	564.3	127.0	-11.8	1155
52.5	3.34	-0.15	3.2	.19	.18	1276	564.6	127.7	-12.3	1102
53.0	1.52	-0.15	1.4	.52	.51	1090	564.9	128.4	-12.7	943
53.5	1.44	-0.14	1.4	.53	.51	1091	565.2	129.2	-13.0	944
54.0	2.89	-0.14	2.8	.24	.23	1244	565.4	130.0	-13.3	1078
54.5	2.89	-0.14	2.8	.25	.23	1244	565.6	130.8	-13.5	1079
55.0	1.67	-0.13	1.5	.50	.48	1106	565.8	131.7	-13.7	960
37256.0	1.60	-0.11	1.5	-15.50	-15.48	1107	566.1	133.4	-13.7	963
57.0	1.37	-0.09	1.3	.56	.54	1079	566.2	135.2	-13.4	942
58.0	1.82	-0.08	1.7	.45	.43	1132	566.2	136.9	-12.8	991
59.0	1.67	-0.09	1.6	.47	.45	1120	566.1	138.6	-11.9	982
60.0	1.75	-0.10	1.6	.47	.45	1119	565.9	140.1	-10.7	985
61.0	1.14	-0.13	1.0	.66	.65	1030	565.6	141.5	-9.3	909
37262.5	1.31	-0.16	1.2	-15.59	-15.57	1062	565.2	143.3	-6.6	941
65.0	1.20	-0.17	1.0	.66	.66	1025	563.4	145.4	-1.1	915
67.5	1.34	-0.16	1.2	.59	.60	1052	561.4	146.4	5.3	945
70.0	1.64	-0.15	1.5	.49	.51	1090	559.6	146.6	12.4	984
72.5	2.06	-0.14	1.9	.40	.42	1134	558.3	146.4	19.9	1029
75.0	2.10	-0.12	2.0	.37	.41	1143	557.6	146.0	27.3	1041
77.5	2.10	-0.11	2.0	.38	.41	1142	557.5	145.8	34.6	1045
80.0	1.81	-0.10	1.7	.44	.48	1108	558.0	146.1	41.3	1020
82.5	1.31	-0.10	1.2	.59	.62	1043	558.7	147.3	47.2	966
85.0	1.17	-0.09	1.1	.63	.65	1029	559.6	149.6	51.9	959
87.5	0.99	-0.08	0.9	.71	.73	997	560.2	152.8	55.0	935
90.0	0.80	-0.07	0.7	.82	.83	957	560.5	156.8	56.3	904
92.5	0.65	-0.06	0.6	.88	.90	934	560.2	160.9	55.6	886
95.0	0.47	-0.05	0.4	-16.05	-16.08	877	559.6	164.4	53.0	834
97.5	0.59	-0.04	0.6	-15.87	-15.90	932	558.7	167.0	48.7	888
37300.0	0.63	-0.03	0.6	.87	.91	931	557.8	168.5	43.2	887
02.5	0.75	-0.02	0.7	.80	.85	953	557.2	169.1	36.7	906
05.0	0.96	0.00	1.0	.66	.70	1011	557.1	169.0	29.5	957
07.5	0.56	0.01	0.6	.87	.91	931	557.6	168.6	22.1	878
10.0	0.50	0.02	0.5	.95	.98	907	558.8	168.3	14.6	851
12.5	0.49	0.02	0.5	.95	.97	911	560.5	168.3	7.3	850
15.0	0.49	0.03	0.5	.95	.95	915	562.6	169.0	0.6	850
17.5	0.34	0.03	0.4	-16.05	-16.04	888	564.7	170.8	-5.2	823
20.0	0.39	0.02	0.4	.05	.03	892	566.4	173.6	-9.8	826
22.5	0.41	0.01	0.4	.05	.02	894	567.5	177.4	-12.9	830
25.0	0.41	0.00	0.4	.05	.02	894	567.8	181.7	-14.0	835
27.5	0.39	-0.01	0.4	.06	.02	893	567.3	185.9	-13.2	840
30.0	0.41	-0.02	0.4	.05	.03	890	566.0	189.4	-10.7	845
32.5	0.52	-0.02	0.5	-15.96	-15.95	917	564.1	191.8	-6.7	879
35.0	0.62	-0.02	0.6	.88	.88	939	562.1	193.2	-1.6	907
37.5	0.74	-0.01	0.7	.81	.83	958	560.2	193.8	4.2	931
40.0	0.57	0.00	0.6	.87	.91	932	558.7	193.8	10.4	909
42.5	0.36	0.02	0.4	-16.05	-16.09	873	557.8	193.7	16.7	854
45.0	0.36	0.03	0.4	.05	.09	873	557.5	193.7	22.9	855
47.5	0.41	0.05	0.5	-15.95	-15.99	904	557.9	194.2	28.7	886
50.0	0.58	0.06	0.6	.88	.91	931	558.6	195.6	33.8	913
52.5	0.46	0.08	0.5	.96	.98	906	559.4	197.9	37.7	890
55.0	0.07	0.09	0.2	-16.36	-16.38	790	560.1	201.4	40.3	777

Table 3.--Continued

SATELLITE 1959 α1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37357.5	0.21	0.10	0.3	-16.18	-16.20	840	560.4	205.6	41.0	828
60.0	0.21	0.10	0.3	.18	.20	840	560.3	210.1	39.9	829
62.5	0.30	0.10	0.4	.05	.08	876	559.7	214.3	36.8	868
65.0	0.27	0.11	0.4	.05	.08	875	558.8	217.5	32.1	868
67.5	0.24	0.12	0.3	.17	.21	837	557.9	219.8	26.0	832
70.0	0.09	0.11	0.2	.35	.40	786	557.2	221.0	18.9	784
72.5	0.10	0.11	0.2	.35	.40	786	556.9	221.5	11.1	784
75.0	0.05	0.12	0.2	.35	.40	787	557.3	221.6	3.1	785
77.5	0.21	0.13	0.3	.17	.21	838	558.4	221.7	-5.1	837
80.0	0.24	0.14	0.4	.05	.07	878	560.0	222.0	-13.0	876
37385.0	0.19	0.17	0.36	-16.10	-16.09	872	564.1	224.9	-27.1	867
90.0	0.43	0.19	0.62	-15.86	-15.84	956	566.9	231.8	-36.3	948
95.0	0.38	0.20	0.58	.89	.87	945	566.7	241.0	-38.2	938
37400.0	0.19	0.20	0.39	-16.06	-16.06	881	563.6	247.8	-32.9	878
05.0	0.12	0.21	0.33	.13	.16	852	559.5	250.6	-22.7	850
10.0	0.16	0.21	0.37	.08	.13	861	556.8	250.9	-10.4	858
15.0	0.17	0.23	0.40	.05	.10	870	556.7	251.4	1.8	860
20.0	0.14	0.25	0.39	.06	.10	869	558.3	254.7	11.5	847
25.0	0.14	0.25	0.39	.07	.09	871	559.6	261.9	16.1	837
30.0	0.18	0.23	0.41	.05	.07	877	559.4	270.6	13.3	837
35.0	0.22	0.18	0.40	.06	.09	871	557.9	276.3	3.8	832
40.0	0.27	0.07	0.34	.12	.17	849	556.8	278.1	-9.8	818
45.0	0.25	0.00	0.25	.26	.30	812	557.9	277.9	-25.0	790
50.0	0.20	0.07	0.27	.23	.24	828	561.4	278.4	-39.4	808
55.0	0.13	0.17	0.30	.19	.17	848	565.4	282.2	-50.6	824
60.0	0.12	0.22	0.34	.14	.11	866	567.4	289.8	-55.8	834
65.0	0.17	0.24	0.41	.06	.04	889	566.3	298.0	-53.2	842
70.0	0.39	0.24	0.63	-15.87	-15.87	944	562.8	302.7	-44.0	880
75.0	0.38	0.23	0.61	.88	.90	932	559.2	303.6	-30.9	860
80.0	0.35	0.21	0.56	.91	.95	917	557.7	303.1	-16.4	838
85.0	0.38	0.20	0.58	.90	.93	924	558.8	304.0	-2.8	834
90.0	0.58	0.19	0.77	.78	.80	971	560.7	308.5	7.3	860
95.0	0.92	0.17	1.09	.63	.64	1032	561.6	316.5	11.2	895
37500.0	0.98	0.14	1.12	.62	.63	1037	560.7	324.3	7.8	885
05.0	0.82	0.11	0.93	.69	.71	1004	559.1	328.3	-1.4	851
10.0	0.58	0.07	0.65	.83	.86	947	558.7	329.1	-13.7	808
15.0	0.31	0.03	0.34	-16.11	-16.13	861	560.8	329.0	-26.7	741
20.0	0.64	-0.01	0.63	-15.85	-15.84	956	564.8	330.8	-38.1	827
25.0	1.02	0.00	1.02	.65	.62	1042	568.3	336.6	-45.3	896
30.0	0.92	0.02	0.94	.69	.65	1030	569.2	345.5	-45.5	869
35.0	0.74	0.07	0.81	.75	.72	1001	566.9	353.2	-38.2	824
40.0	0.73	0.07	0.80	.74	.74	992	563.0	357.0	-25.3	799
45.0	0.89	0.03	0.92	.68	.70	1009	559.9	357.8	-9.7	803
50.0	1.13	-0.01	1.12	.59	.62	1043	559.3	358.2	6.3	828
55.0	1.54	-0.04	1.50	.48	.49	1101	560.7	0.9	20.3	876
60.0	1.35	-0.05	1.30	.54	.54	1077	562.3	7.6	29.7	857
65.0	1.06	-0.05	1.01	.64	.64	1031	562.3	16.6	32.0	816
70.0	0.99	-0.05	0.94	.67	.68	1016	560.8	23.7	27.0	795
75.0	1.53	-0.06	1.47	.48	.50	1094	559.2	26.7	17.2	848
80.0	1.63	-0.09	1.54	.46	.48	1105	559.6	27.1	5.1	852
85.0	1.64	-0.12	1.52	.47	.47	1111	562.5	27.7	-7.0	856
90.0	1.32	-0.14	1.18	.58	.55	1071	566.3	31.0	-16.7	829
95.0	1.27	-0.16	1.11	.60	.57	1065	568.8	38.3	-21.2	828
37600.0	1.59	-0.17	1.42	.50	.47	1110	568.1	47.2	-18.3	863
05.0	1.34	-0.18	1.16	.58	.57	1062	564.7	53.3	-8.5	825
10.0	1.60	-0.19	1.41	.50	.52	1089	560.6	55.2	5.5	847
15.0	1.60	-0.21	1.39	.51	.54	1079	558.2	55.0	21.2	846
20.0	1.16	-0.23	0.93	.68	.71	1005	558.3	55.4	36.1	803
25.0	0.97	-0.24	0.73	.78	.81	968	559.8	58.8	47.9	790

Table 3.--Continued

SATELLITE 1959 α1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37630.0	0.88	-0.23	0.65	-15.83	-15.85	951	560.8	66.0	53.8	790
35.0	1.06	-0.19	0.87	.71	.73	996	560.0	74.0	52.1	832
40.0	0.92	-0.09	0.83	.73	.76	986	558.2	78.5	43.6	816
45.0	0.66	0.01	0.67	.81	.85	951	557.2	79.3	31.1	776
50.0	0.36	-0.01	0.35	-16.09	-16.12	863	558.5	78.5	17.2	693
55.0	0.75	-0.12	0.63	-15.84	-15.85	952	562.1	78.9	4.0	760
60.0	1.01	-0.20	0.81	.74	.72	999	565.9	82.9	-6.0	801
65.0	0.90	-0.24	0.66	.83	.80	969	567.4	90.5	-9.8	785
70.0	0.71	-0.25	0.46	.99	.97	911	565.7	98.1	-6.2	748
75.0	0.72	-0.24	0.48	.96	.97	910	561.8	101.9	3.3	753
80.0	0.69	-0.23	0.46	.98	-16.01	896	558.3	102.2	15.9	748
85.0	0.71	-0.23	0.48	.96	.01	897	556.8	101.7	29.1	757
90.0	0.68	-0.22	0.46	.99	.03	892	557.8	102.9	40.7	763
95.0	0.59	-0.22	0.37	-16.09	.11	865	559.5	108.0	48.2	753
37700.0	0.52	-0.20	0.32	.15	.17	848	559.9	116.3	48.8	748
05.0	0.38	-0.18	0.20	.35	.39	789	558.7	123.6	41.8	699
10.0	0.37	-0.15	0.22	.30	.35	799	557.1	127.0	29.2	705
15.0	0.49	-0.13	0.36	.08	.13	861	557.0	127.5	13.7	755
20.0	0.58	-0.12	0.46	-15.98	.01	898	559.5	127.7	-2.2	785
25.0	0.55	-0.13	0.42	-16.03	.02	893	563.7	130.1	-16.4	783
30.0	0.38	-0.14	0.24	.28	.25	825	566.9	136.6	-26.0	734
35.0	0.34	-0.15	0.19	.39	.36	797	567.3	145.7	-28.6	721
40.0	0.43	-0.13	0.30	.18	.17	850	564.6	152.9	-23.8	780
45.0	0.61	-0.10	0.51	-15.94	-15.96	914	560.6	156.0	-14.0	844
50.0	0.62	-0.07	0.55	.91	.94	919	557.7	156.5	-1.9	849
55.0	0.47	-0.04	0.43	-16.01	-16.06	882	557.4	157.1	10.1	816
60.0	0.33	-0.03	0.30	.18	.21	838	558.8	160.3	19.7	775
65.0	0.29	-0.04	0.25	.26	.28	817	560.1	167.6	24.3	760
70.0	0.35	-0.04	0.31	.16	.19	843	559.9	176.5	21.5	794
75.0	0.49	-0.04	0.45	.00	.03	889	558.3	182.7	11.9	848
80.0	0.35	-0.03	0.32	.15	.19	843	557.1	185.0	-2.2	811
85.0	0.19	-0.01	0.18	.41	.44	775	558.1	185.1	-17.9	750
90.0	0.13	0.02	0.15	.50	.51	759	561.5	185.7	-33.1	737
95.0	0.17	0.04	0.21	.34	.32	806	565.5	189.5	-45.3	787
37800.0	0.23	0.06	0.29	.20	.16	850	567.8	197.2	-51.7	837
05.0	0.16	0.08	0.24	.28	.25	825	566.7	205.7	-50.3	817
10.0	0.15	0.10	0.25	.26	.26	824	563.0	210.9	-42.2	819
15.0	0.14	0.12	0.26	.24	.27	821	559.1	212.2	-30.1	815
20.0	0.09	0.15	0.24	.27	.32	808	557.1	211.8	-16.5	795
25.0	0.05	0.17	0.22	.31	.35	798	557.5	212.5	-3.6	775
30.0	0.02	0.18	0.20	.36	.39	789	559.0	216.7	5.9	757
35.0	0.04	0.16	0.20	.35	.38	791	559.9	224.5	9.4	756
40.0	-0.03	0.12	0.09	.74	.77	696	559.1	232.2	5.6	669
45.0	-0.02	0.09	0.07	.87	.91	661	557.5	236.3	-4.2	646
50.0	-0.06	0.10	0.04	-17.19	-17.23	574	557.1	236.9	-17.2	569
55.0	-0.11	0.12	0.01				559.1	236.5	-30.9	
60.0	-0.05	0.15	0.10	-16.69	-16.69	714	563.0	237.9	-43.1	714
65.0	-0.03	0.18	0.15	.50	.47	767	566.5	243.1	-51.3	766
70.0	-0.04	0.21	0.17	.45	.41	783	567.4	251.7	-52.5	780
75.0	-0.06	0.23	0.17	.45	.43	778	565.0	259.3	-46.1	774
80.0	-0.06	0.23	0.17	.44	.46	771	560.8	262.9	-33.9	765
85.0	-0.04	0.23	0.19	.39	.43	778	557.4	263.6	-18.8	770
90.0	-0.07	0.24	0.17	.44	.49	763	556.5	263.7	+3.1	751
95.0	-0.02	0.24	0.22	.32	.36	795	557.8	266.0	10.7	773
37900.0	0.00	0.25	0.25	.27	.30	812	559.4	272.4	20.1	780
05.0	-0.06	0.24	0.18	.42	.45	773	559.8	281.3	22.6	734
10.0	0.02	0.23	0.25	.27	.31	811	558.6	288.5	17.9	766
15.0	0.06	0.20	0.26	.25	.29	814	557.3	291.7	8.1	769
20.0	0.06	0.18	0.24	.28	.32	806	557.7	292.3	-4.0	762
25.0	0.05	0.18	0.23	.30	.32	806	560.7	292.9	-16.1	761

Table 3.--Continued

SATELLITE 1959 α1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37930.0	0.01	0.19	0.20	-16.38	-16.36	796	564.9	296.2	-25.8	744
35.0	0.14	0.21	0.35	.13	.10	871	567.8	303.5	-30.5	798
40.0	0.25	0.21	0.46	.01	-15.98	908	567.5	312.7	-27.8	812
45.0	0.42	0.18	0.60	-15.88	.87	943	564.4	319.3	-18.0	826
50.0	0.52	0.14	0.66	.83	.85	951	560.5	321.7	-3.8	827
55.0	0.54	0.10	0.64	.84	.88	942	558.2	321.9	12.2	821
60.0	0.59	0.03	0.62	.86	.89	938	558.5	322.6	27.8	822
65.0	0.56	0.00	0.56	.90	.92	925	560.2	326.3	40.3	811
70.0	0.51	0.00	0.51	.95	.96	914	561.5	333.8	47.2	793
75.0	0.50	0.08	0.58	.89	.90	933	561.1	342.3	46.5	793
80.0	0.49	0.11	0.60	.87	.89	936	559.5	347.4	39.1	780
85.0	0.39	0.11	0.50	.94	.97	909	558.7	348.7	27.5	746
90.0	0.41	0.08	0.49	.95	.97	911	560.2	348.3	14.5	740
95.0	0.47	0.05	0.52	.92	.92	928	563.8	348.8	2.1	748
38000.0	0.45	0.02	0.47	.97	.93	922	567.8	352.8	-7.1	737
05.0	0.50	0.00	0.50	.94	.89	936	569.5	0.5	-10.4	739
10.0	0.75	-0.02	0.73	.78	.74	992	568.0	8.2	-6.1	774
15.0	0.80	-0.05	0.75	.76	.75	988	564.1	12.1	4.2	768
20.0	0.78	-0.09	0.69	.79	.81	966	560.3	12.4	17.6	756
25.0	0.66	-0.11	0.55	.89	.92	928	558.8	11.6	31.8	737
30.0	0.49	-0.11	0.38	-16.05	-16.07	877	559.6	12.4	44.4	710
35.0	0.44	-0.04	0.40	.03	.04	886	561.2	17.0	52.9	726
40.0	0.40	0.00	0.40	.03	.04	887	561.7	24.9	54.7	726
45.0	0.38	0.00	0.38	.05	.07	878	560.6	31.9	48.7	709
50.0	0.33	0.00	0.33	.11	.14	857	559.0	35.1	36.9	679
55.0	0.35	-0.05	0.30	.15	.18	846	558.8	35.3	22.1	658
60.0	0.61	-0.10	0.51	-15.92	-15.93	923	561.2	35.0	6.6	710
65.0	0.50	-0.14	0.36	-16.07	-16.06	882	565.2	36.9	-7.3	680
70.0	0.67	-0.18	0.49	-15.95	-15.91	931	568.3	42.9	-16.8	722
75.0	0.64	-0.20	0.44	.99	.95	915	568.6	51.7	-19.3	715
80.0	0.67	-0.20	0.47	.96	.94	918	565.7	58.8	-14.5	719
85.0	0.68	-0.20	0.48	.95	.96	912	561.4	61.9	-4.7	714
90.0	0.76	-0.21	0.55	.89	.93	925	558.2	62.3	7.4	725
95.0	0.87	-0.22	0.65	.82	.86	947	557.6	62.7	19.5	748
38100.0	0.84	-0.23	0.61	.86	.89	938	558.9	65.7	29.2	750
05.0	0.70	-0.24	0.46	.98	-16.00	900	560.1	72.8	33.9	729
10.0	0.54	-0.24	0.30	-16.17	.19	842	559.8	81.8	31.3	689
15.0	0.53	-0.23	0.30	.16	.20	840	558.1	88.3	21.7	688
20.0	0.55	-0.22	0.33	.12	.17	850	556.7	90.8	7.5	695
25.0	0.57	-0.23	0.34	.11	.15	855	557.6	91.1	-8.6	700
30.0	0.58	-0.24	0.34	.11	.13	860	560.9	91.9	-24.2	711
35.0	0.52	-0.24	0.28	.21	.19	842	565.0	95.8	-37.1	709
40.0	0.48	-0.24	0.24	.28	.25	827	567.4	103.6	-44.2	710
45.0	0.46	-0.21	0.25	.26	.23	831	566.5	112.5	-43.7	724
50.0	0.47	-0.18	0.29	.19	.19	844	562.9	118.1	-36.5	738
55.0	0.48	-0.14	0.34	.11	.14	858	559.0	119.7	-25.1	745
60.0	0.50	-0.12	0.38	.06	.10	868	556.9	119.7	-12.2	748
65.0	0.45	-0.12	0.33	.12	.17	849	557.4	120.5	0.0	728
70.0	0.41	-0.14	0.27	.22	.25	826	559.0	124.8	8.9	709
75.0	0.37	-0.18	0.19	.38	.41	784	559.8	132.6	11.9	680
80.0	0.31	-0.19	0.12	.60	.63	729	559.0	140.6	7.5	642
85.0	0.26	-0.17	0.09	.74	.78	692	557.3	144.9	-3.0	618
90.0	0.23	-0.15	0.08	.80	.85	677	556.8	145.6	-16.8	612
95.0	0.24	-0.13	0.11	.64	.67	718	558.8	145.2	-31.4	655
38200.0	0.22	-0.11	0.11	.65	.65	724	562.7	146.3	-44.5	668
05.0	0.18	-0.09	0.09	.75	.73	706	566.5	151.2	-53.7	660
10.0	0.19	-0.07	0.12	.61	.57	742	567.6	159.6	-56.0	703
15.0	0.21	-0.04	0.17	.44	.42	781	565.4	167.0	-50.6	745
20.0	0.17	-0.02	0.15	.49	.50	760	561.4	170.6	-39.2	725
25.0	0.11	0.01	0.12	.59	.63	729	558.0	171.0	-24.9	691

Table 3.--Continued

SATELLITE 1959 α1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	[illegible]	[illegible]	T_π (°K)	(km)	[illegible]	[illegible]	T_N (°K)
38230.0	0.18	0.03	0.21	-16.33	-16.39	792	557.0	170.8	-9.8	744
35.0	0.09	0.04	0.13	.56	.59	738	558.2	172.7	3.5	688
40.0	0.08	0.03	0.11	.64	.67	720	559.7	178.6	12.6	671
45.0	0.08	0.01	0.09	.75	.77	696	559.9	187.3	14.8	656
50.0	0.07	0.00	0.07	.88	.91	662	558.6	194.3	9.8	634
55.0	0.03	0.00	0.03	-17.38	-17.41	517	557.0	197.4	-0.2	503
60.0	0.00	0.02	0.02				557.3	197.9	-12.6	
65.0	-0.01	0.06	0.05	.06	.08	616	560.2	198.3	-25.0	606
70.0	0.02	0.10	0.12	-16.61	-16.60	737	564.2	201.4	-35.0	726
75.0	0.03	0.12	0.15	.50	.47	768	567.1	208.6	-40.1	758
80.0	0.02	0.13	0.15	.50	.47	768	566.8	217.8	-37.7	760
85.0	0.08	0.14	0.22	.32	.31	809	563.6	224.5	-28.1	805
90.0	0.08	0.14	0.22	.31	.34	802	559.5	227.2	-13.9	801
95.0	0.21	0.16	0.37	.08	.12	862	556.9	227.6	2.2	862
38300.0	0.12	0.17	0.29	.19	.23	830	556.9	228.4	17.9	829

Table 3.--Continued

SATELLITE 1959 EM

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36834.0	3.92	0.02	3.9	-14.95	-14.97	1229	511.5	198.4	12.3	1206
36.0	4.10	0.03	4.1	.93	.95	1243	511.5	198.4	7.9	1222
38.0	3.63	0.04	3.7	.96	.99	1216	511.8	198.3	3.4	1196
40.0	3.49	0.06	3.6	.98	-15.00	1212	512.4	198.1	-1.2	1190
42.0	3.58	0.06	3.6	.98	-14.99	1215	513.5	198.0	-5.7	1193
44.0	3.32	0.07	3.4	-15.00	-15.01	1204	514.8	198.1	-10.1	1181
46.0	3.12	0.08	3.2	.03	.03	1194	516.3	198.5	-14.1	1168
48.0	2.49	0.08	2.6	.11	.10	1148	517.8	199.5	-17.7	1121
50.0	1.69	0.09	1.8	.26	.24	1072	519.3	201.0	-20.8	1045
52.0	1.32	0.10	1.4	.37	.33	1027	520.6	203.2	-23.1	999
54.0	1.67	0.10	1.8	.26	.23	1079	521.5	205.9	-24.5	1048
56.0	2.07	0.10	2.2	.18	.15	1123	522.0	209.0	-25.0	1091
58.0	2.49	0.10	2.6	.12	.08	1162	522.0	212.3	-24.4	1129
60.0	2.64	0.10	2.7	.10	.07	1169	521.6	215.4	-22.7	1139
62.0	2.31	0.09	2.4	.15	.12	1139	520.7	218.2	-20.0	1112
64.0	2.33	0.08	2.4	.15	.12	1135	519.4	220.4	-16.4	1112
66.0	2.08	0.08	2.2	.18	.17	1111	517.9	222.0	-12.0	1092
68.0	1.86	0.08	1.9	.24	.24	1075	516.3	223.0	-7.1	1060
70.0	1.89	0.08	2.0	.21	.22	1081	514.8	223.5	-1.7	1070
72.0	1.84	0.08	1.9	.23	.25	1066	513.4	223.5	4.1	1059
74.0	2.08	0.08	2.2	.17	.20	1093	512.2	223.3	10.0	1088
76.0	2.11	0.08	2.2	.17	.20	1091	511.5	222.9	15.9	1087
78.0	1.78	0.08	1.9	.23	.27	1059	511.1	222.6	21.9	1057
80.0	1.83	0.09	1.9	.23	.27	1059	511.0	222.4	27.7	1057
82.0	1.85	0.10	2.0	.21	.24	1070	511.3	222.5	33.2	1069
84.0	1.78	0.10	1.9	.23	.26	1061	511.9	222.9	38.4	1060
86.0	1.79	0.11	1.9	.24	.26	1063	512.5	224.0	43.0	1061
88.0	1.77	0.12	1.9	.24	.26	1064	513.2	225.6	46.9	1063
90.0	1.69	0.13	1.8	.26	.27	1055	513.8	227.7	50.0	1054
92.0	1.58	0.14	1.7	.28	.29	1045	514.2	230.4	52.2	1044
94.0	1.86	0.14	2.0	.22	.23	1078	514.4	233.3	53.3	1077
96.0	2.10	0.15	2.2	.18	.19	1098	514.3	236.3	53.3	1097
98.0	2.12	0.15	2.3	.16	.17	1107	514.0	239.0	52.2	1106
36900.0	2.11	0.15	2.3	.16	.18	1106	513.5	241.2	50.1	1105
02.0	2.42	0.16	2.6	.11	.13	1132	512.9	242.8	47.2	1131
04.0	2.27	0.16	2.4	.14	.17	1112	512.2	243.8	43.5	1111
06.0	1.81	0.16	2.0	.21	.24	1071	511.7	244.2	39.3	1071
08.0	1.95	0.17	2.1	.19	.22	1080	511.4	244.2	34.7	1079
10.0	1.96	0.18	2.1	.19	.22	1080	511.4	243.9	29.8	1078
12.0	1.84	0.18	2.0	.21	.24	1071	511.7	243.3	24.7	1067
14.0	1.98	0.18	2.2	.17	.20	1094	512.4	242.7	19.5	1085
16.0	1.75	0.19	1.9	.23	.25	1066	513.4	242.2	14.4	1054
18.0	1.61	0.19	1.8	.26	.27	1059	514.8	242.0	9.4	1041
20.0	1.55	0.19	1.7	.28	.28	1053	516.3	242.0	4.7	1029
22.0	1.41	0.20	1.6	.31	.29	1045	517.8	242.6	0.4	1015
24.0	1.20	0.20	1.4	.36	.34	1024	519.3	243.8	-3.4	989
26.0	1.63	0.20	1.8	.26	.23	1076	520.5	245.6	-6.4	1034
28.0	2.24	0.20	2.4	.15	.11	1141	521.4	247.9	-8.6	1092
30.0	2.56	0.19	2.8	.09	.05	1179	521.9	250.7	-9.8	1125
32.0	2.78	0.18	3.0	.06	.02	1196	521.8	253.6	-10.0	1140
34.0	2.81	0.17	3.0	.06	.03	1194	521.4	256.4	-9.1	1139
36.0	2.71	0.15	2.9	.07	.05	1182	520.4	258.8	-7.3	1131
38.0	2.76	0.13	2.9	.07	.05	1177	519.2	260.7	-4.5	1131
40.0	2.84	0.10	2.9	.07	.06	1172	517.6	262.0	-1.0	1131
42.0	2.70	0.07	2.8	.08	.08	1159	516.2	262.7	3.0	1124
44.0	2.45	0.04	2.5	.13	.14	1127	514.6	262.8	7.5	1100
46.0	2.66	0.04	2.7	.10	.11	1141	513.3	262.7	12.2	1119
48.0	2.29	0.05	2.3	.16	.18	1101	512.2	262.2	17.2	1085
50.0	2.44	0.07	2.5	.13	.16	1117	511.5	261.7	22.1	1105
52.0	2.48	0.09	2.6	.11	.14	1125	511.2	261.2	27.1	1116

Table 3.--Continued

SATELLITE 1959 EMA

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
36954.0	2.50	0.11	2.6	-15.11	-15.14	1125	511.2	260.9	31.8	1117
56.0	2.70	0.12	2.8	.08	.11	1143	511.6	260.9	36.3	1136
58.0	2.95	0.14	3.1	.04	.07	1169	512.1	261.3	40.4	1161
60.0	3.00	0.16	3.2	.03	.05	1178	512.9	262.3	44.0	1170
62.0	2.93	0.17	3.1	.05	.06	1172	513.6	263.9	46.8	1162
64.0	3.12	0.18	3.3	.02	.03	1189	514.3	266.2	48.9	1176
66.0	3.86	0.19	4.0	-14.95	-14.96	1240	514.7	268.9	49.9	1223
68.0	4.47	0.19	4.7	.89	.89	1287	515.0	271.9	49.9	1265
70.0	4.48	0.20	4.7	.89	.89	1286	515.0	274.9	48.8	1260
72.0	3.37	0.20	3.6	.99	-15.00	1211	514.7	277.7	46.6	1182
74.0	2.37	0.20	2.6	-15.12	.13	1130	514.2	280.0	43.5	1099
76.0	1.76	0.20	2.0	.23	.24	1071	513.7	281.8	39.5	1039
78.0	1.96	0.20	2.2	.19	.20	1090	513.1	282.9	34.8	1055
80.0	1.61	0.20	1.8	.26	.29	1049	512.6	283.5	29.6	1013
82.0	1.49	0.20	1.7	.29	.31	1037	512.4	283.7	24.0	1000
84.0	1.45	0.20	1.6	.31	.34	1026	512.4	283.6	18.1	989
86.0	1.48	0.20	1.7	.29	.31	1039	512.8	283.3	12.1	1001
88.0	1.80	0.19	2.0	.22	.24	1074	513.6	283.0	6.0	1034
90.0	2.14	0.19	2.3	.17	.17	1107	514.7	282.8	0.0	1064
92.0	2.40	0.18	2.6	.12	.12	1138	516.0	282.9	-5.8	1093
94.0	2.43	0.18	2.6	.12	.11	1143	517.6	283.4	-11.4	1094
96.0	1.94	0.18	2.1	.21	.19	1099	519.1	284.3	-16.4	1049
98.0	1.96	0.18	2.1	.21	.18	1103	520.6	285.9	-20.9	1048
37000.0	2.03	0.18	2.2	.19	.16	1117	521.8	288.1	-24.7	1055
02.0	2.27	0.18	2.4	.16	.12	1139	522.7	290.8	-27.6	1069
04.0	2.29	0.18	2.5	.15	.10	1149	523.1	294.0	-29.4	1073
06.0	2.38	0.18	2.6	.13	.08	1159	523.1	297.3	-30.2	1075
08.0	2.33	0.18	2.5	.14	.10	1148	522.5	300.4	-29.9	1059
10.0	2.47	0.18	2.6	.13	.09	1155	521.6	303.2	-28.6	1060
12.0	2.48	0.18	2.7	.11	.08	1161	520.3	305.4	-26.4	1060
14.0	2.55	0.17	2.7	.11	.09	1157	518.8	307.0	-23.5	1053
16.0	2.98	0.17	3.2	.03	.03	1194	517.2	308.0	-19.9	1084
18.0	3.02	0.17	3.2	.03	.03	1190	515.7	308.6	-15.9	1078
20.0	3.52	0.16	3.7	-14.97	-14.98	1224	514.3	308.7	-11.6	1108
37020.5	3.43	0.16	3.6	-14.98	-14.99	1215	514.0	308.7	-10.5	1100
21.0	3.10	0.16	3.3	-15.02	-15.03	1192	513.7	308.7	-9.4	1079
21.5	3.10	0.16	3.3	.01	.03	1191	513.5	308.6	-8.3	1078
22.0	4.00	0.16	4.2	-14.92	-14.94	1255	513.3	308.6	-7.1	1136
22.5	4.33	0.16	4.5	.89	.91	1275	513.0	308.5	-6.0	1154
23.0	4.41	0.15	4.6	.88	.90	1281	512.9	308.5	-4.8	1159
23.5	4.74	0.15	4.9	.86	.88	1300	512.7	308.4	-3.7	1176
24.0	6.04	0.15	6.2	.77	.78	1375	512.6	308.4	-2.5	1245
24.5	8.33	0.15	8.5	.64	.66	1494	512.5	308.3	-1.4	1353
25.0	7.68	0.15	7.8	.68	.70	1458	512.4	308.3	-0.3	1320
25.5	6.70	0.15	6.8	.73	.75	1407	512.3	308.2	0.9	1274
26.0	5.72	0.14	5.9	.78	.81	1357	512.3	308.2	2.0	1228
26.5	4.74	0.14	4.9	.86	.88	1297	512.2	308.2	3.1	1174
27.0	3.43	0.14	3.6	.98	-15.00	1209	512.2	308.2	4.2	1094
27.5	2.45	0.14	2.6	-15.11	.13	1129	512.3	308.2	5.3	1022
37028.0	3.40	0.14	3.5	-14.99	-15.02	1199	512.3	308.2	6.4	1085
30.0	3.28	0.14	3.4	-15.01	.03	1192	512.7	308.5	10.6	1077
32.0	3.52	0.13	3.6	-14.99	.00	1209	513.3	309.3	14.3	1088
34.0	3.70	0.14	3.8	.97	-14.98	1225	514.1	310.6	17.6	1097
36.0	3.86	0.14	4.0	.94	.95	1246	515.2	312.5	20.2	1109
38.0	3.88	0.14	4.0	.94	.94	1249	515.8	314.9	21.9	1102
40.0	4.02	0.14	4.2	.92	.92	1264	516.2	317.9	22.8	1107
42.0	4.11	0.13	4.2	.92	.92	1266	516.4	321.1	22.6	1098
44.0	4.28	0.13	4.4	.90	.90	1280	516.3	324.3	21.3	1100

Table 3.--Continued

SATELLITE 1959 ETA

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37046.0	4.20	0.12	4.3	-14.91	-14.91	1273	515.9	327.2	19.0	1086
48.0	4.34	0.11	4.4	.90	.90	1279	515.4	329.6	15.7	1084
50.0	4.71	0.10	4.8	.86	.87	1305	514.7	331.4	11.7	1100
52.0	4.55	0.09	4.6	.88	.89	1291	514.1	332.6	7.0	1084
54.0	4.15	0.08	4.2	.91	.92	1263	513.6	333.2	1.8	1060
56.0	3.76	0.07	3.8	.95	.96	1235	513.3	333.4	-3.8	1037
58.0	2.88	0.06	3.0	-15.04	-15.06	1174	513.3	333.3	-9.6	988
60.0	2.55	0.04	2.6	.10	.11	1141	513.7	333.0	-15.5	964
62.0	3.09	0.03	3.1	.03	.04	1186	514.5	332.7	-21.4	1007
64.0	3.43	0.02	3.4	-14.99	.00	1214	515.6	332.5	-27.2	1035
66.0	4.15	0.00	4.2	.91	-14.91	1277	517.0	332.5	-32.8	1094
68.0	3.67	0.00	3.7	.96	.95	1246	518.5	332.9	-38.0	1072
70.0	2.91	0.00	2.9	-15.06	-15.04	1187	520.1	333.9	-42.8	1024
72.0	2.36	0.00	2.4	.14	.11	1146	521.5	335.4	-46.9	990
74.0	2.20	0.00	2.2	.18	.13	1130	522.8	337.5	-50.2	976
76.0	2.22	0.00	2.2	.18	.13	1132	523.6	340.1	-52.6	976
78.0	2.31	0.00	2.3	.16	.11	1144	524.1	343.1	-54.0	982
80.0	2.19	0.00	2.2	.18	.13	1133	524.1	346.2	-54.3	968
82.0	2.33	0.00	2.3	.16	.11	1142	523.6	349.2	-53.4	969
84.0	2.75	0.00	2.8	.08	.04	1186	522.6	351.7	-51.5	999
86.0	2.94	0.01	3.0	.05	.02	1200	521.4	353.6	-48.8	1003
88.0	3.19	0.03	3.2	.02	.00	1212	519.9	355.0	-45.2	1005
90.0	3.28	0.05	3.3	.01	-14.99	1215	518.4	355.7	-41.1	1000
92.0	3.93	0.07	4.0	-14.93	.92	1264	516.9	355.9	-36.5	1033
94.0	4.07	0.07	4.1	.92	.92	1267	515.6	355.8	-31.5	1029
96.0	4.13	0.07	4.2	.91	.91	1271	514.6	355.4	-26.4	1027
98.0	3.99	0.06	4.0	.92	.94	1255	514.0	354.9	-21.2	1011
37100.0	3.92	0.05	4.0	.92	.94	1255	513.7	354.5	-16.0	1007
02.0	3.80	0.04	3.8	.94	.96	1241	513.8	354.3	-10.9	993
04.0	3.29	0.03	3.3	-15.00	-15.01	1205	514.2	354.4	-6.0	961
06.0	2.56	0.02	2.6	.09	.10	1148	514.9	354.9	-1.6	914
08.0	2.48	0.01	2.5	.11	.11	1141	515.6	356.0	2.4	906
10.0	3.07	0.00	3.1	.02	.02	1196	516.3	357.8	5.7	947
12.0	3.84	-0.01	3.8	-14.94	-14.94	1253	516.9	0.1	8.2	989
14.0	4.39	-0.02	4.4	.89	.88	1297	517.3	2.8	9.7	1020
16.0	5.00	-0.02	5.0	.84	.83	1337	517.4	5.8	10.2	1048
18.0	5.27	-0.03	5.2	.82	.81	1350	517.3	8.8	9.7	1054
20.0	5.29	-0.03	5.3	.81	.81	1354	516.8	11.5	8.1	1054
22.0	4.72	-0.04	4.7	.86	.86	1313	516.1	13.6	5.6	1020
24.0	4.64	-0.05	4.6	.87	.87	1304	515.3	15.2	2.4	1011
26.0	4.10	-0.06	4.0	.92	.93	1261	514.6	16.2	-1.5	976
28.0	4.60	-0.07	4.5	.87	.88	1294	514.0	16.7	-5.8	1002
30.0	4.47	-0.08	4.4	.88	.89	1286	513.6	16.7	-10.5	998
32.0	4.78	-0.09	4.7	.86	.87	1306	513.6	16.5	-15.4	1016
34.0	5.30	-0.10	5.2	.82	.83	1338	513.9	16.1	-20.4	1046
36.0	4.74	-0.10	4.6	.87	.87	1303	514.7	15.7	-25.4	1024
38.0	4.26	-0.10	4.2	.90	.90	1279	515.7	15.5	-30.2	1011
40.0	4.12	-0.10	4.0	.92	.92	1269	517.1	15.5	-34.9	1009
42.0	3.56	-0.10	3.5	.98	.96	1237	518.6	16.0	-39.1	989
44.0	3.21	-0.10	3.1	-15.03	-15.00	1209	520.1	16.9	-42.9	972
46.0	3.12	-0.09	3.0	.04	.01	1205	521.5	18.5	-46.0	974
48.0	2.66	-0.07	2.6	.10	.06	1174	522.7	20.8	-48.3	951
50.0	2.31	-0.05	2.3	.15	.10	1147	523.5	23.5	-49.7	930
52.0	2.15	-0.01	2.1	.19	.14	1127	523.8	26.7	-50.1	914
54.0	2.77	0.00	2.8	.07	.03	1195	523.7	29.9	-49.3	967
56.0	3.50	0.00	3.5	-14.98	-14.94	1250	523.1	32.9	-47.4	1008
58.0	4.23	0.00	4.2	.91	.88	1299	522.1	35.5	-44.5	1042
60.0	6.02	0.00	6.0	.77	.75	1410	520.7	37.6	-40.7	1124
62.0	7.96	0.00	8.0	.66	.64	1514	519.2	39.0	-36.2	1199
64.0	8.99	-0.01	9.0	.61	.60	1557	517.5	39.9	-31.2	1224

Table 3.--Continued

SATELLITE 1964-[illegible]

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37166.0	8.01	-0.01	8.0	-14.65	-14.65	1503	516.0	40.3	-25.7	1174
68.0	7.56	-0.02	7.5	.68	.68	1471	514.7	40.3	-19.8	1143
70.0	6.28	-0.05	6.2	.75	.76	1396	513.6	40.2	-13.8	1080
72.0	4.72	-0.07	4.6	.86	.88	1296	512.9	40.0	-7.8	999
74.0	4.54	-0.09	4.4	.88	.90	1281	512.6	39.8	-1.8	986
76.0	4.09	-0.11	4.0	.92	.94	1253	512.6	39.9	4.1	965
78.0	4.09	-0.13	4.0	.92	.94	1253	512.9	40.3	9.6	967
80.0	4.79	-0.14	4.6	.87	.88	1296	513.4	41.2	14.8	1003
82.0	5.26	-0.15	5.1	.83	.84	1329	514.0	42.6	19.4	1033
84.0	5.43	-0.16	5.3	.81	.82	1343	514.6	44.7	23.3	1048
86.0	6.45	-0.16	6.3	.75	.75	1403	515.0	47.3	26.4	1100
88.0	8.00	-0.17	7.8	.67	.67	1484	515.2	50.4	28.4	1168
90.0	8.78	-0.17	8.6	.63	.63	1525	516.0	53.7	29.4	1204
92.0	9.34	-0.17	9.2	.61	.61	1551	515.7	56.9	29.4	1229
94.0	9.94	-0.16	9.8	.58	.59	1578	515.2	59.7	28.3	1251
96.0	9.67	-0.16	9.5	.59	.60	1561	514.5	62.1	26.3	1238
98.0	9.57	-0.16	9.4	.60	.61	1553	513.8	63.8	23.5	1232
37200.0	9.97	-0.16	9.8	.58	.59	1570	513.1	65.0	20.1	1243
02.0	9.60	-0.15	9.4	.59	.61	1549	512.6	65.6	16.2	1224
04.0	8.11	-0.14	8.0	.65	.67	1483	512.3	65.9	12.0	1169
06.0	5.95	-0.14	5.8	.78	.80	1364	512.4	65.8	7.5	1074
08.0	5.96	-0.15	5.8	.78	.80	1366	512.9	65.6	2.9	1074
10.0	6.22	-0.16	6.1	.76	.77	1387	513.7	65.4	-1.7	1090
12.0	6.53	-0.17	6.4	.74	.75	1408	514.9	65.4	-6.1	1108
14.0	6.48	-0.17	6.3	.75	.75	1408	516.3	65.7	-10.4	1109
16.0	6.36	-0.18	6.2	.76	.75	1408	517.9	66.3	-14.3	1111
18.0	6.33	-0.18	6.2	.76	.74	1413	519.4	67.5	-17.7	1119
20.0	6.10	-0.19	5.9	.78	.76	1400	520.9	69.4	-20.5	1114
22.0	6.28	-0.20	6.1	.77	.74	1415	522.0	71.8	-22.4	1131
24.0	6.30	-0.20	6.1	.77	.74	1418	522.7	74.7	-23.5	1137
26.0	5.71	-0.21	5.5	.82	.78	1382	523.0	77.9	-23.4	1113
28.0	4.81	-0.21	4.6	.88	.85	1323	522.8	81.1	-22.3	1069
30.0	4.43	-0.22	4.2	.92	.88	1294	522.1	84.1	-20.2	1048
32.0	4.07	-0.22	3.8	.96	.93	1261	521.0	86.7	-17.1	1024
34.0	4.08	-0.22	3.9	.95	.92	1263	519.6	88.6	-13.1	1027
36.0	3.58	-0.22	3.4	-15.00	.99	1221	518.0	89.9	-8.5	993
38.0	3.63	-0.22	3.4	.00	.99	1215	516.3	90.6	-3.3	990
40.0	4.15	-0.22	3.9	-14.94	.95	1247	514.7	90.8	2.3	1017
42.0	4.73	-0.22	4.5	.88	.90	1283	513.3	90.7	8.1	1048
44.0	4.70	-0.22	4.5	.88	.90	1279	512.3	90.3	14.0	1046
46.0	4.89	-0.22	4.7	.87	.89	1289	511.6	89.9	19.9	1058
48.0	5.28	-0.22	5.1	.83	.86	1312	511.2	89.6	25.8	1081
37249.0	5.32	-0.22	5.1	-14.84	-14.86	1311	511.2	89.5	28.7	1083
49.5	5.32	-0.22	5.1	.84	.86	1311	511.2	89.5	30.1	1085
50.0	5.62	-0.22	5.4	.81	.84	1328	511.2	89.5	31.5	1101
50.5	7.22	-0.22	7.0	.71	.74	1418	511.3	89.5	32.8	1177
51.0	9.22	-0.22	9.0	.62	.64	1516	511.4	89.5	34.2	1261
51.5	9.52	-0.22	9.3	.60	.63	1530	511.4	89.6	35.5	1274
52.0	6.62	-0.22	6.4	.75	.77	1385	511.5	89.7	36.8	1156
52.5	4.62	-0.22	4.4	.90	.92	1265	511.7	89.8	38.1	1057
53.0	4.92	-0.22	4.7	.87	.90	1285	511.8	90.0	39.3	1076
53.5	4.22	-0.22	4.0	.93	.96	1238	511.9	90.2	40.5	1039
54.0	5.52	-0.22	5.3	.82	.85	1323	512.0	90.4	41.7	1112
54.5	6.22	-0.22	6.0	.78	.80	1363	512.2	90.7	42.8	1148
55.0	5.22	-0.22	5.0	.85	.87	1305	512.3	91.0	43.9	1101
55.5	5.22	-0.22	5.0	.85	.87	1306	512.5	91.3	44.9	1103
56.0	4.22	-0.22	4.0	.94	.96	1240	512.6	91.7	45.9	1050
56.5	3.62	-0.22	3.4	-15.00	-15.02	1197	512.8	92.1	46.9	1015
57.0	3.22	-0.22	3.0	.05	.07	1166	512.9	92.5	47.8	991

Table 3.--Continued

SATELLITE 1959 ETA

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37257.5	3.22	-0.22	3.0	-15.05	-15.07	1166	513.0	93.0	48.7	993
37258.0	3.56	-0.23	3.3	-15.01	-15.03	1190	513.2	93.5	49.5	1015
60.0	2.84	-0.22	2.6	.11	.13	1133	513.6	95.9	52.1	974
62.0	2.00	-0.19	1.8	.26	.27	1055	513.8	98.8	53.7	912
64.0	1.39	-0.14	1.2	.42	.44	980	513.8	101.7	54.2	852
66.0	1.74	-0.07	1.7	.28	.30	1043	513.5	104.6	53.6	910
68.0	2.17	-0.04	2.1	.19	.21	1085	513.0	107.0	51.9	948
70.0	2.57	-0.06	2.5	.12	.15	1123	512.4	109.0	49.3	980
72.0	2.79	-0.11	2.7	.09	.12	1139	511.7	110.2	45.9	993
74.0	2.68	-0.12	2.6	.10	.13	1129	511.1	111.0	41.9	981
76.0	2.72	-0.09	2.6	.10	.14	1129	510.7	111.1	37.4	976
78.0	2.55	-0.04	2.5	.12	.15	1120	510.6	110.9	32.5	963
80.0	2.61	-0.05	2.6	.10	.13	1130	510.8	110.5	27.4	966
82.0	2.94	-0.08	2.9	.06	.09	1158	511.3	109.9	22.2	984
84.0	2.88	-0.08	2.8	.07	.09	1152	512.3	109.3	16.9	975
86.0	2.34	-0.08	2.3	.15	.17	1111	513.5	109.0	11.8	935
88.0	1.87	-0.08	1.8	.25	.26	1063	515.1	108.9	6.8	892
90.0	1.66	-0.08	1.6	.30	.30	1044	516.7	109.3	2.3	875
92.0	1.47	-0.10	1.4	.36	.34	1023	518.4	110.2	-1.8	857
94.0	1.65	-0.12	1.5	.33	.31	1040	519.8	111.7	-5.3	871
96.0	1.82	-0.14	1.7	.28	.25	1067	521.0	113.8	-7.9	896
98.0	1.86	-0.16	1.7	.29	.25	1068	521.7	116.4	-9.6	901
37300.0	1.93	-0.18	1.8	.26	.22	1081	521.9	119.4	-10.3	915
02.0	2.04	-0.18	1.9	.24	.20	1091	521.7	122.3	-9.9	929
04.0	2.18	-0.17	2.0	.22	.19	1100	521.0	124.9	-8.5	941
06.0	2.48	-0.15	2.3	.16	.14	1127	520.0	127.0	-6.2	970
08.0	1.90	-0.13	1.8	.26	.24	1071	518.6	128.6	-3.0	926
10.0	1.20	-0.10	1.1	.46	.45	975	517.1	129.5	0.8	847
12.0	0.97	-0.10	0.9	.54	.54	938	515.5	129.9	5.0	818
14.0	1.42	-0.13	1.3	.39	.40	997	514.1	129.9	9.6	872
16.0	1.28	-0.16	1.1	.46	.48	964	512.9	129.6	14.5	846
18.0	1.34	-0.16	1.2	.42	.45	977	512.0	129.1	19.4	859
20.0	1.44	-0.14	1.3	.39	.42	989	511.5	128.6	24.4	872
22.0	1.37	-0.14	1.2	.42	.45	974	511.4	128.2	29.2	862
24.0	1.21	-0.13	1.1	.46	.49	960	511.6	128.1	33.8	852
26.0	1.39	-0.13	1.3	.39	.42	989	512.1	128.4	38.0	881
28.0	1.06	-0.12	0.9	.54	.57	929	512.7	129.2	41.8	831
30.0	1.20	-0.12	1.1	.46	.48	963	513.4	130.6	44.9	866
32.0	1.32	-0.12	1.2	.43	.44	979	514.0	132.6	47.2	885
34.0	1.38	-0.12	1.3	.40	.41	994	514.4	135.2	48.6	903
36.0	1.42	-0.12	1.3	.40	.41	995	514.7	138.1	49.0	908
38.0	1.37	-0.12	1.2	.43	.44	981	514.6	141.2	48.3	899
40.0	0.82	-0.12	0.7	.65	.66	895	514.4	144.2	46.5	823
42.0	0.85	-0.11	0.7	.65	.66	894	513.9	146.7	43.6	824
44.0	1.12	-0.10	1.0	.50	.52	948	513.2	148.7	39.9	874
46.0	1.29	-0.09	1.2	.42	.45	977	512.6	150.1	35.4	902
48.0	1.29	-0.08	1.2	.42	.45	976	512.0	151.0	30.4	900
50.0	1.09	-0.07	1.0	.49	.53	945	511.6	151.3	24.8	870
52.0	0.78	-0.07	0.7	.64	.68	891	511.4	151.3	19.0	818
54.0	0.44	-0.06	0.4	.88	.91	816	511.6	151.1	13.0	748
56.0	0.27	-0.06	0.2	-16.18	-16.21	736	512.2	150.8	6.9	673
58.0	0.33	-0.05	0.3	.00	.03	784	513.2	150.6	0.8	716
60.0	0.48	-0.05	0.4	-15.88	-15.89	821	514.5	150.6	-5.2	750
62.0	0.52	-0.04	0.5	.79	.79	853	516.0	150.9	-10.8	779
64.0	0.58	-0.04	0.5	.79	.78	857	517.6	151.7	-16.1	782
66.0	0.70	-0.04	0.7	.65	.63	907	519.1	153.1	-20.9	830
68.0	0.74	-0.05	0.7	.65	.62	910	520.5	155.1	-24.9	836
70.0	0.75	-0.05	0.7	.66	.61	913	521.6	157.7	-28.1	841
72.0	0.78	-0.06	0.7	.66	.61	914	522.2	160.8	-30.3	847

Table 3.--Continued

SATELLITE 1959 ETA

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37374.0	0.71	-0.06	0.6	-15.72	-15.67	892	522.4	164.1	-31.4	831
76.0	0.77	-0.06	0.7	.66	.61	914	522.1	167.4	-31.5	857
78.0	0.83	-0.06	0.8	.60	.56	932	521.3	170.3	-30.5	879
80.0	0.85	-0.05	0.8	.60	.57	930	520.2	172.7	-28.5	881
82.0	0.93	-0.04	0.9	.55	.53	945	518.8	174.5	-25.8	899
84.0	1.03	-0.04	0.9	.55	.54	941	517.3	175.7	-22.4	898
86.0	1.07	-0.03	1.0	.50	.50	955	515.7	176.4	-18.5	913
88.0	1.11	-0.02	1.1	.46	.47	967	514.3	176.6	-14.2	925
90.0	1.08	-0.01	1.1	.46	.48	965	513.2	176.6	-9.7	922
92.0	1.01	0.00	1.0	.49	.52	947	512.4	176.4	-5.2	905
94.0	0.92	0.00	0.9	.54	.57	929	511.9	176.2	-0.6	887
96.0	0.81	0.02	0.8	.59	.62	910	511.9	176.1	3.9	868
98.0	0.71	0.02	0.7	.64	.68	891	512.1	176.3	8.2	848
37400.0	0.60	0.03	0.6	.71	.74	870	512.6	177.0	12.1	826
02.0	0.71	0.03	0.7	.65	.67	893	513.3	178.1	15.6	847
04.0	0.72	0.04	0.8	.59	.61	914	513.9	179.8	18.4	867
06.0	0.58	0.04	0.6	.71	.73	874	514.5	182.2	20.4	828
08.0	0.66	0.04	0.7	.65	.66	897	515.0	185.0	21.5	850
10.0	0.63	0.03	0.7	.65	.66	897	515.1	188.2	21.6	852
12.0	0.50	0.02	0.5	.79	.80	850	515.1	191.4	20.6	810
14.0	0.37	0.02	0.4	.89	.90	820	514.7	194.4	18.6	784
16.0	0.27	0.01	0.3	-16.01	-16.02	784	514.2	196.9	15.6	753
18.0	0.17	0.00	0.2	.19	.21	737	513.5	198.9	11.8	711
20.0	0.21	0.00	0.2	.19	.21	735	512.9	200.2	7.2	713
22.0	0.24	0.00	0.2	.19	.22	734	512.3	201.0	2.2	715
24.0	0.32	0.01	0.3	.01	.04	780	511.9	201.3	-3.3	762
26.0	0.41	0.02	0.4	-15.88	-15.92	814	511.8	201.2	-9.0	798
28.0	0.56	0.02	0.6	.71	.74	869	512.1	200.9	-14.9	853
30.0	0.65	0.02	0.7	.65	.67	892	512.8	200.6	-20.8	878
32.0	0.65	0.04	0.7	.65	.66	895	513.8	200.3	-26.6	881
34.0	0.67	0.04	0.7	.65	.65	898	515.4	200.3	-32.2	886
36.0	0.57	0.05	0.6	.71	.71	880	516.9	200.6	-37.6	868
38.0	0.49	0.06	0.6	.72	.70	883	518.5	201.4	-42.4	872
40.0	0.41	0.07	0.5	.79	.76	861	519.9	202.7	-46.7	852
42.0	0.30	0.08	0.4	.89	.85	834	521.2	204.7	-50.2	826
44.0	0.29	0.08	0.4	.89	.84	836	522.1	207.2	-52.8	830
46.0	0.26	0.09	0.4	.89	.84	837	522.6	210.2	-54.4	832
48.0	0.23	0.09	0.3	-16.02	.96	802	522.6	213.3	-54.8	798
50.0	0.17	0.10	0.3	.01	.96	801	522.1	216.3	-54.2	798
52.0	0.05	0.10	0.1	.51	-16.47	676	521.1	219.0	-52.5	674
54.0	0.04	0.10	0.1	.51	.48	674	519.8	221.0	-49.8	673
56.0	0.09	0.11	0.2	.19	.17	747	518.3	222.5	-46.4	746
58.0	0.12	0.11	0.2	.19	.18	744	516.6	223.3	-42.3	743
60.0	0.16	0.12	0.3	.01	.01	787	515.0	223.7	-37.7	786
62.0	0.22	0.12	0.3	.00	.03	784	513.5	223.6	-32.8	782
64.0	0.38	0.13	0.5	-15.78	-15.81	845	512.4	223.2	-27.6	841
66.0	0.60	0.14	0.7	.64	.68	890	511.6	222.8	-22.3	883
68.0	1.18	0.14	1.3	.39	.42	987	511.1	222.3	-17.1	976
70.0	0.87	0.15	1.0	.50	.53	943	511.1	222.1	-11.9	927
72.0	0.61	0.16	0.8	.59	.62	909	511.3	222.1	-6.9	889
74.0	0.35	0.17	0.5	.78	.82	844	511.8	222.5	-2.3	821
76.0	0.12	0.17	0.3	-16.00	-16.03	782	512.5	223.5	1.8	756
78.0	0.00	0.17	0.2	.18	.21	737	513.2	225.2	5.3	709
80.0	0.10	0.17	0.3	.00	.02	785	513.7	227.4	7.9	752
82.0	0.12	0.16	0.3	.00	.02	785	514.1	230.1	9.7	751
84.0	0.21	0.15	0.4	-15.88	-15.89	821	514.3	233.1	10.4	785
86.0	0.24	0.14	0.4	.88	.89	821	514.2	236.1	10.1	786
88.0	0.41	0.13	0.5	.78	.80	849	513.9	238.8	8.7	815
90.0	0.43	0.12	0.6	.71	.73	872	513.4	241.1	6.5	841
92.0	0.61	0.10	0.7	.64	.67	893	512.8	242.8	3.4	866

Table 3.--Continued

SATELLITE 1959 ETA

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37492.5	0.84	0.10	0.9	-15.54	-15.57	930	512.6	243.1	2.5	903
93.0	0.84	0.10	0.9	.54	.57	929	512.5	243.4	1.6	904
93.5	1.49	0.10	1.6	.31	.33	1028	512.3	243.6	0.6	1002
94.0	1.49	0.10	1.6	.31	.33	1028	512.2	243.9	-0.4	1003
94.5	2.14	0.10	2.2	.18	.20	1091	512.0	244.0	-1.4	1066
95.0	1.82	0.10	1.9	.24	.26	1060	511.9	244.2	-2.4	1038
95.5	1.49	0.09	1.6	.31	.33	1026	511.8	244.3	-3.5	1006
96.0	1.17	0.09	1.3	.39	.42	988	511.7	244.4	-4.6	970
96.5	0.84	0.09	0.9	.54	.57	927	511.6	244.5	-5.7	911
97.0	0.51	0.09	0.6	.71	.74	867	511.5	244.5	-6.9	854
37498.0	0.59	0.09	0.7	-15.64	-15.68	889	511.4	244.5	-9.2	877
37500.0	0.46	0.09	0.5	.78	.82	843	511.4	244.3	-14.1	836
02.0	0.24	0.10	0.3	-16.00	-16.04	780	511.8	244.0	-19.0	776
04.0	0.05	0.11	0.2	.18	.21	736	512.5	243.6	-24.0	734
06.0	-0.06	0.12	0.1	.51	.53	663	513.6	243.4	-28.8	663
08.0	-0.03	0.13	0.1	.51	.52	666	514.9	243.4	-33.5	665
10.0	-0.09	0.14	0.0				516.4	243.7	-37.8	
12.0	-0.06	0.15	0.1	.51	.49	670	517.9	244.7	-41.6	670
14.0	0.01	0.16	0.2	.19	.16	748	519.3	246.2	-44.8	747
16.0	0.12	0.16	0.3	.01	-15.98	797	520.4	248.4	-47.3	795
18.0	0.08	0.17	0.2	.20	-16.15	751	521.3	251.1	-48.8	749
20.0	0.19	0.18	0.4	-15.89	-15.85	834	521.7	254.2	-49.2	830
22.0	0.31	0.18	0.5	.80	.76	863	521.6	257.5	-48.6	858
24.0	0.57	0.19	0.8	.61	.57	929	521.1	260.6	-46.9	922
26.0	0.70	0.20	0.9	.56	.53	945	520.2	263.3	-44.1	936
28.0	0.72	0.20	0.9	.55	.53	942	518.9	265.4	-40.4	932
30.0	-0.05	0.20	0.2	-16.20	-16.18	743	517.5	267.0	-35.9	734
32.0	0.15	0.20	0.3	.01	.02	787	515.9	267.9	-30.9	777
34.0	0.18	0.20	0.4	-15.89	-15.90	819	514.5	268.4	-25.4	808
36.0	0.03	0.20	0.2	-16.19	-16.21	735	513.2	268.5	-19.6	725
38.0	-0.13	0.20	0.1	.51	.55	659	512.2	268.4	-13.6	650
40.0	-0.08	0.20	0.1	.51	.55	658	511.6	268.1	-7.5	648
42.0	0.15	0.20	0.4	-15.89	-15.92	812	511.3	268.0	-1.5	799
44.0	0.39	0.20	0.6	.72	.75	865	511.4	268.0	4.4	850
46.0	0.23	0.20	0.4	.89	.92	812	511.8	268.4	10.0	796
48.0	0.01	0.20	0.2	-16.19	-16.22	733	512.4	269.2	15.3	716
50.0	0.24	0.20	0.4	-15.89	-15.92	814	513.1	270.6	20.0	793
52.0	0.47	0.20	0.7	.66	.68	891	513.8	272.6	24.0	863
54.0	0.65	0.21	0.9	.56	.57	929	514.4	275.2	27.2	896
56.0	0.98	0.21	1.2	.44	.45	977	514.8	278.2	29.4	938
58.0	0.75	0.21	1.0	.51	.52	946	514.9	281.5	30.5	.905
60.0	0.40	0.20	0.6	.73	.74	870	514.7	284.8	30.6	828
62.0	0.35	0.20	0.5	.80	.82	844	514.3	287.7	29.6	801
64.0	0.13	0.20	0.3	-16.02	-16.04	780	513.8	290.1	27.7	738
66.0	-0.11	0.19	0.1	.52	.55	659	513.1	291.9	25.0	622
68.0	-0.09	0.19	0.1	.52	.55	658	512.5	293.1	21.6	620
70.0	0.30	0.18	0.5	-15.80	-15.83	841	512.0	293.8	17.8	792
72.0	0.48	0.18	0.7	.65	.69	887	511.7	294.1	13.6	835
74.0	0.62	0.18	0.8	.60	.63	907	511.8	294.0	9.1	854
76.0	0.66	0.18	0.8	.60	.62	908	512.2	293.9	4.5	855
78.0	0.72	0.17	0.9	.55	.57	928	513.1	293.7	-0.1	874
80.0	0.83	0.17	1.0	.51	.52	948	514.2	293.6	-4.6	891
82.0	0.88	0.17	1.0	.51	.51	951	515.7	293.8	-8.8	893
84.0	0.81	0.17	1.0	.51	.50	955	517.3	294.4	-12.8	893
86.0	0.76	0.17	0.9	.56	.53	942	518.9	295.5	-16.3	876
88.0	0.72	0.18	0.9	.56	.53	945	520.5	297.3	-19.1	874
90.0	0.54	0.18	0.7	.67	.62	910	521.9	299.6	-21.2	835
92.0	0.33	0.18	0.5	.81	.75	864	522.8	302.4	-22.3	786
94.0	0.20	0.18	0.4	.90	.84	836	523.3	305.6	-22.4	753

Table 3.--Continued

SATELLITE 1959ETA

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37596.0	0.10	0.17	0.3	-16.03	-15.97	800	523.3	308.9	-21.5	715
37597.0	0.07	0.17	0.2	-16.21	-16.14	753	523.2	310.4	-20.6	670
97.5	0.07	0.16	0.2	.21	.14	753	523.0	311.2	-20.0	669
98.0	0.39	0.16	0.6	-15.73	-15.68	891	522.9	311.9	-19.4	790
98.5	0.72	0.16	0.9	.56	.51	952	522.7	312.6	-18.8	843
99.0	0.72	0.16	0.9	.56	.51	951	522.5	313.2	-18.0	841
99.5	1.05	0.15	1.2	.44	.39	1000	522.2	313.9	-17.2	882
37600.0	1.37	0.15	1.5	.35	.31	1040	522.0	314.5	-16.4	916
00.5	2.67	0.15	2.8	.09	.06	1174	521.7	315.0	-15.5	1033
01.0	2.02	0.14	2.2	.19	.16	1117	521.4	315.5	-14.6	982
01.5	1.05	0.14	1.2	.44	.40	998	521.1	316.0	-13.6	876
02.0	1.05	0.14	1.2	.43	.40	997	520.8	316.4	-12.5	874
02.5	0.72	0.14	0.9	.55	.52	948	520.4	316.8	-11.4	830
03.0	1.05	0.14	1.2	.43	.40	995	520.1	317.2	-10.3	871
37604.0	0.19	0.13	0.3	-16.01	-15.99	794	519.3	317.8	-8.0	695
06.0	0.22	0.12	0.3	.01	-16.00	792	517.8	318.5	-2.8	692
08.0	0.79	0.11	0.9	-15.54	-15.54	940	516.4	318.8	2.7	822
10.0	1.06	0.09	1.1	.46	.46	970	515.2	318.7	8.4	850
12.0	1.21	0.07	1.3	.39	.40	997	514.3	318.3	14.3	877
14.0	1.07	0.04	1.1	.46	.47	966	513.7	317.9	20.3	854
16.0	1.01	0.01	1.0	.49	.51	950	513.5	317.6	26.1	843
18.0	0.91	0.00	0.9	.54	.56	933	513.6	317.4	31.8	832
20.0	0.86	0.00	0.9	.54	.55	934	514.0	317.6	37.1	835
22.0	0.69	0.00	0.7	.65	.66	897	514.6	318.3	42.0	804
24.0	0.73	0.00	0.7	.65	.65	898	515.3	319.5	46.3	806
26.0	0.49	0.00	0.5	.79	.79	852	515.9	321.4	49.9	763
28.0	0.30	0.00	0.3	-16.01	-16.01	788	516.4	323.7	52.5	704
30.0	0.41	0.00	0.4	-15.89	-15.88	824	516.7	326.5	54.2	733
32.0	0.86	0.03	0.9	.55	.54	938	516.7	329.5	54.7	830
34.0	1.10	0.05	1.1	.47	.46	970	516.4	332.3	54.1	852
36.0	1.30	0.08	1.4	.37	.37	1012	516.0	334.8	52.5	882
38.0	1.20	0.11	1.3	.40	.40	997	515.4	336.7	49.9	863
40.0	1.01	0.12	1.1	.46	.47	967	514.7	338.1	46.5	830
42.0	0.96	0.13	1.1	.46	.47	966	514.0	338.8	42.5	824
44.0	0.92	0.13	1.0	.50	.51	949	513.6	339.0	38.0	805
46.0	0.89	0.13	1.0	.50	.51	950	513.4	338.8	33.1	801
48.0	0.56	0.12	0.7	.64	.66	895	513.5	338.3	27.9	752
50.0	0.32	0.11	0.4	.88	.89	821	514.1	337.7	22.7	687
52.0	0.09	0.10	0.2	-16.18	-16.19	741	515.0	337.1	17.4	619
54.0	0.07	0.09	0.2	.18	.18	744	516.2	336.7	12.2	619
56.0	0.04	0.08	0.1	.51	.49	671	517.8	336.6	7.2	557
58.0	0.08	0.08	0.2	.18	.15	750	519.4	336.9	2.5	621
60.0	0.49	0.07	0.6	-15.71	-15.67	892	521.0	337.8	-1.6	736
62.0	1.04	0.06	1.1	.46	.41	992	522.5	339.3	-5.2	814
64.0	0.88	0.06	0.9	.54	.49	961	523.7	341.4	-7.9	785
66.0	0.67	0.05	0.7	.65	.58	924	524.5	344.0	-9.8	750
68.0	0.52	0.04	0.6	.71	.64	901	524.4	346.9	-10.6	728
70.0	0.48	0.04	0.5	.79	.72	876	524.5	349.8	-10.3	703
72.0	0.66	0.03	0.7	.64	.58	924	524.1	352.5	-9.0	739
74.0	0.71	0.03	0.7	.64	.59	923	523.3	354.7	-6.8	734
76.0	0.77	0.02	0.8	.58	.54	941	522.2	356.3	-3.7	747
78.0	0.96	0.01	1.0	.49	.45	974	520.8	357.3	0.0	772
80.0	0.99	0.00	1.0	.49	.46	971	519.4	357.8	4.2	770
82.0	0.99	-0.01	1.0	.49	.47	967	517.9	357.8	8.8	768
84.0	0.97	-0.02	0.9	.53	.52	947	516.7	357.5	13.6	755
86.0	0.98	-0.02	1.0	.48	.48	962	515.7	357.1	18.5	770
88.0	0.97	-0.03	0.9	.52	.53	943	515.0	356.6	23.4	758
90.0	1.13	-0.04	1.1	.44	.45	975	514.7	356.2	28.2	788

Table 3.--Continued

SATELLITE 1959 EA

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37692.0	1.07	-0.04	1.0	-15.48	-15.49	958	514.7	356.1	32.8	779
94.0	0.91	-0.02	0.9	.53	.53	942	515.0	356.4	37.0	770
96.0	0.85	-0.02	0.8	.58	.58	924	515.5	357.1	40.8	758
98.0	0.80	-0.01	0.8	.58	.58	925	516.0	358.5	43.9	761
37700.0	0.84	0.00	0.8	.58	.58	926	516.6	0.6	46.3	762
02.0	0.81	0.00	0.8	.58	.57	927	517.0	3.1	47.7	762
04.0	0.82	0.00	0.8	.58	.57	927	517.2	6.1	48.1	760
06.0	0.93	0.00	0.9	.53	.52	946	517.2	9.2	47.4	772
08.0	1.01	0.00	1.0	.49	.48	963	517.0	12.2	45.6	781
10.0	1.06	0.01	1.1	.45	.45	978	516.6	14.8	42.8	787
12.0	1.13	0.00	1.1	.45	.45	977	516.0	16.8	39.1	781
14.0	1.20	0.00	1.2	.41	.42	991	515.4	18.3	34.7	786
16.0	1.25	-0.01	1.2	.41	.42	990	514.9	19.2	29.6	779
18.0	1.49	-0.01	1.5	.32	.33	1030	514.5	19.6	24.1	806
20.0	1.72	-0.02	1.7	.27	.28	1054	514.4	19.6	18.3	821
22.0	1.84	-0.03	1.8	.24	.25	1067	514.6	19.4	12.2	827
24.0	1.78	-0.04	1.7	.26	.27	1057	515.1	19.2	6.1	818
26.0	1.49	-0.06	1.4	.34	.34	1022	515.9	18.9	0.0	790
28.0	1.50	-0.07	1.4	.34	.34	1025	517.1	18.9	-6.0	793
30.0	1.39	-0.08	1.3	.38	.36	1015	518.4	19.3	-11.7	787
32.0	1.17	-0.10	1.1	.45	.42	989	519.8	20.1	-17.0	769
34.0	0.91	-0.10	0.8	.58	.54	940	521.2	21.4	-21.8	733
36.0	0.94	-0.11	0.8	.58	.53	943	522.3	23.4	-25.8	737
38.0	1.15	-0.11	1.0	.49	.44	981	523.3	26.0	-29.1	770
40.0	1.51	-0.11	1.4	.35	.30	1043	523.8	29.1	-31.3	819
42.0	1.81	-0.10	1.7	.28	.22	1081	523.9	32.4	-32.5	850
44.0	2.35	-0.10	2.3	.16	.11	1145	523.6	35.7	-32.6	901
46.0	2.71	-0.10	2.6	.11	.06	1171	522.9	38.7	-31.6	921
48.0	2.61	-0.09	2.5	.12	.08	1159	521.9	41.1	-29.7	910
50.0	2.40	-0.09	2.3	.15	.13	1134	520.1	42.9	-27.0	888
52.0	2.29	-0.08	2.2	.17	.15	1120	518.6	44.1	-23.6	874
54.0	2.07	-0.09	2.0	.20	.20	1095	517.1	44.8	-19.8	852
56.0	1.77	-0.09	1.7	.27	.27	1058	515.7	45.1	-15.5	821
58.0	1.55	-0.10	1.4	.34	.35	1018	514.6	45.0	-11.0	788
60.0	1.26	-0.10	1.2	.41	.42	988	513.8	44.9	-6.5	763
62.0	1.41	-0.12	1.3	.37	.39	1001	513.4	44.6	-1.8	772
64.0	1.58	-0.13	1.4	.34	.36	1014	513.3	44.6	2.7	782
66.0	1.69	-0.14	1.5	.32	.33	1027	513.6	44.8	7.0	793
68.0	1.87	-0.15	1.7	.27	.28	1052	514.1	45.3	10.9	814
70.0	2.41	-0.16	2.3	.15	.16	1117	514.7	46.5	14.4	866
72.0	2.65	-0.16	2.5	.12	.12	1138	515.4	48.2	17.3	885
74.0	2.89	-0.17	2.7	.09	.09	1157	516.0	50.5	19.3	903
76.0	2.64	-0.17	2.5	.12	.12	1140	516.4	53.3	20.5	892
78.0	2.15	-0.18	2.0	.21	.20	1090	516.5	56.4	20.7	855
80.0	1.70	-0.18	1.5	.32	.32	1033	516.4	59.6	19.8	812
82.0	1.32	-0.18	1.1	.45	.45	976	516.0	62.6	17.8	768
84.0	0.91	-0.18	0.7	.64	.64	903	515.5	65.2	14.8	711
86.0	0.79	-0.18	0.6	.70	.71	879	514.7	67.1	11.1	693
88.0	1.00	-0.19	0.8	.58	.59	919	514.0	68.5	6.6	725
90.0	1.14	-0.19	0.9	.53	.55	936	513.3	69.2	1.5	739
92.0	1.30	-0.19	1.1	.45	.47	968	512.8	69.5	-3.9	764
94.0	1.33	-0.20	1.1	.45	.47	967	512.7	69.5	-9.6	765
96.0	1.60	-0.20	1.4	.35	.37	1010	512.8	69.2	-15.4	801
98.0	1.67	-0.20	1.5	.32	.34	1024	513.4	68.8	-21.3	816
37800.0	1.82	-0.21	1.6	.30	.31	1039	514.3	68.5	-27.1	831
02.0	1.81	-0.21	1.6	.30	.30	1041	515.5	68.5	-32.7	839
04.0	1.67	-0.21	1.5	.33	.32	1032	517.0	68.7	-38.0	838
06.0	1.28	-0.21	1.1	.46	.44	980	518.5	69.5	-42.8	802
08.0	1.11	-0.21	0.9	.54	.51	950	519.9	70.8	-47.1	784
10.0	0.93	-0.21	0.7	.65	.61	914	521.2	72.7	-50.6	760

Table 3.--Continued

SATELLITE 1959 ETA

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37812.0	0.83	-0.20	0.6	-15.72	-15.67	893	522.1	75.3	-53.2	749
14.0	0.73	-0.20	0.5	.79	.74	869	522.7	78.2	-54.8	733
16.0	0.73	-0.19	0.5	.79	.74	869	522.7	81.3	-55.3	736
18.0	0.77	-0.18	0.6	.71	.67	894	522.3	84.3	-54.6	759
20.0	0.66	-0.17	0.5	.79	.75	867	521.5	86.9	-52.9	737
22.0	0.56	-0.16	0.4	.88	.85	835	520.3	89.0	-50.2	709
24.0	0.61	-0.14	0.5	.78	.76	862	518.8	90.5	-46.8	729
26.0	0.60	-0.12	0.5	.78	.77	859	517.3	91.4	-42.7	724
28.0	0.66	-0.09	0.6	.70	.70	881	515.8	91.7	-38.1	738
30.0	0.69	-0.06	0.6	.70	.71	878	514.4	91.6	-33.1	731
32.0	0.79	-0.02	0.8	.58	.60	917	513.2	91.3	-27.9	759
34.0	0.89	0.00	0.9	.53	.56	934	512.4	90.8	-22.6	768
36.0	0.85	0.00	0.9	.53	.56	932	512.0	90.4	-17.2	763
38.0	0.89	0.00	0.9	.53	.56	932	511.9	90.1	-12.0	760
40.0	0.88	-0.02	0.9	.53	.56	932	512.2	90.1	-7.0	758
42.0	0.97	-0.06	0.9	.53	.56	933	512.6	90.6	-2.4	757
44.0	0.96	-0.12	0.8	.58	.61	915	513.2	91.6	1.8	744
46.0	0.74	-0.16	0.6	.71	.72	874	513.8	93.2	5.3	712
48.0	0.71	-0.18	0.5	.78	.80	850	514.3	95.4	8.1	694
50.0	0.66	-0.19	0.5	.78	.80	851	514.6	98.1	9.9	697
52.0	0.64	-0.20	0.4	.88	.89	821	514.6	101.1	10.7	676
54.0	0.44	-0.20	0.2	-16.18	-16.20	739	514.4	104.1	10.4	612
56.0	0.64	-0.21	0.4	-15.88	-15.90	820	514.0	106.9	9.1	682
58.0	0.65	-0.21	0.4	.88	.90	819	513.4	109.2	6.9	684
60.0	0.69	-0.21	0.5	.78	.81	846	512.6	110.9	3.8	710
62.0	0.91	-0.20	0.7	.64	.67	892	511.9	112.0	0.1	751
64.0	1.00	-0.20	0.8	.58	.62	910	511.3	112.6	-4.1	769
66.0	1.13	-0.20	0.9	.53	.57	927	511.0	112.7	-8.6	786
68.0	1.00	-0.19	0.8	.58	.62	909	511.0	112.6	-13.5	773
70.0	0.90	-0.18	0.7	.64	.68	890	511.3	112.2	-18.4	759
72.0	0.80	-0.18	0.6	.71	.74	870	512.1	111.9	-23.3	744
74.0	0.68	-0.18	0.5	.78	.81	847	513.2	111.6	-28.2	727
76.0	0.47	-0.17	0.3	-16.01	-16.02	786	514.6	111.6	-32.8	677
78.0	0.34	-0.17	0.2	.19	.19	742	516.1	112.0	-37.1	642
80.0	0.32	-0.16	0.2	.19	.18	745	517.8	113.0	-40.9	648
82.0	0.29	-0.16	0.1	.52	.49	672	519.3	114.5	-44.1	588
84.0	0.21	-0.16	0.0				520.7	116.7	-46.5	
86.0	0.18	-0.16	0.0				521.6	119.4	-48.0	
88.0	0.29	-0.15	0.1	.52	.47	677	522.2	122.6	-48.4	603
90.0	0.38	-0.15	0.2	.19	.14	754	522.2	125.8	-47.8	674
92.0	0.45	-0.14	0.3	.01	-15.97	800	521.8	129.0	-46.0	718
94.0	0.43	-0.13	0.3	.01	.97	799	520.9	131.7	-43.2	718
96.0	0.47	-0.12	0.3	.01	.98	797	519.7	133.8	-39.5	717
98.0	0.50	-0.12	0.4	-15.88	.86	830	518.3	135.4	-35.1	746
37900.0	0.48	-0.11	0.4	.88	.87	827	516.8	136.4	-30.0	743
02.0	0.49	-0.11	0.4	.88	.88	824	515.3	136.8	-24.5	739
04.0	0.51	-0.10	0.4	.88	.89	821	514.0	136.9	-18.7	734
06.0	0.61	-0.10	0.5	.78	.80	848	512.9	136.8	-12.6	757
08.0	0.79	-0.09	0.7	.64	.67	893	512.3	136.6	-6.6	795
10.0	0.79	-0.08	0.7	.64	.67	892	511.9	136.5	-0.5	793
12.0	0.79	-0.08	0.7	.64	.67	891	511.9	136.5	5.4	793
14.0	0.65	-0.08	0.6	.71	.74	870	512.3	136.9	11.1	774
16.0	0.56	-0.09	0.5	.79	.81	845	512.8	137.7	16.3	753
18.0	0.54	-0.09	0.5	.79	.81	846	513.4	139.1	21.0	756
20.0	0.54	-0.10	0.4	.88	.90	818	514.0	141.1	25.0	734
22.0	0.54	-0.10	0.4	.89	.90	819	514.4	143.7	28.2	739
24.0	0.46	-0.10	0.4	.89	.90	820	514.7	146.8	30.4	743
26.0	0.51	-0.10	0.4	.89	.90	820	514.7	150.1	31.6	748
28.0	0.48	-0.10	0.4	.89	.90	819	514.5	153.3	31.6	752

Table 3.--Continued

SATELLITE 1960 ξ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37246.0	5.02	0.02	5.0	-14.63	-14.64	1044	424.7	191.8	60.4	1019
47.0	5.21	0.02	5.2	.62	.63	1054	425.0	191.0	61.9	1028
48.0	5.21	0.02	5.2	.62	.63	1055	425.3	190.2	63.3	1028
49.0	6.49	0.02	6.5	.53	.54	1114	425.5	189.7	64.5	1085
37249.5	6.62	0.02	6.6	-14.53	-14.53	1119	425.7	189.4	65.1	1089
50.0	7.60	0.02	7.6	.47	.47	1160	425.8	189.2	65.6	1129
50.5	9.80	0.02	9.8	.37	.38	1242	425.9	189.0	66.1	1209
37251.00	11.82	0.02	11.8	-14.30	-14.30	1311	425.9	188.9	66.6	1275
51.25	14.89	0.02	14.9	.22	.22	1407	426.0	188.8	66.8	1369
51.50	21.62	0.02	21.6	.08	.08	1598	426.0	188.8	67.0	1554
51.75	28.36	0.01	28.4	-13.98	-13.98	1777	426.0	188.7	67.2	1728
52.00	21.01	0.01	21.0	-14.09	-14.09	1581	426.1	188.7	67.4	1538
52.25	6.31	0.01	6.3	.55	.55	1108	426.1	188.6	67.6	1078
52.50	3.86	0.01	3.9	.74	.73	992	426.1	188.6	67.8	964
52.75	2.02	0.01	2.0	-15.00	-15.00	865	426.2	188.5	67.9	841
53.00	2.02	0.01	2.0	.00	.00	865	426.2	188.5	68.1	841
53.25	3.25	0.01	3.3	-14.80	-14.80	957	426.2	188.5	68.2	931
53.50	1.41	0.01	1.4	-15.15	-15.15	810	426.2	188.5	68.3	788
53.75	8.76	0.01	8.8	-14.42	-14.42	1208	426.2	188.4	68.5	1175
54.00	11.21	0.01	11.2	.32	.32	1292	426.2	188.4	68.6	1257
54.25	16.72	0.01	16.7	.18	.17	1461	426.2	188.4	68.7	1421
54.50	11.21	0.01	11.2	.32	.32	1292	426.2	188.4	68.7	1257
54.75	6.92	0.01	6.9	.51	.51	1134	426.2	188.3	68.8	1103
55.00	5.08	0.01	5.1	.63	.63	1054	426.2	188.3	68.9	1025
37255.5	4.35	0.01	4.4	-14.69	-14.69	1019	426.2	188.3	69.0	991
56.0	4.04	0.01	4.0	.73	.72	997	426.2	188.2	69.1	971
56.5	3.55	0.00	3.6	.77	.77	975	426.2	188.2	69.1	948
57.0	3.06	0.00	3.1	.83	.83	944	426.1	188.1	69.0	919
57.5	3.55	0.00	3.6	.77	.77	974	426.1	188.0	69.0	948
58.0	4.04	0.00	4.0	.73	.73	997	426.0	188.0	68.9	970
58.5	4.04	0.00	4.0	.73	.73	997	425.9	187.8	68.7	970
59.0	4.78	0.00	4.8	.65	.65	1038	425.8	187.7	68.6	1011
59.5	6.25	0.00	6.2	.55	.55	1102	425.7	187.5	68.3	1073
60.0	6.00	0.00	6.0	.56	.57	1093	425.6	187.3	68.1	1065
60.5	4.29	0.00	4.3	.70	.70	1011	425.5	187.1	67.8	985
61.0	3.31	0.00	3.3	.80	.81	954	425.4	186.8	67.5	930
61.5	3.55	0.00	3.6	.77	.77	972	425.2	186.6	67.1	947
37262.0	3.68	0.00	3.7	-14.75	-14.76	977	425.1	186.2	66.7	952
63.0	3.54	0.00	3.5	.78	.79	965	424.8	185.5	65.8	940
64.0	3.80	-0.01	3.8	.74	.75	981	424.4	184.6	64.8	955
65.0	3.31	-0.01	3.3	.80	.81	951	424.1	183.5	63.7	925
66.0	3.19	-0.01	3.2	.81	.83	944	423.7	182.3	62.5	918
67.0	3.25	-0.01	3.2	.81	.83	943	423.3	181.0	61.2	916
68.0	3.80	-0.01	3.8	.74	.76	977	422.8	179.5	59.8	947
69.0	5.15	-0.01	5.1	.62	.65	1043	422.4	177.9	58.3	1010
70.0	6.19	-0.01	6.2	.54	.57	1091	422.0	176.1	56.7	1054
71.0	5.02	-0.01	5.0	.62	.66	1036	421.6	174.3	55.1	998
72.0	5.08	-0.01	5.1	.61	.65	1039	421.1	172.3	53.4	999
37274.0	5.78	-0.01	5.8	-14.56	-14.60	1070	420.4	168.2	49.9	1022
76.0	7.29	-0.01	7.3	.47	.51	1131	419.7	163.6	46.2	1072
78.0	5.99	-0.01	6.0	.54	.59	1076	419.1	158.9	42.4	1011
80.0	5.52	-0.01	5.5	.57	.63	1053	418.8	153.9	38.5	979
82.0	5.56	0.00	5.6	.57	.62	1058	418.6	148.7	34.4	973
84.0	5.61	0.00	5.6	.56	.62	1059	418.7	143.5	30.3	962
86.0	5.00	0.00	5.0	.61	.66	1032	418.9	138.1	26.1	926

Table 3.--Continued

JANUARY 1960 51

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37288.0	3.98	0.00	4.0	-14.70	-14.75	983	419.5	132.8	21.8	871
90.0	3.09	0.00	3.1	.80	.85	934	420.2	127.5	17.6	817
92.0	2.33	0.00	2.3	.92	.96	882	421.2	122.2	13.3	762
94.0	3.30	0.00	3.3	.78	.81	954	422.4	117.0	9.0	814
96.0	4.36	0.00	4.4	.66	.68	1022	423.8	112.0	4.8	861
98.0	4.91	0.00	4.9	.62	.63	1053	425.3	107.1	0.6	879
37300.0	5.42	0.00	5.4	.59	.58	1084	426.9	102.6	-3.5	896
02.0	6.34	0.00	6.3	.53	.51	1132	428.5	98.3	-7.5	928
04.0	6.61	0.00	6.6	.52	.49	1152	430.1	94.4	-11.4	939
06.0	6.49	-0.02	6.5	.52	.48	1154	431.7	91.0	-15.0	936
08.0	6.48	-0.03	6.4	.53	.48	1155	433.1	88.1	-18.4	934
10.0	5.08	-0.04	5.0	.63	.57	1092	434.4	85.7	-21.5	882
12.0	4.16	-0.05	4.1	.71	.64	1048	435.5	84.0	-24.3	845
14.0	3.84	-0.05	3.8	.74	.66	1033	436.4	82.8	-26.5	834
16.0	3.49	-0.06	3.4	.79	.70	1011	437.0	82.2	-28.2	816
18.0	3.65	-0.06	3.6	.77	.68	1025	437.3	81.9	-29.4	828
20.0	3.73	-0.06	3.7	.76	.67	1031	437.3	81.8	-29.9	834
22.0	3.77	-0.06	3.7	.75	.67	1031	437.0	81.6	-29.8	833
24.0	4.22	-0.06	4.2	.70	.62	1058	436.5	81.1	-29.1	855
26.0	4.66	-0.05	4.6	.66	.59	1077	435.6	80.1	-27.8	869
28.0	5.03	-0.05	5.0	.63	.56	1095	434.5	78.7	-26.1	881
30.0	5.09	-0.05	5.0	.63	.57	1091	433.2	76.6	-23.9	874
32.0	5.62	-0.04	5.6	.58	.54	1115	431.8	74.0	-21.4	890
34.0	7.58	-0.04	7.5	.46	.43	1195	430.2	70.8	-18.7	949
36.0	7.39	-0.04	7.4	.46	.44	1184	428.5	67.3	-15.7	935
38.0	6.42	-0.04	6.4	.51	.51	1135	426.9	63.3	-12.5	891
40.0	6.02	-0.04	6.0	.54	.54	1110	425.1	59.0	-9.2	867
42.0	5.39	-0.03	5.4	.58	.59	1076	423.6	54.5	-5.8	836
44.0	5.81	-0.03	5.8	.54	.57	1089	422.1	49.8	-2.4	843
46.0	6.43	-0.03	6.4	.50	.54	1111	420.8	44.9	1.2	857
48.0	6.82	-0.03	6.8	.48	.52	1124	419.7	39.9	4.7	866
50.0	6.60	-0.03	6.6	.49	.54	1112	418.8	34.9	8.3	857
52.0	6.45	-0.03	6.4	.50	.56	1101	418.2	29.8	11.9	850
54.0	6.49	-0.03	6.5	.49	.55	1103	417.8	24.8	15.4	854
56.0	6.66	-0.03	6.6	.49	.55	1106	417.6	19.8	18.9	861
58.0	6.64	-0.02	6.6	.49	.55	1106	417.7	15.0	22.4	867
60.0	6.51	-0.02	6.5	.50	.55	1102	418.0	10.2	25.8	871
62.0	6.03	-0.03	6.0	.53	.59	1081	418.4	5.7	29.1	862
64.0	5.51	-0.03	5.5	.57	.62	1060	419.1	1.5	32.2	854
66.0	5.17	-0.02	5.2	.59	.64	1048	419.8	357.5	35.3	852
68.0	4.88	-0.01	4.9	.62	.66	1036	420.6	353.9	38.1	850
70.0	4.32	-0.01	4.3	.67	.71	1007	421.4	350.8	40.8	834
72.0	4.03	-0.01	4.0	.70	.73	993	422.2	348.1	43.1	829
74.0	3.95	0.00	4.0	.70	.73	995	423.0	346.0	45.1	835
76.0	4.15	0.00	4.2	.69	.71	1008	423.6	344.5	46.7	849
78.0	4.44	0.00	4.4	.67	.69	1020	424.2	343.5	47.9	861
80.0	4.58	0.00	4.6	.66	.67	1031	424.6	343.0	48.5	871
82.0	5.06	0.00	5.1	.62	.63	1056	424.8	342.9	48.5	892
84.0	5.40	0.01	5.4	.59	.60	1070	424.9	343.0	47.9	903
86.0	5.97	0.02	6.0	.55	.56	1096	424.7	343.1	46.6	923
88.0	6.01	0.03	6.0	.55	.57	1095	424.4	342.8	44.8	920
90.0	6.04	0.04	6.1	.55	.56	1097	424.0	342.1	42.3	920
92.0	5.63	0.04	5.7	.57	.59	1076	423.4	340.9	39.4	902
94.0	4.39	0.03	4.4	.68	.70	1010	422.7	339.1	36.0	847
96.0	4.06	0.04	4.1	.70	.74	991	421.9	336.7	32.3	833
98.0	3.87	0.04	3.9	.72	.76	978	421.1	333.8	28.3	825
37400.0	3.38	0.04	3.4	.77	.82	946	420.3	330.5	24.0	804
02.0	3.66	0.03	3.7	.74	.79	961	419.5	326.7	19.5	823
04.0	3.73	0.03	3.8	.73	.78	965	418.9	322.6	14.9	835
06.0	3.44	0.03	3.5	.76	.82	946	418.3	318.2	10.2	829

Table 3.--Continued

SATELLITE 1960 51

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37408.0	3.16	0.04	3.2	-14.79	-14.86	928	418.3	313.6	5.4	824
10.0	3.21	0.04	3.3	.78	.85	934	418.1	308.9	0.5	841
12.0	3.19	0.03	3.2	.79	.86	928	418.1	304.0	-4.4	849
14.0	3.42	0.01	3.4	.77	.83	941	418.4	299.0	-9.3	873
16.0	3.34	0.00	3.3	.78	.84	936	418.9	293.9	-14.3	881
18.0	2.83	0.00	2.8	.85	.90	908	419.7	288.9	-19.2	865
20.0	2.35	0.00	2.4	.91	.96	883	420.6	283.9	-24.1	851
22.0	2.10	0.00	2.1	.97	-15.01	863	421.9	279.0	-28.9	840
24.0	1.82	0.00	1.8	-15.04	.06	842	423.2	274.2	-33.7	826
26.0	1.60	0.02	1.6	.09	.10	828	424.8	269.6	-38.3	816
28.0	1.44	0.04	1.5	.12	.11	822	426.4	265.3	-42.9	814
30.0	1.32	0.05	1.4	.15	.13	816	428.1	261.2	-47.3	810
32.0	1.16	0.06	1.2	.21	.18	799	429.7	257.4	-51.5	794
34.0	1.04	0.06	1.1	.25	.20	791	431.4	254.1	-55.5	787
36.0	1.26	0.07	1.3	.19	.12	818	432.9	251.3	-59.2	814
38.0	1.39	0.07	1.5	.13	.06	843	434.3	249.0	-62.5	838
40.0	1.52	0.07	1.6	.11	.02	857	435.5	247.3	-65.4	850
42.0	1.48	0.07	1.6	.11	.02	859	436.4	246.2	-67.8	852
44.0	1.55	0.07	1.6	.11	.01	861	437.1	245.6	-69.7	854
46.0	1.42	0.07	1.5	.13	.03	852	437.5	245.3	-70.9	844
48.0	1.27	0.07	1.3	.19	.09	831	437.6	245.3	-71.5	823
50.0	1.00	0.07	1.1	.26	.15	807	437.4	245.2	-71.4	800
52.0	0.95	0.07	1.0	.30	.19	793	436.9	244.9	-70.6	787
54.0	0.86	0.06	0.9	.34	.24	777	436.1	244.1	-69.2	772
56.0	0.86	0.06	0.9	.34	.25	774	435.0	242.7	-67.2	771
58.0	0.80	0.06	0.9	.33	.26	771	433.7	240.8	-64.8	769
60.0	0.87	0.05	0.9	.33	.27	768	432.3	238.3	-62.0	766
62.0	1.02	0.05	1.1	.24	.20	791	430.7	235.2	-58.8	790
64.0	1.02	0.05	1.1	.24	.21	786	429.0	231.6	-55.4	786
66.0	1.18	0.04	1.2	.20	.19	794	427.3	227.7	-51.7	794
68.0	1.35	0.04	1.4	.14	.14	811	425.6	223.4	-47.9	811
37469.0	1.21	0.04	1.3	-15.17	-15.18	799	424.8	221.1	-45.9	797
69.5	1.23	0.04	1.3	.17	.18	798	424.4	220.0	-44.9	796
70.0	1.97	0.04	2.0	-14.99	.01	862	424.0	218.8	-43.9	860
70.5	2.23	0.04	2.3	.94	-14.96	885	423.6	217.6	-42.9	882
71.0	2.50	0.04	2.5	.90	.92	899	423.3	216.4	-41.8	895
71.5	3.25	0.04	3.3	.79	.81	950	422.9	215.2	-40.8	946
72.0	2.53	0.04	2.6	.88	.91	903	422.5	214.0	-39.8	899
72.5	2.30	0.04	2.3	.93	.97	880	422.2	212.7	-38.7	876
73.0	2.32	0.04	2.4	.92	.95	887	421.8	211.5	-37.7	881
73.5	1.85	0.04	1.9	-15.01	-15.05	847	421.5	210.3	-36.6	840
74.0	1.63	0.04	1.7	.05	.10	828	421.2	209.0	-35.5	821
74.5	1.40	0.04	1.4	.13	.18	798	420.9	207.7	-34.5	791
75.0	1.67	0.04	1.7	.05	.10	826	420.6	206.5	-33.4	818
37476.0	1.54	0.03	1.6	-15.08	-15.13	816	420.0	203.9	-31.2	805
78.0	1.38	0.03	1.4	.13	.19	793	419.1	198.7	-26.9	778
80.0	1.33	0.04	1.4	.13	.20	791	418.4	193.5	-22.5	771
82.0	1.21	0.04	1.3	.16	.23	780	418.0	188.3	-18.1	753
84.0	1.52	0.04	1.6	.07	.15	809	417.8	183.1	-13.6	774
86.0	1.78	0.04	1.8	.02	.10	827	417.8	178.1	-9.2	783
88.0	1.54	0.04	1.6	.07	.15	810	418.1	173.2	-4.9	758
90.0	1.46	0.04	1.5	.10	.17	802	418.5	168.4	-0.6	742
92.0	2.14	0.03	2.2	-14.95	.01	864	419.1	163.9	3.7	791
94.0	2.81	0.03	2.8	.85	-14.90	908	419.9	159.7	7.8	824
96.0	2.96	0.02	3.0	.82	.87	924	420.7	155.9	11.8	830
98.0	3.20	0.01	3.2	.80	.84	939	421.6	152.5	15.6	837
37500.0	3.27	0.00	3.3	.79	.82	947	422.4	149.5	19.1	839
02.0	3.11	0.00	3.1	.82	.84	937	423.2	147.1	22.4	826

Table 5.--Continued

SATELLITE 1964 [illegible]

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_k$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_\odot$	T_∞ (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_ν (°K)
37504.0	2.99	0.00	3.0	-14.83	-14.85	933	424.0	145.3	25.2	819
37505.0	3.20	0.00	3.2	-14.81	-14.82	947	424.3	144.7	26.5	830
05.5	3.21	-0.01	3.2	.81	.82	947	424.4	144.4	27.1	829
06.0	3.72	-0.01	3.7	.75	.76	977	424.6	144.1	27.7	856
06.5	3.73	-0.01	3.7	.75	.76	978	424.7	143.9	28.2	855
07.0	3.75	-0.01	3.7	.75	.76	978	424.8	143.7	28.7	855
07.5	4.00	-0.02	4.0	.72	.73	995	424.9	143.6	29.2	870
08.0	4.51	-0.02	4.5	.67	.68	1022	425.0	143.4	29.6	893
08.5	4.03	-0.03	4.0	.72	.73	996	425.1	143.3	30.0	870
09.0	1.85	-0.03	1.8	-15.04	-15.05	847	425.2	143.2	30.4	740
09.5	1.62	-0.04	1.6	.09	.10	828	425.3	143.2	30.7	724
10.0	1.39	-0.04	1.3	.17	.18	798	425.3	143.1	31.0	697
37512.0	1.84	-0.06	1.8	-15.04	-15.05	847	425.4	143.1	31.8	741
14.0	2.41	-0.07	2.3	-14.94	-14.95	888	425.3	143.0	32.0	777
16.0	2.47	-0.07	2.4	.93	.93	895	425.1	142.7	31.5	784
18.0	1.97	-0.07	1.9	-15.02	-15.03	854	424.7	142.0	30.5	749
20.0	2.52	-0.07	2.4	-14.92	-14.94	892	424.1	140.8	29.0	783
22.0	3.54	-0.08	3.5	.77	.79	962	423.4	139.0	27.0	845
24.0	3.94	-0.08	3.9	.72	.75	983	422.6	136.7	24.7	862
26.0	4.25	-0.08	4.2	.69	.73	997	421.8	133.8	22.1	872
28.0	4.43	-0.08	4.4	.67	.71	1005	420.9	130.5	19.2	876
30.0	4.26	-0.08	4.2	.69	.73	992	420.1	126.8	16.2	861
32.0	3.80	-0.07	3.7	.73	.79	963	419.4	122.7	13.0	831
34.0	3.60	-0.07	3.5	.75	.81	950	418.8	118.4	9.7	814
36.0	2.79	-0.07	2.7	.86	.92	900	418.3	113.8	6.2	765
38.0	2.48	-0.07	2.4	.90	.97	879	418.0	109.1	2.8	741
40.0	3.15	-0.07	3.1	.80	.86	925	418.0	104.2	-0.8	774
42.0	3.65	-0.07	3.6	.74	.80	956	418.1	99.3	-4.3	793
44.0	3.48	-0.07	3.4	.76	.82	947	418.5	94.4	-7.9	779
46.0	3.41	-0.07	3.3	.77	.83	943	419.2	89.4	-11.5	770
48.0	3.55	-0.07	3.5	.75	.80	958	420.0	84.5	-15.0	777
50.0	4.08	-0.07	4.0	.70	.74	990	421.1	79.7	-18.5	799
52.0	5.11	-0.07	5.0	.61	.64	1047	422.4	75.0	-21.9	841
54.0	5.50	-0.07	5.4	.58	.60	1071	423.8	70.5	-25.3	858
56.0	5.71	-0.07	5.6	.57	.58	1086	425.3	66.2	-28.6	868
58.0	5.58	-0.07	5.5	.58	.58	1087	426.9	62.2	-31.7	868
60.0	5.13	-0.07	5.1	.62	.60	1074	428.5	58.6	-34.7	858
62.0	4.10	-0.08	4.0	.72	.68	1021	430.1	55.4	-37.4	816
64.0	3.27	-0.08	3.2	.81	.76	978	431.5	52.7	-39.9	783
66.0	3.50	-0.08	3.4	.78	.73	995	432.9	50.5	-42.1	799
68.0	3.56	-0.08	3.5	.77	.71	1006	434.0	48.8	-43.9	809
70.0	3.54	-0.08	3.5	.78	.70	1009	435.1	47.8	-45.2	813
37570.5	3.29	-0.08	3.2	-14.81	-14.74	991	435.3	47.6	-45.5	798
71.0	3.32	-0.08	3.2	.81	.74	991	435.5	47.5	-45.7	799
71.5	3.83	-0.08	3.8	.74	.67	1029	435.7	47.4	-45.9	830
72.0	4.10	-0.08	4.0	.72	.65	1042	435.8	47.3	-46.0	840
72.5	5.11	-0.08	5.0	.64	.56	1096	436.0	47.3	-46.1	884
73.0	3.91	-0.07	3.8	.74	.67	1031	436.1	47.2	-46.2	832
73.5	3.69	-0.07	3.6	.76	.69	1020	436.2	47.2	-46.2	823
74.0	3.47	-0.07	3.4	.79	.71	1008	436.3	47.3	-46.2	813
74.5	3.73	-0.07	3.7	.75	.67	1027	436.4	47.3	-46.2	828
75.0	4.00	-0.07	3.9	.73	.65	1039	436.5	47.3	-46.1	838
37576.0	3.82	-0.07	3.8	-14.74	-14.66	1033	436.5	47.4	-45.8	833
78.0	4.18	-0.06	4.1	.71	.63	1051	436.4	47.6	-44.7	845
80.0	4.49	-0.05	4.4	.68	.61	1066	436.0	47.5	-43.0	855
82.0	4.94	-0.05	4.9	.64	.57	1090	435.2	47.0	-40.6	871

Table 3.--Continued

SATELLITE 1960 ξ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37584.0	5.40	-0.04	5.4	-14.60	-14.54	1112	434.3	46.0	-37.8	885
86.0	5.37	-0.03	5.3	.60	.55	1103	433.1	44.4	-34.5	873
88.0	4.75	-0.03	4.7	.65	.61	1068	431.7	42.2	-30.8	840
90.0	4.49	-0.03	4.5	.66	.63	1053	430.1	39.4	-26.8	823
92.0	4.74	-0.02	4.7	.64	.62	1058	428.5	36.1	-22.5	823
94.0	4.92	-0.02	4.9	.62	.62	1062	426.8	32.4	-18.1	823
96.0	5.20	-0.02	5.2	.59	.60	1071	425.2	28.3	-13.5	828
37597.0	5.43	-0.01	5.4	-14.58	-14.59	1078	424.3	26.1	-11.1	832
97.5	5.67	-0.01	5.7	.56	.57	1090	423.9	25.0	-10.0	842
98.0	5.90	-0.01	5.9	.54	.56	1098	423.6	23.9	-8.8	848
98.5	5.89	-0.01	5.9	.54	.56	1097	423.2	22.8	-7.6	847
99.0	6.12	-0.01	6.1	.53	.55	1104	422.8	21.6	-6.4	853
99.5	7.08	-0.01	7.1	.47	.49	1146	422.4	20.5	-5.2	886
37600.0	7.56	-0.01	7.5	.45	.47	1161	422.1	19.3	-4.0	898
00.5	8.27	-0.01	8.3	.41	.44	1191	421.7	18.1	-2.8	922
01.0	8.01	-0.01	8.0	.42	.45	1178	421.4	16.9	-1.5	912
01.5	7.02	-0.01	7.0	.47	.51	1136	421.0	15.7	-0.3	881
02.0	6.76	-0.01	6.7	.49	.53	1122	420.7	14.5	0.9	871
02.5	5.03	-0.01	5.0	.60	.64	1044	420.4	13.2	2.1	811
03.0	4.77	-0.01	4.8	.62	.66	1033	420.1	12.0	3.4	804
37604.0	4.48	-0.02	4.5	-14.64	-14.69	1016	419.6	9.5	5.8	793
06.0	4.17	-0.02	4.1	.68	.74	990	418.6	4.5	10.7	780
37607.0	3.86	-0.02	3.8	-14.71	-14.77	972	418.2	1.9	13.2	769
07.5	4.57	-0.02	4.6	.63	.69	1014	418.0	0.6	14.4	805
08.0	5.03	-0.02	5.0	.60	.66	1034	417.9	359.3	15.7	823
08.5	5.01	-0.02	5.0	.60	.66	1033	417.7	358.1	16.9	825
09.0	5.23	-0.02	5.2	.58	.65	1042	417.6	356.8	18.1	835
09.5	5.69	-0.02	5.7	.55	.61	1065	417.5	355.5	19.3	855
10.0	6.39	-0.02	6.4	.50	.57	1094	417.4	354.2	20.6	882
10.5	7.34	-0.02	7.3	.45	.51	1131	417.3	352.9	21.8	915
11.0	6.09	-0.02	6.1	.52	.59	1081	417.3	351.7	23.0	877
11.5	5.81	-0.02	5.8	.54	.61	1067	417.2	350.4	24.2	870
12.0	4.56	-0.02	4.5	.64	.71	1004	417.2	349.1	25.4	821
12.5	4.29	-0.02	4.3	.66	.73	993	417.2	347.8	26.6	816
13.0	4.01	-0.02	4.0	.69	.76	977	417.2	346.6	27.8	806
37614.0	4.18	-0.02	4.2	-14.67	-14.74	987	417.2	344.1	30.2	821
16.0	3.91	-0.01	3.9	.70	.77	971	417.4	339.2	35.0	820
18.0	3.29	0.00	3.3	.77	.84	937	417.8	334.4	39.6	805
20.0	3.17	0.00	3.2	.79	.85	931	418.4	329.8	44.1	813
22.0	2.77	0.00	2.8	.85	.90	907	419.1	325.6	48.4	804
24.0	2.10	0.00	2.1	.97	-15.02	858	419.9	321.6	52.6	770
26.0	1.54	0.00	1.5	-15.11	.16	806	420.7	318.0	56.5	733
28.0	1.51	0.00	1.5	.11	.15	808	421.5	315.0	60.2	741
30.0	1.55	0.00	1.6	.09	.12	818	422.3	312.4	63.5	757
32.0	1.53	0.00	1.5	.12	.15	809	423.0	310.4	66.4	753
37633.0	1.44	0.00	1.4	-15.15	-15.17	800	423.3	309.6	67.6	746
33.5	0.89	0.00	0.9	.33	.36	741	423.5	309.2	68.2	692
34.0	1.81	0.00	1.8	.05	.07	838	423.6	308.9	68.8	783
34.5	2.97	0.00	3.0	-14.84	-14.86	926	423.7	308.6	69.3	866
35.0	5.83	0.00	5.8	.58	.60	1072	423.8	308.4	69.8	1004
35.5	5.53	0.01	5.5	.60	.62	1059	423.9	308.2	70.2	992
36.0	4.98	0.02	5.0	.64	.66	1036	424.0	308.0	70.6	971
36.5	3.69	0.03	3.7	.76	.78	968	424.1	307.8	71.0	908
37.0	2.65	0.04	2.7	.89	.91	907	424.2	307.7	71.4	851
37.5	1.85	0.05	1.9	-15.03	-15.05	847	424.3	307.5	71.6	794

TABLE [illegible]—Continued

[illegible]	$-10^7 \dot{P}$	$10^7 \dot{P}_k$	$-10^7 \dot{P}_v$	[illegible]	[illegible]	[illegible] (°K)	[illegible] (km)	[illegible]	[illegible]	P_N (°K)
37638.0	2.09	0.06	2.1	-14.99	-15.01	863	424.3	307.4	71.9	810
40.0	1.63	0.07	1.7	-15.08	.09	829	424.4	307.1	72.5	779
42.0	1.56	0.08	1.6	.11	.12	819	424.4	306.8	72.4	770
44.0	1.51	0.08	1.6	.11	.12	818	424.1	306.3	71.7	769
46.0	1.28	0.09	1.4	.16	.18	797	423.7	305.3	70.3	751
48.0	0.97	0.09	1.1	.26	.29	763	423.2	303.9	68.4	720
50.0	0.72	0.09	0.8	.39	.42	722	422.7	301.8	66.0	683
52.0	0.25	0.09	0.3	.80	.85	617	421.9	299.2	63.2	586
54.0	0.60	0.09	0.7	.44	.49	703	421.1	296.1	60.1	670
56.0	1.18	0.09	1.3	.18	.23	779	420.2	292.4	56.6	747
58.0	1.39	0.09	1.5	.12	.18	798	419.4	288.4	52.9	770
60.0	1.65	0.09	1.7	.06	.13	816	418.6	284.0	49.0	791
62.0	1.79	0.08	1.9	.01	.09	832	417.9	279.3	44.9	812
64.0	1.30	0.08	1.4	.14	.22	785	417.4	274.4	40.7	770
66.0	1.13	0.08	1.2	.20	.28	764	417.1	269.3	36.4	753
68.0	0.87	0.08	1.0	.27	.36	740	417.0	264.1	32.0	732
70.0	0.76	0.08	0.8	.36	.45	713	417.1	258.8	27.5	707
72.0	0.64	0.08	0.7	.42	.50	699	417.4	253.5	22.9	694
74.0	0.67	0.08	0.7	.42	.50	700	418.0	248.2	18.4	695
76.0	0.84	0.07	0.9	.31	.38	733	418.8	242.9	13.8	725
78.0	0.74	0.07	0.8	.36	.42	721	419.8	237.7	9.2	712
80.0	0.69	0.07	0.8	.36	.41	724	421.0	232.6	4.6	712
82.0	0.62	0.07	0.7	.42	.46	712	422.4	227.8	0.1	696
84.0	0.50	0.07	0.6	.49	.51	698	423.9	223.1	-4.4	679
86.0	0.61	0.07	0.7	.42	.43	720	425.5	218.8	-8.7	695
88.0	0.74	0.07	0.8	.37	.36	740	427.1	214.8	-12.9	710
90.0	1.29	0.07	1.4	.14	.12	819	428.7	211.2	-17.0	781
92.0	1.35	0.07	1.4	.15	.11	823	430.3	208.2	-20.8	780
94.0	0.86	0.07	0.9	.33	.27	766	431.7	205.7	-24.3	722
96.0	0.79	0.06	0.9	.33	.26	770	432.9	203.8	-27.4	722
98.0	0.71	0.06	0.8	.38	.30	757	433.9	202.5	-30.2	708
37700.0	0.69	0.05	0.7	.44	.35	743	434.7	201.7	-32.4	693
02.0	0.79	0.04	0.8	.38	.29	761	435.2	201.4	-34.0	708
04.0	0.79	0.03	0.8	.38	.29	761	435.4	201.4	-35.1	709
06.0	0.73	0.02	0.7	.44	.35	744	435.4	201.4	-35.4	695
08.0	0.87	0.01	0.9	.33	.25	775	435.0	201.2	-35.2	725
10.0	0.87	0.00	0.9	.33	.25	773	434.4	200.7	-34.3	726
12.0	1.14	-0.01	1.1	.25	.18	797	433.5	199.6	-33.0	752
14.0	1.29	-0.01	1.3	.18	.12	817	432.4	197.9	-31.1	774
16.0	1.38	-0.02	1.4	.15	.11	825	431.1	195.6	-28.9	784
18.0	1.50	-0.02	1.5	.12	.09	831	429.7	192.8	-26.4	792
20.0	1.78	-0.03	1.7	.07	.05	846	428.2	189.6	-23.6	808
22.0	1.97	-0.03	1.9	.02	.02	860	426.6	185.9	-20.7	821
24.0	1.99	-0.03	2.0	.00	.01	864	425.0	181.8	-17.5	824
26.0	1.83	-0.03	1.8	.04	.06	843	423.5	177.5	-14.3	802
28.0	1.79	-0.03	1.8	.03	.07	839	422.1	173.0	-10.9	795
30.0	1.60	-0.03	1.6	.08	.12	818	420.8	168.2	-7.5	770
32.0	1.54	-0.03	1.5	.10	.16	806	419.7	163.4	-4.0	753
34.0	1.21	-0.03	1.2	.19	.26	772	418.8	158.4	-0.5	716
36.0	1.21	-0.03	1.2	.19	.26	770	418.1	153.5	3.0	708
38.0	1.59	-0.03	1.6	.07	.15	810	417.7	148.5	6.5	738
40.0	1.86	-0.02	1.8	.02	.10	827	417.2	143.5	10.0	747
42.0	2.18	-0.02	2.2	-14.94	.02	859	417.3	138.7	13.5	769
44.0	3.17	-0.03	3.1	.81	-14.88	920	417.5	134.0	16.9	817
46.0	3.72	-0.03	3.7	.74	.80	956	417.9	129.4	20.2	842
48.0	3.92	-0.04	3.9	.72	.78	969	418.5	125.1	23.4	846
50.0	4.05	-0.04	4.0	.71	.76	976	419.2	121.0	26.5	847
52.0	3.91	-0.04	3.9	.72	.77	973	420.0	117.3	29.4	839
54.0	3.69	-0.05	3.6	.76	.80	958	420.9	114.0	32.1	823
56.0	3.31	-0.06	3.2	.80	.84	937	421.7	111.2	34.6	801

Table 3.--Continued

SATELLITE 1960 51

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37758.0	2.73	-0.06	2.7	-14.88	-14.91	907	422.5	108.9	36.8	773
60.0	2.55	-0.07	2.5	.91	.93	895	423.2	107.1	38.6	761
62.0	2.71	-0.08	2.6	.89	.91	904	423.8	105.9	40.0	767
64.0	2.70	-0.08	2.6	.89	.91	905	424.3	105.3	40.8	767
66.0	2.48	-0.08	2.4	.93	.94	892	424.6	105.1	41.1	755
68.0	2.59	-0.08	2.5	.91	.92	900	424.7	105.1	40.8	761
70.0	3.32	-0.08	3.2	.81	.82	947	424.6	105.1	39.8	800
72.0	4.05	-0.09	4.0	.72	.73	993	424.4	105.0	38.2	837
74.0	4.37	-0.09	4.3	.69	.71	1008	424.0	104.4	36.1	848
76.0	4.36	-0.09	4.3	.69	.71	1007	423.4	103.3	33.4	844
78.0	4.23	-0.09	4.1	.70	.73	995	422.7	101.7	30.2	830
80.0	3.56	-0.08	3.5	.76	.80	959	421.9	99.4	26.7	796
82.0	3.13	-0.08	3.0	.82	.86	927	421.1	96.6	22.9	765
84.0	2.89	-0.08	2.8	.85	.89	912	420.3	93.4	18.8	747
86.0	2.69	-0.08	2.6	.87	.93	897	419.5	89.6	14.5	730
88.0	2.94	-0.08	2.9	.83	.89	915	418.7	85.6	10.1	739
90.0	3.18	-0.08	3.1	.80	.86	926	418.1	81.2	5.6	743
92.0	3.33	-0.07	3.3	.77	.84	937	417.6	76.6	0.9	747
94.0	3.35	-0.07	3.3	.77	.84	937	417.3	71.7	-3.8	742
96.0	3.90	-0.06	3.8	.71	.78	966	417.2	66.8	-8.6	761
98.0	4.91	-0.06	4.8	.62	.69	1020	417.3	61.7	-13.3	801
37800.0	4.91	-0.06	4.9	.61	.67	1026	417.7	56.6	-18.1	804
02.0	4.62	-0.06	4.6	.64	.70	1014	418.3	51.5	-22.9	794
04.0	4.55	-0.07	4.5	.65	.70	1012	419.2	46.4	-27.6	794
06.0	4.27	-0.07	4.2	.67	.72	999	420.2	41.4	-32.3	787
08.0	3.83	-0.08	3.7	.73	.76	976	421.5	36.4	-36.9	773
10.0	3.45	-0.08	3.4	.76	.79	963	422.9	31.7	-41.4	768
12.0	3.33	-0.08	3.3	.78	.79	961	424.4	27.1	-45.8	773
14.0	3.05	-0.07	3.0	.82	.82	947	426.0	22.9	-50.0	769
16.0	2.71	-0.07	2.6	.88	.87	924	427.6	18.9	-54.1	758
18.0	2.48	-0.06	2.4	.92	.89	914	429.1	15.4	-57.9	757
20.0	1.91	-0.06	1.9	-15.01	.97	878	430.6	12.3	-61.5	734
22.0	1.70	-0.05	1.6	.08	-15.03	854	432.0	9.8	-64.7	720
24.0	1.70	-0.02	1.7	.06	.00	867	433.1	7.9	-67.5	737
26.0	1.66	0.00	1.7	.06	-14.99	869	434.1	6.5	-69.9	744
28.0	1.65	0.00	1.7	.06	.99	871	434.8	5.7	-71.6	749
30.0	1.64	0.00	1.6	.09	-15.01	862	435.2	5.3	-72.8	743
32.0	1.60	0.00	1.6	.09	.01	862	435.3	5.2	-73.3	744
34.0	1.62	0.00	1.6	.09	.01	861	435.2	5.1	-73.1	743
36.0	1.59	0.00	1.6	.09	.02	859	434.7	4.9	-72.2	740
38.0	1.57	0.00	1.6	.09	.02	856	434.1	4.2	-70.7	736
40.0	1.53	0.01	1.5	.12	.06	843	433.1	3.0	-68.7	722
42.0	1.53	0.02	1.6	.09	.04	849	431.9	1.2	-66.1	725
44.0	1.49	0.03	1.5	.12	.08	835	430.6	358.8	-63.1	710
46.0	1.49	0.04	1.5	.12	.09	830	429.1	355.8	-59.7	705
48.0	1.45	0.05	1.5	.12	.10	826	427.5	352.4	-56.1	700
50.0	1.59	0.06	1.6	.09	.09	831	425.9	348.6	-52.2	704
52.0	1.71	0.06	1.8	.04	.05	845	424.3	344.3	-48.1	718
54.0	1.69	0.06	1.8	.03	.06	841	422.7	339.8	-43.9	717
56.0	1.70	0.06	1.8	.03	.07	837	421.3	335.1	-39.5	717
58.0	1.66	0.06	1.7	.05	.11	824	420.0	330.2	-35.1	712
60.0	1.66	0.06	1.7	.05	.12	821	418.9	325.2	-30.5	715
62.0	1.70	0.06	1.8	.03	.10	827	418.0	320.0	-25.9	728
64.0	1.69	0.06	1.8	.03	.10	825	417.3	314.9	-21.3	735
66.0	1.61	0.06	1.7	.05	.13	814	416.9	309.7	-16.6	734
68.0	1.55	0.06	1.6	.08	.16	804	416.7	304.6	-11.9	732
70.0	1.52	0.06	1.6	.08	.16	804	416.8	299.6	-7.3	740
72.0	1.46	0.07	1.5	.11	.19	794	417.0	294.7	-2.6	737
74.0	1.12	0.07	1.2	.20	.28	764	417.5	290.0	1.9	714
76.0	1.04	0.08	1.1	.24	.31	754	418.1	285.5	6.4	708

Table 3.--Continued

SATELLITE 1960 ξ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37878.0	0.97	0.08	1.0	-15.28	-15.35	743	418.8	281.3	10.8	701
80.0	0.95	0.08	1.0	.28	.34	745	419.7	277.5	15.0	704
82.0	0.94	0.08	1.0	.28	.34	747	420.5	274.1	19.1	706
84.0	0.79	0.08	0.9	.33	.37	735	421.4	271.1	22.9	694
86.0	0.75	0.08	0.8	.38	.42	723	422.2	268.7	26.4	682
88.0	0.74	0.09	0.8	.38	.41	725	422.9	266.9	29.6	682
90.0	0.75	0.09	0.8	.38	.41	726	423.5	265.7	32.3	682
92.0	0.87	0.09	1.0	.29	.31	755	424.0	265.0	34.5	709
94.0	1.02	0.09	1.1	.25	.27	768	424.3	264.7	36.2	721
96.0	1.13	0.09	1.2	.21	.23	781	424.4	264.7	37.3	733
98.0	1.12	0.09	1.2	.21	.23	781	424.3	264.8	37.7	734
37900.0	0.96	0.08	1.0	.29	.31	756	424.1	264.6	37.5	713
02.0	0.85	0.08	0.9	.33	.35	742	423.7	264.1	36.7	702
04.0	0.69	0.08	0.8	.38	.41	726	423.1	263.1	35.4	691
06.0	0.89	0.07	1.0	.28	.32	753	422.4	261.5	33.6	721
08.0	1.13	0.07	1.2	.21	.25	775	421.6	259.3	31.5	747
10.0	1.31	0.06	1.4	.14	.19	794	420.8	256.6	29.0	771
12.0	1.44	0.05	1.5	.11	.17	803	420.0	253.4	26.3	784
14.0	1.49	0.05	1.5	.11	.17	801	419.2	249.8	23.4	787
16.0	1.57	0.04	1.6	.08	.15	809	418.5	245.8	20.3	799
18.0	1.37	0.04	1.4	.13	.21	788	417.9	241.6	17.0	782
20.0	1.26	0.04	1.3	.16	.24	777	417.5	237.1	13.7	774
22.0	1.21	0.04	1.2	.19	.28	766	417.3	232.4	10.3	764
24.0	1.12	0.03	1.1	.23	.31	755	417.2	227.6	6.8	753
26.0	1.12	0.03	1.1	.23	.31	755	417.4	222.7	3.3	754
28.0	1.12	0.02	1.1	.23	.30	757	417.8	217.8	-0.2	754
30.0	1.04	0.03	1.1	.23	.30	758	418.5	212.9	-3.7	754
32.0	0.98	0.03	1.0	.27	.33	748	419.4	207.9	-7.2	741
34.0	1.11	0.04	1.2	.20	.25	775	420.6	203.1	-10.7	764
36.0	1.41	0.04	1.4	.14	.17	800	421.9	198.4	-14.2	784
37937.0	1.73	0.04	1.8	-15.04	-15.07	840	422.6	196.1	-15.8	821
37.5	1.73	0.04	1.8	.04	.06	841	422.9	195.0	-16.7	820
38.0	2.23	0.04	2.3	-14.94	-14.96	882	423.3	193.8	-17.5	859
38.5	3.21	0.04	3.2	.81	.82	945	423.7	192.7	-18.3	918
39.0	2.73	0.04	2.8	.86	.88	920	424.1	191.6	-19.2	893
39.5	2.49	0.04	2.5	.91	.92	901	424.5	190.6	-20.0	872
40.0	2.25	0.04	2.3	.94	.95	887	424.9	189.5	-20.8	858
40.5	1.28	0.04	1.3	-15.17	-15.18	799	425.3	188.5	-21.6	771
41.0	1.04	0.04	1.1	.24	.24	777	425.7	187.4	-22.4	748
37942.0	1.04	0.04	1.1	-15.24	-15.24	779	426.5	185.5	-23.9	747
44.0	1.20	0.04	1.2	.21	.19	795	428.2	181.7	-26.9	757
46.0	1.63	0.03	1.7	.07	.04	851	429.8	178.4	-29.7	804
48.0	1.67	0.03	1.7	.07	.03	856	431.4	175.6	-32.3	802
50.0	1.71	0.02	1.7	.07	.02	860	432.8	173.3	-34.5	800
52.0	1.75	0.02	1.8	.05	-14.98	872	434.0	171.6	-36.4	808
54.0	1.76	0.02	1.8	.05	.98	875	435.0	170.4	-37.9	806
56.0	1.79	0.01	1.8	.06	.97	878	435.7	169.8	-38.8	805
58.0	1.81	0.00	1.8	.06	.97	879	436.2	169.7	-39.1	805
60.0	1.87	-0.01	1.9	.03	.95	889	436.3	169.8	-38.8	812
62.0	2.31	-0.02	2.3	-14.96	.87	922	436.2	169.9	-37.8	842
37962.5	2.69	-0.02	2.7	-14.89	-14.81	951	436.1	169.9	-37.5	869
63.0	3.19	-0.03	3.2	.83	.75	985	436.0	169.8	-37.1	899
63.5	3.92	-0.03	3.9	.75	.67	1027	435.9	169.8	-36.7	937
64.0	3.44	-0.04	3.4	.80	.73	997	435.7	169.7	-36.2	910
64.5	2.47	-0.04	2.4	.94	.86	928	435.6	169.6	-35.7	847
65.0	1.98	-0.04	1.9	-15.03	.95	886	435.4	169.5	-35.2	809

Table 3.--Continued

SATELLITE 1960 ξ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37966.0	1.39	-0.04	1.4	-15.15	-15.08	836	435.0	169.2	-34.1	763
68.0	1.38	-0.05	1.3	.18	.11	822	434.0	168.1	-31.3	750
70.0	1.54	-0.06	1.5	.12	.06	840	432.8	166.4	-28.2	767
72.0	1.73	-0.06	1.7	.07	.02	856	431.4	164.1	-24.6	781
74.0	1.72	-0.06	1.7	.07	.03	852	429.9	161.3	-20.8	776
76.0	1.63	-0.06	1.6	.09	.07	838	428.2	157.9	-16.6	761
78.0	1.59	-0.06	1.5	.11	.11	824	426.6	154.1	-12.3	745
80.0	1.42	-0.06	1.4	.14	.15	810	424.9	149.9	-7.9	729
82.0	1.56	-0.06	1.5	.11	.13	816	423.3	145.4	-3.3	730
84.0	1.55	-0.06	1.5	.10	.14	812	421.8	140.7	1.3	722
86.0	1.71	-0.06	1.6	.07	.12	818	420.5	135.7	6.0	723
88.0	1.76	-0.06	1.7	.05	.11	824	419.4	130.6	10.7	724
90.0	2.03	-0.06	2.0	-14.98	.05	848	418.5	125.4	15.5	739
92.0	2.15	-0.06	2.1	.96	.03	854	417.8	120.2	20.2	739
94.0	1.96	-0.06	1.9	-15.00	.08	836	417.4	114.9	24.9	719
96.0	1.68	-0.07	1.6	.07	.15	808	417.3	109.7	29.6	692
98.0	1.83	-0.07	1.8	.02	.10	826	417.4	104.5	34.2	704
38000.0	2.18	-0.07	2.1	-14.96	.04	852	417.7	99.4	38.7	723
02.0	2.59	-0.07	2.5	.90	-14.96	882	418.2	94.5	43.1	747
04.0	2.71	-0.07	2.6	.88	.94	891	418.9	89.8	47.3	754
06.0	2.96	-0.08	2.9	.84	.89	912	419.8	85.4	51.4	772
08.0	2.73	-0.08	2.6	.89	.93	895	420.7	81.3	55.4	758
10.0	2.68	-0.08	2.6	.89	.93	897	421.4	77.6	59.1	761
12.0	2.52	-0.08	2.4	.92	.96	885	422.3	74.4	62.5	753
14.0	2.45	-0.09	2.4	.93	.95	887	423.1	71.7	65.5	758
16.0	2.43	-0.09	2.3	.94	.96	882	423.8	69.6	68.2	756
18.0	2.30	-0.09	2.2	.96	.98	876	424.4	68.0	70.3	753
38044.0	2.93	0.01	2.9	-14.83	-14.89	915	418.7	43.3	47.1	738
46.0	2.90	0.01	2.9	.82	.89	914	418.1	38.7	42.7	731
48.0	2.49	0.01	2.5	.88	.95	886	417.5	33.8	38.2	703
50.0	2.29	0.01	2.3	.91	.99	871	417.2	28.8	33.6	687
52.0	2.09	0.01	2.1	.95	-15.02	856	417.1	23.7	28.9	672
54.0	2.05	0.01	2.1	.95	.02	857	417.3	18.5	24.2	671
56.0	1.97	0.01	2.0	.97	.04	850	417.6	13.3	19.4	666
58.0	1.90	0.01	1.9	.99	.06	844	418.3	8.1	14.5	662
38059.0	2.14	0.01	2.1	-14.95	-15.01	861	418.7	5.5	12.1	678
59.5	2.37	0.01	2.4	.89	-14.96	885	418.9	4.2	10.9	697
60.0	2.61	0.01	2.6	.86	.92	900	419.1	2.9	9.7	710
60.5	3.82	0.01	3.8	.71	.76	975	419.4	1.6	8.5	770
61.0	5.04	0.01	5.0	.60	.65	1039	419.7	0.4	7.3	822
61.5	2.83	0.01	2.8	.83	.89	916	419.9	359.1	6.1	726
62.0	2.34	0.01	2.4	.90	.95	889	420.2	357.8	4.9	706
62.5	1.60	0.01	1.6	-15.06	-15.11	823	420.5	356.6	3.7	655
63.0	1.35	0.01	1.4	.11	.16	804	420.8	355.4	2.5	641
38064.0	1.31	0.01	1.3	-15.15	-15.19	795	421.5	352.9	0.1	636
66.0	1.32	0.01	1.3	.15	.18	798	423.0	348.2	-4.7	645
68.0	1.59	0.01	1.6	.07	.08	833	424.5	343.6	-9.4	680
70.0	1.83	0.02	1.9	.00	.00	865	426.2	339.4	-13.9	714
72.0	1.65	0.02	1.7	.05	.04	851	427.8	335.6	-18.3	709
74.0	1.54	0.02	1.6	.08	.05	845	429.5	332.2	-22.6	711
76.0	1.12	0.02	1.1	.24	.19	793	431.0	329.2	-26.5	673
78.0	1.02	0.02	1.0	.28	.22	783	432.4	326.9	-30.2	669
80.0	0.97	0.02	1.0	.29	.21	786	433.7	325.1	-33.5	674
82.0	1.05	0.03	1.1	.25	.17	801	434.7	323.9	-36.4	690
84.0	1.05	0.04	1.1	.26	.17	802	435.5	323.3	-38.8	693
86.0	1.11	0.04	1.2	.22	.13	815	436.0	323.2	-40.5	705

Table 5.--Continued

VANGUARD 3 (1961 ξ)

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
38088.0	1.17	0.05	1.2	-15.22	-15.13	815	436.2	323.3	-41.6	706
90.0	1.27	0.06	1.3	.19	.10	826	436.1	323.4	-42.1	716
92.0	1.25	0.06	1.3	.19	.11	824	435.7	323.3	-41.9	716
94.0	1.27	0.07	1.3	.19	.11	822	435.0	322.8	-41.2	715
38096.0	1.60	0.07	1.7	-15.08	-15.01	861	434.1	321.8	-39.9	751
96.5	1.58	0.07	1.7	.08	.01	860	433.9	321.4	-39.4	751
97.0	1.57	0.08	1.6	.11	.04	850	433.6	321.1	-39.0	743
97.5	1.80	0.08	1.9	.04	-14.97	877	433.3	320.6	-38.6	768
98.0	2.03	0.08	2.1	.00	.94	893	433.0	320.2	-38.1	783
98.5	2.01	0.08	2.1	.00	.94	892	432.7	319.7	-37.6	783
99.0	1.76	0.08	1.8	.06	-15.00	865	432.3	319.1	-37.0	761
99.5	1.74	0.08	1.8	.06	.01	864	432.0	318.6	-36.5	761
38100.0	1.49	0.08	1.6	.10	.05	844	431.6	318.0	-35.9	745
00.5	1.23	0.08	1.3	.19	.14	812	431.3	317.3	-35.3	717
01.0	1.21	0.08	1.3	.19	.14	811	430.9	316.7	-34.7	718
38102.0	1.06	0.08	1.1	-15.25	-15.22	786	430.2	315.2	-33.5	698
04.0	1.01	0.08	1.1	.25	.23	782	428.6	312.0	-30.7	701
06.0	0.95	0.08	1.0	.29	.28	765	427.0	308.3	-27.8	693
08.0	0.90	0.07	1.0	.28	.29	761	425.4	304.3	-24.7	697
10.0	0.81	0.07	0.9	.32	.35	744	423.8	300.0	-21.4	690
12.0	0.71	0.07	0.8	.37	.41	726	422.4	295.5	-18.1	681
14.0	0.64	0.07	0.7	.42	.47	707	421.1	290.8	-14.7	671
16.0	0.62	0.07	0.7	.42	.48	705	420.0	285.9	-11.2	676
18.0	0.62	0.07	0.7	.42	.49	703	419.1	281.0	-7.7	680
20.0	0.66	0.06	0.7	.42	.49	701	418.4	276.0	-4.2	684
22.0	0.73	0.06	0.8	.36	.44	715	417.8	271.1	-0.6	702
24.0	1.05	0.07	1.1	.23	.31	755	417.7	266.1	2.9	744
26.0	0.92	0.07	1.0	.27	.35	742	417.8	261.3	6.4	734
28.0	0.85	0.07	0.9	.32	.39	730	418.1	256.6	9.8	722
30.0	0.80	0.08	0.9	.32	.39	731	418.6	252.0	13.2	723
32.0	1.06	0.08	1.1	.23	.30	758	419.3	247.7	16.5	747
34.0	1.15	0.08	1.2	.20	.26	772	420.1	243.6	19.6	758
36.0	1.27	0.08	1.4	.14	.19	796	420.9	239.9	22.6	777
38.0	1.03	0.08	1.1	.24	.28	765	421.8	236.6	25.4	743
40.0	0.88	0.08	1.0	.28	.31	755	422.6	233.7	28.0	729
42.0	0.48	0.08	0.6	.49	.51	696	423.4	231.4	30.2	667
44.0	0.52	0.08	0.6	.49	.51	698	424.2	229.6	32.1	665
46.0	0.63	0.08	0.7	.42	.44	717	424.7	228.5	33.5	680
48.0	0.77	0.08	0.8	.37	.38	734	425.2	227.8	34.4	693
50.0	0.79	0.08	0.9	.32	.33	750	425.5	227.5	34.8	706
52.0	0.90	0.07	1.0	.28	.28	764	425.5	227.5	34.5	717
54.0	0.94	0.07	1.0	.28	.28	763	425.4	227.4	33.7	717
56.0	0.95	0.05	1.0	.28	.29	763	425.1	227.2	32.2	716
58.0	1.00	0.03	1.0	.28	.29	761	424.7	226.5	30.1	716
60.0	1.28	0.02	1.3	.17	.19	795	424.1	225.3	27.5	750
62.0	1.30	0.01	1.3	.17	.19	793	423.3	223.5	24.5	751
64.0	1.08	0.00	1.1	.24	.27	767	422.5	221.1	21.1	730
66.0	0.76	0.00	0.8	.37	.41	725	421.6	218.2	17.4	692
68.0	0.71	0.00	0.7	.42	.48	707	420.8	214.8	13.5	677
70.0	0.64	-0.01	0.6	.49	.55	687	419.9	211.0	9.4	661
72.0	0.50	-0.02	0.5	.56	.63	666	419.2	206.8	5.1	642
74.0	0.50	-0.02	0.5	.56	.64	665	418.5	202.3	0.7	641
76.0	0.57	-0.02	0.5	.56	.64	664	418.0	197.5	-3.8	641
78.0	0.68	-0.03	0.6	.48	.57	682	417.7	192.6	-8.3	658
80.0	0.70	-0.03	0.7	.42	.50	700	417.7	187.6	-12.8	673
82.0	0.71	-0.03	0.7	.41	.50	700	417.8	182.4	-17.4	671
84.0	0.71	-0.03	0.7	.41	.49	701	418.2	177.2	-22.0	670
86.0	0.81	-0.03	0.8	.36	.43	719	418.9	172.0	-26.5	683

Table 3.--Continued

SATELLITE 1960 ξ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
38188.0	0.92	-0.03	0.9	-15.31	-15.37	735	419.8	166.8	-31.0	695
90.0	0.83	-0.03	0.8	.36	.41	724	420.9	161.7	-35.5	680
92.0	0.67	-0.03	0.6	.49	.52	693	422.3	156.8	-39.8	648
94.0	0.86	-0.03	0.8	.37	.39	730	423.7	152.0	-44.1	680
38195.0	0.83	-0.03	0.8	-15.37	-15.38	732	424.5	149.7	-46.2	680
96.0	0.89	-0.03	0.9	.32	.33	749	425.4	147.4	-48.2	694
97.0	1.07	-0.03	1.0	.28	.28	764	426.2	145.2	-50.2	707
98.0	1.19	-0.03	1.2	.21	.20	791	427.0	143.1	-52.2	730
99.0	1.31	-0.03	1.3	.18	.16	804	427.9	141.1	-54.1	741
38200.0	1.30	-0.03	1.3	.18	.16	806	428.7	139.2	-56.0	742
01.0	0.75	-0.03	0.7	.44	.40	727	429.6	137.4	-57.8	669
02.0	0.20	-0.04	0.2	.98	.93	600	430.4	135.7	-59.6	551
03.0	0.26	-0.04	0.2	.98	.92	602	431.2	134.1	-61.2	552
04.0	0.38	-0.04	0.3	.80	.74	641	432.0	132.7	-62.8	589
05.0	0.49	-0.04	0.5	.59	.51	696	432.8	131.4	-64.3	638
06.0	0.73	-0.05	0.7	.45	.37	736	433.5	130.2	-65.8	675
07.0	1.04	-0.05	1.0	.30	.22	783	434.2	129.2	-67.1	718
08.0	0.73	-0.05	0.7	.45	.36	739	434.8	128.3	-68.3	678
09.0	0.60	-0.05	0.6	.51	.42	722	435.4	127.6	-69.3	663
10.0	0.60	-0.05	0.6	.51	.41	724	435.9	127.0	-70.3	664
38212.0	0.55	-0.06	0.5	-15.59	-15.48	705	436.7	126.3	-71.8	647
14.0	0.48	-0.06	0.4	.69	.56	684	438.2	125.9	-72.6	628
16.0	0.56	-0.06	0.5	.59	.46	710	438.4	125.8	-72.7	652
18.0	0.63	-0.06	0.6	.51	.39	731	438.3	125.8	-72.2	671
20.0	0.70	-0.06	0.6	.51	.39	731	437.9	125.5	-71.0	669
22.0	0.63	-0.06	0.6	.51	.40	729	437.2	124.8	-69.2	666
24.0	0.69	-0.06	0.6	.50	.40	727	436.2	123.5	-66.8	662
26.0	0.70	-0.06	0.6	.50	.41	725	434.9	121.7	-63.9	656
28.0	0.66	-0.06	0.6	.50	.42	722	433.5	119.3	-60.6	649
38229.0	0.68	-0.06	0.6	-15.49	-15.43	720	432.7	117.9	-58.8	645
30.0	0.89	-0.06	0.8	.37	.32	753	431.9	116.4	-57.0	671
31.0	0.99	-0.06	0.9	.32	.27	766	431.0	114.7	-55.0	680
32.0	1.08	-0.06	1.0	.28	.24	778	430.2	112.9	-53.1	687
33.0	1.17	-0.05	1.1	.24	.20	789	429.3	111.1	-51.0	693
34.0	1.26	-0.05	1.2	.20	.18	799	428.4	109.1	-48.9	698
35.0	1.29	-0.05	1.2	.20	.18	797	427.5	107.0	-46.8	692
36.0	1.14	-0.05	1.1	.23	.22	783	426.7	104.9	-44.6	675
37.0	1.05	-0.04	1.0	.27	.27	768	425.8	102.7	-42.3	659
38238.0	1.08	-0.04	1.0	-15.26	-15.27	766	425.0	100.5	-40.1	653
40.0	1.21	-0.04	1.2	.19	.21	787	423.4	95.8	-35.5	662
42.0	1.62	-0.02	1.6	.07	.10	826	422.0	90.9	-30.8	686
44.0	1.79	0.00	1.8	.02	.06	841	420.8	86.0	-26.0	689
46.0	1.77	0.00	1.8	.01	.07	838	419.7	80.9	-21.2	679
48.0	1.74	0.00	1.7	.04	.10	827	418.9	75.9	-16.3	663
50.0	1.63	0.00	1.6	.06	.13	817	418.4	70.8	-11.5	648
52.0	1.49	0.00	1.5	.08	.16	806	418.1	65.8	-6.6	634
54.0	1.39	-0.03	1.4	.11	.19	795	418.1	60.9	-1.8	622
56.0	1.37	-0.04	1.3	.14	.22	785	418.2	56.1	3.0	611
38257.0	1.51	-0.05	1.5	-15.09	-15.16	806	418.4	53.8	5.4	626
58.0	1.66	-0.06	1.6	.06	.13	816	418.6	51.5	7.8	633
59.0	1.81	-0.06	1.7	.04	.10	826	418.8	49.3	10.1	641
60.0	2.69	-0.06	2.6	-14.87	-14.92	898	419.1	47.2	12.4	696
61.0	3.02	-0.06	3.0	.81	.86	926	419.4	45.1	14.7	718
62.0	2.80	-0.06	2.7	.85	.91	907	419.8	43.1	16.9	703
63.0	2.71	-0.06	2.6	.87	.92	901	420.2	41.2	19.1	700

Table 3.--Continued

SATELLITE 1960 ξ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
38264.0	2.67	-0.06	2.6	-14.87	-14.92	902	420.5	39.4	21.3	701
65.0	2.64	-0.06	2.6	.87	.91	903	420.9	37.8	23.4	703
66.0	2.55	-0.06	2.5	.89	.93	897	421.3	36.2	25.4	700
67.0	2.33	-0.06	2.3	.92	.96	884	421.7	34.7	27.4	691
38268.0	2.32	-0.06	2.3	-14.92	-14.96	885	422.1	33.4	29.4	693
70.0	2.15	-0.06	2.1	.96	.99	871	422.9	31.2	33.0	686
72.0	1.82	-0.06	1.8	-15.02	-15.04	848	423.6	29.5	36.2	671
74.0	1.36	-0.06	1.3	.15	.17	801	424.1	28.5	38.9	636
76.0	1.35	-0.06	1.3	.15	.17	802	424.6	27.9	41.2	640
78.0	1.40	-0.05	1.4	.13	.14	813	424.8	27.8	42.9	651
80.0	1.52	-0.04	1.5	.10	.11	824	424.9	27.9	43.9	660
82.0	1.34	-0.03	1.3	.16	.17	802	424.8	27.9	44.3	643
84.0	1.55	-0.02	1.5	.10	.11	822	424.6	27.8	44.1	659
38284.5	1.53	-0.02	1.5	-15.10	-15.11	822	424.5	27.7	43.9	659
85.0	1.54	-0.02	1.5	.10	.11	822	424.4	27.6	43.7	658
85.5	1.79	-0.01	1.8	.03	.04	850	424.3	27.4	43.5	681
86.0	3.51	-0.01	3.5	-14.76	-14.77	971	424.1	27.2	43.3	777
86.5	4.98	-0.01	5.0	.62	.63	1051	424.0	27.0	43.0	841
87.0	3.53	-0.01	3.5	.76	.78	970	423.9	26.7	42.7	776
87.5	3.05	0.01	3.1	.81	.82	945	423.7	26.4	42.3	755
88.0	2.57	-0.01	2.6	.88	.90	911	423.6	26.1	41.9	728
88.5	3.31	-0.01	3.3	.78	.80	956	423.4	25.7	41.5	763
89.0	3.81	-0.01	3.8	.72	.75	985	423.2	25.3	41.1	786
89.5	4.31	0.00	4.3	.68	.70	1012	423.0	24.9	40.6	807
90.0	3.83	0.00	3.8	.72	.75	984	422.9	24.4	40.1	784
90.5	3.59	0.00	3.6	.75	.77	971	422.7	23.9	39.6	774
91.0	3.60	0.00	3.6	.74	.77	971	422.5	23.4	39.1	773
91.5	3.37	0.00	3.4	.77	.80	958	422.3	22.8	38.6	762
92.0	2.65	0.00	2.6	.88	.91	906	422.1	22.2	38.0	720
92.5	3.14	0.00	3.1	.80	.84	938	421.9	21.5	37.4	746
93.0	3.39	0.00	3.4	.77	.80	956	421.7	20.9	36.8	759
93.5	3.89	0.00	3.9	.71	.75	984	421.5	20.1	36.2	781
94.0	4.63	0.00	4.6	.65	.68	1021	421.3	19.4	35.5	810
94.5	6.34	0.00	6.3	.52	.56	1100	421.0	18.6	34.9	872
95.0	6.35	0.01	6.4	.52	.55	1103	420.8	17.8	34.2	875
95.5	7.08	0.01	7.1	.47	.51	1132	420.6	17.0	33.5	897
96.0	5.14	0.01	5.2	.60	.64	1048	420.4	16.1	32.8	830
96.5	3.45	0.01	3.5	.75	.80	957	420.2	15.3	32.1	758
97.0	3.21	0.01	3.2	.79	.84	938	420.0	14.3	31.4	743
97.5	2.97	0.02	3.0	.81	.87	925	419.8	13.4	30.6	733
38298.0	2.93	0.02	2.9	-14.83	-14.88	918	419.6	12.5	29.9	727
38300.0	2.44	0.02	2.5	.89	.95	889	418.9	8.4	26.8	705

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37349.0	3.0	11.0	14.0	-16.44	-16.55	933	641.0	306.5	47.2	861
50.0	2.8	11.0	13.8	.44	.56	932	641.7	307.4	45.4	858
51.0	3.1	10.9	14.0	.44	.54	936	642.2	308.1	43.3	859
52.0	3.4	10.8	14.2	.43	.53	939	642.8	308.6	41.1	860
53.0	3.1	10.7	13.8	.44	.54	937	643.2	308.9	38.6	856
54.0	3.3	10.6	13.9	.43	.53	939	643.6	309.0	36.0	857
55.0	2.8	10.5	13.3	.45	.55	934	644.1	308.9	33.2	852
56.0	3.1	10.3	13.4	.45	.54	937	644.5	308.7	30.2	853
57.0	3.8	10.1	13.9	.43	.52	943	644.9	308.3	27.2	859
58.0	5.1	9.9	15.0	.39	.48	956	645.4	307.8	24.1	871
59.0	6.4	9.6	16.0	.36	.45	967	646.0	307.2	20.9	882
60.0	4.9	9.4	14.3	.41	.49	952	646.6	306.5	17.6	869
37360.5	3.5	9.3	12.8	-16.46	-16.54	937	647.0	306.1	15.9	855
61.0	3.2	9.2	12.4	.48	.55	933	647.3	305.7	14.3	853
61.5	3.1	9.0	12.1	.49	.56	930	647.7	305.3	12.6	851
62.0	2.9	8.9	11.8	.50	.57	928	648.1	304.9	10.9	849
62.5	2.4	8.8	11.2	.52	.59	921	648.6	304.5	9.3	844
63.0	3.0	8.7	11.7	.50	.57	928	649.1	304.0	7.6	851
63.5	3.9	8.6	12.5	.47	.54	938	649.5	303.6	5.9	861
64.0	6.4	8.5	14.9	.39	.45	965	650.1	303.2	4.2	886
64.5	7.3	8.4	15.7	.37	.43	974	650.6	302.8	2.5	895
65.0	9.0	8.3	17.3	.33	.38	990	651.2	302.3	0.8	911
65.5	5.5	8.3	13.8	.43	.48	956	651.8	301.9	-0.9	881
66.0	2.6	8.2	10.8	.54	.59	922	652.4	301.5	-2.5	850
66.5	2.4	8.1	10.5	.56	.60	919	653.0	301.2	-4.2	848
67.0	2.5	8.0	10.5	.56	.60	920	653.7	300.8	-5.9	850
67.5	2.8	7.9	10.7	.55	.58	923	654.4	300.4	-7.5	854
68.0	3.1	7.8	10.9	.54	.57	927	655.1	300.1	-9.1	858
68.5	7.8	7.8	15.6	.38	.41	981	655.8	299.8	-10.8	908
69.0	9.7	7.8	17.5	.33	.35	1000	656.5	299.5	-12.4	926
69.5	2.8	7.8	10.6	.56	.58	926	657.3	299.3	-13.9	858
70.0	2.3	7.8	10.1	.58	.59	920	658.0	299.1	-15.5	853
70.5	1.8	7.8	9.6	.61	.61	914	658.8	298.9	-17.0	848
71.0	1.9	7.8	9.7	.60	.61	917	659.6	298.7	-18.6	850
37372.0	1.6	7.9	9.5	-16.62	-16.61	916	661.2	298.6	-21.5	850
73.0	2.3	8.0	10.3	.58	.56	930	662.8	298.6	-24.3	862
74.0	2.5	8.1	10.6	.57	.54	936	664.3	298.8	-27.0	868
75.0	2.3	8.2	10.5	.58	.54	937	665.8	299.2	-29.5	867
76.0	2.0	8.4	10.4	.58	.54	937	667.3	299.8	-31.8	866
77.0	2.5	8.5	11.0	.56	.51	947	668.7	300.7	-33.8	874
78.0	3.8	8.7	12.5	.51	.44	968	670.0	301.7	-35.7	892
79.0	4.5	8.9	13.4	.48	.41	981	671.2	302.9	-37.2	901
80.0	5.0	9.0	14.0	.46	.38	989	672.3	304.3	-38.5	906
81.0	5.1	9.2	14.3	.45	.37	994	673.2	305.8	-39.4	908
82.0	6.0	9.4	15.4	.41	.33	1007	674.0	307.4	-40.1	917
83.0	5.7	9.5	15.2	.42	.33	1007	674.7	309.0	-40.4	914
84.0	6.0	9.6	15.6	.41	.32	1012	675.3	310.5	-40.4	916
85.0	8.9	9.7	18.6	.33	.23	1041	675.7	312.0	-40.1	939
86.0	12.3	9.7	22.0	.25	.16	1070	676.0	313.3	-39.5	962
87.0	12.1	9.7	21.8	.26	.16	1069	676.2	314.5	-38.6	959
88.0	11.0	9.7	20.7	.28	.18	1062	676.3	315.4	-37.5	950
89.0	10.6	9.6	20.2	.29	.19	1058	676.3	316.2	-36.1	945
90.0	10.6	9.5	20.1	.29	.19	1058	676.2	316.7	-34.5	943
91.0	10.3	9.4	19.7	.29	.20	1055	676.1	317.1	-32.7	940
92.0	9.3	9.3	18.6	.32	.22	1046	675.9	317.2	-30.8	931
93.0	7.2	9.2	16.4	.37	.28	1026	675.8	317.1	-28.7	913
94.0	5.2	9.0	14.2	.43	.46	1003	675.6	316.9	-26.5	892
95.0	4.2	8.8	13.0	.47	.50	990	675.4	316.6	-24.1	880

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37396.0	4.4	8.7	13.1	-16.47	-16.50	991	675.2	316.1	-21.7	882
97.0	3.9	8.5	12.4	.49	.52	983	675.0	315.4	-19.3	875
98.0	4.0	8.3	12.3	.49	.52	982	674.8	314.7	-16.7	875
99.0	3.3	8.2	11.5	.52	.55	972	674.8	314.0	-14.1	867
37400.0	3.1	8.0	11.1	.54	.57	967	674.8	313.2	-11.5	864
01.0	2.4	7.9	10.3	.57	.61	956	674.9	312.3	-8.9	856
02.0	0.7	7.7	8.4	.67	.70	926	675.2	311.5	-6.3	831
03.0	2.8	7.6	10.4	.57	.60	958	675.5	310.7	-3.7	861
04.0	7.9	7.5	15.4	.39	.42	1018	676.0	309.9	-1.1	916
05.0	6.0	7.5	13.5	.45	.47	998	676.6	309.2	1.5	900
06.0	2.5	7.5	10.0	.59	.61	954	677.2	308.5	4.0	860
07.0	3.1	7.5	10.6	.57	.58	963	678.0	307.9	6.4	869
08.0	2.1	7.5	9.6	.62	.62	950	678.9	307.5	8.8	857
09.0	2.1	7.5	9.6	.62	.62	951	679.8	307.2	11.1	857
10.0	3.1	7.5	10.6	.58	.57	967	680.8	307.0	13.2	871
11.0	3.6	7.6	11.2	.55	.54	976	681.9	307.1	15.3	878
12.0	4.1	7.6	11.7	.53	.52	984	683.0	307.3	17.1	884
13.0	3.8	7.7	11.5	.54	.52	983	684.0	307.7	18.8	881
14.0	5.6	7.7	13.3	.48	.45	1007	685.1	308.3	20.3	900
15.0	5.6	7.8	13.4	.48	.44	1010	686.1	309.2	21.6	900
16.0	6.6	7.8	14.4	.44	.40	1023	687.1	310.2	22.6	908
17.0	5.9	7.9	13.8	.46	.42	1018	688.0	311.4	23.4	900
18.0	5.5	7.9	13.4	.48	.43	1015	688.9	312.7	23.9	894
19.0	5.4	7.9	13.3	.48	.42	1016	689.6	314.2	24.0	891
20.0	4.4	7.8	12.2	.52	.46	1004	690.3	315.7	23.9	877
21.0	4.2	7.8	12.0	.53	.46	1003	690.9	317.2	23.5	872
22.0	4.2	7.7	11.9	.53	.46	1003	691.4	318.6	22.7	869
23.0	3.0	7.6	10.6	.58	.51	986	691.8	320.0	21.7	852
24.0	2.9	7.4	10.3	.59	.52	983	692.1	321.2	20.3	847
25.0	4.8	7.2	12.0	.52	.45	1008	692.4	322.2	18.7	866
26.0	5.7	7.0	12.7	.49	.42	1018	692.5	323.0	16.9	873
27.0	2.8	6.7	9.5	.62	.55	974	692.6	323.7	14.8	834
28.0	0.9	6.4	7.3	.74	.67	936	692.7	324.1	12.5	801
29.0	0.1	6.1	6.2	.82	.74	912	692.7	324.3	10.0	780
30.0	1.8	5.8	7.6	.72	.64	943	692.6	324.3	7.4	807
31.0	2.9	5.5	8.4	.67	.71	958	692.5	324.2	4.7	821
32.0	4.1	5.2	9.3	.62	.66	974	692.4	323.8	1.8	836
33.0	4.1	4.8	8.9	.64	.68	968	692.4	323.3	-1.1	833
34.0	4.5	4.4	8.9	.64	.68	969	692.5	322.7	-4.2	836
35.0	4.3	4.1	8.4	.67	.71	960	692.7	322.0	-7.3	832
36.0	3.2	3.7	6.9	.76	.80	931	692.9	321.2	-10.4	810
37.0	4.1	3.2	7.3	.73	.77	940	693.2	320.4	-13.6	821
38.0	5.9	2.7	8.6	.65	.69	966	693.7	319.5	-16.8	847
39.0	7.4	2.0	9.4	.61	.64	981	694.2	318.6	-20.0	864
40.0	8.4	1.3	9.7	.60	.63	986	694.9	317.7	-23.2	873
41.0	9.6	0.8	10.4	.57	.59	998	695.7	316.8	-26.4	888
42.0	11.1	0.4	11.5	.52	.54	1016	696.6	315.9	-29.5	907
43.0	12.6	0.1	12.7	.48	.49	1033	697.6	315.1	-32.6	927
44.0	11.7	-0.2	11.5	.53	.53	1018	698.6	314.4	-35.7	917
45.0	11.0	-0.3	10.7	.56	.56	1008	699.8	313.8	-38.6	912
46.0	10.2	-0.4	9.8	.61	.60	996	701.0	313.3	-41.5	903
47.0	9.1	-0.4	8.7	.66	.65	978	702.2	313.0	-44.3	890
48.0	8.1	-0.4	7.7	.73	.71	961	703.5	312.8	-46.9	877
49.0	8.6	-0.3	8.3	.69	.67	973	704.8	312.8	-49.4	890
50.0	9.5	-0.3	9.2	.65	.61	991	706.0	313.0	-51.8	907
51.0	9.7	-0.3	9.4	.64	.60	996	707.2	313.4	-53.9	912
52.0	9.3	-0.2	9.1	.66	.61	992	708.4	314.0	-55.8	909
53.0	8.7	-0.1	8.6	.69	.64	984	709.5	314.9	-57.5	902
54.0	7.3	0.1	7.4	.76	.70	961	710.5	315.9	-59.0	880
55.0	7.4	0.5	7.9	.73	.67	972	711.4	317.1	-60.1	889

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37456.0	8.4	1.3	9.7	-16.64	-16.57	1006	712.1	318.4	-60.9	918
57.0	7.0	2.1	9.1	.67	.60	996	712.8	319.9	-61.5	907
58.0	4.6	3.2	7.8	.75	.67	973	713.3	321.3	-61.6	883
59.0	2.8	4.4	7.2	.78	.71	961	713.8	322.8	-61.5	869
60.0	1.4	5.6	7.0	.80	.72	957	714.0	324.2	-61.1	863
61.0	0.4	6.7	7.1	.79	.71	960	714.2	325.5	-60.3	862
62.0	-0.3	7.5	7.2	.78	.70	962	714.3	326.6	-59.2	861
63.0	-0.3	8.0	7.7	.75	.78	972	714.3	327.5	-57.9	867
64.0	-0.3	8.3	8.0	.73	.76	979	714.2	328.3	-56.3	870
65.0	0.3	8.5	8.8	.68	.72	994	714.0	328.8	-54.5	880
66.0	1.3	8.6	9.9	.63	.66	1013	713.7	329.1	-52.4	894
67.0	1.6	8.7	10.3	.61	.64	1019	713.4	329.2	-50.2	897
68.0	1.8	8.7	10.5	.60	.63	1022	713.1	329.1	-47.8	898
69.0	3.0	8.7	11.7	.54	.58	1040	712.9	328.8	-45.3	911
70.0	3.8	8.6	12.4	.52	.56	1049	712.6	328.4	-42.7	918
71.0	7.0	8.4	15.4	.42	.46	1086	712.4	327.8	-40.0	948
72.0	5.1	8.3	13.4	.48	.52	1062	712.2	327.2	-37.1	927
73.0	4.9	8.2	13.1	.49	.53	1059	712.1	326.4	-34.2	923
74.0	2.6	8.0	10.6	.58	.63	1025	712.1	325.5	-31.3	893
75.0	1.2	7.9	9.1	.65	.70	1001	712.2	324.6	-28.3	872
76.0	0.6	7.7	8.3	.70	.74	987	712.4	323.7	-25.3	860
77.0	-0.1	7.5	7.4	.75	.79	969	712.7	322.7	-22.3	844
78.0	-0.2	7.3	7.1	.77	.81	964	713.1	321.8	-19.3	839
79.0	-0.5	7.2	6.7	.80	.83	955	713.6	320.8	-16.3	832
80.0	-1.1	7.0	5.9	.86	.89	936	714.2	320.0	-13.3	816
81.0	-1.4	6.9	5.5	.90	.92	926	714.9	319.2	-10.3	807
82.0	-1.4	6.8	5.4	.91	.93	924	715.7	318.5	-7.4	805
83.0	-1.2	6.7	5.5	.90	.92	928	716.6	317.8	-4.6	808
84.0	-0.8	6.6	5.8	.87	.89	937	717.5	317.4	-1.8	816
85.0	-0.7	6.5	5.8	.87	.88	939	718.4	317.0	0.8	817
86.0	-0.3	6.4	6.1	.85	.85	948	719.4	316.9	3.3	824
87.0	0.1	6.3	6.4	.83	.83	957	720.3	316.9	5.7	830
88.0	0.4	6.3	6.7	.81	.80	965	721.3	317.2	8.0	836
89.0	0.2	6.2	6.4	.83	.82	959	722.2	317.6	10.0	829
90.0	0.3	6.2	6.5	.82	.81	963	723.1	318.3	11.9	830
91.0	0.5	6.1	6.6	.82	.80	967	723.9	319.1	13.5	831
92.0	2.4	6.1	8.5	.70	.67	1009	724.6	320.2	14.8	865
37493.0	2.6	6.1	8.7	-16.69	-16.66	1013	725.3	321.4	15.9	866
93.5	4.7	6.1	10.8	.59	.56	1050	725.6	322.0	16.3	895
94.0	7.0	6.0	13.0	.50	.47	1081	725.8	322.7	16.7	921
94.5	7.7	6.0	13.7	.48	.44	1091	726.1	323.4	17.0	927
95.0	11.1	6.0	17.1	.37	.34	1131	726.3	324.1	17.2	960
95.5	9.7	5.9	15.6	.42	.38	1115	726.5	324.9	17.3	945
96.0	6.8	5.9	12.7	.51	.47	1080	726.7	325.6	17.4	913
96.5	5.5	5.9	11.4	.56	.52	1062	726.8	326.3	17.3	897
97.0	4.9	5.8	10.7	.59	.55	1052	726.9	327.1	17.2	887
97.5	5.1	5.8	10.9	.58	.54	1056	727.0	327.7	17.0	889
98.0	8.0	5.7	13.7	.47	.43	1095	727.1	328.4	16.8	921
98.5	9.9	5.7	15.6	.41	.37	1118	727.2	329.1	16.5	939
99.0	12.0	5.6	17.6	.36	.32	1140	727.2	329.7	16.1	957
99.5	7.9	5.5	13.4	.48	.44	1092	727.2	330.2	15.6	916
37500.0	6.3	5.4	11.7	.54	.50	1070	727.2	330.8	15.1	896
00.5	5.9	5.4	11.3	.56	.52	1064	727.2	331.2	14.5	890
01.0	6.2	5.3	11.5	.55	.51	1067	727.2	331.7	13.8	892
37502.0	5.8	5.1	10.9	-16.57	-16.53	1059	727.2	332.4	12.3	884
03.0	5.6	4.9	10.5	.58	.55	1053	727.1	332.9	10.6	879
04.0	4.8	4.7	9.5	.63	.59	1037	727.0	333.2	8.7	866
05.0	6.1	4.5	10.6	.58	.64	1058	727.7	333.3	6.6	883

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37505.5	6.2	4.4	10.6	-16.58	-16.64	1058	727.7	333.2	5.5	884
06.0	2.8	4.2	7.0	.77	.83	990	727.6	333.2	4.4	827
06.5	3.4	4.1	7.5	.74	.80	1001	727.6	333.1	3.3	837
07.0	7.8	4.0	11.8	.52	.59	1077	727.5	332.9	2.1	901
07.5	15.7	3.9	19.6	.29	.36	1167	727.5	332.8	0.9	977
08.0	11.1	3.7	14.8	.42	.48	1116	727.5	332.5	-0.4	936
08.5	3.6	3.6	7.2	.75	.82	995	727.4	332.3	-1.6	835
09.0	2.3	3.5	5.8	.86	.92	960	727.4	332.0	-2.9	808
09.5	2.9	3.3	6.2	.82	.89	971	727.4	331.7	-4.2	818
10.0	2.4	3.2	5.6	.87	.94	955	727.4	331.4	-5.5	806
37511.0	2.2	3.0	5.2	-16.91	-16.97	944	727.5	330.6	-8.1	799
12.0	2.7	2.7	5.4	.89	.95	950	727.7	329.9	-10.8	807
13.0	2.8	2.5	5.3	.90	.96	948	727.9	329.0	-13.5	808
14.0	4.6	2.2	6.8	.78	.84	988	728.3	328.1	-16.3	846
15.0	5.1	2.0	7.1	.76	.82	995	728.8	327.3	-19.0	856
16.0	4.3	1.7	6.0	.84	.90	969	729.4	326.4	-21.7	837
17.0	3.8	1.4	5.2	.91	.96	947	730.1	325.6	-24.4	821
18.0	4.5	1.2	5.7	.87	.92	962	731.0	324.8	-27.1	838
19.0	5.7	0.8	6.5	.81	.85	984	731.9	324.1	-29.7	860
20.0	6.9	0.5	7.4	.75	.78	1007	732.9	323.5	-32.2	883
21.0	9.7	0.3	10.0	.61	.64	1058	734.0	323.0	-34.7	931
22.0	10.5	0.1	10.6	.58	.61	1069	735.2	322.7	-37.1	943
23.0	11.2	-0.1	11.1	.57	.58	1078	736.4	322.5	-39.3	953
24.0	9.5	-0.2	9.3	.65	.66	1049	737.6	322.5	-41.4	929
25.0	10.3	-0.2	10.1	.62	.62	1064	738.8	322.7	-43.4	944
26.0	11.0	-0.3	10.7	.59	.59	1075	740.0	323.1	-45.2	954
27.0	10.7	-0.2	10.5	.60	.60	1073	741.1	323.7	-46.8	952
28.0	10.3	-0.1	10.2	.62	.61	1069	742.2	324.6	-48.1	948
29.0	10.2	0.1	10.3	.62	.60	1072	743.2	325.6	-49.2	949
30.0	10.0	0.5	10.5	.61	.59	1076	744.1	326.8	-50.1	950
31.0	9.2	1.0	10.2	.62	.60	1073	744.9	328.2	-50.6	944
32.0	8.3	1.8	10.1	.63	.60	1072	745.6	329.7	-50.8	941
33.0	5.8	2.7	8.5	.71	.68	1043	746.2	331.3	-50.8	912
34.0	3.2	3.6	6.8	.82	.79	1006	746.6	332.9	-50.4	876
35.0	2.2	4.4	6.6	.83	.80	1002	746.9	334.5	-49.6	869
36.0	1.4	5.1	6.5	.84	.80	1000	747.1	335.9	-48.6	863
37.0	1.1	5.5	6.6	.83	.79	1003	747.1	337.3	-47.2	862
38.0	0.9	5.8	6.7	.82	.79	1006	747.1	338.4	-45.6	861
39.0	0.9	6.0	6.9	.81	.77	1011	747.0	339.4	-43.7	861
40.0	1.4	6.1	7.5	.76	.73	1026	746.7	340.2	-41.5	870
41.0	1.6	6.1	7.7	.75	.72	1030	746.4	340.7	-39.2	871
42.0	1.5	6.1	7.6	.75	.72	1028	746.0	341.0	-36.7	866
43.0	1.9	6.0	7.9	.73	.70	1035	745.6	341.2	-34.0	869
44.0	1.5	5.9	7.4	.76	.73	1024	745.1	341.1	-31.1	857
45.0	0.7	5.7	6.4	.83	.80	1000	744.7	340.9	-28.1	835
46.0	1.1	5.5	6.6	.81	.79	1005	744.2	340.6	-25.1	838
47.0	1.5	5.3	6.8	.79	.77	1010	743.8	340.1	-21.9	841
48.0	1.9	5.0	6.9	.79	.77	1013	743.4	339.5	-18.7	843
49.0	2.6	4.8	7.4	.75	.73	1024	743.1	338.8	-15.4	853
50.0	3.8	4.5	8.3	.69	.68	1044	742.8	338.1	-12.0	869
51.0	5.1	4.3	9.4	.63	.62	1065	742.7	337.3	-8.7	888
52.0	5.7	4.0	9.7	.62	.61	1070	742.6	336.5	-5.3	893
53.0	6.0	3.7	9.7	.62	.60	1070	742.6	335.7	-1.9	895
54.0	7.1	3.5	10.6	.58	.56	1086	742.7	334.9	1.4	910
55.0	7.5	3.3	10.8	.57	.55	1089	742.9	334.2	4.8	915
56.0	7.8	3.1	10.9	.57	.55	1091	743.2	333.5	8.1	918
57.0	7.5	2.9	10.4	.59	.57	1083	743.5	332.9	11.3	914
58.0	7.4	2.7	10.1	.60	.58	1079	743.9	332.4	14.5	912
59.0	7.1	2.5	9.6	.63	.61	1070	744.4	332.0	17.6	907

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37560.0	6.9	2.4	9.3	-16.65	-16.62	1065	745.0	331.8	20.6	904
61.0	6.3	2.4	8.7	.68	.65	1054	745.5	331.7	23.5	896
62.0	5.5	2.3	7.8	.73	.70	1036	746.1	331.8	26.2	882
63.0	4.6	2.4	7.0	.79	.80	1018	746.9	332.1	28.8	868
64.0	4.2	2.3	6.5	.82	.84	1007	747.6	332.6	31.2	858
65.0	4.2	2.4	6.6	.82	.83	1010	748.3	333.3	33.4	861
66.0	4.3	2.4	6.7	.81	.82	1013	749.0	334.2	35.4	863
67.0	4.2	2.5	6.7	.81	.82	1014	749.6	335.3	37.1	862
68.0	4.0	2.6	6.6	.82	.82	1012	750.2	336.6	38.5	860
69.0	4.1	2.8	6.8	.81	.80	1018	750.7	338.0	39.7	863
70.0	3.8	2.9	6.7	.81	.81	1016	751.1	339.5	40.5	859
37571.0	4.2	3.2	7.4	-16.77	-16.76	1034	751.4	341.1	41.0	872
71.5	4.5	3.3	7.8	.74	.73	1043	751.5	341.8	41.2	878
72.0	5.6	3.5	9.2	.66	.65	1072	751.6	342.6	41.3	901
72.5	7.0	3.6	10.6	.59	.59	1097	751.7	343.4	41.3	921
73.0	9.5	3.7	13.1	.50	.49	1135	751.8	344.1	41.2	952
73.5	11.9	3.8	15.7	.41	.40	1168	751.8	344.8	41.0	978
74.0	6.3	3.9	10.2	.61	.60	1091	751.9	345.5	40.8	912
74.5	5.5	4.0	9.5	.64	.63	1078	751.9	346.2	40.4	900
75.0	4.2	4.1	8.2	.71	.70	1053	751.9	346.8	40.1	878
75.5	4.2	4.2	8.4	.70	.69	1057	751.9	347.3	39.6	880
76.0	3.4	4.2	7.6	.75	.74	1040	751.8	347.9	39.1	864
76.5	4.5	4.3	8.8	.68	.67	1066	751.8	348.3	38.5	884
37577.0	5.0	4.4	9.4	-16.65	-16.64	1077	751.7	348.7	37.9	893
78.0	5.5	4.5	10.0	.62	.61	1088	751.6	349.4	36.4	899
79.0	6.3	4.6	10.9	.57	.57	1104	751.5	349.9	34.8	910
80.0	5.8	4.6	10.4	.59	.59	1096	751.3	350.1	33.0	901
81.0	6.3	4.5	10.8	.58	.57	1103	751.2	350.2	31.0	905
82.0	6.8	4.5	11.3	.55	.55	1111	751.0	350.1	28.9	910
83.0	7.1	4.4	11.5	.54	.54	1115	751.0	349.8	26.6	912
84.0	8.4	4.2	12.6	.50	.49	1132	751.0	349.4	24.3	925
85.0	8.9	4.1	13.1	.48	.48	1140	751.1	348.8	21.8	930
86.0	7.4	3.9	11.3	.55	.54	1114	751.2	348.2	19.3	909
87.0	6.2	3.8	10.0	.60	.59	1093	751.5	347.5	16.8	892
88.0	4.7	3.6	8.3	.69	.68	1062	751.9	346.7	14.2	866
89.0	4.7	3.4	8.1	.70	.69	1058	752.3	345.9	11.6	864
90.0	4.3	3.2	7.5	.74	.72	1046	752.9	345.0	9.0	855
91.0	5.0	3.0	8.0	.71	.69	1058	753.7	344.2	6.3	866
92.0	5.0	2.8	7.8	.72	.70	1055	754.5	343.4	3.7	865
93.0	4.8	2.6	7.4	.75	.72	1048	755.4	342.6	1.1	860
94.0	4.3	2.5	6.8	.79	.76	1035	756.4	341.9	-1.5	850
95.0	4.0	2.4	6.4	.82	.78	1026	757.5	341.3	-4.0	844
96.0	4.3	2.2	6.6	.81	.76	1032	758.6	340.8	-6.4	850
97.0	4.8	2.2	6.9	.79	.74	1042	759.8	340.4	-8.8	859
37597.5	5.0	2.1	7.1	-16.77	-16.72	1047	760.4	340.3	-9.9	864
98.0	5.2	2.1	7.3	.76	.70	1053	761.0	340.2	-11.0	868
98.5	5.2	2.0	7.3	.76	.70	1054	761.6	340.1	-12.1	869
99.0	5.5	2.0	7.5	.75	.69	1059	762.2	340.1	-13.2	874
99.5	6.0	2.0	8.0	.72	.65	1071	762.8	340.1	-14.2	884
37600.0	7.9	2.0	9.9	.62	.55	1110	763.4	340.2	-15.1	916
00.5	17.4	1.9	19.3	.31	.24	1238	763.9	340.4	-16.1	1021
01.0	18.1	1.9	20.0	.30	.23	1246	764.5	340.5	-17.0	1028
01.5	6.8	1.9	8.7	.68	.60	1090	765.0	340.8	-17.8	898
02.0	6.0	1.9	7.9	.73	.65	1073	765.6	341.1	-18.6	884
02.5	5.4	1.9	7.3	.77	.68	1060	766.0	341.4	-19.4	873
03.0	5.2	1.9	7.1	.78	.69	1056	766.5	341.8	-20.0	869
03.5	4.4	1.9	6.3	.84	.75	1037	767.0	342.3	-20.7	852

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37604.0	4.6	1.9	6.5	-16.82	-16.73	1043	767.4	342.8	-21.2	856
05.0	3.9	2.0	5.9	.87	.78	1028	768.1	343.9	-22.2	841
06.0	3.0	2.0	5.0	.95	.86	1001	768.7	345.2	-22.8	817
07.0	3.5	2.0	5.5	.90	.80	1018	769.2	346.7	-23.2	829
08.0	4.2	2.0	6.2	.84	.74	1039	769.5	348.2	-23.2	844
09.0	5.2	2.0	7.2	.77	.67	1066	769.6	349.7	-23.0	863
10.0	6.5	2.0	8.5	.69	.59	1095	769.6	351.3	-22.4	884
11.0	6.9	2.0	8.9	.67	.57	1104	769.4	352.7	-21.4	888
12.0	7.0	2.0	9.0	.66	.56	1106	769.1	354.0	-20.2	887
13.0	6.9	1.9	8.8	.67	.57	1101	768.7	355.2	-18.7	881
14.0	6.0	1.8	7.8	.72	.63	1080	768.1	356.1	-17.0	861
15.0	6.1	1.7	7.8	.72	.63	1079	767.4	356.9	-15.0	859
16.0	6.4	1.5	7.9	.71	.63	1080	766.6	357.4	-12.8	859
17.0	6.0	1.4	7.3	.75	.67	1066	765.8	357.7	-10.4	846
18.0	5.9	1.2	7.1	.76	.68	1060	764.9	357.8	-7.8	841
19.0	5.2	0.9	6.1	.83	.76	1033	763.9	357.7	-5.1	819
20.0	5.4	0.7	6.1	.83	.76	1032	763.0	357.4	-2.3	818
21.0	6.4	0.4	6.8	.78	.71	1049	762.1	357.0	0.7	833
22.0	7.8	0.2	7.9	.70	.65	1074	761.2	356.4	3.7	854
23.0	8.2	-0.1	8.1	.69	.64	1077	760.4	355.7	6.8	859
24.0	6.7	-0.4	6.3	.81	.76	1033	759.6	354.9	9.9	826
25.0	5.6	-0.7	5.0	.92	.88	993	759.0	354.0	13.1	796
26.0	6.0	-1.0	5.1	.91	.87	995	758.4	353.1	16.3	801
27.0	6.8	-1.2	5.6	.87	.83	1010	757.9	352.2	19.5	817
28.0	7.1	-1.5	5.6	.87	.83	1009	757.6	351.2	22.7	820
29.0	7.6	-1.6	6.0	.84	.80	1020	757.3	350.3	25.9	833
30.0	8.3	-1.8	6.5	.80	.82	1032	757.0	349.4	29.0	846
31.0	9.1	-1.9	7.2	.75	.77	1049	756.7	348.5	32.2	865
32.0	9.6	-2.0	7.7	.72	.74	1060	756.6	347.7	35.2	878
33.0	9.6	-1.8	7.7	.72	.74	1059	756.5	347.0	38.2	882
37633.5	9.8	-1.8	8.0	-16.70	-16.72	1065	756.6	346.7	39.7	890
34.0	10.5	-1.6	9.0	.65	.67	1086	756.6	346.4	41.1	909
34.5	11.3	-1.3	10.0	.60	.62	1104	756.7	346.2	42.5	927
35.0	15.2	-0.9	14.3	.44	.45	1169	756.8	346.0	43.9	984
35.5	18.9	-0.5	18.4	.32	.34	1218	756.9	345.8	45.2	1027
36.0	19.7	-0.4	19.2	.31	.32	1226	757.0	345.7	46.6	1036
36.5	13.1	-0.4	12.7	.49	.51	1147	757.1	345.6	47.9	971
37.0	10.0	-0.4	9.6	.63	.64	1096	757.2	345.5	49.1	930
37.5	8.3	-0.4	7.9	.72	.73	1061	757.4	345.5	50.3	902
38.0	7.9	-0.4	7.5	.75	.76	1052	757.6	345.6	51.5	896
38.5	8.1	-0.4	7.7	.73	.75	1057	757.7	345.7	52.6	901
37639.0	8.8	-0.4	8.5	-16.69	-16.70	1074	757.9	345.8	53.7	917
40.0	9.4	-0.4	9.0	.66	.67	1084	758.2	346.3	55.6	928
41.0	9.0	-0.3	8.6	.69	.69	1076	758.6	346.9	57.4	922
42.0	7.0	-0.3	6.8	.80	.81	1034	758.9	347.8	58.9	888
43.0	7.8	-0.2	7.6	.75	.75	1054	759.2	348.8	60.1	905
44.0	7.7	-0.1	7.6	.75	.75	1054	759.4	350.0	61.0	904
45.0	7.8	-0.1	7.7	.75	.75	1056	759.6	351.3	61.6	905
46.0	7.2	0.0	7.2	.78	.78	1044	759.7	352.6	61.9	894
47.0	6.8	0.0	6.9	.80	.80	1036	759.8	354.0	61.9	886
48.0	6.4	0.1	6.5	.83	.83	1026	759.8	355.3	61.6	874
49.0	5.7	0.2	5.9	.88	.88	1009	759.8	356.5	60.9	858
50.0	5.8	0.2	6.1	.86	.86	1015	759.7	357.6	59.9	859
51.0	5.1	0.3	5.4	.92	.92	994	759.5	358.5	58.7	839
52.0	4.8	0.3	5.1	.95	.95	984	759.4	359.2	57.2	827
53.0	4.5	0.5	5.1	.95	.95	984	759.2	359.7	55.4	824
54.0	3.5	0.9	4.4	-17.02	-17.03	958	759.0	0.0	53.4	799
55.0	3.2	1.5	4.7	-16.99	-16.99	970	758.9	0.1	51.3	806

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37656.0	3.5	3.5	6.8	-16.80	-16.81	1033	758.7	0.0	49.0	855
57.0	4.0	4.0	6.5	.82	.83	1026	758.6	359.8	46.5	846
58.0	4.2	4.2	6.4	.83	.84	1024	758.6	359.3	43.9	841
59.0	4.3	4.3	6.7	.81	.81	1032	758.6	358.7	41.1	845
60.0	4.3	4.3	7.1	.78	.78	1043	758.7	358.0	38.3	852
61.0	4.3	4.3	7.7	.74	.74	1058	758.9	357.2	35.4	862
62.0	4.2	4.2	8.3	.70	.70	1072	759.2	356.4	32.5	871
63.0	4.0	4.0	7.4	.75	.75	1054	759.6	355.4	29.4	854
64.0	3.8	3.8	6.0	.85	.85	1018	760.2	354.4	26.4	825
65.0	3.6	3.6	5.3	.91	.91	999	760.8	353.4	23.3	808
66.0	3.4	3.4	4.8	.96	.96	983	761.5	352.4	20.2	794
67.0	3.2	3.2	4.0	-17.05	-17.04	952	762.4	351.5	17.2	769
68.0	2.9	2.9	3.4	.14	.12	925	763.4	350.5	14.1	747
69.0	2.7	2.7	2.8	.24	.22	891	764.4	349.6	11.1	719
70.0	2.4	2.4	2.4	.32	.30	862	765.5	348.9	8.1	696
71.0	2.2	2.2	2.3	.35	.32	855	766.6	348.2	5.1	691
72.0	2.0	2.0	3.4	.14	.10	931	767.8	347.6	2.3	752
73.0	1.8	1.8	3.1	.19	.15	915	769.0	347.2	-0.5	740
74.0	1.6	1.6	3.6	.11	.07	944	770.2	347.0	-3.1	763
75.0	1.5	1.5	3.6	.11	.06	946	771.3	347.0	-5.7	764
76.0	1.3	1.3	3.6	.11	.06	947	772.4	347.1	-8.0	765
77.0	1.2	1.2	3.3	.16	.10	933	773.4	347.5	-10.2	753
78.0	1.0	1.0	3.5	.13	.06	945	774.2	348.1	-12.2	762
79.0	2.4	1.0	3.4	.15	.08	940	774.7	348.9	-14.0	757
80.0	2.7	1.0	3.6	.12	.04	952	775.4	349.9	-15.5	766
81.0	2.6	1.0	3.6	.12	.04	953	776.0	351.1	-16.7	765
82.0	2.9	0.9	3.9	.07	.00	968	776.4	352.4	-17.6	776
83.0	2.8	0.9	3.8	.09	.01	964	776.7	353.8	-18.2	771
84.0	3.4	0.9	4.2	.04	-16.96	983	776.9	355.3	-18.6	785
85.0	3.4	0.8	4.2	.03	.95	983	776.9	356.8	-18.5	783
86.0	3.6	0.8	4.5	.00	.92	996	776.8	358.2	-18.2	791
87.0	3.7	0.8	4.6	-16.99	.91	999	776.5	359.5	-17.6	793
88.0	4.0	0.7	4.8	.96	.89	1007	776.1	0.7	-16.7	797
89.0	4.2	0.7	4.9	.95	.88	1010	775.5	1.6	-15.5	798
90.0	4.6	0.6	5.2	.92	.85	1020	774.9	2.4	-14.1	804
91.0	5.4	0.5	6.0	.85	.78	1045	774.1	2.9	-12.4	823
92.0	6.2	0.4	6.6	.80	.73	1061	773.3	3.3	-10.6	835
93.0	6.0	0.3	6.3	.82	.76	1052	772.4	3.4	-8.6	827
94.0	5.8	0.2	6.0	.84	.79	1042	771.4	3.4	-6.4	819
95.0	5.6	0.0	5.6	.88	.83	1028	770.5	3.1	-4.1	808
96.0	5.7	-0.1	5.6	.88	.83	1027	769.5	2.7	-1.7	808
97.0	5.4	-0.3	5.1	.92	.88	1009	768.6	2.2	0.7	795
98.0	5.5	-0.5	5.0	.93	.89	1005	767.7	1.6	3.3	792
99.0	6.6	-0.7	5.9	.85	.81	1033	766.8	0.8	5.9	816
37700.0	7.9	-0.9	7.0	.76	.73	1062	766.1	0.0	8.6	841
01.0	7.5	-1.1	6.4	.81	.78	1045	765.4	359.2	11.2	830
02.0	6.9	-1.3	5.6	.87	.85	1020	764.8	358.3	13.9	813
03.0	7.3	-1.5	5.8	.86	.83	1025	764.3	357.4	16.6	819
04.0	6.7	-1.7	5.0	.93	.91	999	764.0	356.5	19.3	801
05.0	6.4	-1.9	4.5	.98	.96	980	763.7	355.7	22.0	789
06.0	7.5	-2.0	5.5	.88	.87	1014	763.5	354.9	24.6	819
07.0	7.5	-2.2	5.3	.90	.89	1007	763.4	354.1	27.1	817
08.0	8.0	-2.2	5.8	.86	.84	1022	763.4	353.5	29.7	832
09.0	8.7	-2.2	6.5	.81	.79	1041	763.5	353.0	32.1	851
10.0	8.5	-2.1	6.3	.82	.81	1035	763.7	352.6	34.4	849
11.0	9.1	-2.0	7.1	.77	.75	1056	763.9	352.4	36.6	869
12.0	9.6	-1.9	7.8	.72	.70	1073	764.1	352.3	38.7	885
13.0	9.1	-1.6	7.5	.74	.72	1066	764.4	352.5	40.6	881
14.0	8.5	-1.3	7.2	.76	.74	1058	764.6	352.8	42.3	876
15.0	8.0	-0.9	7.1	.77	.75	1056	764.9	353.3	43.9	875

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37716.0	8.0	-0.6	7.4	-16.75	-16.73	1063	765.1	354.1	45.2	882
17.0	7.6	-0.3	7.3	.76	.73	1061	765.3	355.1	46.3	880
18.0	10.2	-0.1	10.1	.61	.58	1119	765.4	356.2	47.1	928
19.0	8.1	0.0	8.1	.71	.68	1079	765.5	357.5	47.6	894
20.0	9.2	0.0	9.2	.65	.62	1102	765.6	359.0	47.9	911
21.0	9.3	0.0	9.3	.65	.62	1104	765.5	0.5	47.8	910
22.0	10.6	0.1	10.7	.58	.55	1129	765.4	2.0	47.4	928
23.0	9.8	0.1	9.8	.62	.59	1113	765.3	3.5	46.6	912
24.0	10.2	0.0	10.2	.60	.58	1120	765.1	5.0	45.6	915
25.0	7.7	0.1	7.8	.73	.71	1072	764.8	6.2	44.2	872
26.0	7.7	0.4	8.1	.71	.69	1078	764.5	7.4	42.6	874
27.0	7.0	0.7	7.7	.73	.71	1069	764.2	8.3	40.7	863
28.0	6.7	0.9	7.6	.74	.72	1066	763.9	9.1	38.6	858
29.0	6.2	1.0	7.2	.76	.75	1057	763.6	9.6	36.2	847
30.0	5.8	1.1	6.9	.78	.77	1050	763.3	9.9	33.7	838
31.0	4.6	1.2	5.8	.87	.85	1020	763.7	10.1	31.0	811
32.0	4.7	1.1	5.9	.86	.84	1024	763.4	10.0	28.1	811
33.0	3.1	1.0	4.1	-17.03	-17.02	961	763.1	9.8	25.2	759
34.0	4.9	0.9	5.8	-16.86	-16.85	1021	762.8	9.4	22.1	805
35.0	5.3	0.7	6.0	.84	.83	1027	762.5	9.0	18.9	808
36.0	5.4	0.5	5.9	.85	.84	1024	762.3	8.4	15.7	805
37.0	5.0	0.3	5.3	.90	.89	1006	762.2	7.7	12.3	790
38.0	6.3	0.0	6.3	.81	.80	1036	762.1	6.9	9.0	813
39.0	6.9	-0.2	6.6	.79	.78	1045	762.2	6.2	5.6	820
40.0	6.3	-0.5	5.7	.86	.85	1020	762.3	5.4	2.2	800
41.0	6.9	-0.8	6.1	.83	.81	1032	762.5	4.6	-1.2	811
42.0	9.4	-1.1	8.3	.68	.66	1087	762.9	3.8	-4.6	855
43.0	12.4	-1.4	11.0	.55	.53	1138	763.3	3.0	-8.0	897
44.0	13.5	-1.7	11.8	.51	.50	1152	763.8	2.3	-11.3	910
45.0	13.0	-2.0	11.1	.54	.52	1141	764.4	1.7	-14.6	904
46.0	12.7	-2.2	10.5	.57	.55	1132	765.0	1.2	-17.8	899
47.0	13.3	-2.4	10.9	.55	.53	1140	765.7	0.8	-20.9	908
48.0	13.9	-2.6	11.3	.54	.51	1147	766.4	0.6	-24.0	917
49.0	13.7	-2.7	11.0	.55	.52	1143	767.1	0.5	-26.9	916
50.0	12.5	-2.8	9.7	.61	.57	1121	767.8	0.6	-29.7	901
51.0	12.5	-2.8	9.7	.61	.57	1122	768.5	1.0	-32.3	904
52.0	12.1	-2.8	9.3	.64	.59	1115	769.2	1.5	-34.7	901
53.0	11.9	-2.7	9.2	.64	.59	1114	769.7	2.2	-37.0	901
54.0	11.1	-2.6	8.5	.68	.63	1100	770.2	3.2	-39.0	891
55.0	9.3	-2.4	7.0	.78	.72	1065	770.6	4.3	-40.7	864
56.0	9.4	-2.1	7.3	.76	.70	1073	770.9	5.6	-42.1	871
57.0	9.3	-1.7	7.6	.74	.68	1081	771.1	7.1	-43.3	877
58.0	8.6	-1.4	7.2	.76	.71	1071	771.1	8.7	-44.1	869
59.0	7.2	-1.1	6.2	.84	.78	1043	771.0	10.3	-44.6	846
60.0	6.9	-0.7	6.2	.84	.78	1043	770.8	11.9	-44.8	844
61.0	7.6	-0.5	7.1	.77	.72	1067	770.4	13.5	-44.7	862
62.0	7.7	-0.4	7.2	.76	.71	1068	769.9	14.9	-44.2	862
63.0	7.4	-0.4	7.0	.78	.73	1062	769.3	16.2	-43.5	855
64.0	7.0	-0.4	6.6	.81	.76	1051	768.6	17.3	-42.5	844
65.0	7.2	-0.4	6.9	.78	.74	1057	767.8	18.2	-41.2	847
66.0	7.6	-0.3	7.3	.75	.72	1066	766.9	18.9	-39.7	852
67.0	7.7	-0.2	7.5	.74	.71	1070	766.0	19.4	-38.0	852
68.0	8.5	-0.1	8.4	.68	.66	1089	765.0	19.6	-36.1	865
69.0	9.6	0.0	9.6	.62	.60	1111	764.0	19.7	-34.0	880
70.0	11.6	0.0	11.6	.53	.51	1144	763.0	19.6	-31.8	904
71.0	13.7	0.1	13.7	.45	.44	1174	762.1	19.3	-29.5	925
72.0	13.9	0.1	13.9	.44	.44	1176	761.1	18.8	-27.1	923
73.0	13.2	0.0	13.2	.46	.46	1165	760.3	18.3	-24.6	913
74.0	13.0	-0.1	12.9	.47	.48	1160	759.5	17.7	-22.1	907
75.0	13.3	-0.2	13.1	.46	.47	1162	758.8	16.9	-19.5	907

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37776.0	14.9	-0.3	14.6	-16.41	-16.42	1182	758.2	16.1	-16.8	921
77.0	15.9	-0.5	15.4	.39	.40	1191	757.7	15.3	-14.2	928
78.0	13.9	-0.7	13.2	.46	.47	1161	757.3	14.5	-11.5	904
79.0	10.7	-0.9	9.8	.59	.61	1107	757.0	13.7	-8.8	861
80.0	10.1	-1.1	9.0	.63	.65	1092	756.8	12.9	-6.2	849
81.0	9.9	-1.3	8.6	.66	.62	1083	756.5	12.1	-3.5	842
82.0	9.2	-1.5	7.7	.71	.68	1063	756.5	11.4	-0.9	827
83.0	8.9	-1.7	7.1	.75	.72	1049	756.5	10.8	1.6	817
84.0	8.6	-1.9	6.7	.78	.74	1039	756.6	10.3	4.1	810
85.0	7.9	-2.1	5.8	.85	.81	1015	756.7	10.0	6.4	791
86.0	8.1	-2.3	5.7	.86	.82	1012	756.9	9.7	8.7	790
87.0	8.0	-2.6	5.5	.88	.84	1006	757.1	9.7	10.8	786
88.0	8.0	-2.7	5.2	.90	.87	997	757.4	9.8	12.8	779
89.0	8.1	-2.9	5.2	.90	.87	997	757.6	10.2	14.7	780
90.0	8.4	-3.0	5.4	.89	.85	1004	757.9	10.7	16.3	785
91.0	8.5	-3.1	5.4	.89	.85	1004	758.1	11.4	17.7	786
92.0	8.3	-3.1	5.2	.91	.86	998	758.2	12.4	18.9	781
93.0	7.8	-3.2	4.6	.97	.93	976	758.3	13.5	19.8	764
94.0	8.3	-3.2	5.1	.91	.87	994	758.3	14.8	20.4	777
95.0	8.6	-3.2	5.4	.89	.84	1004	758.2	16.2	20.8	784
96.0	9.1	-3.3	5.8	.85	.81	1016	758.0	17.7	20.8	793
97.0	9.2	-3.3	6.0	.83	.79	1021	757.7	19.2	20.5	796
98.0	9.8	-3.3	6.5	.79	.76	1034	757.4	20.7	20.0	805
99.0	10.3	-3.3	7.0	.76	.72	1046	756.9	22.1	19.1	813
37800.0	11.0	-3.3	7.7	.71	.68	1062	756.4	23.4	17.9	824
01.0	10.5	-3.4	7.2	.74	.71	1050	755.8	24.4	16.4	813
02.0	10.6	-3.4	7.2	.74	.72	1049	755.1	25.3	14.7	812
03.0	10.8	-3.4	7.4	.73	.71	1053	754.4	26.0	12.7	813
04.0	10.9	-3.5	7.4	.73	.71	1052	753.6	26.5	10.5	812
05.0	10.9	-3.6	7.3	.73	.72	1048	752.9	26.8	8.2	808
06.0	10.9	-3.7	7.2	.74	.73	1045	752.1	26.8	5.7	805
07.0	11.1	-3.8	7.2	.74	.73	1044	751.3	26.7	3.0	804
08.0	11.2	-4.0	7.2	.74	.73	1043	750.6	26.4	0.2	803
09.0	10.7	-4.2	6.6	.78	.78	1027	749.9	25.9	-2.7	791
10.0	10.2	-4.3	5.8	.84	.84	1005	749.3	25.4	-5.6	775
11.0	11.0	-4.5	6.4	.79	.80	1020	748.8	24.7	-8.6	788
12.0	12.1	-4.7	7.4	.72	.73	1044	748.3	23.9	-11.7	807
13.0	12.3	-5.0	7.4	.72	.73	1044	748.0	23.0	-14.8	809
14.0	12.5	-5.2	7.2	.73	.74	1038	747.8	22.1	-18.0	807
15.0	12.6	-5.4	7.2	.73	.75	1038	747.6	21.2	-21.1	809
16.0	12.7	-5.6	7.1	.74	.75	1035	747.6	20.3	-24.3	810
17.0	12.6	-5.9	6.8	.76	.78	1028	747.7	19.4	-27.4	807
18.0	12.7	-6.1	6.6	.78	.79	1023	747.8	18.5	-30.5	806
19.0	12.7	-6.2	6.5	.79	.80	1020	748.1	17.7	-33.6	808
20.0	12.8	-6.4	6.4	.80	.81	1017	748.4	17.0	-36.6	810
21.0	12.7	-6.5	6.1	.82	.83	1009	748.8	16.3	-39.5	808
22.0	12.6	-6.6	6.1	.83	.83	1009	749.3	15.8	-42.4	812
23.0	12.8	-6.6	6.2	.82	.82	1012	749.7	15.4	-45.1	818
24.0	13.0	-6.5	6.5	.80	.80	1020	750.2	15.2	-47.8	828
25.0	13.0	-6.4	6.6	.79	.79	1023	750.6	15.2	-50.2	834
26.0	13.1	-6.1	7.0	.77	.76	1033	751.0	15.3	-52.5	846
27.0	12.6	-5.8	6.9	.78	.77	1030	751.3	15.7	-54.7	847
28.0	11.9	-5.1	6.8	.78	.78	1028	751.6	16.3	-56.6	848
29.0	10.5	-4.1	6.4	.81	.81	1017	751.7	17.1	-58.2	842
30.0	9.1	-2.2	6.9	.78	.77	1029	751.7	18.1	-59.6	854
31.0	7.9	-0.2	7.7	.73	.67	1047	751.3	19.2	-60.8	871
32.0	6.8	-0.3	6.5	.81	.75	1018	751.2	20.6	-61.6	847
33.0	6.8	-0.2	6.6	.80	.75	1020	751.0	22.0	-62.1	849
34.0	6.8	-0.1	6.7	.80	.74	1022	750.7	23.5	-62.2	850
35.0	6.6	-0.1	6.6	.80	.75	1018	750.3	24.9	-62.1	847

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37836.0	6.9	0.0	6.9	-16.78	-16.73	1025	749.7	26.4	-61.6	851
37.0	6.6	0.1	6.7	.80	.75	1019	749.1	27.7	-60.8	844
38.0	6.4	0.1	6.5	.81	.77	1013	748.4	28.8	-59.7	837
39.0	6.2	0.2	6.4	.82	.78	1009	747.6	29.8	-58.3	831
40.0	6.2	0.3	6.4	.82	.78	1008	746.7	30.6	-56.6	828
41.0	6.0	0.3	6.3	.82	.79	1004	745.8	31.2	-54.7	821
42.0	6.0	0.4	6.4	.81	.79	1006	744.8	31.5	-52.6	819
43.0	6.1	0.4	6.5	.80	.78	1007	743.8	31.7	-50.3	816
44.0	6.2	0.4	6.6	.79	.78	1009	742.8	31.6	-47.9	814
45.0	5.4	0.4	5.8	.85	.84	986	741.8	31.4	-45.3	792
46.0	4.7	0.5	5.2	.91	.90	967	740.8	31.0	-42.6	773
47.0	4.9	0.5	5.4	.88	.89	973	739.9	30.4	-39.7	774
48.0	5.1	0.5	5.5	.87	.88	975	739.0	29.8	-36.8	772
49.0	5.3	-0.1	5.2	.90	.91	965	738.2	29.0	-33.8	761
50.0	5.9	-0.3	5.5	.87	.88	974	737.4	28.2	-30.8	765
51.0	6.1	-0.5	5.7	.85	.86	980	736.8	27.3	-27.7	767
52.0	6.4	-0.6	5.9	.83	.85	985	736.2	26.4	-24.6	768
53.0	6.5	-0.8	5.7	.84	.87	979	735.8	25.5	-21.5	762
54.0	6.6	-1.0	5.5	.86	.88	973	735.5	24.6	-18.4	755
55.0	6.8	-1.3	5.4	.87	.89	970	735.2	23.7	-15.3	752
56.0	6.8	-1.6	5.2	.89	.91	964	735.1	22.8	-12.2	746
57.0	6.9	-1.9	5.1	.90	.92	961	735.1	22.0	-9.1	743
58.0	7.3	-2.2	5.1	.90	.92	961	735.1	21.4	-6.2	742
59.0	7.5	-2.6	5.0	.91	.93	958	735.2	20.8	-3.2	740
60.0	7.7	-2.9	4.8	.93	.95	951	735.3	20.4	-0.4	735
61.0	8.0	-3.2	4.8	.93	.95	951	735.5	20.1	2.3	735
62.0	8.2	-3.4	4.7	.94	.96	948	735.7	20.0	4.9	733
63.0	8.5	-3.7	4.8	.93	.95	952	735.9	20.1	7.4	736
64.0	8.7	-3.9	4.7	.94	.96	948	736.1	20.3	9.7	734
65.0	8.9	-4.2	4.8	.93	.95	952	736.2	20.8	11.8	737
66.0	9.0	-4.4	4.6	.95	.97	945	736.3	21.6	13.7	732
67.0	9.4	-4.6	4.8	.93	.95	952	736.3	22.5	15.4	738
68.0	9.6	-4.7	4.9	.92	.94	955	736.2	23.6	16.8	740
69.0	9.8	-4.8	4.9	.92	.94	955	736.1	24.9	17.9	740
70.0	10.0	-5.0	5.1	.90	.92	961	735.8	26.3	18.7	745
71.0	10.1	-5.0	5.0	.91	.93	957	735.5	27.7	19.2	742
72.0	10.0	-5.1	4.9	.92	.95	953	735.1	29.2	19.4	739
73.0	9.7	-5.2	4.5	.96	.99	938	734.5	30.7	19.3	728
74.0	9.5	-5.2	4.4	.97	-17.00	933	733.9	32.1	18.8	724
75.0	9.4	-5.2	4.3	.98	.02	929	733.2	33.4	18.1	719
76.0	8.9	-5.2	3.7	-17.06	.10	902	732.5	34.5	17.1	698
77.0	9.5	-5.2	4.3	-16.98	.02	926	731.7	35.4	15.9	717
78.0	9.7	-5.2	4.5	.96	.01	933	730.8	36.1	14.4	721
79.0	9.7	-5.2	4.5	.96	.01	932	730.0	36.6	12.7	719
80.0	9.6	-5.2	4.4	.97	.02	927	729.1	36.9	10.8	715
81.0	9.9	-5.2	4.7	.93	-16.89	936	728.6	37.0	8.7	721
82.0	9.8	-5.3	4.5	.96	.92	928	727.8	36.9	6.5	715
83.0	10.1	-5.3	4.8	.92	.89	937	727.0	36.6	4.2	722
84.0	10.3	-5.4	4.9	.91	.88	940	726.3	36.2	1.8	723
85.0	10.5	-5.5	5.1	.89	.86	945	725.6	35.7	-0.7	727
86.0	10.7	-5.6	5.2	.88	.85	948	725.0	35.0	-3.3	729
87.0	10.8	-5.7	5.1	.89	.87	944	724.5	34.3	-5.9	727
88.0	10.2	-5.9	4.4	.96	.94	919	724.0	33.5	-8.6	708
89.0	10.4	-6.0	4.4	.96	.94	919	723.7	32.7	-11.3	709
90.0	11.4	-6.2	5.2	.88	.86	945	723.5	31.9	-14.0	730
91.0	12.7	-6.3	6.4	.78	.76	979	723.4	31.0	-16.7	758
92.0	13.7	-6.5	7.2	.72	.71	998	723.4	30.2	-19.4	774
93.0	15.2	-6.7	8.6	.64	.62	1026	723.4	29.4	-22.1	798
94.0	15.2	-6.9	8.3	.66	.64	1021	723.6	28.7	-24.7	796
95.0	14.2	-7.0	7.2	.73	.71	998	723.9	28.1	-27.3	780

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	$\bar{T}_\pi$ (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37896.0	14.1	-7.2	6.9	-16.75	-16.73	991	724.2	27.6	-29.8	777
97.0	13.5	-7.3	6.2	.80	.78	973	724.5	27.1	-32.2	766
98.0	14.3	-7.4	6.9	.75	.73	991	724.9	26.9	-34.5	783
99.0	14.5	-7.5	7.0	.75	.72	993	725.3	26.8	-36.7	787
37900.0	14.7	-7.6	7.1	.74	.71	996	725.6	26.9	-38.8	792
01.0	14.6	-7.6	6.9	.76	.72	991	726.0	27.2	-40.7	790
02.0	14.0	-7.7	6.3	.80	.77	976	726.2	27.7	-42.4	781
03.0	13.4	-7.6	5.8	.84	.81	963	726.4	28.4	-43.8	771
04.0	12.7	-7.5	5.2	.90	.86	945	726.5	29.4	-45.1	758
05.0	12.9	-7.3	5.6	.86	.83	957	726.5	30.5	-46.1	769
06.0	14.0	-7.2	6.8	.77	.73	988	726.4	31.9	-46.8	796
07.0	14.7	-6.9	7.7	.71	.67	1008	726.1	33.3	-47.2	812
08.0	14.7	-6.6	8.1	.68	.65	1016	725.7	34.9	-47.3	818
09.0	14.7	-6.2	8.5	.66	.63	1022	725.2	36.6	-47.0	824
10.0	14.5	-5.8	8.7	.65	.63	1025	724.5	38.2	-46.4	825
11.0	14.3	-5.4	8.9	.64	.62	1027	723.7	39.7	-45.5	826
12.0	14.2	-4.9	9.3	.62	.60	1033	722.7	41.2	-44.3	829
13.0	14.0	-4.5	9.6	.60	.59	1037	721.7	42.5	-42.8	830
14.0	13.8	-4.0	9.8	.59	.59	1038	720.5	43.6	-41.0	829
15.0	13.5	-3.7	9.8	.59	.59	1036	719.2	44.5	-39.0	825
16.0	13.5	-3.4	10.1	.57	.47	1041	718.2	45.0	-36.7	826
17.0	13.5	-3.4	10.1	.57	.47	1039	717.0	45.5	-34.3	822
37918.0	13.0	-3.5	9.5	-16.60	-16.51	1027	715.6	45.8	-31.6	810
18.5	14.2	-3.5	10.7	.54	.46	1046	714.9	45.8	-30.2	823
19.0	15.1	-3.6	11.5	.51	.43	1056	714.2	45.8	-28.8	830
19.5	16.4	-3.7	12.7	.46	.38	1072	713.6	45.8	-27.3	841
20.0	16.5	-3.8	12.7	.46	.39	1071	712.9	45.7	-25.8	839
20.5	16.1	-3.9	12.2	.48	.41	1063	712.2	45.6	-24.3	831
21.0	15.4	-4.0	11.5	.50	.44	1052	711.5	45.4	-22.8	821
21.5	15.6	-4.1	11.5	.50	.44	1051	710.8	45.3	-21.2	819
37922.0	15.8	-4.2	11.6	-16.50	-16.44	1052	710.2	45.0	-19.6	818
23.0	15.4	-4.4	11.0	.52	.47	1041	708.9	44.5	-16.4	808
24.0	15.6	-4.7	10.9	.52	.48	1038	707.7	43.9	-13.1	803
25.0	15.6	-4.9	10.7	.53	.49	1033	706.6	43.2	-9.7	798
26.0	16.1	-5.2	11.0	.52	.48	1036	705.5	42.4	-6.3	799
27.0	16.4	-5.4	11.0	.51	.49	1034	704.6	41.6	-2.9	797
28.0	16.7	-5.2	11.5	.49	.47	1040	703.7	40.8	0.5	801
29.0	16.9	-6.0	10.9	.52	.50	1029	703.0	40.0	3.9	793
30.0	17.0	-6.2	10.8	.52	.51	1027	702.3	39.2	7.3	791
31.0	17.3	-6.5	10.9	.52	.51	1027	701.8	38.5	10.6	792
32.0	17.6	-6.8	10.8	.52	.52	1024	701.3	37.9	13.9	792
33.0	18.3	-7.0	11.2	.51	.50	1029	700.9	37.3	17.2	797
34.0	18.5	-7.3	11.2	.51	.51	1028	700.6	36.9	20.3	798
37935.0	19.3	-7.6	11.7	-16.49	-16.49	1034	700.3	36.6	23.4	805
35.5	19.6	-7.7	11.9	.48	.48	1036	700.2	36.5	24.9	808
36.0	20.0	-7.8	12.2	.47	.47	1040	700.1	36.4	26.3	812
36.5	20.6	-7.9	12.7	.45	.45	1046	700.0	36.4	27.8	818
37.0	21.5	-8.0	13.4	.43	.43	1054	699.9	36.4	29.2	826
37.5	22.9	-8.1	14.8	.39	.39	1070	699.8	36.5	30.5	840
38.0	25.3	-8.2	17.1	.32	.32	1094	699.7	36.6	31.8	861
38.5	23.8	-8.3	15.5	.37	.37	1077	699.6	36.8	33.1	848
39.0	21.7	-8.4	13.4	.43	.44	1053	699.4	37.0	34.3	831
39.5	21.0	-8.4	12.6	.46	.47	1042	699.3	37.3	35.5	824
40.0	20.3	-8.5	11.8	.49	.50	1031	699.2	37.6	36.6	816
37941.0	20.1	-8.5	11.6	-16.50	-16.51	1027	698.9	38.5	38.7	816
42.0	19.7	-8.6	11.1	.52	.53	1019	698.5	39.5	40.5	812

Table [illegible].--Continued

SATELLITE [illegible]

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_N$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
37943.0	19.7	-8.6	11.2	-16.52	-16.53	1020	698.1	40.7	42.0	815
44.0	19.9	-8.5	11.4	.51	.52	1021	697.6	42.1	43.3	818
37944.5	20.2	-8.5	11.8	-16.49	-16.51	1026	697.4	42.8	43.8	823
45.0	20.5	-8.4	12.1	.48	.50	1030	697.1	43.6	44.2	827
45.5	21.4	-8.3	13.1	.45	.47	1042	696.7	44.3	44.6	837
46.0	23.5	-8.2	15.4	.37	.39	1068	696.4	45.1	44.8	859
46.5	24.1	-8.0	16.1	.35	.38	1075	696.0	45.9	45.0	865
47.0	20.9	-7.9	13.0	.45	.48	1039	695.7	46.7	45.1	836
47.5	21.0	-7.8	13.2	.44	.47	1040	695.3	47.4	45.2	838
48.0	21.0	-7.6	13.4	.44	.47	1042	694.8	48.2	45.1	840
37949.0	21.2	-7.1	14.0	-16.42	-16.45	1048	694.0	49.6	44.8	844
50.0	21.1	-6.6	14.5	.40	.44	1052	693.0	50.9	44.1	847
51.0	21.0	-5.9	15.1	.38	.43	1056	692.0	52.0	43.2	851
52.0	20.5	-5.2	15.3	.37	.42	1057	691.0	52.9	42.1	850
53.0	19.6	-4.4	15.3	.37	.43	1055	689.9	53.6	40.6	847
54.0	18.4	-3.4	15.1	.38	.44	1051	688.9	54.1	39.0	842
55.0	17.8	-2.3	15.5	.36	.43	1054	687.8	54.4	37.2	842
56.0	17.5	-1.1	16.3	.34	.41	1061	686.8	54.4	35.2	845
57.0	16.9	0.0	16.9	.32	.40	1065	685.9	54.3	33.1	847
58.0	16.3	0.0	16.2	.34	.42	1057	685.0	54.0	30.8	838
59.0	16.2	-0.7	16.2	.34	.43	1056	684.3	53.6	28.5	834
60.0	16.4	-1.5	16.4	.33	.42	1058	683.6	53.1	26.0	832
61.0	19.2	-2.3	16.9	.31	.23	1063	683.7	52.4	23.5	834
37962.0	20.8	-3.0	17.9	-16.29	-16.21	1072	683.1	51.7	20.9	839
62.5	23.3	-3.2	20.1	.24	.16	1091	682.8	51.3	19.6	853
63.0	23.6	-3.5	20.1	.24	.16	1091	682.6	50.8	18.2	851
63.5	24.0	-3.7	20.2	.23	.16	1092	682.4	50.4	16.9	851
64.0	24.5	-3.9	20.6	.22	.15	1095	682.3	50.0	15.6	852
64.5	24.1	-4.1	19.9	.24	.17	1089	682.1	49.6	14.2	846
65.0	23.3	-4.3	19.0	.26	.19	1081	682.0	49.1	12.9	839
65.5	21.8	-4.5	17.3	.30	.23	1065	681.9	48.7	11.5	826
37966.0	20.6	-4.7	16.0	-16.33	-16.26	1052	681.9	48.2	10.2	815
67.0	20.1	-5.0	15.1	.36	.29	1042	681.9	47.4	7.5	806
68.0	20.1	-5.3	14.8	.37	.30	1039	681.9	46.6	4.8	803
69.0	19.7	-5.5	14.2	.39	.32	1033	682.1	45.8	2.2	797
70.0	20.2	-5.8	14.4	.38	.31	1035	682.3	45.2	-0.4	799
71.0	20.4	-6.1	14.3	.39	.31	1035	682.7	44.6	-2.9	798
72.0	20.7	-6.4	14.3	.39	.31	1035	683.0	44.2	-5.3	799
73.0	21.2	-6.6	14.6	.38	.30	1039	683.4	43.9	-7.6	802
74.0	21.4	-6.9	14.5	.38	.30	1038	683.7	43.7	-9.8	802
75.0	21.6	-7.1	14.5	.39	.30	1038	684.1	43.8	-11.9	803
76.0	21.7	-7.4	14.3	.39	.31	1036	684.4	44.1	-13.8	802
77.0	20.8	-7.6	13.2	.43	.34	1024	684.7	44.6	-15.5	794
78.0	20.7	-7.8	12.9	.44	.35	1020	684.8	45.3	-17.0	792
79.0	20.1	-8.0	12.2	.47	.38	1011	684.9	46.2	-18.3	786
80.0	20.5	-8.1	12.3	.46	.38	1012	684.9	47.3	-19.3	788
81.0	20.8	-8.3	12.6	.45	.37	1015	684.7	48.6	-20.0	791
82.0	21.5	-8.4	13.1	.44	.35	1021	684.4	50.0	-20.4	796
37982.5	22.3	-8.4	13.9	-16.41	-16.33	1030	684.1	50.7	-20.5	804
83.0	22.9	-8.5	14.4	.39	.31	1035	683.9	51.5	-20.5	808
83.5	23.5	-8.5	14.9	.38	.30	1040	683.6	52.2	-20.4	812
84.0	26.4	-8.6	17.9	.30	.22	1069	683.3	53.0	-20.3	835
84.5	27.5	-8.6	18.9	.27	.20	1077	682.9	53.7	-20.0	842
85.0	28.4	-8.6	19.8	.25	.18	1084	682.5	54.5	-19.7	848
85.5	24.7	-8.7	16.0	.35	.28	1048	682.0	55.2	-19.3	820

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
37986.0	23.4	-8.7	14.7	-16.38	-16.32	1033	681.5	55.9	-18.8	808
86.5	20.2	-8.7	11.5	.50	.43	994	681.0	56.5	-18.3	778
37987.0	19.0	-8.7	10.3	-16.55	-16.48	976	680.5	57.2	-17.7	764
88.0	19.5	-8.7	10.7	.53	.47	980	679.3	58.3	-16.2	767
37989.0	21.0	-8.7	12.3	-16.46	-16.41	999	677.9	59.2	-14.5	781
89.5	25.0	-8.7	16.3	.33	.29	1042	677.2	59.5	-13.5	815
90.0	27.7	-8.7	19.0	.27	.23	1066	676.5	59.9	-12.5	833
90.5	29.9	-8.7	21.2	.22	.18	1083	675.7	60.1	-11.4	847
91.0	25.7	-8.7	17.0	.31	.28	1045	675.0	60.3	-10.3	817
91.5	23.3	-8.7	14.6	.38	.36	1019	674.2	60.5	-9.1	796
37992.0	23.0	-8.7	14.3	-16.39	-16.37	1014	673.4	60.6	-7.9	792
93.0	22.9	-8.7	14.2	.39	.38	1010	671.8	60.6	-5.4	789
94.0	22.0	-8.8	13.2	.42	.42	996	670.1	60.4	-2.7	777
95.0	19.7	-8.8	10.9	.51	.52	964	668.4	60.1	0.1	752
96.0	20.7	-8.9	11.8	.47	.49	973	666.8	59.6	3.0	759
97.0	20.8	-8.9	11.9	.47	.50	972	665.2	58.9	6.0	758
98.0	22.0	-9.0	13.0	.42	.46	982	663.7	58.2	9.1	767
99.0	23.1	-9.1	14.0	.39	.44	991	662.2	57.3	12.2	774
38000.0	22.8	-9.2	13.6	.40	.46	984	660.8	56.4	15.3	769
01.0	23.3	-9.3	14.0	.39	.45	986	659.5	55.4	18.5	772
02.0	23.6	-9.5	14.1	.39	.46	984	658.4	54.4	21.7	772
03.0	25.4	-9.6	15.8	.34	.41	1000	657.3	53.4	24.8	786
04.0	26.0	-9.7	16.3	.32	.40	1002	656.3	52.4	28.0	790
05.0	23.9	-9.9	14.0	.39	.48	977	655.5	51.5	31.1	772
06.0	23.4	-10.0	13.4	.41	.51	968	654.8	50.6	34.2	768
07.0	24.0	-10.2	13.8	.40	.50	971	654.1	49.7	37.2	773
08.0	25.8	-10.3	15.5	.35	.45	987	653.5	49.0	40.1	789
09.0	26.5	-10.4	16.1	.33	.44	991	653.0	48.4	42.9	796
10.0	26.7	-10.5	16.2	.33	.44	991	652.6	47.9	45.7	800
11.0	26.7	-10.6	16.0	.34	.45	988	652.2	47.6	48.3	801
12.0	25.4	-10.7	14.8	.38	.49	975	651.8	47.5	50.7	794
13.0	24.5	-10.6	13.8	.41	.52	963	651.4	47.6	53.0	787
14.0	22.5	-10.6	11.9	.48	.59	940	650.9	47.9	55.1	772
38015.0	27.9	-10.6	12.3	-16.46	-16.58	944	650.5	48.4	56.9	778
15.5	24.8	-10.5	14.3	.39	.51	965	650.2	48.7	57.8	798
16.0	27.2	-10.5	16.8	.32	.44	990	650.0	49.1	58.6	819
16.5	30.5	-10.4	20.1	.24	.36	1017	649.7	49.5	59.3	843
17.0	29.8	-10.3	19.5	.25	.38	1012	649.4	50.0	59.9	840
17.5	25.5	-10.2	15.4	.36	.30	973	648.8	50.4	60.5	810
18.0	26.7	-10.0	16.7	.32	.27	985	648.5	51.0	61.0	820
38019.0	14.1	-9.7	14.1	-16.40	-16.35	959	648.0	52.2	61.7	800
20.0	22.1	-9.3	12.8	.44	.39	943	647.4	53.5	62.2	789
21.0	19.8	-8.8	11.0	.51	.47	920	646.8	54.9	62.3	771
22.0	18.2	-8.1	10.1	.55	.51	907	646.1	56.2	62.1	760
23.0	17.0	-7.1	9.9	.56	.53	903	645.3	57.5	61.5	756
24.0	15.4	-5.8	9.5	.58	.55	896	644.5	58.7	60.7	750
25.0	14.9	-3.9	11.0	.51	.48	916	643.6	59.7	59.5	765
26.0	10.9	-1.3	9.6	.57	.55	895	642.7	60.5	58.0	746
27.0	8.2	0.1	8.3	.64	.62	874	641.8	61.2	56.3	726
28.0	6.4	0.2	6.6	.74	.74	841	640.8	61.6	54.4	697
29.0	7.9	0.2	8.1	.64	.64	868	639.9	61.8	52.2	716
30.0	10.0	0.3	10.3	.53	.54	900	638.9	61.8	49.9	739
31.0	10.0	0.3	10.3	.53	.54	899	638.0	61.7	47.4	735
32.0	8.7	0.4	9.1	.58	.60	881	637.1	61.3	44.7	717
33.0	10.4	0.4	10.8	.50	.52	904	636.3	60.8	42.0	732

MJD	$-10^7 \dot{P}$	$10^7 \dot{P}_R$	$-10^7 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_B$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
38034.0	10.0	0.4	10.4	-16.52	-16.54	898	635.6	60.1	39.1	723
35.0	10.8	0.4	11.3	.47	.51	908	634.9	59.4	36.1	728
36.0	11.3	0.4	11.7	.46	.49	913	634.4	58.5	33.1	728
37.0	11.6	0.4	12.0	.44	.48	916	633.9	57.6	30.0	727
38.0	12.1	0.4	12.5	.42	.47	921	633.6	56.6	26.8	728
39.0	10.0	0.2	10.2	.52	.56	893	633.4	55.6	23.6	702
40.0	11.7	-1.1	10.6	.50	.54	898	633.3	54.6	20.4	704
41.0	13.7	-2.4	11.3	.47	.51	907	633.3	53.6	17.3	709
38041.5	13.9	-3.0	10.9	-16.48	-16.53	902	633.4	53.1	15.7	704
42.0	19.6	-3.5	16.1	.31	.35	958	633.4	52.7	14.1	746
42.5	20.8	-4.0	16.8	.29	.33	964	633.5	52.2	12.5	750
43.0	22.3	-4.4	17.8	.26	.30	973	633.7	51.8	10.9	756
43.5	20.7	-4.8	15.9	.31	.35	957	633.8	51.3	9.4	743
44.0	20.7	-5.1	15.6	.32	.36	954	634.0	50.9	7.8	740
44.5	21.0	-5.4	15.6	.32	.36	955	634.1	50.6	6.3	740
45.0	21.1	-5.6	15.6	.32	.36	955	634.3	50.2	4.7	739
45.5	22.5	-5.8	16.7	.29	.33	965	634.5	49.9	3.2	747
46.0	20.8	-6.0	14.8	.35	.38	948	634.7	49.6	1.8	733
46.5	19.9	-6.3	13.7	.38	.42	937	634.9	49.4	0.3	725
38047.0	20.0	-6.5	13.5	-16.39	-16.42	935	635.1	49.2	-1.1	723
48.0	20.2	-6.9	13.3	.40	.43	933	635.6	48.9	-3.9	722
49.0	19.3	-7.3	12.0	.45	.47	919	636.0	48.8	-6.6	711
50.0	17.8	-7.7	10.1	.53	.55	896	636.4	48.9	-9.1	693
51.0	18.2	-7.8	10.4	.51	.54	900	636.7	49.3	-11.4	698
52.0	18.5	-8.3	10.2	.53	.55	897	636.9	49.8	-13.6	697
53.0	18.8	-8.6	10.2	.53	.55	897	637.0	50.6	-15.4	698
54.0	19.3	-8.8	10.4	.52	.54	899	637.0	51.6	-17.1	701
55.0	19.8	-9.1	10.7	.51	.53	903	636.8	52.8	-18.5	705
56.0	19.6	-9.3	10.4	.52	.54	898	636.5	54.1	-19.5	702
57.0	19.2	-9.4	9.8	.55	.57	889	636.1	55.6	-20.3	696
58.0	18.7	-9.6	9.1	.58	.61	878	635.4	57.1	-20.7	688
38059.0	19.9	-9.7	10.2	-16.53	-16.56	892	634.7	58.6	-20.8	700
59.5	28.6	-9.7	18.9	.25	.29	979	634.2	59.3	-20.7	769
60.0	36.3	-9.8	26.5	.10	.14	1031	633.7	60.1	-20.6	810
60.5	34.0	-9.8	24.2	.14	.18	1015	633.2	60.8	-20.3	798
61.0	28.2	-9.8	18.4	.26	.31	972	632.6	61.4	-20.0	765
61.5	27.6	-9.8	17.7	.28	.33	965	632.0	62.0	-19.6	760
62.0	25.3	-9.8	15.4	.34	.39	944	631.3	62.6	-19.2	743
38063.0	24.9	-9.8	15.1	-16.35	-16.41	938	629.9	63.6	-18.1	739
64.0	23.5	-9.8	13.7	.39	.46	922	628.4	64.5	-16.7	726
65.0	22.6	-9.8	12.8	.42	.50	910	626.8	65.0	-15.1	716
66.0	23.2	-9.7	13.5	.39	.49	914	625.2	65.4	-13.3	720
67.0	23.0	-9.7	13.4	.39	.50	910	623.4	65.6	-11.3	716
68.0	22.2	-9.6	12.5	.42	.54	898	621.7	65.5	-9.2	706
69.0	24.0	-9.6	14.4	.36	.49	914	619.9	65.3	-6.9	718
38070.0	28.0	-9.5	18.5	-16.24	-16.12	947	618.4	64.9	-4.5	744
70.5	29.1	-9.5	19.6	.22	.10	954	617.6	64.7	-3.3	749
71.0	31.8	-9.5	22.3	.16	.05	972	616.8	64.4	-2.0	762
71.5	31.6	-9.5	22.1	.16	.06	969	616.0	64.1	-0.8	760
72.0	30.9	-9.5	21.4	.18	.07	963	615.2	63.8	0.5	755
72.5	29.1	-9.5	19.6	.22	.12	948	614.4	63.4	1.8	743
73.0	28.9	-9.5	19.4	.22	.13	945	613.7	63.0	3.1	740
73.5	28.1	-9.5	18.6	.24	.15	937	612.9	62.7	4.5	734

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^6 \dot{P}$	$10^6 \dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
38074.0	2.82	-0.95	1.86	-16.24	-16.15	936	612.2	62.2	5.8	733
75.0	2.79	-0.96	1.83	.24	.17	931	610.8	61.4	8.5	729
76.0	2.69	-0.97	1.73	.27	.20	920	609.6	60.5	11.2	721
77.0	2.64	-0.97	1.66	.29	.23	912	608.4	59.6	13.9	715
78.0	2.54	-0.99	1.55	.32	.27	900	607.4	58.7	16.6	706
79.0	2.56	-1.00	1.55	.32	.27	898	606.4	57.9	19.2	705
80.0	2.68	-1.02	1.67	.28	.25	906	605.6	57.1	21.9	713
81.0	2.72	-1.03	1.69	.28	.25	906	604.9	56.3	24.4	714
82.0	2.83	-1.04	1.78	.26	.23	912	604.3	55.7	27.0	720
83.0	2.74	-1.06	1.68	.28	.26	902	603.7	55.2	29.4	714
84.0	2.72	-1.07	1.65	.29	.27	899	603.3	54.9	31.7	713
85.0	2.72	-1.08	1.64	.30	.28	896	602.8	54.7	33.9	713
86.0	2.73	-1.09	1.64	.30	.28	895	602.5	54.6	36.0	714
87.0	2.68	-1.10	1.58	.32	.30	889	602.1	54.8	37.9	712
88.0	2.66	-1.12	1.54	.33	.32	885	601.7	55.2	39.6	710
89.0	2.67	-1.12	1.55	.33	.32	885	601.3	55.8	41.1	712
90.0	2.69	-1.13	1.56	.32	.32	884	600.9	56.7	42.4	714
91.0	2.70	-1.13	1.57	.32	.32	884	600.5	57.7	43.4	715
92.0	2.68	-1.13	1.55	.33	.33	882	600.0	58.9	44.1	715
93.0	2.57	-1.13	1.44	.36	.36	871	599.4	60.3	44.6	707
94.0	2.71	-1.12	1.59	.31	.32	882	598.7	61.8	44.7	718
95.0	2.95	-1.12	1.83	.25	.27	900	598.0	63.4	44.5	733
38095.5	3.09	-1.11	1.98	-16.22	-16.23	910	597.6	64.1	44.3	741
96.0	3.18	-1.11	2.07	.20	.22	916	597.2	64.9	44.0	746
96.5	3.48	-1.10	2.38	.14	.16	935	596.7	65.7	43.6	762
97.0	3.49	-1.10	2.39	.13	.16	934	596.3	66.4	43.1	761
97.5	3.58	-1.09	2.49	.11	.14	939	595.8	67.2	42.6	765
98.0	3.51	-1.08	2.43	.12	.16	935	595.3	67.8	41.9	762
98.5	3.67	-1.07	2.60	.09	.13	944	594.8	68.5	41.2	769
99.0	3.39	-1.06	2.33	.14	.18	927	594.2	69.1	40.5	754
99.5	3.37	-1.05	2.32	.14	.19	925	593.7	69.7	39.6	753
38100.0	3.30	-1.04	2.26	.15	.20	921	593.1	70.2	38.7	748
00.5	3.04	-1.02	2.02	.20	.25	904	592.6	70.6	37.7	734
01.0	2.94	-1.01	1.93	.22	.28	897	592.0	71.0	36.7	728
38102.0	2.82	-0.99	1.83	-16.24	-16.31	888	590.8	71.7	34.4	719
03.0	2.82	-0.96	1.86	.23	.31	888	589.6	72.2	32.0	717
04.0	2.77	-0.93	1.84	.24	.32	884	588.4	72.4	29.3	713
05.0	2.82	-0.91	1.91	.22	.31	888	587.2	72.4	26.5	713
06.0	3.24	-0.89	2.35	.12	.22	914	586.1	72.3	23.5	732
07.0	3.36	-0.88	2.49	.10	.20	920	585.0	72.0	20.4	735
08.0	3.24	-0.87	2.37	.12	.23	912	584.0	71.5	17.3	726
09.0	3.17	-0.87	2.30	.13	.25	906	583.1	70.9	14.0	720
10.0	2.90	-0.87	2.03	.18	.31	888	582.2	70.3	10.7	703
11.0	3.01	-0.88	2.13	.16	.29	893	581.5	69.5	7.3	706
12.0	3.38	-0.90	2.48	.09	.23	912	580.9	68.7	3.9	720
13.0	3.34	-0.92	2.43	.10	.24	909	580.4	67.9	0.4	716
14.0	3.17	-0.94	2.24	.14	.28	897	580.0	67.1	-3.0	706
15.0	3.04	-0.96	2.08	.17	.31	886	579.7	66.2	-6.5	697
16.0	3.17	-0.98	2.19	.15	.29	892	579.6	65.4	-9.9	703
17.0	3.26	-1.01	2.25	.14	.28	895	579.5	64.7	-13.3	706
18.0	3.17	-1.04	2.14	.16	.30	888	579.5	64.0	-16.6	701
19.0	3.27	-1.06	2.21	.15	.29	892	579.6	63.4	-19.9	705
20.0	3.39	-1.09	2.30	.13	.27	897	579.8	63.0	-23.1	711
21.0	3.34	-1.11	2.23	.15	.29	893	579.9	62.6	-26.2	709
22.0	3.03	-1.13	1.90	.22	.36	872	580.1	62.5	-29.2	694
38122.5	3.06	-1.14	1.92	-16.22	-16.36	873	580.2	62.5	-30.7	697
23.0	3.33	-1.15	2.18	.16	.30	890	580.2	62.5	-32.1	711

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^6 \dot{P}$	$10^6 \dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
38123.5	3.55	-1.16	2.39	-16.12	-16.26	902	580.3	62.6	-33.5	722
24.0	3.71	-1.16	2.55	.10	.23	911	580.3	62.8	-34.8	731
24.5	3.85	-1.17	2.68	.07	.21	917	580.4	63.0	-36.1	738
25.0	3.89	-1.18	2.71	.07	.21	919	580.4	63.2	-37.3	740
25.5	3.68	-1.18	2.50	.11	.24	907	580.4	63.5	-38.5	732
38126.0	3.61	-1.23	2.38	-16.13	-15.90	901	579.8	63.9	-39.6	729
27.0	3.38	-1.24	2.14	.17	.95	886	579.6	64.8	-41.7	719
28.0	3.34	-1.24	2.10	.18	.96	882	579.4	65.9	-43.5	719
29.0	3.24	-1.25	1.99	.21	.99	874	579.0	67.2	-45.0	715
30.0	3.21	-1.25	1.96	.21	-16.00	870	578.5	68.6	-46.2	714
31.0	3.31	-1.25	2.06	.19	-15.98	876	578.0	70.2	-47.1	721
32.0	3.74	-1.24	2.50	.11	.90	902	577.2	71.8	-47.6	745
33.0	4.10	-1.22	2.88	.04	.85	918	576.4	73.4	-47.8	760
34.0	4.17	-1.21	2.96	.03	.85	920	575.4	74.9	-47.7	763
35.0	3.70	-1.19	2.51	.10	.92	896	574.3	76.4	-47.2	744
36.0	3.33	-1.16	2.17	.16	.99	873	573.1	77.7	-46.5	725
37.0	3.32	-1.13	2.19	.16	.99	872	571.7	78.8	-45.4	724
38.0	3.53	-1.09	2.44	.11	.95	884	570.3	79.7	-44.1	734
39.0	3.53	-1.05	2.49	.10	.96	884	568.8	80.3	-42.6	733
40.0	3.22	-1.00	2.22	.14	-16.02	865	567.2	80.8	-40.8	716
41.0	2.98	-0.93	2.04	.18	.06	851	565.6	81.0	-38.8	702
42.0	3.12	-0.86	2.26	.13	.03	862	564.0	81.0	-36.7	709
43.0	2.92	-0.78	2.14	.15	.06	851	562.4	80.8	-34.4	699
44.0	2.60	-0.68	1.92	.20	.12	835	560.8	80.5	-32.1	683
45.0	2.49	-0.57	1.92	.20	.13	832	559.2	80.0	-29.6	678
46.0	2.69	-0.45	2.25	.12	.07	850	557.8	79.4	-27.0	690
47.0	2.88	-0.28	2.60	.06	.01	866	556.4	78.7	-24.3	701
48.0	2.65	-0.08	2.56	.07	.03	862	555.1	77.9	-21.7	695
49.0	2.48	0.05	2.53	.07	.04	858	553.9	77.0	-18.9	690
38149.5	2.90	0.05	2.95	-16.00	-15.98	877	553.3	76.6	-17.6	704
50.0	4.19	0.01	4.20	-15.85	.83	925	552.8	76.2	-16.2	742
50.5	5.19	-0.05	5.14	.77	.75	954	552.3	75.7	-14.8	764
51.0	4.37	-0.13	4.24	.85	.83	924	551.8	75.3	-13.4	739
51.5	4.40	-0.22	4.18	.85	.84	921	551.4	74.8	-12.0	735
52.0	4.38	-0.31	4.07	.86	.86	917	551.0	74.4	-10.7	730
52.5	4.15	-0.39	3.76	.90	.89	904	550.6	73.9	-9.3	720
38153.0	4.50	-0.45	4.05	-15.87	-15.86	914	550.2	73.5	-7.9	727
54.0	5.00	-0.57	4.43	.83	.83	925	549.6	72.7	-5.2	734
55.0	4.87	-0.66	4.20	.85	.86	916	549.1	72.0	-2.5	726
56.0	4.94	-0.75	4.19	.85	.86	914	548.5	71.4	0.1	723
57.0	5.22	-0.82	4.40	.83	.85	920	548.0	70.9	2.6	727
58.0	5.62	-0.88	4.74	.80	.82	930	547.6	70.5	5.0	734
59.0	6.10	-0.94	5.16	.77	.79	941	547.3	70.3	7.4	744
38160.0	6.12	-0.98	5.14	-15.77	-15.79	940	547.0	70.3	9.5	742
60.5	6.21	-1.01	5.21	.76	.79	941	546.9	70.3	10.6	744
61.0	6.07	-1.03	5.04	.78	.80	935	546.8	70.4	11.6	740
61.5	6.22	-1.05	5.17	.77	.79	939	546.6	70.6	12.5	743
62.0	6.14	-1.07	5.07	.78	.80	935	546.5	70.8	13.4	740
62.5	6.66	-1.08	5.58	.74	.76	949	546.4	71.1	14.2	752
63.0	6.27	-1.10	5.17	.77	.80	937	546.2	71.4	15.0	743
63.5	5.61	-1.12	4.50	.83	.86	916	546.1	71.8	15.8	727
38164.0	5.49	-1.13	4.36	-15.84	-15.87	911	545.9	72.3	16.4	723
65.0	5.01	-1.16	3.86	.89	.93	893	545.5	73.3	17.6	710
66.0	4.74	-1.18	3.56	.93	.97	880	545.1	74.5	18.4	701
67.0	4.66	-1.21	3.45	.94	.98	875	544.5	75.9	19.0	698

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^6 \dot{P}$	$10^6 \dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
38168.0	4.53	-1.23	3.30	-15.96	-16.01	867	543.9	77.4	19.2	693
69.0	5.05	-1.24	3.81	.90	-15.95	885	543.2	78.9	19.1	709
70.0	4.84	-1.25	3.59	.93	.98	875	542.4	80.4	18.7	702
71.0	4.02	-1.26	2.76	-16.04	-16.10	839	541.4	81.8	18.0	674
72.0	3.76	-1.27	2.49	.08	.16	824	540.5	83.2	16.9	663
73.0	3.63	-1.28	2.35	.11	.19	815	539.4	84.3	15.5	656
74.0	3.80	-1.28	2.52	.07	.16	822	538.2	85.3	13.9	662
75.0	4.05	-1.28	2.77	.03	.13	831	537.0	86.0	12.0	670
76.0	4.23	-1.28	2.95	.00	.11	837	535.8	86.5	9.9	675
38177.0	4.65	-1.28	3.37	-15.94	-16.06	852	534.5	86.8	7.6	688
77.5	4.72	-1.28	3.44	.93	.05	854	533.9	86.9	6.4	689
78.0	5.40	-1.28	4.12	.86	-15.98	876	533.3	86.9	5.1	707
78.5	5.87	-1.28	4.59	.81	.94	889	532.6	86.9	3.8	718
79.0	5.18	-1.28	3.90	.88	-16.01	866	532.0	86.8	2.5	699
79.5	4.84	-1.28	3.56	.92	.05	854	531.4	86.7	1.1	689
38180.0	4.85	-1.28	3.57	-15.91	-16.06	853	530.8	86.5	-0.3	688
81.0	5.31	-1.27	4.04	.86	.01	866	529.7	86.0	-3.2	699
82.0	5.62	-1.27	4.35	.83	-15.99	874	528.6	85.4	-6.2	705
83.0	5.54	-1.27	4.27	.83	-16.00	869	527.6	84.7	-9.2	702
84.0	5.20	-1.27	3.93	.87	.04	857	526.7	83.9	-12.3	692
85.0	4.52	-1.27	3.25	.95	.13	831	526.0	83.0	-15.5	672
38186.0	3.90	-1.27	2.63	-16.04	-15.91	801	525.3	82.1	-18.6	648
86.2	3.88	-1.27	2.61	.05	.92	800	525.1	81.9	-19.3	647
86.4	4.19	-1.27	2.92	.00	.87	813	525.0	81.7	-19.9	658
86.6	4.33	-1.27	3.06	-15.98	.85	818	524.9	81.5	-20.6	663
86.8	5.13	-1.27	3.86	.88	.76	847	524.8	81.3	-21.2	686
87.0	7.25	-1.27	5.97	.69	.58	908	524.6	81.1	-21.8	735
87.2	7.88	-1.27	6.61	.65	.54	922	524.5	80.9	-22.5	747
87.4	8.52	-1.27	7.24	.61	.51	936	524.4	80.7	-23.1	758
87.6	8.16	-1.28	6.89	.63	.53	928	524.3	80.5	-23.7	752
87.8	7.16	-1.28	5.88	.70	.59	904	524.2	80.3	-24.4	733
88.0	6.80	-1.28	5.53	.73	.62	895	524.1	80.1	-25.0	726
88.2	6.62	-1.28	5.34	.74	.63	890	524.0	79.9	-25.7	722
88.4	6.59	-1.28	5.31	.74	.63	889	523.9	79.8	-26.3	722
38189.0	6.24	-1.28	4.96	-15.77	-15.66	878	523.7	79.2	-28.2	714
90.0	5.96	-1.29	4.67	.80	.69	869	523.4	78.3	-31.3	708
91.0	5.83	-1.30	4.54	.81	.71	864	523.2	77.4	-34.4	706
92.0	5.66	-1.30	4.36	.83	.72	858	523.2	76.6	-37.5	703
93.0	5.66	-1.31	4.36	.83	.73	858	523.1	76.0	-40.4	705
94.0	5.78	-1.31	4.47	.82	.72	861	523.2	75.4	-43.3	710
95.0	5.71	-1.32	4.39	.83	.73	858	523.3	75.0	-46.0	710
96.0	5.20	-1.32	3.87	.89	.78	841	523.4	74.8	-48.7	699
97.0	4.93	-1.33	3.60	.92	.81	832	523.5	74.8	-51.1	694
38197.2	4.96	-1.33	3.63	-15.91	-15.81	833	523.5	74.8	-51.6	695
97.4	4.94	-1.33	3.61	.92	.81	832	523.5	74.8	-52.1	695
97.6	4.91	-1.33	3.58	.92	.81	831	523.6	74.9	-52.5	695
97.8	5.55	-1.33	4.22	.85	.74	852	523.6	74.9	-53.0	714
98.0	6.19	-1.33	4.86	.79	.68	871	523.6	75.0	-53.4	730
98.2	6.49	-1.33	5.16	.77	.66	880	523.6	75.0	-53.8	738
98.4	6.14	-1.33	4.81	.80	.69	870	523.6	75.1	-54.3	730
98.6	5.79	-1.33	4.46	.83	.72	859	523.6	75.2	-54.7	722
98.8	5.44	-1.33	4.11	.86	.75	848	523.6	75.3	-55.1	713
99.0	5.58	-1.33	4.26	.85	.74	853	523.6	75.4	-55.5	718

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^6 \dot{P}$	$10^6 \dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
38200.0	5.01	-1.32	3.69	-15.91	-15.80	834	523.6	76.0	-57.3	705
01.0	4.26	-1.31	2.94	-16.01	.90	806	523.5	76.9	-58.9	684
02.0	3.50	-1.30	2.20	.14	-16.02	771	523.3	77.9	-60.3	656
03.0	3.13	-1.29	1.84	.22	.10	750	522.9	79.2	-61.3	641
04.0	3.17	-1.27	1.89	.20	.10	752	522.5	80.6	-61.9	644
05.0	3.41	-1.26	2.15	.15	.04	766	521.9	82.1	-62.3	657
38205.5	3.75	-1.24	2.51	-16.08	-15.98	783	521.5	82.8	-62.3	673
06.0	4.14	-1.23	2.91	.01	.92	800	521.1	83.6	-62.3	688
06.5	4.49	-1.22	3.26	-15.96	.87	813	520.7	84.3	-62.1	700
07.0	4.17	-1.21	2.96	-16.00	.92	800	520.3	85.1	-61.9	689
07.5	3.85	-1.19	2.66	.05	.96	787	519.8	85.8	-61.6	678
38208.0	3.78	-1.18	2.60	-16.06	-15.98	783	519.3	86.5	-61.2	675
09.0	3.66	-1.15	2.51	.07	-16.00	777	518.1	87.7	-60.2	669
10.0	3.63	-1.11	2.52	.07	.01	775	516.9	88.8	-58.9	667
11.0	3.71	-1.07	2.64	.04	.00	778	515.5	89.7	-57.3	669
12.0	3.41	-1.02	2.39	.08	.05	764	514.1	90.4	-55.4	655
13.0	2.86	-0.97	1.89	.19	.16	735	512.6	90.8	-53.3	628
38214.0	2.92	-0.91	2.00	-16.16	-16.15	739	511.1	91.0	-50.9	629
14.5	3.42	-0.88	2.54	.05	.05	764	510.3	91.0	-49.7	650
15.0	4.21	-0.84	3.36	-15.93	-15.93	796	509.5	91.0	-48.4	676
15.5	4.64	-0.81	3.83	.87	.88	810	508.8	90.9	-47.1	686
16.0	4.58	-0.76	3.82	.87	.89	808	508.0	90.8	-45.8	684
16.5	4.60	-0.71	3.89	.86	.88	809	507.2	90.7	-44.4	683
17.0	4.12	-0.64	3.48	.91	.94	794	506.4	90.5	-43.0	668
17.5	4.22	-0.57	3.65	.89	.92	798	505.7	90.2	-41.6	671
18.0	4.13	-0.48	3.65	.89	.93	797	504.9	89.9	-40.1	668
18.5	4.12	-0.38	3.74	.87	.92	799	504.2	89.6	-38.6	667
19.0	3.98	-0.26	3.72	.87	.93	796	503.5	89.3	-37.1	664
19.5	4.00	-0.16	3.84	.86	.92	799	502.8	88.9	-35.5	665
20.0	4.12	-0.07	4.05	.84	.90	804	502.1	88.5	-34.0	667
20.5	4.21	0.01	4.22	.82	.89	808	501.4	88.1	-32.4	669
21.0	4.13	0.04	4.17	.82	.90	805	500.8	87.7	-30.8	665
21.5	3.98	0.05	4.03	.84	.92	800	500.2	87.2	-29.3	659
22.0	3.66	0.05	3.70	.87	.96	788	499.6	86.8	-27.7	647
22.5	3.67	0.04	3.71	.87	.96	787	499.0	86.3	-26.0	645
23.0	3.48	0.04	3.51	.89	.99	779	498.5	85.8	-24.4	637
23.5	3.73	0.03	3.76	.86	.97	786	498.0	85.3	-22.8	642
24.0	3.82	0.03	3.85	.85	.96	788	497.5	84.9	-21.2	642
24.5	3.83	0.04	3.87	.85	.96	788	497.1	84.4	-19.6	640
25.0	3.74	0.04	3.78	.86	.97	784	496.7	83.9	-17.9	636
25.5	3.96	0.04	4.00	.84	.95	790	496.3	83.4	-16.3	640
26.0	4.21	0.04	4.25	.81	.93	797	496.0	83.0	-14.7	644
26.5	4.98	0.03	5.01	.74	.86	817	495.6	82.5	-13.1	659
27.0	6.12	0.02	6.14	.65	.77	843	495.3	82.1	-11.5	679
27.5	7.46	0.00	7.47	.57	.69	869	495.1	81.7	-9.9	699
28.0	7.26	-0.02	7.25	.59	.71	864	494.8	81.3	-8.3	694
28.5	6.88	-0.05	6.83	.61	.73	855	494.6	80.9	-6.8	686
29.0	6.42	-0.15	6.27	.65	.77	843	494.4	80.6	-5.2	676
29.5	5.70	-0.32	5.37	.71	.84	822	494.3	80.3	-3.7	658
30.0	5.28	-0.48	4.81	.76	.89	807	494.1	80.0	-2.2	646
30.5	4.64	-0.61	4.02	.84	.97	784	494.0	79.7	-0.7	627
31.0	4.93	-0.72	4.22	.82	.95	790	493.8	79.5	0.8	631
31.5	7.51	-0.79	6.72	.62	.75	850	493.7	79.4	2.2	679
32.0	7.67	-0.85	6.82	.61	.74	852	493.6	79.3	3.6	680
32.5	6.97	-0.90	6.07	.66	.80	835	493.5	79.2	5.0	667
33.0	6.85	-0.95	5.90	.68	.81	831	493.4	79.2	6.3	664
33.5	7.09	-0.99	6.10	.66	.80	835	493.3	79.2	7.6	667

Table 3.--Continued

SATELLITE 1 # 1 S1

MJD	$-10^6 \dot{P}$	$10^6 \dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
38234.0	7.78	-1.02	6.75	-15.62	-15.75	848	493.3	79.3	8.9	678
34.5	7.78	-1.06	6.72	.62	.76	847	493.2	79.4	10.1	677
35.0	7.50	-1.09	6.41	.64	.78	840	493.1	79.6	11.2	672
35.5	7.03	-1.12	5.91	.68	.82	829	492.9	79.9	12.3	663
36.0	6.54	-1.15	5.39	.72	.86	816	492.8	80.2	13.4	654
36.5	6.49	-1.17	5.32	.72	.87	814	492.7	80.6	14.4	652
37.0	6.23	-1.19	5.04	.75	.89	807	492.5	81.0	15.3	647
37.5	6.26	-1.21	5.05	.75	.89	807	492.4	81.5	16.2	647
38.0	6.29	-1.23	5.06	.75	.89	806	492.2	82.0	17.0	648
38.5	6.26	-1.24	5.02	.75	.90	805	492.0	82.6	17.7	647
39.0	5.64	-1.26	4.38	.81	.96	787	491.7	83.2	18.4	634
39.5	4.83	-1.28	3.55	.90	-16.06	761	491.5	83.9	19.0	614
40.0	6.84	-1.29	5.55	.71	-15.86	815	491.2	84.6	19.5	658
40.5	9.17	-1.30	7.87	.56	.71	862	490.9	85.3	19.9	697
41.0	10.06	-1.31	8.75	.52	.67	876	490.5	86.1	20.2	709
41.5	9.20	-1.32	7.87	.56	.72	860	490.1	86.9	20.5	697
42.0	8.83	-1.33	7.50	.58	.74	852	489.7	87.7	20.7	692
42.5	8.83	-1.34	7.49	.58	.75	851	489.3	88.4	20.7	691
43.0	8.59	-1.35	7.24	.59	.76	845	488.9	89.2	20.8	687
43.5	8.17	-1.36	6.82	.62	.79	836	488.4	90.0	20.7	681
44.0	7.86	-1.36	6.50	.64	.82	828	487.8	90.7	20.5	675
44.5	7.88	-1.36	6.52	.64	.82	828	487.3	91.4	20.3	675
38245.0	7.90	-1.37	6.53	-15.63	-15.49	824	486.3	92.1	19.9	673
46.0	8.14	-1.37	6.77	.62	.49	826	485.1	93.3	19.1	676
47.0	7.86	-1.38	6.48	.64	.51	818	483.8	94.4	17.9	670
48.0	7.50	-1.38	6.12	.66	.55	808	482.6	95.2	16.5	663
49.0	6.98	-1.37	5.61	.69	.59	794	481.5	95.8	14.8	652
50.0	6.71	-1.36	5.35	.71	.62	786	480.3	96.2	13.0	646
51.0	6.60	-1.35	5.24	.72	.63	781	479.2	96.3	10.9	642
52.0	6.32	-1.35	4.97	.74	.66	772	478.1	96.3	8.7	635
53.0	6.13	-1.33	4.80	.75	.69	766	477.1	96.1	6.3	629
54.0	5.91	-1.32	4.58	.77	.71	758	476.1	95.7	3.9	623
55.0	5.86	-1.31	4.55	.77	.72	756	475.3	95.2	1.3	620
56.0	5.93	-1.31	4.63	.76	.72	756	474.5	94.5	-1.4	620
57.0	6.40	-1.29	5.11	.72	.69	766	473.7	93.8	-4.1	628
58.0	7.38	-1.28	6.10	.65	.62	786	473.1	93.0	-6.8	644
38258.2	7.64	-1.28	6.36	-15.63	-15.60	791	473.0	92.8	-7.4	648
58.4	7.81	-1.28	6.53	.62	.59	794	472.8	92.7	-7.9	651
58.6	7.83	-1.28	6.55	.62	.59	794	472.7	92.5	-8.5	651
58.8	8.34	-1.28	7.06	.58	.56	803	472.6	92.3	-9.0	658
59.0	8.85	-1.28	7.57	.55	.53	812	472.5	92.2	-9.6	666
59.2	9.52	-1.28	8.24	.52	.50	823	472.4	92.0	-10.1	674
59.4	10.04	-1.28	8.76	.49	.47	831	472.3	91.8	-10.7	681
59.6	10.71	-1.28	9.43	.46	.44	841	472.2	91.6	-11.3	689
59.8	10.58	-1.28	9.30	.47	.45	839	472.1	91.4	-11.8	687
60.0	10.61	-1.28	9.33	.47	.45	839	472.0	91.3	-12.4	687
60.2	10.48	-1.28	9.20	.47	.46	837	471.9	91.1	-12.9	686
60.4	10.02	-1.28	8.74	.49	.48	829	471.8	90.9	-13.5	680
60.6	10.37	-1.28	9.09	.48	.46	835	471.7	90.7	-14.1	684
60.8	11.05	-1.28	9.77	.45	.43	844	471.6	90.6	-14.6	692
61.0	12.21	-1.28	10.93	.40	.39	860	471.5	90.4	-15.2	705
61.2	16.47	-1.28	15.19	.27	.26	911	471.4	90.2	-15.7	747
61.4	16.81	-1.28	15.53	.26	.25	914	471.4	90.0	-16.3	749
61.6	16.18	-1.28	14.90	.28	.27	907	471.3	89.9	-16.9	744
61.8	14.89	-1.28	13.61	.31	.30	893	471.2	89.7	-17.4	732
62.0	12.62	-1.28	11.33	.39	.38	864	471.1	89.5	-18.0	708
62.2	12.45	-1.28	11.17	.39	.39	862	471.1	89.4	-18.5	706
62.4	12.45	-1.28	11.17	.39	.39	862	471.0	89.2	-19.1	706

Table 3.--Continued

SATELLITE 1961 δ1

MJD	$-10^6 \dot{P}$	$10^6 \dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi-\alpha_\odot$	$\delta_\pi-\delta_\odot$	T_N (°K)
38262.6	12.28	-1.29	10.99	-15.40	-15.39	859	470.9	89.0	-19.6	704
62.8	11.77	-1.29	10.48	.42	.41	852	470.9	88.9	-20.2	699
38263.0	11.28	-1.29	9.99	-15.44	-15.43	845	470.8	88.7	-20.7	693
63.5	11.11	-1.29	9.82	.45	.44	842	470.7	88.3	-22.1	691
64.0	12.07	-1.29	10.78	.41	.41	855	470.5	88.0	-23.4	702
64.5	13.18	-1.29	11.89	.37	.37	869	470.4	87.6	-24.8	713
65.0	12.85	-1.29	11.55	.38	.38	864	470.3	87.3	-26.1	710
65.5	11.90	-1.30	10.61	.42	.42	851	470.2	87.0	-27.4	700
66.0	11.81	-1.30	10.51	.42	.42	849	470.2	86.8	-28.7	699
66.5	11.64	-1.30	10.34	.43	.43	847	470.2	86.5	-29.9	697
67.0	11.47	-1.31	10.16	.44	.44	844	470.2	86.4	-31.2	696
67.5	11.46	-1.31	10.15	.44	.44	843	470.2	86.2	-32.4	696
68.0	11.31	-1.32	9.99	.45	.45	841	470.2	86.1	-33.6	695
68.5	11.51	-1.32	10.19	.44	.44	844	470.2	86.1	-34.7	698
69.0	11.50	-1.33	10.17	.44	.44	843	470.2	86.1	-35.8	698
69.5	11.81	-1.33	10.48	.43	.43	847	470.2	86.1	-36.9	703
70.0	12.17	-1.34	10.84	.42	.41	852	470.2	86.2	-37.9	707
70.5	11.39	-1.34	10.05	.45	.45	841	470.2	86.4	-38.9	699
71.0	10.52	-1.34	9.18	.49	.48	828	470.2	86.6	-39.8	689
71.5	9.70	-1.34	8.36	.53	.52	815	470.2	86.9	-40.7	680
72.0	9.43	-1.34	8.08	.54	.54	810	470.2	87.2	-41.5	677
72.5	9.34	-1.35	7.99	.54	.54	809	470.1	87.6	-42.2	676
73.0	9.51	-1.35	8.16	.54	.54	811	470.1	88.0	-42.9	679
73.5	9.20	-1.35	7.84	.55	.55	806	470.0	88.5	-43.6	676
74.0	8.73	-1.35	7.38	.58	.58	798	469.9	89.1	-44.1	670
74.5	8.41	-1.36	7.05	.60	.60	791	469.8	89.7	-44.6	666
75.0	8.12	-1.36	6.77	.62	.62	786	469.6	90.4	-45.0	662
75.5	8.24	-1.36	6.88	.61	.61	787	469.4	91.1	-45.3	664
76.0	8.19	-1.36	6.83	.61	.62	786	469.2	91.8	-45.6	664
76.5	8.11	-1.36	6.75	.62	.63	784	469.0	92.6	-45.8	663
77.0	8.08	-1.36	6.72	.62	.63	783	468.7	93.4	-45.8	663
77.5	8.09	-1.36	6.74	.62	.63	782	468.4	94.3	-45.8	663
78.0	8.24	-1.36	6.88	.61	.62	784	468.1	95.1	-45.7	665
78.5	8.05	-1.35	6.70	.62	.64	780	467.7	96.0	-45.5	662
79.0	7.99	-1.35	6.64	.62	.65	778	467.3	96.8	-45.3	661
79.5	7.82	-1.35	6.47	.63	.66	774	466.8	97.6	-44.9	658
80.0	8.36	-1.34	7.01	.60	.63	783	466.4	98.4	-44.5	666
80.5	9.01	-1.34	7.67	.56	.59	793	465.8	99.2	-43.9	675
81.0	9.29	-1.33	7.96	.54	.58	797	465.3	100.0	-43.3	678
81.5	9.18	-1.32	7.85	.55	.59	793	464.7	100.7	-42.6	676
82.0	8.98	-1.32	7.67	.55	.61	789	464.1	101.4	-41.8	672
82.5	8.84	-1.31	7.53	.56	.62	785	463.4	102.0	-41.0	669
83.0	8.79	-1.30	7.48	.56	.63	783	462.7	102.6	-40.0	667
83.5	9.20	-1.30	7.90	.54	.61	788	462.0	103.1	-39.0	672
84.0	9.76	-1.29	8.47	.51	.59	796	461.3	103.5	-38.0	678
84.5	10.17	-1.28	8.88	.49	.39	800	460.5	103.9	-36.8	681
85.0	9.90	-1.28	8.62	.50	.41	794	459.7	104.3	-35.6	676
38285.2	9.53	-1.27	8.26	-15.52	-15.43	788	459.3	104.4	-35.1	670
85.4	9.24	-1.27	7.97	.53	.45	783	459.0	104.5	-34.6	666
85.6	8.94	-1.27	7.67	.55	.47	777	458.6	104.6	-34.1	661
85.8	8.49	-1.26	7.22	.57	.49	769	458.3	104.7	-33.6	653
86.0	9.33	-1.26	8.07	.52	.45	782	457.9	104.8	-33.1	664
86.2	12.93	-1.26	11.67	.37	.30	830	457.6	104.9	-32.6	705
86.4	16.21	-1.25	14.95	.27	.21	865	457.2	104.9	-32.0	735
86.6	23.69	-1.25	22.44	.10	.05	931	456.9	105.0	-31.5	790
86.8	21.33	-1.25	20.08	.15	.10	911	456.5	105.0	-30.9	773
87.0	19.77	-1.24	18.53	.18	.13	897	456.2	105.1	-30.3	761
87.2	16.78	-1.24	15.54	.25	.20	868	455.8	105.1	-29.8	736

Table 4.--Continued

SATELLITE 1961 δ_1

MJD	$-10^6 \dot{P}$	$10^6 \dot{P}_R$	$-10^6 \dot{P}_A$	$\log \rho_\pi$	$\log \rho_s$	T_π (°K)	z (km)	$\alpha_\pi - \alpha_\odot$	$\delta_\pi - \delta_\odot$	T_N (°K)
38287.4	16.53	-1.23	15.30	-15.26	-15.21	864	455.5	105.1	-29.2	733
87.6	16.79	-1.23	15.56	.25	.21	866	455.1	105.1	-28.6	734
87.8	16.89	-1.23	15.66	.25	.21	866	454.7	105.1	-28.0	733
88.0	16.52	-1.22	15.30	.26	.22	861	454.4	105.1	-27.4	729
88.2	16.64	-1.22	15.42	.25	.22	862	454.0	105.1	-26.8	729
88.4	16.78	-1.21	15.56	.25	.22	862	453.6	105.1	-26.2	729
88.6	16.76	-1.21	15.55	.25	.22	861	453.2	105.1	-25.6	728
88.8	16.75	-1.21	15.55	.25	.22	860	452.9	105.0	-25.0	727
89.0	17.73	-1.21	16.52	.22	.20	868	452.5	105.0	-24.4	733
89.2	18.39	-1.20	17.19	.20	.19	873	452.1	104.9	-23.7	738
89.4	20.36	-1.20	19.16	.16	.15	890	451.8	104.9	-23.1	751
89.6	20.39	-1.20	19.20	.16	.15	889	451.4	104.8	-22.5	750
89.8	19.96	-1.19	18.76	.17	.16	884	451.0	104.8	-21.8	746
90.0	18.72	-1.19	17.53	.19	.19	872	450.6	104.7	-21.2	735
90.2	17.82	-1.19	16.63	.22	.21	863	450.3	104.6	-20.5	727
90.4	16.28	-1.19	15.09	.25	.26	848	449.9	104.5	-19.9	713
90.6	15.07	-1.18	13.88	.29	.29	834	449.5	104.4	-19.2	702
90.8	15.00	-1.18	13.82	.29	.30	833	449.1	104.3	-18.5	700
38291.0	16.66	-1.18	15.48	-15.24	-15.25	848	448.8	104.2	-17.9	713
91.5	19.56	-1.17	18.39	.17	.19	872	447.8	103.9	-16.2	732
92.0	20.52	-1.16	19.36	.15	.18	878	446.9	103.6	-14.5	736
92.5	20.17	-1.16	19.01	.16	.19	872	446.0	103.3	-12.8	730
93.0	20.87	-1.16	19.71	.14	.18	876	445.1	103.0	-11.0	732
38293.2	21.60	-1.16	20.44	-15.12	-15.17	880	444.7	102.8	-10.3	736
93.4	22.49	-1.15	21.33	.11	.15	886	444.3	102.7	-9.7	741
93.6	24.17	-1.15	23.02	.08	.13	898	444.0	102.5	-9.0	750
93.8	25.85	-1.15	24.70	.05	.10	909	443.6	102.4	-8.3	759
94.0	29.44	-1.15	28.29	-14.99	.05	932	443.3	102.2	-7.6	778
94.2	33.82	-1.15	32.67	.93	-14.99	958	442.9	102.0	-6.8	799
94.4	37.05	-1.15	35.90	.90	.95	976	442.6	101.9	-6.1	814
94.6	35.92	-1.15	34.77	.91	.97	968	442.2	101.7	-5.4	807
94.8	35.56	-1.15	34.41	.91	.98	965	441.9	101.5	-4.7	804
95.0	35.99	-1.15	34.84	.91	.97	966	441.6	101.4	-4.0	805
95.2	46.21	-1.15	45.06	.80	.87	1019	441.2	101.2	-3.3	848
95.4	66.05	-1.15	64.90	.66	.72	1106	440.9	101.0	-2.6	920
95.6	45.95	-1.15	44.80	.81	.88	1016	440.6	100.9	-1.9	845
95.8	28.06	-1.15	26.91	-15.01	-15.09	914	440.3	100.7	-1.2	760
96.0	17.71	-1.15	16.56	.21	.29	834	440.0	100.5	-0.5	693
96.2	17.61	-1.15	16.46	.21	.30	832	439.7	100.4	0.2	691
96.4	19.73	-1.15	18.58	.16	.25	849	439.4	100.2	0.9	706
96.6	21.15	-1.15	20.00	.13	.22	860	439.1	100.0	1.7	714
96.8	23.01	-1.15	21.86	.09	.19	873	438.8	99.8	2.4	725
38297.0	24.23	-1.15	23.08	-15.07	-15.17	882	438.6	99.7	3.1	732
97.5	24.65	-1.16	23.50	.06	.16	883	437.9	99.2	4.8	732
98.0	24.30	-1.16	23.14	.07	.18	878	437.4	98.8	6.6	728
98.5	21.24	-1.17	20.07	.13	.24	854	436.9	98.4	8.4	708
99.0	18.09	-1.17	16.92	.20	.31	826	436.6	98.0	10.1	685
38299.2	17.53	-1.17	16.36	-15.21	-15.33	821	436.5	97.9	10.8	680
99.4	17.98	-1.18	16.80	.20	.32	825	436.4	97.7	11.5	683
99.6	19.29	-1.18	18.11	.17	.29	835	436.3	97.6	12.2	692
99.8	21.98	-1.18	20.79	.11	.23	857	436.2	97.4	12.9	710
38300.0	21.43	-1.19	20.25	.12	.24	852	436.2	97.3	13.6	706