

Radiation Observations
with
Satellite 1958 Alpha
(Explorer I) *

March, 1961

Department of Physics and Astronomy
State University of Iowa

* Research assisted by

- (a) National Science Foundation/National Academy of Sciences
- I.G.Y. Grant 32.1.
- (b) Joint program of Office of Naval Research and Atomic Energy
Commission, Contract Nonr-93803.
- (c) Contract DA-11-022-ORD-2788 with the Chicago Ordnance District
of the Department of the Army.
- (d) Contract NASw-17 with the National Aeronautics and Space
Administration.

DESCRIPTION OF TABULATED DATA

by

George H. Ludwig*

INTRODUCTION

On 1 February 1958 at 0348 U.T. earth satellite 1958 Alpha (Explorer I) was launched from Cape Canaveral. This satellite contained a Geiger Müller tube for the measurement of the flux of energetic charged particles, and detectors for determining the micrometeorite flux and satellite temperature (see Figure 1). The high power transmitter and its associated instrumentation operated until partial exhaustion of the transmitter batteries on 12 February 1958. The transmitter reappeared briefly on 24 February. The low power system operated properly until about 0700 U.T. on 16 March, at which time the batteries powering the G.M. tube circuits became exhausted. During the operating time a large amount of data was recorded by a network of seventeen receiving stations. A sampling of early recordings was reduced and analyzed as they arrived from the receiving stations. These data, in conjunction with data from the first few orbits of 1958 Gamma (Explorer III), resulted in the announcement on 1 May 1958 of the region of high intensity radiation surrounding the earth (Van Allen, 1958).

The detailed, complete reduction of the 1958 Alpha data has now been completed. This paper is a tabulation of all the data received from this

* Now at the Goddard Space Flight Center, Greenbelt, Maryland.

satellite. It consists primarily of two parts. The first part is the master recording log on which are listed all recordings of the satellite signals obtained by the receiving station network. The actual data tabulation is contained in part two.

GENERAL DISCUSSION

A complete description of the satellite instrumentation has been published (Ludwig, 1959) and will not be repeated here. The G.M. tube was a cylindrical Anton type 314 halogen quenched one having a stainless steel wall with a thickness of about 0.127 cm. The counter was surrounded by the 0.058 cm. thick stainless steel payload wall, making a total shielding of 1.46 ± 0.07 g/cm.² (extrapolated range for electrons of energy 3 Mev. or range for 30 Mev. protons) for particles incident normal to the longitudinal axis of the tube.

The efficiency ϵ of the G.M. counter for energetic charged particles was $85 \pm 3\%$. Its omnidirectional geometric factor G_o defined as

$$G_o = 0.25 \pi a l (1 + a/2l)$$

where a is the effective diameter and l is the effective length, was 17.4 ± 1.0 cm.². Thus the omnidirectional flux J_o was given by

$$J_o = \frac{R}{\epsilon G_o} = 0.068 R$$

where R was the true counting rate.

The relationship between the true counting rate R and the apparent counting rate r is not linear at high rates due to counter dead time and scaler pulse amplitude threshold effects. Since the existence of the high

intensity trapped radiation was not anticipated before the flight of 1958 Alpha, it was believed that the counter would always operate on the lower linear portion of the R vs r curve; thus the R vs r calibration of the flight instrumentation was not performed. After the discovery that the flight counter was being saturated, this relationship was determined for the spare payload and was found to be well represented by the one parameter formula:

$$r = R e^{-R \tau} \quad (1)$$

where $\tau = 344$ microseconds, corresponding to $r_{\max} = 1069 \text{ sec}^{-1}$. The maximum observed rate in flight of 1958 Alpha varied from 2480 sec^{-1} to about 2150 sec^{-1} . The single best choice of r_{\max} seems to be 2250 sec^{-1} . Hence, in the correction of the tabulated apparent counting rates to true rates, it is suggested that the formula (1) be used with $\tau = 164$ microseconds. For example, an apparent rate r of 2250 sec^{-1} is taken to correspond to a true rate $R = 6100 \text{ sec}^{-1}$; as another example an apparent counting r of 1500 sec^{-1} corresponds either to 2130 sec^{-1} or to 13,300 sec^{-1} . The intrinsic ambiguity of formula (1) can usually be resolved without difficulty by a general examination of the context - i.e., position in space and other data in that general region and continuity of the data - and by a study of the statistical fluctuations of the apparent counting rates (which are relatively greater on the lower branch of the r vs R curve). The foundations for arriving at the above procedure for the determination of R obviously permit a progressively greater uncertainty for values of r greater than about 1800 sec^{-1} , though reduction to true

rates is believed to be worthwhile nonetheless in order to learn the general nature of the dependence of R on positional coordinates.

The temperature characteristics of the G.M. tube and circuitry for the flight payload were determined with the entire payload placed in a temperature chamber and operating from the internal batteries and with the G.M. tube illuminated by a Co^{60} gamma source maintained at a fixed position. The results of this test, Figure 2, show that the temperature effect was negligible, at least at low counting rates.

The receiving stations which participated in the gathering of the 1958 Alpha data are listed in Table I. This table also lists the number of recordings which produced usable data received by each station. The Tokyo station was not one of the regular network of Minitrack and Microlock stations but was an independent station established by the Radio Research Laboratories, Kokubunji, Tokyo. The cooperation of these Laboratories is gratefully acknowledged.

Table I
1958 Alpha Receiving Stations

Station	Type	Transmitter Received	Code	Usable Recordings	
				Before 12 Feb.	After 12 Feb.
Antigua, Br. W. Ind.	Minitrack	High Power	O	19	6
Antofagasta, Chile	Minitrack	High Power	H	9	1
Blossom Point, Md.	Minitrack	High Power	BP	14	-
Earthquake Valley, California	Microlock	Low Power	2000	31	49
Fort Stewart, Ga.	Minitrack	High Power	C	33	-
Havana, Cuba	Minitrack	High Power	D	39	4
Pasadena, California (JPL)	Microlock	Low and High Power	8000	42	12
Lima, Peru	Minitrack	High Power	G	9	-
Ibadan, Nigeria	Microlock	Low Power	4000	20	46
Patrick Air Force Base, Florida	Microlock	Low Power	1000	27	12
Quito, Ecuador	Minitrack	High Power	F	22	-
San Diego, Calif.	Minitrack	High Power	B	1	2
Santiago, Chile	Minitrack	High Power	J	35	2
Singapore	Microlock	Low Power	3000	12	22
Temple City, California	Microlock	Low Power	5000	11	5
Tokyo, Japan	Conventional	High Power	T	32	-
Woomera, Australia	Minitrack	(High Power (Low Power (after 12 Feb.	I	38	76

DISCUSSION OF RECORDING LOG TABULATION

Included in the recording log are all tape recordings, whether or not they resulted in usable data. The recordings are listed chronologically, and an indication of the usefulness of the recording is given. The data beginning and ending times refer to the reception of an R. F. carrier signal and a detectable subcarrier oscillator modulation. Thus, the listings after about 0700 U.T. on 16 March 1958 do not include usable data, since the circuitry located ahead of the subcarrier oscillator became inoperative at that time.

A. Dates and times: All dates and times are universal. Thus, 2248, 31 January 1958 local standard time at Patrick Air Force Base, Florida, is 0348, 1 February 1958 universal time.

B. Record number: The recordings were generally numbered consecutively by station. The number is preceded by the station code as listed in Table I.

C. Transmitter: H.P. refers to the high power (60 milliwatt), amplitude-modulated transmitter which radiated at a frequency of 108.030 mc/sec. L.P. is the low power (10 milliwatt), phase-modulated, 108.000 mc/sec transmitter.

D. Orbit number: The satellite orbits are numbered consecutively. The orbit number changes at the ascending node.

E. Approximate acquisition: This is the approximate time at which the R.F. carrier signal was first detected.

F. Data begins and data ends: The times, to the nearest second, between which a readable record was obtained when the raw telemetry signal

was filtered, discriminated, and displayed on a moving pen oscillograph at the SUI data reduction center.

G. Data quality: the data quality is a graduated scaling from A to F, which is to be interpreted as follows:

- A. Noise free data.
- B. Data readable within extended segments. Some noise.
- C. Regular noise fade patterns with clear segments between fades.
- D. Noise on all data.
- E. Very noisy data. Barely readable.
- F. No readable data.

The regular fade patterns observed on many passes were due to amplitude nulls in the satellite antenna pattern and polarization nulls as the satellite tumbled end over end in space with a seven second tumble period.

H. Remarks: This column contains comments by the data reducer and/or data readers. The abbreviations and often used remarks are as follows:

- RSL - Recording starts late, usually because the receiving station tuned in late.
- REE - Recording ends early, usually because the recorder ran out of tape.
- NR - Recording not reduced, usually because there was a better recording from another station.
- BNR - Beginning not reduced, usually because the recording from another station was better at that time.
- ENR - Ending not reduced, usually because the recording from another station was better at that time.

- See ____ - Refers to another recording of higher quality.
- No Voice - No voice announcement was present on the voice track. The voice track usually contained a secondary recording identification, date, signal quality information, time on some recordings, and microlock station acquisition time.
- Low Recording Level - Usually this was the result of a low tape recorder gain setting at the time of recording.
- No Time Signal - Absence of any local coded, WWV, or voice time.
- Time Base Interpolated - Refers to those records which contained only a voice time announcement at the beginning and end of the recording.
- Times Obtained by Comparison with ____ - Refers to those records which carried no time marking, and which were synchronized in time by comparison of the switching pattern with another recording obtained at the same time by another station.
- Counter Saturated - Refers to those recordings in which the apparent rate r was zero due to saturation of the G.M. tube by the high intensity trapped radiation.

DISCUSSION OF DATA TABULATION

A separate sheet is used for the data tabulation obtained from each station recording. They contain the raw data as read manually from the oscillograph records by the data reader and then, independently, by the data checker. The determination of questionable switching events on the records was also checked by a third person. Thus, all data have been double-checked and in many cases triple-checked.

The comments on record number, date and time, data quality and remarks which appear in the discussion of the recording log above, apply also to these tabulations. Additional comments are as follows:

A. Data Reader: The name of the person making the original reading from the oscillograph record.

B. Data Checker: The name of the person making the second reading.

C. Nominal Time and Time Interval: The readable data segments were marked and subdivided into segments not exceeding twelve seconds in duration. The beginning and ending of most segments were coincident with a switching of the scaler last stage. The time interval is the duration of the segment, and the nominal time is the time at the center of the segment. It is the time to which the rate determined for that segment is attributed. In those cases where only a few switches occurred during the recording, a maximum rate is determined for some segments. This would be the rate if the next switch occurred just after the signal faded into the noise.

D. Count (cycles): In this column are listed the number of cycles of the square waveform obtained from the fifth (final) scaler stage. This number, times 32 is the number of ionizing events which occurred in the counter during the time interval.

E. Rate (counts/sec): This is the apparent rate r , obtained from

$$r = \frac{\text{count} \times 32}{\text{time interval}}$$

From r , the true rate R may be obtained as explained in the general discussion above. Since this expression is double valued, care must be exercised to determine on which branch of the curve the point lies. A few points in the region $R \approx 6100$ are indeterminate. Those points for which R is not near 6100 can be placed on the proper branch by considering the position of the satellite at that time.

F. Satellite Position (Latitude, Longitude, and Height): The positions of the satellite at the nominal times were determined by the use of the satellite position data obtained from the Vanguard Computing Center. These data were the result of a long time smoothing of the Minitrack tracking data. The position of the satellite was tabulated by the Computing Center for each minute of the operating lifetime. A straight line interpolation between those one minute points was performed to obtain the position at the nominal times listed. The accuracy of these positions is believed to be better than ten kilometers in any direction.

G. Local Time Correction: This is the factor used by the data readers to convert from centimeters on the oscillograph recording to seconds in real time.

ACKNOWLEDGEMENTS

The large amount of effort expended by the data readers and checkers listed on the tabulations is obvious when one considers that each figure contained in these volumes was manually read, checked, and often checked again. This effort and diligence are gratefully acknowledged. The services of Mrs. E. Robison who performed most of the typing and assembling of the report is also acknowledged.

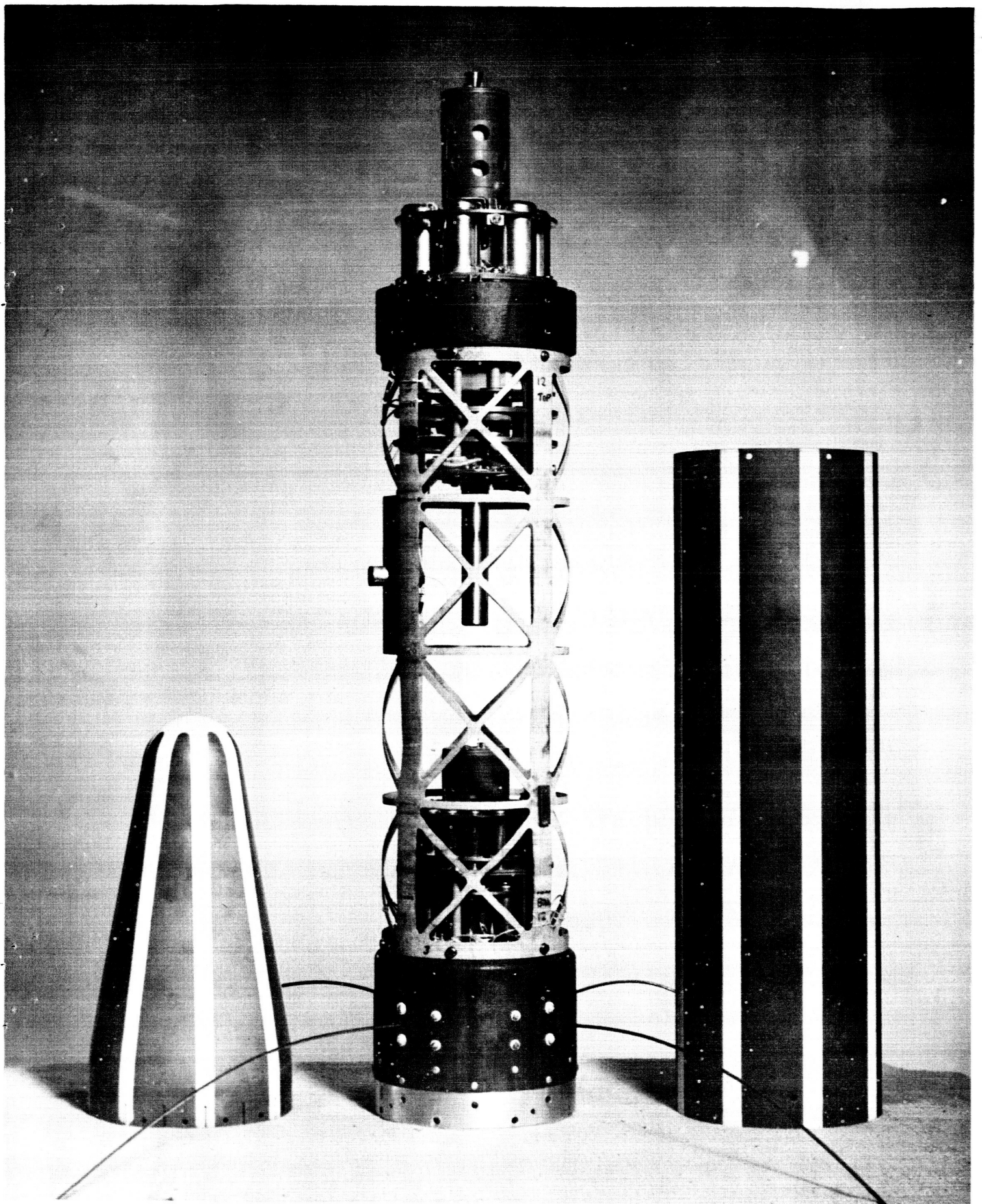
The 1958 Alpha project has been directed and supervised by Professor James A. Van Allen.

Van Allen, J. A., G. H. Ludwig, E. C. Ray, and C. E. McIlwain, "Observations of High Intensity Radiation by Satellites 1958 Alpha and Gamma", Jet Propulsion 28, 588-592 (1958).

Ludwig, G. H., "Cosmic Ray Instrumentation in the First U. S. Earth Satellite", Rev. Sci. Instr. 30, 223-229 (1959).

Figure Captions

- Fig. 1 Photograph of the satellite 1958 Alpha instrumentation.
- Fig. 2 Temperature calibration of the counting rate of the G.M. tube and associated circuitry at low rates when illuminated with a fixed Co⁶⁰ source.



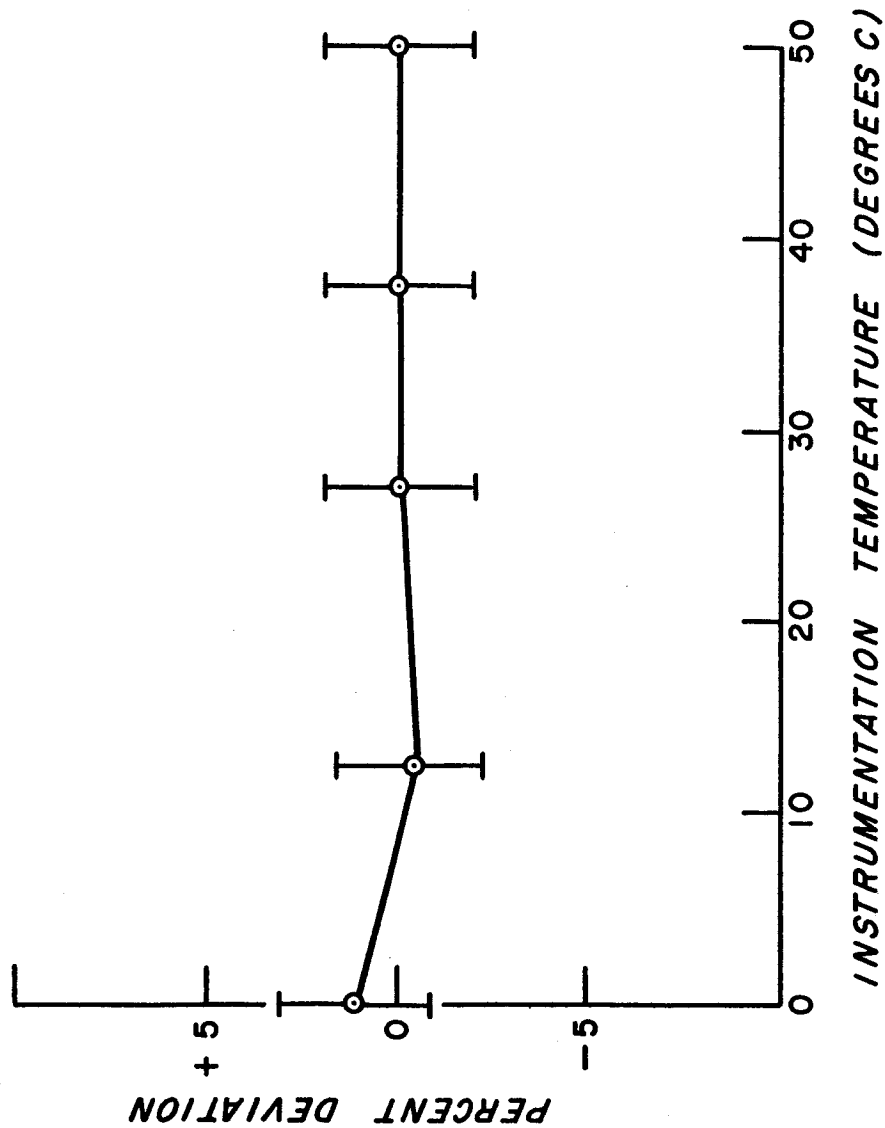


FIGURE 2. TEMPERATURE CALIBRATION

Volume I

Table of Contents

	<u>Page</u>
Recording Log	1
Tokyo	105
Fort Stewart	138

Index of Stations

	Volume	Pages
Antigua	II	183-231
Antofagasta	II	232-240
Blossom Point	II	241-257
Earthquake Valley (EQV)	IV	550-669
Fort Stewart	I	138-182
Havana	II	258-320
Jet Propulsion Laboratory (JPL)	V	739-801
Lima	II	360-368
Nigeria	IV	670-738
Patrick Air Force Base (PAFB)	V	802-850
Quito	II	321-344
San Diego	II	345-347
Santiago	V	851-892
Singapore	V	893-929
Temple City	II	348-359
Tokyo	I	105-137
Woomera	III	369-549

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 1 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
PAFB	1001	L	1	0348	0348:10	0354:49	A	Launch Tape
Antigua	001	H	1	0350			F	
JPL	8002	H	2	0545			F	
JPL	8001	L	2	0545	0545:22	0547:35	B	
EQV	2001	H	2	0530	0545:36	0546:40	B	
San Diego	B-4	H	2	0545	0545:47	0546:06	B	NR. Date uncertain. See 8001, 2001.
Havana	D-1	H	2	0550	0554:02	0555:34	C	RSL
Quito	F-1	H	2	0550			F	RSL
Singapore	3001	L	2	0703	0707:01	0709:47	E	
EQV	2002	L	3	0730			F	
Temple City	5002	L	3	0731			F	
JPL	8003	L	3	0745			F	
JPL	8004	H	3	0745			F	
Quito	F-2	H	3	0755	0758:43	0811:27	B	
Lima	G-1	H	3	0811	0811:43	0802:03	B	RSL
Singapore	3002	L	3	0902			F	
Antofagasta	H-1-1	H	4	1010			F	
EQV	2003	L	4	1030			F	
Antofagasta	H-1-2	H	5	1210			F	
Nigeria	4001	L	5	1245			F	
Tokyo	T-1-A	H	6	1300	1325:04	1328:23	C	
Antofagasta	H-1-3	H	6	1418			F	
Nigeria	4002	L	7	1445	1452:26	1455:52	D	
Santiago	F-4	H	7	1622	1622:00	1632:48	C	Counter saturated.
Nigeria	4003	L	8	1650			F	
Singapore	3003	L	9	1923	1926:07	1928:32	D	
PAFB	1003	L	10	2040			F	No voice.
Havana	D-2	H	10	2040	2041:46	2043:04	D	
Quito	F-3	H	10	2040			F	
Singapore	3004	L	10	2128			F	
Woomera	J-1	H	10	2140	2143:05	2145:57	C	
Havana	D-3	H	10	2243	2243:33	2246:37	B	ENF. See 1004.
PAFB	1004	L	10	2235	2243:34	2247:45	D	
Ft. Stewart	C-1	H	10	2240	2244:33	2246:03	C	NR. See D-3, 1004.
Blossom Pt.	BF-3	H	10	2243	2246:23	2246:47	D	NR. See D-3, 1004.

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 2 February 1958

Station	Record No	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
Temple City	5003	L	12	0027			F	
JPL	8005	L	12	0033	0036:41	0038:38	E	Data questionable.
EQV	2004	L	12	0031	0038:23	0041:50	E	Data questionable.
JPL	8006	H	12	0033			F	
Havana	D-4	H	12	0045	0046:17	0046:32	D	
PAFB	1005	L	12	0041	0046:18	0048:59	E	
Ft. Stewart	C-2-1	H	12	0043	0046:30	0048:06	C	
Blossom Pt.	BP-6	H	12	0035	0047:57	0048:36	C	NR. See 1005. BP6.
Nigeria	4004	L	12	0108	0108:23	0109:41	C	
Woomera	I-3	L	12	0150			F	
JPL	8007	H	13	0235	0238:10	0241:29	B	
EQV	2005	L	13	0234	0239:00	0242:11	B	
Temple City	5004	L	13	0235			F	
JPL	8022	H	13	0220	0239:38	0240:40	E	
Ft. Stewart	C-2-2	H	13	0247	0247:50	0249:17	C	
Blossom Pt.	BP-5	H	13	0245	0249:29	0249:41	D	Time base interpolated.
Havana	D-5	H	13	0245			F	
Nigeria	4005	L	13	0310			F	
JPL	8023	H	14	0430	0441:08	0442:14	C	
JPL	8026	L	14	0430	0441:10	0441:48	E	
EQV	2006	L	14	0440	0441:10	0443:07	A	
Temple City	5005	L	14	0441			F	
Ft. Stewart	C-2-3	H	14	0445			E	
Havana	D-6	H	14	0445	0449:57	0451:15	B	NR. See D-6.
Antigua	O-2	H	14	0554			F	
JPL	8024	H	15	0635	0641:43	0643:26	E	
EQV	2007	L	15	0640	0641:49	0641:52	E-F	
JPL	8025	H	15	0635	0642:04	0643:21	E	
Temple City	5006	L	15	0644			F	
Quito	F-4	H	15	0649	0654:48	0656:10	B	BSL. Time base interpolated.
Singapore	3005	L	15	0755			F	
Tokyo	T-1-B	H	16	0800	0819:39	0823:37	C	
Mima	O-2-2	H	16	0900			C	No time signal.
Santiago	J-5	H	16	0900	0903:49	0905:34	B	Counter saturated.
Quito	F-5	H	16	0905			F	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 2 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
Antofagasta	H-1-4	H	16	0910			F	RSL.
Tokyo	T-1-C	H	17	1000	1021:54	1024:32	C	
Singapore	3006	L	17	1007			F	
Tina	G-2-3	H	17	1104			F	
Santiago	J-6	H	17	1104	1106:08	1108:51	B	RSL.
Antofagasta	H-1-5	H	17	1110			F	
Nigeria	4006	L	17	1135			F	
Tokyo	T-1-D	H	18	1200	1222:52	1225:26	C	
Santiago	J-7	H	18	1305	1314:20	1318:33	C	Counter saturated.
Nigeria	4007	L	19	1338	1350:08	1351:15	E	Counter saturated.
Tokyo	T-2-A	H	19	1400	1425:05	1426:08	C	
PAFB	1008	L	19	1427			F	
Santiago	J-8	H	19	1512	1515:00	1520:36	C	Counter saturated.
Nigeria	4008	L	20	1544			F	
Quito	F-6	H	20	1724	1724:41	1726:15	C	RSL. Time base interpolated. Counter saturated.
Antigua	O-3	H	20	1730			F	
Woomera	I-4-1	H	21	1833			F	
Quito	F-7	H	22	1920	1931:57	1935:14	B	
Antigua	O-4-1	H	22	1937	1942:16	1944:11	B	
Singapore	3007	L	22	2020			F	
Woomera	I-4-2	L	22	2033	2035:15	2042:54	B	
PAFB	1009	L	23	2129	2138:43	2142:18	D	
EGV	2008	L	23	2135			F	
Ft. Stewart	C-3-1	H	23	2140	2140:17	2143:04	B	Time base interpolated.
Antigua	O-4-2	H	23	2144			F	
Woomera	I-5	L	23	2238	2239:21	2248:37	C	
JPL	8008	H	24	2325			F	
JPL	8012	L	24	2325			F	
Temple City	5007	L	24	2327			F	
EGV	2009	L	24	2335			F	
Havana	D-7	H	24	2340	2341:13	2343:43	C	EMR. See C-3-2.
PAFB	1010	L	24	2334	2341:35	2344:29	E	
Ft. Stewart	C-3-2	H	24	2341	2341:43	2345:20	A	Time base interpolated. BMR. See 1010.

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 3 February 1958

Station	Record No	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
Nigeria	4009	L	24	0001	0003:34	0004:42	E	
Woomera	I-6	L	24	0040	0043:58	0055:48	B	
JPL	8013	H	25	0128			F	
EQV	2010	L	25	0133	0133:00	0137:37	B	
JPL	8009	H	25	0128	0134:51	0135:48	E	
Temple City	5009	L	25	0132	0135:10	0137:30	D	NR. See JPL 8009, EQV 2010.
Ft. Stewart	C-3-3	H	25	0143	0143:01	0145:58	B	Time base interpolated.
PAFB	1011	L	25	0141	0143:27	0145:47	D	
Blossom Pt.	BP 7-1	H	25	0145			D	No time signal. See C-3-3.
Havana	D-8	H	25	0150			F	RSL
Nigeria	4010	L	25	0205			F	
Woomera	I-7-1	L	25	0255			F	
EQV	2011	L	26	0330	0336:10	0338:33	B	
JPL	8014	L	26	0335			F	(times obtained by
Temple City	5010	L	26	0334	0336:50	0338:08	B	No time signal (comparison with 2011.
JPL	8010	H	26	0332	0336:53	0337:54	E	
Havana	D-9	H	26	0344	0344:54	0346:43	B	
PAFB	1012	L	26	0343	0345:09	0346:20	D	
Ft. Stewart	C-3-4	H	26	0345	0345:30	0346:32	C	NR. RSL. See 1012, D-9.
Blossom Pt.	BP 7/II	H	26	0345			F	
Antigua	O-5-1	H	26	0349	0349:59	0351:53	B	
JPL	8015	L	27	0525	0537:18	0539:19	C	
JPL	8011	H	27	0525	0537:31	0539:28	D	
EQV	2012	L	27	0535	0537:46	0538:22	E	
Havana	D-10	H	27	0545			F	
Singapore	3008	L	28	0644	0700:28	0702:01	E	
Tokyo	T-2-B	H	28	0700	0724:17	0726:38	D	
JPL	8019	H	28	0725			F	
JPL	8016	L	28	0725			F	
Lima	G-2-4	H	28	0750			B	No time signal.
Quito	F-9	H	28	0750	0752:45	0754:22	D	Data questionable.
Antofagasta	H-2-1	H	28	0755			F	
Singapore	3009	L	29	0853			F	
Tokyo	T-2-C	H	29	0900	0916:52	0919:15	B	
Antofagasta	H-2-2	H	29	0955			F	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 3 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
Santiago	1-9	H	29	0958:38	0958:38	1005:30	C	Counter saturated.
Tokyo	T-2-D	H	30	1100	1118:28	1120:15	B	
Antofagasta	H-2-3	H	30	1200			F	
Santiago	J-1-10	H	30	1200	1204:28	1206:04	B	
Nigeria	4011	L	30	1230	1239:54	1243:47	D	Counter saturated.
Tokyo	T-3A	H	31	1300	1318:01	1322:06	C	
Santiago	J-1-11	H	31	1405	1406:06	1417:55	C	RSL
Antofagasta	H-3-1	H	31	1410			F	
Nigeria	4012	L	32	1438	1443:46	1448:27	E	Data questionable.
Blossom Pt.	BP-101	H	32	1538			F	No time signal.
Antofagasta	H-3-2	H	32	1600			F	
Santiago	J-1-12	H	32	1613			F	
Quito	F-1-10	H	32	1615			F	Probable counter saturation.
Nigeria	4013	L	33	1645			F	
PAFB	1013	L	33	1819			F	
Quito	F-1-11	H	33	1815	1824:55	1827:30	C	
Singapore	3010	L	34	1915			F	
Woomera	1-7-2	L	34	1934	1934:06	1937:15	B	Beginning not played.
Quito	F-1-12	H	34	2015			F	
PAFB	1014	L	35	2022			F	
EQV	2013	L	35	2029			F	
Ft. Stewart	C-4-1	H	35	2030	2030:21	2036:21	B	Time base interpolated. See D-11
Havana	D-1-11	H	35	2030	2032:24	2035:49	B	
Blossom Pt.	BP 4-1	H	35	2035			F	
Antigua	Q-5-2	H	35	2038	2038:39	2039:19	B	
Singapore	3011	L	35	2125			F	
Woomera	1-8-1	L	35	2129	2134:25	2141:05	B	
JPL	8017	L	36	2218			F	
JPL	820	H	36	2218			F	
EQV	2014	L	36	2230			F	
Ft. Stewart	C-4-2	H	36	2234	2235:35	2239:41	A	BNR. See D-12. Time base interpolated.
Havana	1-12	H	36	2230	2235:42	2238:57	A	
PAFB	1015	L	36	2225	2236:08	2240:12	C-D	
Blossom Pt.	BP-4-11	H	36	2240			B	No time signal. NR.
Nigeria	4014	L	36	2248			F	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 4 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
JPL	8018	L	37	0020			F	
JPL	8021	H	37	0020	0027:39	0031:46	D	
EQV	2015	L	37	0030	0030:18	0032:34	E	
Blossom Pt.	BP-2	H	37	0035			B	No voice, no time signal. NR.
Ft. Stewart	C-4-3	H	37	0037	0037:32	0041:53	B	RSL. Time base interpolated.
Havana	D-13	H	37	0038	0038:29	0039:47	C	RSL
PAFB	1016	L	37	0033	0038:45	0041:07	D	Tape flutter.
Woomera	I-9-1	L	37	0147			B	No time signal. RSL
JPL	8028	H	38	0226	0227:23	0232:40	E	
EQV	2016	L	38	0230	0231:42	0234:31	C	
JPL	8030	L	38	0226	0231:51	0233:41	E	(times obtained by
Temple City	5011	L	38	0229	0232:03	0234:17	B	No time signal (comparison with 2016.
Ft. Stewart	C-5-1	H	38	0238	0238:46	0242:34	B	Time interpolated and extrapolated.
Havana	D-14	H	38	0240	0240:07	0240:34	C	RSL
PAFB	1017	L	38	0237	0240:24	0242:27	D	
JPL	8029	H	39	0428	0432:28	0433:04	D	REE
EQV	2017	L	39	0430	0433:16	0435:14	B	
JPL	8031	L	39	0432	0433:25	0434:41	C	(times obtained by
Temple City	5012	L	39	0423	0433:29	0435:00	A	No time signal (comparison with 2017.
PAFB	1018	L	39	0440			F	
Havana	D-15	H	39	0442	0442:47	0443:45	D	
Antigua	O-6-1	H	39	0447			F	
Temple City	5013	L	40	0629			F	
EQV	2018	L	40	0630			F	
JPL	8032I	L	40	0632	0635:02	0636:01	E	Data questionable
JPL	8039I	H	40	0635			F	
Quito	F-13	H	40	0645			F	
Lima	C-3-1	H	40	0655			D	No time signal
Singapore	3012	L	40	0749			F	
Tokyo	T-3-B	H	41	0800	0811:17	0815:06	B	
Santiago	J-13	H	41	0845	0852:52	0858:51	B	RSL
Antofagasta	H-3-3	H	41	0850	0853:40	0854:39	C	RSL
Tokyo	T-3-C	H	42	1000	1013:53	1015:46	B	
Santiago	J-14	H	42	1047	1054:55	1105:06	B	
Antofagasta	H-4-1	H	42	1058			F	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 4 February 1958

Station	Record No	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
Tokyo	T-3-D	H	43	1200	1213:54	1217:27	C-D	
Antofagasta	H-4-2	H	43	1300			F	
Santiago	J-15	H	43	1257	1300:43	1310:09	C	
Nigeria	4015	L	43	1332			F	
Antofagasta	H-5-1	H	44	1503			F	
Lima	G-33	H	44	1508			F	
Santiago	J-16	H	44	1503	1510:00	1513:42	C	Counter saturated.
Nigeria	4016	L	45	1533			F	
Quito	F-14	H	45	1715	1716:10	1718:37	C	Time base interpolated.
PAFB	1019	L	45	1722			F	
Lima	G-4	H	45	1723			F	
Antigua	O-6-2	H	46	1729			F	
Singapore	3013	L	46	1811	1813:25	1816:52	D	
Woomera	I-9-2	L	46	1826	1826:38	1830:31	B	RSL
PAFB	1020	L	46	1918			F	
Quito	F-15	H	47	1920	1925:50	1927:42	B	
Ft. Stewart	C-5-2	H	47	1924	1926:26	1929:09	C	Time base interpolated.
Antigua	O-7	H	47	1925	1932:22	1936:27	B	
Singapore	3014	L	47	2016			F	
Woomera	I-10-1	L	47	2028	2028:05	2035:19	A	RSL
JPL	8039II	L	48	2116			F	
JPL	8032II	H	48	2116			F	
EGV	2019	L	48	2125			F	
Havana	D-16	H	48	2128	2128:32	2133:55	B	EMR. See C-5-3.
Ft. Stewart	C-5-3	H	48	2129	2129:02	2134:35	A	
PAFB	1021	L	48	2120	2130:45	2134:39	C	
Blossom Pt.	BP-10II	H	48	2133			F	Low recording level.
Antigua	O-8	H	48	2136			F	
Woomera	I-10-2	L	48	2230	2230:25	2238:51	B	RSL
JPL	8039III	H	49	2315	2317:52	2327:19	D	
JPL	8032III	L	49	2313	2318:55	2326:49	C	
EGV	2020	L	49	2325			F	
Ft. Stewart	C-6-1	H	49	2330	2332:05	2337:29	A	Time base interpolated.
Havana	D-17	H	49	2332	2332:48	2335:46	B	NR. See C-6-1, 1022, BP-14.
PAFB	1022	L	49	2329	2333:47	2336:50	C-D	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 5 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
Woomera.	I-11-1	L	49	0035	0035:10	0043:23	C	
Temple City	5014	L	50	0122			F	
JPL	8036	L	50	0116	0123:26	0129:14	C	
EQV	2021	L	50	0124	0124:51	0129:48	C	
JPL	8033	H	50	0120	0126:42	0133:22	A	Microlock.
Ft. Stewart	C-6-2	H	50	0134	0134:10	0136:52	B	Time base interpolated.
Havana	D-18	H	50	0135	0135:08	0135:58	C	RSI.
PAFB	1023	L	50	0132	0135:18	0138:00	D	
Antigua.	O-9-1	H	50	0140			F	
JPL	8034	H	51	0320	0324:54	0330:54	B	Microlock.
EQV	2022	L	51	0327	0327:47	0330:59	A	
JPL	8037	L	51	0320	0328:43	0330:37	D	
Temple City	5015	L	51	0326	0329:18	0330:16	C	No time signal. (Times obtained by comparison with 2022.)
Havana.	D-19	H	51	0336	0336:46	0339:18	C	
Ft. Stewart	C-6-3	H	51	0337	0337:42	0338:11	C	Time base interpolated and extrapolated.
PAFB	1024	L	51	0334	0337:56	0338:46	E	
Antigua	O-9-2	H	51	0340	0343:44	0343:48	D	
Singapore	3015	L	51	0437			F	
Tokyo	T-4-A	H	52	0500			F	
JPL	8035	H	52	0527	0527:30	0533:23	B	Microlock.
JPL	8038	L	52	0530	0530:10	0531:47	D	
Quito	F-16	H	52	0540	0541:39	0542:53	B	RSI.
Singapore	3016	L	52	0639	0650:52	0652:49	E	Nearly unreadable.
Tokyo	T-4-B	H	53	0700	0704:49	0710:13	B	
JPL	8040	L	53	0715			F	
Antofagasta.	H-5-2	H	53	0745	0748:04	0748:35	C	
Antofagasta.	H-5-3	H	53	0810			F	Unidentified signal.
Tokyo	T-4-C	H	54	0900	0908:22	0912:22	B	
Santiago	J-17	H	54	0948	0950:18	0953:29	A	
Antofagasta.	H-6-1	H	54	1014			F	Unidentified signal.
Tokyo	T-5-A	H	55	1100	1110:11	1113:12	C	
Antofagasta.	H-6-2	H	55	1154			F	
Santiago	J-18	H	55	1155	1155:26	1200:06	B	REE
Nigeria	4018	L	55	1220	1228:16	1237:15	C	Counter saturated.
Tokyo	T-5-B	H	56	1300	1312:39	1313:49	C	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 6 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
EQV	2025	L	62	0019	0019:31	0026:26	C	Rate tumble modulated at beginning.
JPL	8040111	L	62	0015	0020:06	0023:45	E	
Temple City	5016	L	62	0020			F	
Ft. Stewart	C-7-4	H	62	0029	0029:41	0033:36	A	Time base interpolated and extrapolated.
Havana	D-22	H	62	0029	0030:06	0032:18	C	RSI. ENR. See C-7-4.
PAFB	1028	L	62	0026	0030:39	0033:11	C-D	
Nigeria	4022	L	62	0051			F	
JPL	8041	H	63	0220	0220:55	0227:44	C	
EQV	2026	L	63	0222	0222:32	0226:28	B	
Ft. Stewart	C-8-1	H	63	0231	0231:49	0234:09	A	Time base interpolated.
Havana	D-23	H	63	0232	0232:05	0234:02	B	ENR. See C-8-1.
PAFB	1029	L	63	0229	0232:19	0234:18	B	
Antigua	C-11	H	63	0237	0237:33	0239:25	A	RSI
Singapore	3019	L	63	0335			F	
JPL	80421	H	64	0420	0422:59	0428:06	A	
EQV	2027	L	64	0424	0424:28	0426:30	E	Data questionable.
Temple City	5017	L	64	0430			B	RSI. No time signal. No comparison possible.
Havana	D-24	H	64	0435			F	RSI
Singapore	3020	L	65	0535	0544:36	0548:36	D	Counter saturated.
Tokyo	T-5-C	H	65	0600	0600:39	0603:51	B	
JPL	804211	H	65	0624	0624:52	0628:51	D	
Lima	G-7-1	H	65	0630	0638:37	0641:07	A	Time base interpolated.
Quito	F-21	H	65	0630	0639:20	0640:02	C	
Antofagasta	H-7-1	H	65	0640	0643:50	0644:50	U	
Tokyo	T-5-B	H	65	0800	0802:29	0807:16	A	
Lima	G-7-2	H	66	0840			F	
Antofagasta	H-7-2	H	66	0843			F	
Santiago	T-21	H	66	0844	0844:56	0849:48	B	
Tokyo	T-6-A	H	67	1000	1005:20	1008:35	B	
Antofagasta	H-7-3	H	67	1029	1047:32	1049:48	F	Unidentified signal.
Santiago	T-22	H	67	1046			B	Nearly unreadable.
Antofagasta	H-8-1	H	67	1048			E	RSI
Nigeria	4023	L	67	1115			F	
Tokyo	T-6-B	H	68	1200	1205:41	1209:12	B	
Antofagasta	H-8-2	H	68	1248			F	RSI

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 6 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
Lima	G-8	H	68	1250			F	
Santiago	G-23	H	68	1249	1252:59	1301:05	C	
Nigeria	4024	L	69	1320	1325:27	1334:55	E	Counter saturated.
Quito	F-21	H	69	1450			F	
Lima	G-9	H	69	1457	1458:50	1500:50	C	Time base interpolated. Counter saturated.
Antofagasta	H-8-3	H	69	1500			F	
Nigeria	4025	L	70	1525			F	
Singapore	3021	L	70	1623	1606:55	1607:10	E	Data questionable.
Quito	F-22	H	70	1650			F	
PAFB	1030	L	70	1708			F	
Antigua	D-12	H	71	1717	1723:02	1724:30	C	Time base extrapolated.
Singapore	3022	L	71	1803	1805:17	1809:36	E	Data questionable.
Woomera	I-13-1	L	71	1817	1817:05	1822:03	B	
PAFB	1031	L	72	1907			F	
Antigua	D-13	H	72	1916			B	No time signal.
Pt. Stewart	C-8-2	H	72	1916	1916:55	1922:18	B	
Havana	D-25	H	72	1914	1917:22	1921:43	B	RSL.
Quito	F-23	H	72	1910	1918:13	1919:00	D	
Woomera	I-13-2	L	72	2018	2018:17	2026:17	A	
Havana	D-26	H	73	2119	2120:09	2125:34	B	ENR. See C-8-3.
HQV	2028	L	73	2120			F	
Pt. Stewart	C-8-3	H	73	2121	2121:16	2126:18	A	Time base interpolated and extrapolated.
PAFB	I-32	L	73	2114	2121:47	2124:00	C	
Blossom Pt.	BP-31	H	73	2123			B	NR. RSL. Time base unreliable. See C-9-1.
Nigeria	4026	L	73	2140			F	
Woomera	I-14-1	L	73	2221	2221:19	2229:55	B	Time base extrapolated.
JPL	8043	H	74	2314	2314:14	2317:30	D	
HQV	C-29	L	74	2317	2317:17	2318:34	E	Data questionable. Nearly unreadable.
Pt. Stewart	C-9-1	H	74	2323	2323:37	2328:34	A	Time base interpolated and extrapolated.
Havana	D-27	H	74	2324	2324:17	2327:20	C	NR. See C-9-1, 1033, BP 3311
PAFB	I-33	L	74	2320	2325:09	2327:52	C-D	
Blossom Pt.	BP-31	H	74	2325	2325:18	2329:58	B	BNR. See C-9-1.
Nigeria	4027	L	74	2345	2347:52	2349:20	E	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 7 February 1958

Station	Record No	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
Woomera	I-14-2	L	74	0028	0128:58	0033:02	C	RSL.
EQV	2030	L	75	0110	0115:33	0121:17	B	
JPL	8044	H	75	0115	0117:23	0123:34	B	
Havana	D-28	H	75	0125			F	
Ft. Stewart	C-9-2	H	75	0125	0125:40	0130:20	A	Time base interpolated.
PAFB	1034	L	75	0127	0127:25	0129:32	B	
Blossom Pt.	BP 14I	H	75	0129			F	
Antigua	D-14	H	75	0131	0132:50	0134:40	A	
Singapore	3023	L	75	0227			F	
EQV	2031	L	76	0319	0319:34	0322:43	B	
PAFB	1035	L	76	0326			F	
Havana	D-29	H	76	0328	0328:37	0330:38	C	
Antigua	D-15	H	76	0335			E	
Singapore	3024	L	76	0428			F	
Temple City	5018	L	77	0520	0521:23	0523:08	D	Time base unreliable.
EQV	2032	L	77	0520			F	
Quito	F-24	H	77	0530	0533:28	0535:18	B	RSL
Lima	G-10	H	77	0534	0534:45	0536:22	C	RSL. Time base interpolated. BNR. See F-24.
Singapore	3025	L	77	0628			F	
Tokyo	T-6-C	H	78	0658	0658:05	0700:13	B	
Lima	G-11	H	78	0735			D	No time signal.
Santiago	A-24	H	78	0738	0742:17	0743:23	A	
Antofagasta	H-9-1	H	78	0735	0742:30	0742:51	C	
Antofagasta	H-9-2	H	79	0939			F	
Santiago	A-25	H	79	0939	0941:11	0941:53	D	
Tokyo	T-6-D	H	80	1100	1102:12	1104:00	B	
Antofagasta	H-10-1	H	80	1144			F	
Santiago	A-26	H	80	1141	1151:00	1153:12	C	Counter saturated.
Nigeria	4028	L	81	1217	1222:30	1225:37	D	Counter saturated.
Antofagasta	H-10-2	H	81	1315			F	Test tape calibration check.
Lima	G-12	H	81	1348			D	No time signal.
Santiago	A-28	H	81	1345	1349:00	1355:00	C	Counter saturated.
Nigeria	4029	L	82	1420			F	
Lima	G-13	H	82	1550	1554:13	1556:21	C	Counter saturated.
Ft. Stewart	C-10-1	H	83	1620			F	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 8 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
EQV	2034	L	87	0010	0011:31	0015:04	C	
JPL	8063	H	87	0008	0012:00	0015:09	B	
FT. Stewart	C-11-2	H	87	0019	0019:41	0025:24	A	Time base interpolated.
PAFB	L-39	L	87	0022			F	
Woomera	L-16-2	L	87	0126			F	
EQV	2035	L	88	0210	0214:01	0217:37	C	
JPL	8064	H	88	0214	0214:34	0216:15	D	
Temple City	3019	L	88	0212	0215:25	0217:36	D	NR. See EQV 2035, JPL 8064.
PAFB	L-40	L	88	0218			F	
FT. Stewart	C-12-1	H	88	0222	0222:44	0225:55	B	Etd. NR. See D-32.
Havana	D-32	H	88	0223	0223:38	0225:53	B	Low level recording.
Antigua	3018	H	88	0228	0228:49	0231:17	B	
Singapore	3027	L	88	0327			F	
EQV	2036	L	89	0415	0415:54	0416:31	D	(Time base obtained by
Temple City	5025	L	89	0412	0416:01	0419:09	C	No time signal (comparison with 2036).
Quito	F-26	H	89	0425	0428:41	0429:11	B	
Singapore	3028	L	89	0521			F	
Quito	F-27	H	90	0630			F	
Tama	G-14	H	90	0630	0631:21	0634:41	A	
Antofagasta	H-10-3	H	90	0633			F	
Tokyo	3024	H	91	0753	0753:00	0758:24	C	
Singapore	3029	L	91	0831			F	
Tama	3030	H	91	0831	0832:27	0835:40	C	RSL. REE. Time base interpolated.
Santiago	4029	H	91	0837	0836:20	0840:54	A	
Antofagasta	H-10-1	H	91	0837	0837:00	0839:00	E	Recording level low. NR. See 4029.
Tokyo	707-B	H	92	0900	0900:39	0929:11	B	
Santiago	3031	H	92	1030	1037:05	1044:15	A	
Antofagasta	H-10-2	H	92	1038			F	Recording level low.
Nigeria	4033	H	92	1109			F	
Tokyo	T-10-C	H	92	1207	1207:00	1211:00	D	
Antofagasta	H-10-3	H	92	1240			F	Recording level low.
Santiago	4034	H	92	1240	1249:00	1253:00	C	Courier saturated.
Nigeria	4035	H	92	1311			F	
Quito	F-28	H	92	1345			F	
Santiago	4032	H	92	1450			F	

**RECORDING LOG
SATELLITE 1958 ALPHA**

Universal Date: 9 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U.T.)	Data Begins (U.T.)	Data Ends (U.T.)	Data Quality	Remarks
Woomera	F-13-2	L	99	0121:31	0124:37		D	
Woomera	F-13-2	H	10	0155			F	
Temple City	523	L	100	0103	0107:44	0112:12	F	
Eqv	2049	L	100	0116	0116:57	0121:15	B	
Ft. Stewart	C-13-2	H	100	0118	0118:30	0120:21	A	Time base interpolated and extrapolated.
Havana	D-36	H	100	0118	0118:36	0120:44	B	Low level recording. NR. See C-13-2.
PAFB	1045	L	100	0118	0123:17	0127:09	B	
Antigua	0-21	H	100	0123			B	
JPL	8167	H	101	0306			F	
Eqv	2040	L	101	0305	0311:00	0312:47	C	(times obtained by
Temple City	5024	L	101	0311	0312:13	0313:19	C	No time signal (comparison with 2040).
Quito	F-29	H	101	0320			F	
Havana	D-37	H	101	0320	0321:18	0321:34	C	RSL
Singapore	3032	L	102	0428			F	
Eqv	2041	L	102	0510			F	
Quito	F-30	H	102	0525	0526:04	0527:17	B	(time base
Lima	G-16	H	102	0526	0526:27	0529:38	C	RSL, Beginning NR. See F-30 (interpolated).
Singapore	3033	L	103	0631			F	
Tokyo	T-6-D	H	103	0647	0647:01	0648:18	D	Time base extrapolated.
Antofagasta	H-12-1	H	103	0730	0730:33	0734:30	D	Recording level low. NR. See T-33.
Santiago	3034	H	103	0730	0730:56	0734:26	A+B	
Tokyo	T-6-A	H	104	0851	0851:11	0854:27	B	
Antofagasta	H-12-2	H	104	0920			F	Low level recording.
Santiago	3035	H	104	0920	0933:11	0938:00	B	
Nigeria	4-37	L	104	1130			F	
Tokyo	T-6-B	H	105	1132	1052:17	1137:16	B	
Antofagasta	H-12-3	H	105	1132			F	
Santiago	3036	H	105	1134	1135:12	1135:21	A	
Nigeria	4-38	L	106	1246			F	
Lima	G-17	H	106	1330			F	
Antofagasta	H-12-4	B	106	1340			F	
Quito	F-31	H	106	1340			F	
Santiago	3037	H	106	1346	1346:00	1344:26	L	Counter saturated.
Nigeria	4-39	L	107	1411			F	
Singapore	3038	L	107	1449			F	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 10 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
EQV	2044	L	112	0000	0000:52	0006:21	A	
Temple City	5027	L	112	0001	0001:00	0005:56	C	NR. See EQV 2044.
JPL	8049	H	112	0005			F	
Havana	D-42	H	112	0010	0011:59	0014:51	C	
PAFB	1050	L	112	0004	0012:50	0016:03	B	
JPL	8050	H		0204	0204:28	0210:56	C	
EQV	2045	L	113	0204	0204:38	0208:36	B	(times obtained by
Temple City	5028	L	113	0205	0205:40	0208:42	A	No time signal (comparison with 2045.
Havana	D-43	H	113	0214	0214:58	0217:03	A	
Antigua	C-24	H	113	0220	0221:23	0221:49	C	Time signal questionable. Code in error.
Singapore	3036	L	113	0312			F	
EQV	2046	L	114	0406	0406:12	0407:44	E	Data questionable.
JPL	8051	H	114	0405	0407:12	0411:40	E	Data questionable.
Quito	F-33	H	114	0415	0420:00	0421:59	A	
Singapore	3037	L	114	0510			F	(No time signal.
Yima	G-18	H	114	0517			C	Recording level varies. (Counter saturation.
Tokyo	T-8-C	H	115	0530	0541:31	0543:04	B	Time base interpolated. (with other
Tokyo	T-8-D	H	116	0730			B	No time signal. Comparison (records impossible
Santiago	J-37	H	116	0825	0827:13	0831:35	A	RSL
Nigeria	K-42	L	116	0900			F	
Tokyo	T-9-A	H		0930	0946:28	0949:31	B	
Santiago	J-38	H	117	1028	1029:02	1135:42	A	
Antofagasta	H-13-1	H	117	1033			F	
Nigeria	4043	L	117	1054			F	
Tokyo	T-9-B	H	118	1130	1149:02	1151:18	C	
Antofagasta	H-13-2	H	118	1232			F	
Santiago	J-39-1	H	118	1232	1242:19	1241:54	B	Counter saturated.
Nigeria	4044	L	119	1300			F	
Singapore	3038	L	119	1346			F	
Quito	F-34	H	119	1440			F	
Nigeria	4045	L	120	1508			F	
Singapore	3039	L	120	1545	1547:19	1549:37	B	
Quito	F-35	H	121	1605	1601:06	1652:39	C	Time base interpolated.
PAFB	1051	L	121	1652			F	
Antigua	C-25	H	121	1653	1655:06	1705:34	A	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 11 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
Woomera	I-22-2	L	124	0010	0010:29	0012:16	C	
JPL	8047	L	125	0040			F	
JPL	8058	H	125	0040	0058:08	0102:55	B	
EqV	2049	L	125	0058	0058:21	0102:52	B	
Havana	D-45	H	125	0108	0108:46	0111:43	B	RSL.
PAFB	1055	L	125	0105	0109:10	0111:44	D	
Antigua	O-26	H	125	0112	0113:51	0117:28	A	
Singapore	3041	L	125	0206			F	
JPL	8059	H	126	0255	0258:33	0305:58	A	
EqV	2050	L	126	0300	0301:41	0303:08	E	(times obtained by
JPL	8048	L	126	0258	0301:49	0304:16	D	No time signal (comparison with 2.50.
Quito	F-36	H	126	0310	0312:18	0314:31	C	
Singapore	3042	L	126	0405			F	
Tokyo	T-9-C	H	127	0430			F	
Quito	F-37	H	127	0515	0518:23	0519:55	C	RSL
Antofagasta	H-13-3	H	127	0520			F	Recording level low.
Tokyo	T-9-D	H	128	0630			F	NR
Antofagasta	H-13-4	H	128	0720	0721:50	0722:40	D	Recording level low.
Tokyo	T-9-E	H	129	0830	0841:43	0843:59	B	
Antofagasta	H-14-1	H	129	0920			F	NR. See J-43-II. Recording level low.
Santiago	F-43-II	H	129	0923	0923:29	0928:00	A	Counter saturated.
Nigeria	4047	L	129	0950	0954:10	0959:40	E	
Santiago	J-42-I	H	131	1125	1125:55	1133:33	A	
Antofagasta	H-14-2	H	130	1124	1126:20	1127:10	E	NR. See J-42-I. Recording level low.
Nigeria	4048	L	131	1253	1253:21	1257:22	E	Counter saturated.
Santiago	J-42-III	H	131	1337	1331:2	1335:00	C	RSL. Counter saturated.
Antofagasta	H-14-3	H	131	1329	1333:33	1334:20	E	NR. See J-42-II. Recording level low.
Lima	G-19	H	131	1345			C	Recording level low. No time signal. (Counter saturation.)
Nigeria	4049	L	132	1410			F	
Singapore	3043	L	132	1441			F	
Quito	F-38	H	132	1530	1536:16	1545:33	D	
Antigua	O-27	H	132	1538			F	
Nigeria	4050	L	133	1610			F	
Singapore	3044	L	133	1641			F	
Woomera	I-23-1	L	133	1654	1654:16	1658:24	A	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 12 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Begins (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
Havana	D-49	H	137	0002	0002:05	0005:33	C	
PAFB	1059	L	137	0000	0002:35	0005:58	C	H.P trans. out, time base interpolated.
Antigua	O-29	H	137	0003	0010:14	0011:07	C	
Singapore	3045	L	138	0116			F	
EQV	2053	L	138	0154	0154:26	0200:28	D	(time base
JPL	8062	L	138	0153	0154:53	0201:16	A	Rate tumble modulated to 0156 (extrapolated)
JPL	8055	L	138	0139	0155:13	0158:48	E	Data questionable.
PAFB	1060	L	138	0201			F	
Havana	D-50	H	138	0204	0205:27	0207:09	D	
Antigua	O-30	H	138	0210			F	
Singapore	3046	L	138	0306			F	
Temple City	5031	L	139	0352	0358:24	0401:14	D	Time base unreliable.
EQV	2054	L	139	0400			F	
Lima	C-20	H	139	0409			F	
Nigeria	4053	L	141	0839			F	
Antofagasta	H-15-1	H	142	1018			F	Recording level low.
Nigeria	4054	L	142	1045			F	
Antofagasta	H-15-2	H	143	1220			F	Recording level low.
Nigeria	4055	L	144	1247			F	
Antigua	O-31	H	145	1439			F	
Nigeria	4056	L	145	1500			F	
Singapore	3047	L	145	1537	1537:28	1539:21	E	
PAFB	1061	L	145	1631			F	REF.
PAFB	1062	L	147	1837			F	
Nigeria	4057	L	147	1916			F	
PAFB	1063	L	148	2035			F	
San Diego	B-28	H	148	2043			F	
EQV	2055	L	148	2050			F	
Nigeria	4058	L	148	2116			F	Interference.
JPL	8056	L	149	2233			F	
Temple City	5032	L	149	2233			F	
EQV	2056	L	149	2240	2243:32	2249:57	C	
San Diego	B-29	H	149	2244			F	
PAFB	1064	L	149	2247			F	

RECORDING LOG
SATELLITE 1958 ALPHA

Universal Date: 24 February 1958

Station	Record No.	Transmitter	Orbit No.	Approx. Acquisition (U. T.)	Data Reqs. (U. T.)	Data Ends (U. T.)	Data Quality	Remarks
EGV	2101	L	288	0050			F	
Nigeria	4126	L	290	0530			F	
Nigeria	4127	L	292	0730	0736:20	0740:14	E	Counter saturated.
Singapore	3074	L	292	0812			F	
Nigeria	4128	L	293	0936			F	
Singapore	3075	L	293	1017	1028:02	1030:58	D	
Nigeria	4129	L	294	1144			F	
Singapore	3076	L	294	1224			F	
Woomera	I-34-2	L	294	1241	1243:13	1244:07	C	
Havana	D-1	H	295	1323	1323:38	1329:44	C	Time base extrapolated.
Antigua	O-32	H	295	1326	1329:28	1338:02	B	Time base erratic.
Nigeria	4130	L	295	1357			F	
Woomera	I-34-3	L	295	1443	1443:46	1444:19	C	
PAFB	1089	L	296	1523			F	H. P. trans. on.
Havana	D-2	H	296	1527	1527:23	1536:31	C	
Antigua	O-33	H	296	1533	1537:06	1542:46	C	
Nigeria	4131	L	296	1554	1604:08	1612:00	D	
Woomera	I-34-4	L	296	1643	1645:40	1646:16	B	
JPL	8068	L	297	1717			F	
EGV	2102	L	297	1725			F	
San Diego	B-31	H	297	1727	1728:26	1729:27	C	RSL
PAFB	1090	L	297	1730			F	H. P. trans. on.
Havana	D-3	H	297	1732	1733:01	1742:22	C	
Antigua	O-34	H	297	1742	1742:31	1750:31	B	
Nigeria	4132	L	297	1803	1808:26	1810:15	D	Counter saturated.
JPL	8069	L	298	1917			F	
San Diego	B-32	H	298	1925	1925:33	1935:08	C	RSL
EGV	2103	L	298	1929	1929:24	1931:57	E	Data questionable.
PAFB	1091	L	298	1937			F	
Havana	D-4	H	298	1932	1939:05	1948:32	C	
Antigua	O-35	H	298	1946	1947:04	1957:05	A	ENR. See D-4.
EGV	2104	L	299	2133	2133:12	2136:19	E	
Antigua	O-36	H	299	2156			F	
EGV	2105	L	300	2345			F	

iment A
However, the radiation counter operated on a higher portion of the R curve than expected so that a correction formula for the determination of R was ~~derived~~ devised. The temperature effect, at least at low counting rates, was found to be ~~negligible~~ negligible.

DOCUMENTATION
INCORPORATED

Date:

cc:

To:

From:

Subject:

SATELLITE 1958 ALPHA

Station Tokyo Data Reader M. Thornwell
 Record No. T-7-B Data Checker M. Van Meter
 Date 8 Feb. 1958 U. T. Data Quality B

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
0955 39.7	.75	1.5	64.0	32 43	128 40	884
0955 48.0	5.28	8.5	51.5	32 40	129 13	877
0956 21.7	3.26	5.0	49.1	32 23	131 28	846
0956 27.4	1.41	3.0	68.1	32 19	131 51	841
0956 35.1	4.79	8.5	56.8	32 15	132 22	834
0956 45.5	10.66	17.0	51.0	32 09	133 04	825
0956 56.2	10.61	18.0	54.3	32 03	133 47	815
0957 04.9	3.87	6.5	53.7	31 57	134 22	808
0957 11.3	3.68	5.5	47.8	31 53	134 47	802
0957 54.3	3.64	6.0	52.7	31 22	137 40	765
0958 01.9	7.97	13.5	54.2	31 16	138 11	758
0958 12.2	1.61	2.5	49.7	31 07	138 52	750
0958 14.9	1.55	3.0	61.9	31 05	139 03	747
0958 19.2	3.73	6.0	51.5	31 01	139 20	744
0958 24.7	7.45	11.5	49.4	30 56	139 42	739
0958 30.7	4.46	6.5	46.6	30 51	140 06	734
0958 41.2	3.93	6.0	48.9	30 42	140 48	726
0958 49.7	7.36	11.5	50.0	30 34	141 23	719
0958 57.7	8.74	14.0	51.3	30 27	141 55	712
0959 06.1	6.01	10.0	53.2	30 19	142 04	705
0959 14.9	1.21	2.0	52.9	30 10	143 03	698
0959 22.1	5.04	7.5	47.6	30 03	143 32	692
0959 28.2	4.82	7.5	49.8	29 56	143 56	688
0959 36.1	6.58	9.5	46.2	29 48	144 28	681
0959 43.2	6.24	10.0	51.3	29 41	144 56	676
0959 50.0	1.89	2.5	42.3	29 34	145 23	670

Local time base cor. 0.994 (cm/sec) Data begins 0955:39.3 U. T. Data ends 0959:50.9 U. T.

Remarks _____

SATELLITE 1958 ALPHA

Station Tokyo Data Reader M. Thorwall
 Record No. T-4-B Data Checker M. Van Meter
 Date 5 Feb. 1958 Data Quality B U. T.

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
0704 49.3	.84	8.5	324.0	25 13	130 30	1413
0704 53.9	1.13	10.5	297.0	25 19	130 43	1408
0705 00.6	1.30	11.0	271.0	25 27	131 03	1402
0705 03.8	1.48	11.0	238.0	25 30	131 12	1398
0705 52.0	2.48	11.0	142.0	26 28	133 38	1350
0705 58.2	5.67	20.5	116.0	26 35	133 57	1344
0706 03.3	3.83	12.5	104.0	26 41	134 12	1339
0706 10.1	2.23	6.5	93.3	26 48	134 34	1332
0706 13.8	1.59	5.0	101.0	26 52	134 45	1328
0706 16.4	1.72	5.5	102.0	26 55	134 54	1326
0706 25.2	11.82	29.5	79.9	27 05	135 21	1317
0706 37.1	11.59	27.0	74.5	27 18	135 59	1305
0706 48.4	10.96	24.5	71.5	27 31	136 34	1294
0706 57.2	5.12	11.0	68.8	27 41	137 04	1284
0707 02.7	1.79	3.5	62.6	27 47	137 20	1279
0707 06.1	2.78	6.0	69.1	27 50	137 31	1276
0707 10.3	2.52	4.5	57.1	27 55	137 45	1272
0707 15.2	3.46	6.5	60.1	28 00	138 01	1267
0708 01.6	.91	1.5	52.7	28 48	140 32	1220
0708 05.4	1.96	3.0	49.0	28 51	140 45	1217
0708 13.3	3.58	5.5	49.2	28 59	141 12	1209
0708 19.4	4.97	7.5	48.3	29 05	141 33	1203
0708 25.3	3.50	5.5	50.3	29 10	141 53	1197
0709 45.2	8.25	11.5	44.6	30 24	146 29	1117
0709 56.3	4.14	6.0	46.4	30 34	147 08	1106
0710 00.9	1.66	2.5	48.2	30 38	147 24	1102
0710 04.5	2.40	3.5	46.7	30 40	147 37	1098
0710 12.0	1.44	2.5	55.6	30 46	148 05	1091

Local time base cor. 2.50 (cm/sec) Data begins 0704:48.9 U. T. Data ends 0710:12.7 U. T.

Remarks _____

SATELLITE 1958 ALPHA

Station Tokyo Data Reader M. Thornwall
 Record No. I-5-C Data Checker M. Van Meter
 Date 6 Feb. 1958 Data Quality B U. T.

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
0600 39.6	.57	26.0	1460.0	23 38	137 31	1608
0600 47.3	1.13	50.0	1420.0	23 47	137 51	1600
0600 51.8	1.19	48.0	1290.0	23 53	138 04	1596
0600 54.6	1.48	59.0	1280.0	23 56	138 11	1593
0600 58.8	2.13	93.5	1400.0	24 02	138 23	1589
0601 01.2	1.37	67.0	1560.0	24 04	138 29	1587
0601 05.6	2.44	114.0	1500.0	24 10	138 42	1583
0601 13.7	4.59	234.5	1630.0	24 19	139 04	1575
0601 18.1	2.85	149.0	1670.0	24 25	139 17	1571
0601 20.6	1.50	89.0	1900.0	24 28	139 24	1568
0601 23.8	4.84	266.5	1760.0	24 32	139 33	1565
0601 29.6	2.50	139.0	1780.0	24 39	139 49	1559
0601 32.5	3.22	183.5	1820.0	24 42	139 57	1556
0601 36.7	2.27	124.5	1760.0	24 47	140 09	1552
0601 43.3	1.60	92.5	1850.0	24 55	140 27	1546
0601 47.6	2.09	119.5	1830.0	25 00	140 39	1542
0601 50.5	1.18	72.0	1950.0	25 04	140 47	1539
0601 56.4	4.26	269.0	2020.0	25 11	141 04	1533
0602 01.2	1.45	93.5	2060.0	25 16	141 17	1528
0602 11.8	2.45	165.5	2160.0	25 29	141 48	1518
0602 14.6	1.44	94.5	2100.0	25 32	141 56	1515
0602 20.2	5.61	377.5	2150.0	25 38	142 13	1510
0602 25.3	1.58	107.5	2180.0	25 44	142 27	1505
0602 29.6	1.84	127.0	2210.0	25 49	142 40	1500
0602 36.1	1.11	74.0	2130.0	25 57	142 59	1494
0602 53.8	2.16	149.0	2210.0	26 17	143 50	1477
0603 00.5	1.10	75.5	2200.0	26 25	144 10	1470
0603 07.7	2.30	159.0	2210.0	26 32	144 31	1463

Local time base cor. 9.99 (cm/sec) Data begins 0600:39.3 U. T. Data ends 0603:51.1 U. T.
 Remarks Page 1 of 2.

SATELLITE 1958 ALPHA

Station Tokyo Data Reader M. Thornwall
 Record No. T-5-D Data Checker M. Van Meter
 Date 6 Feb. 1958 U. T. A Data Quality

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
0802 34.0	9.43	16.5	56.0	30 59	130 36	1192
0802 39.8	2.13	4.0	60.1	31 03	130 56	1186
0802 47.4	8.92	15.0	53.8	31 09	131 23	1179
0802 56.1	4.91	8.0	52.1	31 15	131 53	1170
0803 04.8	8.79	13.0	47.3	31 23	132 24	1161
0803 32.1	7.61	12.0	50.5	31 50	134 03	1134
0803 44.9	11.19	18.0	51.5	32 03	134 49	1121
0803 56.0	11.02	17.0	49.4	32 14	135 30	1110
0804 07.1	11.19	18.0	51.5	32 02	136 11	1099
0804 14.4	3.42	5.5	51.5	32 06	136 38	1092
0804 21.7	9.00	14.0	49.8	32 10	137 05	1085
0804 31.6	10.98	16.5	48.1	32 15	137 42	1075
0804 41.6	8.20	12.5	48.8	32 21	138 20	1065
0804 51.4	3.98	5.5	44.2	32 26	138 57	1056
0804 58.8	3.01	4.0	42.5	32 30	139 24	1049
0805 05.7	4.41	6.5	47.2	32 33	139 51	1042
0805 16.6	5.34	9.0	53.9	32 38	140 33	1032
0805 29.8	3.81	6.0	50.4	32 44	141 24	1019
0805 39.7	11.78	18.0	48.9	32 48	142 02	1009
0805 48.6	3.09	4.5	46.6	32 52	142 36	1001
0805 55.3	8.46	11.5	43.5	32 55	143 02	994
0806 05.4	8.92	13.5	48.4	32 59	143 41	984
0806 42.7	1.61	2.5	49.7	33 09	146 09	949
0806 48.0	4.75	7.0	47.2	33 11	146 30	944
0806 56.9	8.83	12.5	45.3	33 13	147 05	936
0807 07.7	4.06	6.5	51.2	33 15	147 48	926
0807 14.8	3.38	5.0	47.3	33 16	148 17	919

Local time base cor. 0.996 (cm/sec) Data begins 0802:29.4 U. T. Data ends 0807:16.4 U. T.

Remarks _____

SATELLITE 1958 ALPHA

Station Tokyo Data Reader M. Thornwall
 Record No. T-7-A Data Checker M. Van Meter
 Date 8 Feb. 1958 Data Quality C U. T.

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
0753 00.6	.68	2.0	94.1	31 56	127 55	1340
0753 03.7	1.16	2.5	69.0	31 58	128 06	1337
0753 06.7	1.32	3.5	84.8	32 00	128 16	1334
0753 11.2	1.44	3.5	77.8	32 02	128 32	1329
0753 18.1	1.22	3.0	78.7	32 06	128 56	1322
0753 22.7	3.39	7.5	70.8	32 08	129 12	1318
0753 25.3	1.87	4.5	77.0	32 09	129 22	1315
0753 28.9	2.81	7.0	79.7	32 11	129 34	1311
0753 32.0	.70	1.5	68.6	32 13	129 45	1308
0753 36.0	1.09	3.0	88.1	32 15	129 59	1304
0754 29.5	1.35	3.5	83.0	32 40	133 09	1251
0754 33.0	1.66	3.5	67.5	32 42	133 22	1247
0754 40.2	7.79	16.0	65.7	32 45	133 48	1240
0754 46.5	4.72	10.0	67.8	32 47	134 10	1233
0754 52.7	5.28	11.0	66.7	32 50	134 33	1227
0754 59.9	4.52	9.0	63.7	32 53	134 59	1220
0755 05.7	2.82	5.0	56.7	32 55	135 20	1214
0755 59.0	1.81	3.5	61.9	33 11	138 27	1161
0756 11.1	5.19	11.0	67.8	33 13	139 23	1149
0756 20.3	1.51	3.5	74.2	33 15	139 57	1140
0756 27.2	1.64	4.0	78.0	33 16	140 23	1133
0756 30.2	1.77	3.5	63.3	33 17	140 35	1130
0756 34.2	2.03	4.0	63.7	33 17	140 50	1126
0756 37.1	.98	2.5	81.6	33 18	141 01	1123
0756 42.9	3.56	7.5	67.4	33 19	141 23	1117
0758 15.3	3.54	7.0	63.3	33 23	147 18	1027
0758 22.8	2.25	4.0	56.9	33 22	147 47	1019

Local time base cor. 1.001 (cm/sec) Data begins 0753:00.2 U. T. Data ends 0758:23.9 U. T.

Remarks

SATELLITE 1958 ALPHA

Station Fort Stewart M. Thornwall
 Record No. C-4-3 M. Sipe
 Date 4 Feb. 1958 K. Attit Data Reader
Data Checker
Data Quality B

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
0037 32.9	1.666	3.5	67.5	33 04	- 90 39	742
0037 36.1	.80	1.5	60.0	33 05	- 90 25	742
0037 39.7	1.98	4.0	64.6	33 07	- 90 10	733
0037 46.9	1.84	3.5	60.9	33 09	- 89 40	733
0037 54.1	2.04	4.0	62.7	33 11	- 89 10	727
0038 00.9	1.65	3.5	67.9	33 13	- 88 41	722
0038 09.4	4.12	7.0	54.4	33 15	- 88 05	715
0038 16.2	4.15	8.0	61.7	33 16	- 87 36	710
0038 25.9	11.92	21.5	57.7	33 17	- 86 54	702
0038 37.8	12.05	23.5	62.4	33 19	- 86 03	692
0038 49.8	11.94	23.0	61.6	33 21	- 85 12	683
0038 58.6	5.69	11.5	64.7	33 23	- 84 34	676
0039 09.9	12.13	23.0	60.7	33 23	- 83 45	667
0039 22.0	11.97	24.0	64.2	33 23	- 82 52	658
0039 30.7	5.47	10.5	61.4	33 23	- 82 14	651
0039 39.5	11.58	21.0	58.0	33 23	- 81 36	645
0039 51.3	11.95	23.5	62.9	33 23	- 80 45	636
0040 02.9	11.17	21.5	61.6	33 22	- 79 54	627
0040 13.2	9.56	18.0	60.3	33 21	- 79 09	620
0040 25.8	12.04	23.0	61.1	33 18	- 78 13	611
0040 37.8	11.94	22.0	59.0	33 16	- 77 20	602
0040 48.6	9.49	16.5	55.6	33 14	- 76 32	595
0041 00.1	2.10	3.5	53.3	33 12	- 75 42	586
0041 07.1	9.46	18.0	60.9	33 10	- 75 11	582
0041 13.6	1.83	3.0	52.5	33 07	- 74 42	577
0041 17.7	1.73	3.5	64.7	33 06	- 74 24	575
0041 31.4	1.55	2.5	51.6	33 01	- 73 23	565
0041 35.0	2.25	4.5	64.0	33 00	- 73 07	562

Local time base cor. 0.980 (cm/sec). Data begins 0037:32.0 U. T. Data ends 0041:52.8 U. T.

Remarks Page 1 of 2. Time base interpolated. Recording starts late.

SATELLITE 1958 ALPHA

Station Fort Stewart Data Reader J. Von Voltenburg
 Record No. C-5-3 Data Checker K. Attit
 Date 4 Feb. 1958 Data Quality A U. T.

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2129 02.7	1.40	74.0	1690.0	22 40	- 89 58	1490
2129 04.1	1.39	64.0	1470.0	22 42	- 89 54	1490
2129 06.5	1.99	97.0	1560.0	22 45	- 89 48	1480
2129 09.9	2.81	133.0	1510.0	22 50	- 89 38	1480
2129 12.8	1.53	72.5	1520.0	22 53	- 89 30	1480
2129 16.5	2.72	122.0	1440.0	22 58	- 89 20	1470
2129 20.0	2.51	111.0	1420.0	23 03	- 89 10	1470
2129 23.1	1.66	68.0	1310.0	23 07	- 89 01	1470
2129 26.8	2.48	104.0	1340.0	23 11	- 88 51	1450
2129 29.3	1.35	54.0	1280.0	23 15	- 88 43	1450
2129 30.5	.46	20.5	1430.0	23 15	- 88 40	1450
2129 30.9	.24	10.5	1400.0	23 17	- 88 39	1460
2129 35.0	5.39	205.0	1220.0	23 22	- 88 27	1450
2129 41.3	5.33	191.0	1150.0	23 30	- 88 10	1450
2129 44.2	.36	13.0	1160.0	23 34	- 88 02	1450
2129 46.5	3.17	108.0	1090.0	23 37	- 87 55	1440
2129 49.0	2.55	82.0	1030.0	23 40	- 87 48	1440
2129 53.4	4.23	142.0	1070.0	23 46	- 87 36	1440
2129 56.5	1.61	48.0	954.0	23 50	- 87 27	1440
2129 59.4	2.92	93.0	1020.0	23 53	- 87 19	1430
2130 01.4	.47	14.0	953.0	23 56	- 87 13	1430
2130 01.9	.47	16.0	1090.0	23 56	- 87 11	1430
2130 02.3	.28	9.0	1030.0	23 57	- 87 10	1430
2130 03.2	1.24	38.0	980.0	23 58	- 87 08	1430
2130 04.6	.19	6.0	1010.0	24 00	- 87 04	1430
2130 06.3	2.79	86.0	986.0	24 02	- 86 59	1420
2130 09.2	.84	26.0	990.0	24 06	- 86 50	1420
2130 10.1	.72	21.0	933.0	24 07	- 86 47	1420

Local time base cor. 4.89 (cm/sec) Data begins 2129:02.0 U. T. Data ends 2134:34.9 U. T.

SATELLITE 1958 ALPHA

Station Fort Stewart Data Reader J. Von Voltenburg
 Record No. C-5-3 Data Checker K. Atit
 Date 4 Feb. 1958 Data Quality A U. T.

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2130 12.4	1.62	49.0	968.0	24 10	- 86 41	1420
2130 13.7	.71	18.0	811.0	24 11	- 86 37	1420
2130 14.4	.45	11.0	782.0	24 12	- 86 35	1420
2130 16.3	2.50	73.0	934.0	24 14	- 86 29	1410
2130 19.2	2.30	66.0	918.0	24 18	- 86 21	1410
2130 20.7	.34	9.0	847.0	24 20	- 86 16	1410
2130 22.9	2.27	64.5	909.0	24 23	- 86 10	1410
2130 26.2	1.88	53.0	902.0	24 27	- 86 00	1400
2130 29.9	2.24	73.0	795.0	24 31	- 85 49	1400
2130 32.7	2.56	64.0	800.0	24 35	- 85 41	1400
2130 35.4	1.17	23.5	643.0	24 38	- 85 33	1390
2130 38.1	4.33	101.0	746.0	24 42	- 85 25	1390
2130 40.9	.24	6.0	800.0	24 45	- 85 17	1390
2130 41.3	.21	5.0	762.0	24 46	- 85 16	1390
2130 44.4	5.74	129.0	719.0	24 50	- 85 07	1390
2130 49.6	4.45	103.0	741.0	24 55	- 84 52	1380
2130 52.8	1.56	33.5	687.0	25 00	- 84 42	1380
2130 54.1	.72	17.0	756.0	25 02	- 84 38	1380
2130 57.3	5.54	121.0	699.0	25 06	- 84 29	1370
2131 02.2	3.13	67.0	685.0	25 12	- 84 14	1370
2131 11.1	5.59	122.0	698.0	25 22	- 83 47	1360
2131 15.8	3.15	65.0	660.0	25 27	- 83 33	1350
2131 19.0	2.47	51.0	661.0	25 31	- 83 23	1350
2131 21.1	.25	5.0	640.0	25 33	- 83 17	1350
2131 22.4	2.01	41.0	653.0	25 35	- 83 13	1350
2131 26.2	2.54	48.0	605.0	25 39	- 83 02	1340
2131 29.1	2.09	32.5	605.0	25 42	- 82 53	1340
2131 32.9	2.87	52.5	585.0	25 47	- 82 41	1340

Local time base cor. 4.89 (cm/sec). Data begins 2129:02.0 U. T. Data ends 2134:34.9 U. T.

SATELLITE 1958 ALPHA

Station Fort Stewart Data Reader J. Von Voltenburg
 Record No. C-5-3 Data Checker K. Atit
 Date 4 Feb. 1958 Data Quality A U. T.

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2131 34.5	.27	4.0	474.0	25 49	- 82 36	1330
2131 35.8	2.39	43.0	576.0	25 50	- 82 32	1330
2131 40.1	5.19	84.0	518.0	25 53	- 82 19	1330
2131 43.5	2.02	31.0	491.0	25 59	- 82 09	1330
2131 48.4	7.91	132.0	534.0	26 05	- 81 54	1320
2131 52.4	.29	3.5	386.0	26 09	- 81 42	1320
2131 59.7	14.42	232.0	515.0	26 13	- 81 29	1310
2132 08.4	2.83	48.0	543.0	26 31	- 80 53	1300
2132 13.6	6.44	106.0	527.0	26 37	- 80 36	1300
2132 20.5	6.68	107.0	513.0	26 43	- 80 14	1290
2132 25.5	2.61	43.0	527.0	26 50	- 79 59	1280
2132 29.3	3.10	51.0	526.0	26 55	- 79 47	1280
2132 32.3	2.21	39.0	565.0	26 53	- 79 37	1280
2132 37.5	5.73	95.0	531.0	27 04	- 79 21	1270
2132 50.0	17.43	275.0	505.0	27 19	- 78 41	1260
2133 03.4	8.98	137.0	488.0	27 34	- 77 59	1250
2133 10.2	1.84	30.0	522.0	27 41	- 77 37	1240
2133 12.3	2.09	30.0	459.0	27 43	- 77 30	1240
2133 14.3	1.55	26.0	537.0	27 45	- 77 23	1230
2133 24.5	18.49	306.0	530.0	27 55	- 76 50	1220
2133 37.4	6.20	111.5	575.0	28 10	- 76 07	1210
2133 40.7	.23	4.0	557.0	28 13	- 75 56	1210
2133 42.6	2.83	51.0	577.0	28 15	- 75 50	1210
2133 46.5	2.25	40.0	569.0	28 20	- 75 37	1200
2133 53.9	9.26	171.0	591.0	28 27	- 75 13	1200
2134 01.4	6.07	110.0	580.0	28 35	- 74 48	1190
2134 11.2	12.09	213.5	565.0	28 42	- 74 15	1180
2134 21.7	9.20	157.5	548.0	28 53	- 73 39	1170

Local time base cor. 4.89 (cm/sec) Data begins 2129:02.0 U. T. Data ends 2134:34.9 U. T.

SATELLITE 1958 ALPHA

Station Fort Stewart Data Reader M. Thornwall
 Record No. C-6-1 Data Checker K. Atit
 Date 4 Feb. 1958 U. T. Data Quality A

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2332 06.1	1.43	9.5	213.0	31 29	- 92 13	1002
2332 09.6	1.24	8.5	219.0	31 31	- 91 59	999
2332 12.9	1.35	10.0	237.0	31 34	- 91 47	996
2332 19.8	2.32	19.0	262.0	31 38	- 91 20	989
2332 50.0	1.43	12.0	269.0	31 58	- 89 25	960
2332 52.9	2.48	19.5	252.0	32 00	- 89 14	957
2332 56.0	2.28	19.0	267.0	32 02	- 89 02	954
2332 59.6	2.35	19.5	266.0	32 05	- 88 49	951
2333 02.5	2.46	19.0	247.0	32 06	- 88 37	948
2333 06.1	2.96	25.5	276.0	32 08	- 88 23	945
2333 09.3	1.85	14.5	251.0	32 10	- 88 11	942
2333 12.5	2.05	15.5	242.0	32 12	- 87 58	939
2333 22.6	1.90	14.0	236.0	32 17	- 87 18	929
2333 32.3	1.85	15.5	268.0	32 23	- 86 40	920
2333 39.2	1.99	17.0	273.0	32 27	- 86 13	914
2333 44.3	5.36	44.5	266.0	32 29	- 85 53	909
2333 50.3	5.05	41.5	263.0	32 33	- 85 30	904
2333 56.1	2.43	22.0	290.0	32 36	- 85 07	898
2333 59.1	1.36	12.5	294.0	32 38	- 84 56	895
2334 03.0	6.08	49.5	261.0	32 40	- 84 37	891
2334 09.2	2.88	24.5	272.0	32 42	- 84 15	886
2334 17.1	4.74	41.0	277.0	32 45	- 83 43	879
2334 32.9	2.38	20.0	269.0	32 51	- 82 39	865
2334 40.0	2.02	17.5	277.0	32 54	- 82 11	858
2334 42.9	2.19	20.5	300.0	32 55	- 81 59	855
2334 46.8	2.13	20.5	308.0	32 57	- 81 43	852
2334 50.0	1.79	16.5	295.0	32 58	- 81 30	849
2334 53.7	2.05	18.0	281.0	32 59	- 81 15	846

Local time base cor. 2.42 (cm/sec). Data begins 2332:05.4 U. T. Data ends 2337:29.3 U. T.

Remarks Page 1 of 2. Time base interpolated.

SATELLITE 1958 ALPHA

Station Fort Stewart Data Reader M. Thornwall
 Record No. C-7-3 Data Checker K. Atit
 Date 5 Feb. 1958 Data Quality A U. T.

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2228 01.8	1.18	31.0	841.0	30 26	86 14	1190
2228 03.6	1.94	49.0	808.0	30 32	85 50	1180
2228 15.8	9.74	253.5	833.0	30 38	85 24	1170
2228 25.7	10.09	263.0	834.0	30 46	84 49	1160
2228 35.7	10.00	255.0	816.0	30 54	84 24	1150
2228 45.2	9.04	233.0	825.0	31 01	83 40	1140
2228 52.0	4.01	102.0	814.0	31 07	83 16	1140
2228 55.2	1.55	42.0	867.0	31 09	83 05	1130
2229 07.3	6.30	166.0	843.0	31 18	82 21	1120
2229 11.4	1.49	38.5	827.0	31 21	82 07	1120
2229 12.9	1.40	38.5	880.0	31 22	82 01	1120
2229 19.1	10.34	271.5	840.0	31 26	81 28	1110
2229 25.5	2.63	65.5	797.0	31 30	81 15	1100
2229 30.2	6.33	159.5	806.0	31 34	80 57	1100
2229 37.1	6.72	163.0	800.0	31 38	80 32	1090
2229 43.3	5.14	124.0	772.0	31 42	80 09	1090
2229 52.5	10.16	246.0	775.0	31 49	79 26	1080
2229 59.1	3.09	71.5	740.0	31 53	79 11	1070
2230 04.2	6.83	162.0	759.0	31 56	78 52	1050
2230 10.3	5.30	121.5	734.0	32 00	78 29	1050
2230 23.3	6.64	141.0	708.0	32 02	77 35	1050
2230 29.2	2.23	63.0	712.0	32 11	77 17	1040
2230 31.1	6.31	138.5	702.0	32 14	76 58	1040
2230 40.0	3.25	63.5	655.0	32 17	76 37	1030
2230 42.0	2.49	53.5	583.0	32 18	76 25	1030
2230 46.0	3.00	56.0	583.0	32 20	76 17	1020
2230 50.0	6.08	153.0	430.0	32 24	75 27	1010
2231 03.0	10.44	200.5	615.0	30 30	75 01	1020

Local time base cor. 5.09 (cm/sec). Data begins 2228:01.2 U. T. Data ends 2231:34.8 U. T.

Remarks Page 1 of 2.

SATELLITE 1958 ALPHA

Station Fort Stewart Data Reader M. Thornwall
 Record No. C-8-3 Data Checker J. Quinn
 Date 6 Feb. 1958 U. T. Data Quality A
M. Sipe

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2120 17.5	2.55	133.0	1670.0	25 33	- 90 52	1590
2120 24.8	2.30	118.0	1640.0	25 41	- 90 31	1590
2120 28.5	2.98	151.5	1630.0	25 45	- 90 21	1580
2120 33.9	6.72	339.0	1610.0	25 51	- 90 05	1580
2120 44.3	5.93	291.5	1570.0	26 03	- 89 36	1570
2120 51.5	5.85	275.0	1500.0	26 11	- 89 15	1560
2121 01.5	11.44	519.0	1450.0	26 23	- 88 47	1550
2121 13.2	11.89	537.0	1450.0	26 35	- 88 12	1540
2121 21.4	4.62	184.0	1270.0	26 44	- 87 48	1530
2121 28.6	6.62	263.5	1270.0	26 52	- 87 27	1520
2121 45.7	2.04	83.0	1300.0	27 10	- 86 36	1510
2121 50.9	6.55	237.0	1160.0	27 15	- 86 21	1500
2121 56.1	2.87	107.0	1190.0	27 21	- 86 06	1500
2122 01.2	5.48	202.0	1180.0	27 26	- 85 50	1490
2122 08.2	5.26	195.0	1190.0	27 33	- 85 29	1480
2122 18.7	11.81	401.0	1090.0	27 44	- 84 57	1470
2122 30.5	11.85	385.0	1040.0	27 56	- 84 20	1460
2122 42.5	12.01	350.0	933.0	28 08	- 83 44	1450
2122 53.6	6.37	175.5	882.0	28 19	- 83 10	1440
2123 01.2	6.37	176.0	884.0	28 27	- 82 46	1430
2123 11.3	6.65	170.0	818.0	28 37	- 82 14	1420
2123 21.1	11.94	291.0	780.0	28 46	- 81 43	1410
2123 33.0	11.82	277.0	750.0	28 57	- 81 06	1400
2123 44.9	11.85	262.0	708.0	29 09	- 80 28	1390
2123 56.7	11.93	257.0	689.0	29 20	- 79 50	1380
2124 08.2	10.97	232.0	677.0	29 30	- 79 13	1370
2124 16.1	4.83	95.0	629.0	29 37	- 78 47	1360
2124 29.4	11.65	225.5	619.0	29 48	- 78 03	1340

Local time base cor. 4.97 (cm/sec) Data begins 2120:16.3 U. T. Data ends 2126:18.3 U. T.

Remarks Page 1 of 2. Time base interpolated and extrapolated.

SATELLITE 1958 ALPHA

M. Thornwall
M. Sipe

Station Fort Stewart Data Reader M. Sipe
 Record No. C-9-1 Data Checker K. Atit
 Date 6 Feb. 1958 U. T. A

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2323 37.2	1.12	7.5	214.0	32 42	91 45	1090
2323 45.2	3.91	25.5	209.0	32 46	91 15	1080
2323 52.8	3.92	24.5	200.0	32 49	90 46	1080
2324 25.0	6.48	43.0	212.0	33 00	88 43	1040
2324 33.5	9.79	73.5	240.0	33 03	88 10	1040
2324 45.1	11.92	89.0	239.0	33 06	87 25	1030
2324 57.0	11.90	93.0	250.0	33 10	86 40	1010
2325 08.9	11.86	95.0	256.0	33 13	85 53	1000
2325 20.8	11.86	94.0	254.0	33 15	85 06	991
2325 32.6	11.65	90.0	247.0	33 17	84 20	980
2325 44.3	11.75	90.0	245.0	33 19	83 34	968
2325 54.7	8.85	65.0	235.0	33 21	82 53	958
2326 05.0	11.85	89.0	240.0	33 22	82 12	949
2326 13.6	5.34	40.0	240.0	33 22	81 37	941
2326 19.8	6.32	46.0	233.0	33 23	81 12	935
2326 26.6	6.45	46.5	231.0	33 23	80 45	928
2326 33.5	6.49	48.0	237.0	33 23	80 17	922
2326 40.3	6.25	44.5	228.0	33 23	79 49	916
2326 49.8	11.89	80.0	215.0	33 24	79 11	907
2327 01.6	11.81	78.0	211.0	33 24	78 23	896
2327 13.5	11.91	75.0	202.0	33 23	77 35	885
2327 25.4	11.75	71.0	193.0	33 21	76 47	874
2327 37.2	11.83	74.0	200.0	33 20	75 59	863
2327 47.8	9.39	53.0	181.0	33 19	75 16	854
2327 56.0	6.26	36.0	184.0	33 18	74 42	846
2328 01.2	2.34	12.0	164.0	33 18	74 21	841
2328 12.1	1.87	10.0	171.0	33 15	73 36	832
2328 15.7	2.79	15.0	172.0	33 14	73 21	820

Local time base cor. 2.47 (cm/sec). Data begins 2323:36.7 U. T. Data ends 2328:33.9 U. T.

Remarks Time base interpolated and extrapolated. Page 1 of 2.

SATELLITE 1958 ALPHA

M. Thornwall
S. Clendenning

Station Fort Stewart Data Reader M. Thornwall
 Record No. C-9-2 Data Checker S. Clendenning
 Date 7 Feb. 1958 U. T. A Data Quality A

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
0125 41.1	1.36	5.5	129.0	32 05	- 91 30	701
0125 45.0	2.65	11.5	139.0	32 02	- 91 14	698
0125 48.4	2.03	9.5	150.0	32 00	- 91 00	695
0125 52.6	2.40	10.5	140.0	31 58	- 90 43	692
0125 55.4	1.64	7.0	137.0	31 56	- 90 31	690
0125 59.5	2.35	11.0	150.0	31 53	- 90 14	686
0126 28.6	5.64	20.0	113.0	31 31	- 88 13	664
0126 35.5	5.57	18.5	106.0	31 25	- 87 44	658
0126 42.6	5.55	19.0	110.0	31 20	- 87 15	653
0126 59.9	11.81	40.0	108.0	31 06	- 86 02	640
0127 10.3	9.01	29.0	103.0	30 56	- 85 19	632
0127 17.1	4.43	15.0	108.0	30 50	- 84 51	627
0127 27.5	11.88	35.0	94.3	30 40	- 84 08	620
0127 39.2	11.56	33.0	91.3	30 29	- 83 20	611
0127 47.2	4.33	12.5	92.4	30 21	- 82 47	605
0127 55.8	11.92	31.5	84.6	30 13	- 82 11	599
0128 05.7	7.88	19.0	77.2	30 03	- 81 31	592
0128 13.0	2.33	6.0	82.4	29 54	- 81 01	587
0128 22.1	11.68	26.0	71.2	29 45	- 80 24	581
0128 31.7	7.65	15.0	62.7	29 34	- 79 45	575
0128 42.0	11.58	23.0	63.6	29 23	- 79 02	568
0128 52.6	9.63	19.0	63.1	29 11	- 78 19	561
0129 03.5	11.73	22.5	61.4	28 59	- 77 35	553
0129 13.6	8.53	14.5	54.4	28 46	- 76 54	547
0129 22.3	11.55	18.0	49.9	28 23	- 75 38	536
0129 40.4	4.80	8.5	56.7	28 13	- 75 05	531
0129 58.2	5.48	8.0	46.7	27 50	- 73 53	519
0130 08.0	10.96	16.0	46.7	27 37	- 73 14	514

Local time base cor. 0.986 (cm/sec). Data begins 0125:40.4 U. T. Data ends 0130:20.4 U. T.

Remarks Page 1 of 2. Time base interpolated.

SATELLITE 1958 ALPHA

Station Fort Stewart Data Reader M. Thornwall
 Record No. C-10-3 Data Checker K. Atit
 Date 7 Feb. 1958 Data Quality A U. T.

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2012 53.4	1.81	99.5	1760.0	20 26	90 56	1942
2013 01.3	1.68	93.5	1780.0	20 36	90 47	1935
2013 08.8	1.72	98.0	1810.0	20 45	90 29	1929
2013 13.0	1.12	61.5	1760.0	20 50	90 19	1925
2013 15.2	1.93	114.5	1900.0	20 54	90 11	1923
2013 20.3	1.80	101.5	1800.0	20 59	90 01	1919
2013 27.7	2.33	139.0	1910.0	21 08	89 44	1913
2013 31.4	1.25	74.0	1890.0	21 13	89 35	1910
2013 34.9	2.15	130.0	1930.0	21 17	89 26	1907
2013 42.7	2.26	143.0	2020.0	21 27	89 08	1900
2013 46.7	1.59	103.5	2080.0	21 32	88 58	1897
2013 50.4	1.57	105.5	2150.0	21 36	88 49	1893
2014 05.0	1.62	106.5	2100.0	21 54	88 14	1881
2014 16.9	2.24	143.0	2040.0	22 09	87 44	1870
2014 24.5	1.44	95.0	2110.0	22 18	87 25	1864
2014 31.7	2.07	139.0	2150.0	22 27	87 07	1858
2014 38.9	2.24	152.0	2170.0	22 35	86 49	1851
2014 43.0	1.47	97.0	2110.0	22 40	86 38	1845
2014 47.0	1.65	107.0	2080.0	22 45	86 28	1844
2014 58.0	2.25	145.0	2050.0	22 59	86 01	1834
2015 01.3	1.62	89.0	2010.0	23 03	85 53	1832
2015 05.9	1.66	106.0	2040.0	23 08	85 41	1827
2015 08.8	1.86	120.0	2060.0	23 11	85 33	1825
2015 13.3	1.50	93.5	1990.0	23 17	85 22	1821
2015 16.7	1.32	81.0	1960.0	23 20	85 13	1818
2015 35.5	2.98	184.0	1980.0	23 42	84 25	1801
2015 38.6	2.77	164.5	1900.0	23 46	84 17	1798
2015 57.8	2.14	118.5	1770.0	24 08	83 28	1781

Local time base cor. 4.84 (cm/sec) Data begins 2012:52.5 U. T. Data ends 2020:23.6 U. T.

Remarks Page 1 of 3. Time base interpolated and extrapolated.

SATELLITE 1958 ALPHA

Station Fort Stewart Data Reader M. Thornwall
 Record No. C-10-3 Data Checker K. Atit
 Date 7 Feb. 1958 U. T. Data Quality A

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2016 05.1	1.31	70.0	1710.0	24 17	-- 83 08	1774
2016 09.4	2.50	131.5	1680.0	24 22	-- 82 57	1770
2016 13.0	2.57	136.0	1690.0	24 26	-- 81 47	1767
2016 16.8	2.56	132.5	1660.0	24 30	-- 81 37	1763
2016 20.5	2.99	154.0	1650.0	24 34	-- 81 27	1760
2016 24.8	1.43	75.0	1680.0	24 39	-- 81 16	1756
2016 28.1	2.76	140.5	1630.0	24 43	-- 81 07	1753
2016 31.8	2.87	144.0	1610.0	24 47	-- 80 57	1749
2016 35.4	2.68	135.0	1610.0	24 51	-- 80 48	1746
2016 39.3	2.95	144.0	1560.0	24 56	-- 80 37	1743
2016 42.8	2.74	133.0	1550.0	25 00	-- 80 28	1739
2016 46.6	2.71	128.5	1520.0	25 04	-- 80 18	1736
2016 49.8	2.40	115.0	1530.0	25 07	-- 80 09	1733
2016 53.8	2.64	125.0	1520.0	25 12	-- 79 59	1729
2016 56.9	1.63	76.0	1490.0	25 15	-- 79 50	1726
2017 01.6	2.74	120.0	1400.0	25 21	-- 80 38	1722
2017 04.5	2.20	99.0	1440.0	25 24	-- 80 30	1779
2017 08.8	2.71	116.0	1370.0	25 29	-- 80 18	1715
2017 11.7	1.83	79.0	1380.0	25 32	-- 80 10	1713
2017 16.4	3.31	141.0	1360.0	25 37	-- 79 57	1708
2017 19.6	1.98	79.0	1280.0	25 41	-- 79 48	1705
2017 23.8	3.42	137.0	1280.0	25 45	-- 79 36	1701
2017 27.1	3.16	125.5	1270.0	25 49	-- 79 27	1698
2017 31.1	2.45	94.0	1230.0	25 53	-- 79 16	1694
2017 39.0	2.77	107.5	1240.0	26 02	-- 78 54	1687
2017 42.8	2.82	111.0	1260.0	26 06	-- 78 44	1683
2017 48.1	7.01	265.0	1210.0	26 12	-- 78 29	1678
2017 55.4	6.51	234.5	1150.0	26 20	-- 78 09	1671

Local time base cor. 4.84 (cm/sec). Data begins 2012:52.5 U. T. Data ends 2020:23.6 U. T.

Remarks Page 2 of 3. Time base interpolated and extrapolated.

SATELLITE 1958 ALPHA

Station Fort Steuart Data Reader M. Thornwall
 Record No. C-11-2 Data Checker K. Atit
 Date 8 Feb. 1958 U. T. Data Quality A

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
0019 42.3	2.41	9.0	120.0	33 20	93 56	964
0019 42.5	2.90	11.0	121.0	33 19	93 47	957
0019 56.6	1.44	6.0	133.0	33 18	93 19	950
0020 03.8	1.28	5.0	125.0	33 17	92 51	943
0020 29.8	1.01	4.5	143.0	33 11	91 06	919
0020 33.5	2.85	25.0	281.0	33 08	90 31	911
0020 43.0	2.91	12.0	132.0	33 07	90 10	906
0020 47.0	1.95	9.5	157.0	33 06	89 57	903
0020 51.4	3.14	13.5	138.0	33 05	89 40	899
0020 54.5	2.13	9.5	143.0	33 04	89 27	896
0020 58.2	1.95	9.0	142.0	33 03	89 12	893
0021 12.8	2.47	11.5	149.0	32 58	88 13	879
0021 29.3	5.29	21.0	127.0	32 52	87 07	866
0021 35.3	4.45	18.5	133.0	32 49	86 43	859
0021 45.4	2.22	8.5	123.0	32 46	86 02	850
0021 50.6	4.37	18.0	132.0	32 44	85 41	845
0021 57.9	5.98	25.0	136.0	32 41	85 11	838
0022 04.8	6.99	28.0	128.0	32 37	84 43	832
0022 10.0	2.61	10.0	123.0	32 35	84 22	827
0022 21.4	10.28	40.0	125.0	32 28	83 36	817
0022 27.9	2.75	10.0	116.0	32 25	83 10	812
0022 31.7	3.00	11.0	117.0	32 23	82 54	802
0022 42.1	11.40	41.5	116.0	32 16	82 07	798
0022 51.6	5.65	20.5	116.0	32 12	81 32	791
0023 01.9	11.61	41.0	113.0	32 06	80 51	782
0023 16.4	4.10	16.0	125.0	31 56	79 57	770
0023 27.2	11.12	38.5	111.0	31 48	79 09	760
0023 36.2	4.35	14.0	92.4	31 42	78 36	754

Local time base cor. 2.45 (cm/sec) Data begins 0019:41.1 U. T. Data ends 0025:24.1 U. T.
 Remarks Page 1 of 2. Time base interpolated.

SATELLITE 1958 ALPHA

M. Thornwall
S. Clendenning

Station Fort Stewart Data Reader J. Quinn
 Record No. C-12-3 Data Checker J. Quinn
 Date 8 Feb. 1958 U. T. A Data Quality A

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2111 28.3	1.69	67.0	1270.0	28 02	91 30	1700
2111 32.4	1.71	64.5	1210.0	28 06	91 29	1700
2111 36.1	2.58	98.0	1220.0	28 13	91 07	1693
2111 39.2	1.92	69.5	1160.0	28 16	90 58	1690
2111 42.9	2.66	96.0	1160.0	28 19	90 66	1686
2111 46.9	2.52	96.0	1190.0	28 23	90 35	1682
2111 50.9	2.61	93.0	1140.0	28 26	90 26	1679
2111 54.2	2.21	79.5	1150.0	28 30	90 14	1676
2111 57.7	2.01	108.0	1150.0	28 33	90 04	1672
2111 61.6	2.92	103.5	1130.0	28 36	89 53	1669
2111 65.1	2.25	112.5	1120.0	28 40	89 43	1656
2111 68.6	2.36	93.5	1110.0	28 43	89 32	1662
2111 72.6	2.07	109.0	1110.0	28 47	89 22	1659
2112 01.0	2.89	100.5	1110.0	28 50	89 11	1655
2112 04.6	2.81	93.0	1120.0	28 53	89 00	1652
2112 08.1	2.60	96.0	1120.0	28 56	88 50	1648
2112 11.7	1.79	95.0	1090.0	28 59	88 33	1645
2112 15.9	2.48	84.5	1090.0	29 02	88 27	1641
2112 19.0	2.62	92.0	1080.0	29 05	88 17	1638
2112 23.3	2.00	100.5	1040.0	29 11	87 56	1621
2112 27.9	1.67	35.5	773.0	30 17	83 57	1667
2112 31.3	1.87	45.5	779.0	30 19	83 40	1661
2112 35.3	2.75	66.0	752.0	30 22	83 29	1654
2112 39.9	3.20	72.0	768.0	30 25	83 18	1647
2112 44.0	3.16	73.0	729.0	30 28	83 07	1640
2112 48.5	3.43	80.5	751.0	30 31	82 50	1637
2112 53.2	3.24	74.0	721.0	30 33	82 31	1632
2112 58.2	12.72	265.0	705.0	30 39	82 22	1625

Local time base cor. 4.94. (cm/sec). Data begins 2111:09.0 U. T. Data ends 2118:10 U. T.

Page 1 of 3.
 Remarks Time base interpolated. End of tape not reduced. See Blossom Point RP-15, Havana D-34.

SATELLITE 1958 ALPHA

M. Thornwall
S. Clendenning

Station Fort Stewart Data Reader
 Record No. C-12-3 Data Checker J. Quinn
 Date 8 Feb. 1958 U. T. Data Quality A

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2114 26.4	10.31	218.0	677.0	30 47	- 82 08	1514
2114 33.0	2.75	58.0	675.0	30 52	- 81 54	1508
2114 36.3	3.20	65.0	650.0	30 54	- 81 47	1504
2114 40.1	3.03	52.5	660.0	30 57	- 81 38	1501
2114 43.6	2.85	57.5	646.0	30 59	- 81 31	1494
2114 50.9	2.82	54.5	618.0	31 04	- 81 14	1490
2114 54.3	2.99	62.0	664.0	31 07	- 81 07	1487
2114 57.9	2.65	55.0	664.0	31 09	- 79 59	1483
2115 05.1	2.71	58.0	685.0	31 14	- 79 37	1476
2115 08.3	2.99	64.5	690.0	31 17	- 79 30	1472
2115 12.3	3.03	65.0	686.0	31 19	- 79 13	1469
2115 15.7	2.76	59.5	690.0	31 21	- 79 02	1465
2115 19.5	2.50	56.0	717.0	31 23	- 78 49	1462
2115 23.3	2.60	53.5	720.0	31 26	- 78 37	1458
2115 28.2	5.72	142.5	679.0	31 28	- 78 20	1453
2115 33.2	2.55	53.5	671.0	31 32	- 78 04	1448
2115 37.4	2.55	54.5	584.0	31 35	- 77 50	1444
2115 42.6	6.62	140.5	679.0	31 38	- 77 33	1439
2115 49.6	6.74	137.5	653.0	31 42	- 77 09	1432
2115 54.9	2.85	60.5	679.0	31 45	- 76 52	1426
2116 03.8	6.15	128.5	669.0	31 57	- 76 22	1417
2116 19.1	3.80	79.5	669.0	31 59	- 75 30	1402
2116 22.6	2.70	56.0	664.0	32 01	- 75 18	1399
2116 26.6	3.00	62.0	661.0	32 03	- 75 04	1395
2116 31.7	6.73	138.0	656.0	32 05	- 74 47	1389
2116 39.7	6.60	134.0	650.0	32 10	- 74 23	1382
2116 45.7	6.70	137.0	654.0	32 13	- 73 59	1375
2116 52.7	6.69	136.0	651.0	32 17	- 73 35	1368

Local time base cor. 4.94 (cm/sec). Data begins 2111:09.0 U. T. Data ends 2118:10 U. T.

Page 2 of 3.
 Remarks Time base interpolated. End of tape not reduced. See Blossom Point BP-15.

SATELLITE 1958 ALPHA

Station Fort Stewart Data Reader M. Thornwell
 Record No. C-13-1 Data Checker K. Atit
 Date 8 Feb. 1958 U. T. Data Quality A

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2314 17.8	2.07	9.5	147.0	33 14	-- 93 09	1220
2314 21.3	1.89	8.5	144.0	33 15	-- 92 56	1210
2314 24.6	2.36	11.0	149.0	33 15	-- 92 44	1210
2314 27.9	2.17	9.5	140.0	33 16	-- 92 32	1210
2314 31.2	1.84	9.0	157.0	33 16	-- 92 20	1200
2314 34.8	1.78	8.0	144.0	33 17	-- 92 06	1200
2314 37.7	1.94	9.5	157.0	33 17	-- 91 56	1200
2314 41.2	1.83	9.0	157.0	33 18	-- 91 43	1190
2315 01.6	2.16	9.5	141.0	33 21	-- 90 27	1170
2315 04.8	2.43	10.5	138.0	33 21	-- 90 15	1170
2315 12.4	10.97	51.0	149.0	33 22	-- 89 46	1160
2315 23.3	11.00	51.0	148.0	33 22	-- 89 05	1150
2315 34.3	11.03	52.0	151.0	33 23	-- 88 23	1140
2315 45.3	10.89	50.0	147.0	33 23	-- 87 42	1130
2315 56.2	11.05	51.0	148.0	33 24	-- 87 00	1120
2316 07.2	10.90	55.0	161.0	33 23	-- 86 18	1110
2316 18.1	10.88	55.0	162.0	33 22	-- 85 37	1100
2316 29.0	11.05	58.0	168.0	33 22	-- 84 55	1090
2316 40.1	11.03	59.0	171.0	33 21	-- 84 12	1080
2316 51.1	11.11	60.0	173.0	33 20	-- 83 30	1060
2317 02.2	11.03	58.0	168.0	33 19	-- 82 47	1050
2317 13.0	10.59	53.0	159.0	33 16	-- 82 06	1040
2317 23.8	10.98	57.0	166.0	33 14	-- 81 24	1030
2317 34.9	11.08	63.0	182.0	33 11	-- 80 40	1020
2317 45.9	10.97	63.0	184.0	33 09	-- 79 58	1010
2317 56.8	10.79	52.0	184.0	33 07	-- 79 15	1000
2318 07.7	10.99	61.0	178.0	33 03	-- 78 33	990
2318 18.6	10.93	68.0	199.0	32 59	-- 77 50	979

Local time base cor. 2.67 (cm/sec) Data begins 2314:16.8 U. T. Data ends 2319:55.2 U. T.

Remarks Page 1 of 2. Time base interpolated.

SATELLITE 1958 ALPHA

Station Fort Stewart Data Reader M. Thornwall
 Record No. C-14-2 Data Checker K. Atit
 Date 9 Feb. 1958 U. T. Data Quality A

Nominal Time (U.T.)	Time Interval (sec)	Count (cycles)	Rate (counts/sec)	Geographic Latitude	Geographic Longitude	Height (km)
2209 55.7	2.86	35.5	522.0	32 55	85 76	1400
2209 58.9	3.10	50.0	557.0	32 57	85 84	1395
2210 02.6	2.93	42.0	525.0	32 58	85 51	1390
2210 05.8	2.88	38.5	540.0	32 59	85 40	1380
2210 09.7	3.01	43.6	516.0	33 00	85 26	1350
2210 12.0	2.73	45.5	537.0	33 00	85 15	1310
2210 16.7	2.77	60.0	508.0	33 01	85 01	1370
2210 20.1	2.90	67.0	503.0	33 03	84 35	1370
2210 23.3	2.52	60.5	514.0	33 04	84 24	1360
2210 31.3	3.10	50.0	516.0	33 05	84 10	1250
2210 34.7	2.77	62.0	485.0	33 06	83 58	1360
2210 39.5	2.91	64.5	489.0	33 07	83 45	1350
2210 41.5	2.03	31.5	497.0	33 08	83 34	1350
2210 45.7	2.80	41.5	474.0	33 09	83 19	1240
2210 53.0	1.42	21.0	473.0	33 11	82 54	1340
2211 07.8	3.00	46.0	491.0	33 14	82 01	1320
2211 11.2	2.44	35.5	466.0	33 14	81 49	1320
2211 14.7	2.95	60.0	477.0	33 15	81 36	1310
2211 18.1	3.15	45.0	457.0	33 15	81 24	1310
2211 21.8	2.89	61.5	460.0	33 16	81 11	1310
2211 25.6	2.53	35.5	449.0	33 16	80 57	1300
2211 31.0	6.70	90.5	451.0	33 17	80 37	1300
2211 36.1	2.81	38.5	438.0	33 18	80 19	1290
2211 40.1	1.98	29.5	477.0	33 18	80 05	1290
2211 43.5	2.84	41.0	462.0	33 19	79 52	1290
2211 47.0	3.01	43.0	457.0	33 19	79 40	1280
2211 52.5	6.44	89.5	445.0	33 20	79 20	1280
2211 59.6	6.77	93.5	442.0	33 21	78 54	1270

Local time base cor. 2.45 (cm/sec). Data begins 2209:54.1 U. T. Data ends 2215:05 U. T.
 Page 1 of 2.
 Remarks Time base obtained by comparison with Blossom Point. End of tape not reduced. See Blossom Point BP-16.

