

DATA SET CATALOG # 2

Explorer 7 Thermal Radiation

59-009A-01A	1 Tape
59-009A-01B	2 Tapes

59-009A-01A

Explorer 7 (1959 IOTA 1)
Thermal Radiation Experiment

Data Set A white sensor temperatures at night. This data set consists of a single magnetic tape (D-00022) which contains information from day 33 through day 224 of launch (11/15/1959 to 6/23/1960).

The tape is a BCD listing tape produced as output by a program. This Data Set Catalog consists of:

1. A BCD dump of part of the tape
2. A copy of the first 6 pages of the tape as listed. The complete listing is available at the NSSDC (2 volumes).
3. A format description of the data provided by the University of Wisconsin.
4. A data inventory of the data provided by the University of Wisconsin (number of readouts per day).

EXPLORER 7
THERMAL RADIATION

59-009A-01A

59-009A-01B

D-00022	C-02101	Nov. 15, 1959 - May 24, 1960	01A
D-00023	C-00004	Oct. 19, 1959 - Apr 17, 1960	01B
D-00024	C-02102	Apr. 17, 1960 - Jun 4, 1960	01B

Tapes are now down stairs.

The formats for these data sets can be found on pages 6-13 of the
Data User's Note 67-17 included in this catalog.

DATA USERS' NOTE

NSSDC 67-17

**EXPLORER 7 (1959 IOTA 1)
THERMAL RADIATION EXPERIMENT**

MARCH 1967



NATIONAL SPACE SCIENCE DATA CENTER

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION • GODDARD SPACE FLIGHT CENTER, GREENBELT, MD.

DATA USERS' NOTE
NSSDC 67-17

EXPLORER 7 (1959 IOTA 1)
THERMAL RADIATION EXPERIMENT

EXPERIMENTER
V. Suomi

MARCH 1967

FOREWORD

This Data Users' Note is specifically designed to help potential data users decide if they can make use of the data obtained in the Explorer 7 (1959 Iota 1) thermal radiation experiment. Once a data user decides that he requires the data, it will serve as the unifying element - the key - in the actual use of the data available at the National Space Science Data Center (NSSDC). To achieve these goals, the Note briefly describes the experiment, including the instrumentation and measurements, the telemetry, and the operational experience. All available details are then provided on the actual reduction techniques and format of recorded data. For those desiring more details, the name and address of the experimenter is provided to facilitate direct contact. As a further aid, detailed references (and bibliography) are also included. When available, NASA accession numbers* are given. The primary purpose of these references is to identify the sources containing complete information concerning the subject under discussion. Most of these references are physically available at NSSDC - those that are not are readily obtainable.

Inquiries concerning the availability of data should be directed to:

National Space Science Data Center
Goddard Space Flight Center
Greenbelt, Maryland 20771
Area Code 301 982-6695

*For example, M64-2243 is an accession number for an article reported in the *Scientific and Technical Aerospace Reports (STAR)*, and A63-5921 refers to an entry in the *International Aerospace Abstracts (IAA)*.

CONTENTS

	<u>Page</u>
BACKGROUND	1
EXPERIMENTER	1
EXPERIMENT	
Instrumentation and Measurements	1
Telemetry	3
Operational Experience	4
DATA	
Reduction Techniques	4
Timespan of Data	6
Format of Available Data	6
REFERENCES	17
BIBLIOGRAPHY	19

LIST OF FIGURES

Figure

1	Explorer 7 Experiments	2
2	Values of Absorptivity for Various Coatings	3
3	Sensor Parameters for the Radiation Balance Experiment	3
4	Sampling Order for the 7: -cps Subcarrier	5
5	EXPVIIRAD Tape (BCD) Format Description	6
6	EXPVIIRAD Record	7
7	Explorer 7 Radiation Data Sample	8
8a	Explorer 7 Thermal Radiation Data Distribution (Longitude East)	9
8b	Explorer 7 Thermal Radiation Data Distribution (Longitude West)	9
9	Explorer 7 Data Inventory - Tape EXPVIIRAD	10
10	EXPVIITEMPS #1 and #2 (Binary) Format Description	11
11	Explorer 7 Data Inventory (EXPVIITEMPS)	14
12	Explorer 7 Tracking Station Codes	16

EXPLORER 7 (1959 IOTA 1)
THERMAL RADIATION EXPERIMENT

BACKGROUND

The thermal radiation experiment on board Explorer 7 was proposed by Dr. Harry Wexler of the U.S. Weather Bureau and was carried out under the direction of Dr. Verner Suomi of the University of Wisconsin.¹ The experiment was designed to measure solar, reflected, and terrestrial radiation currents in order to determine the radiant heat flow to and from the earth and to obtain a clearer understanding of the driving force behind the atmosphere.² A complete list of experiments aboard Explorer 7 is given in Figure 1.

The United States IGY Technical Panel on the Earth Satellite Programs planned the launch of Explorer 7. Launched on October 13, 1959, at 1530 UT, the satellite very nearly achieved the planned orbit.³ The Explorer 7 satellite had an initial apogee of 1090 km, a perigee of 555 km, an inclination of 50°, and a period of 101 min.⁴

EXPERIMENTER

V. Suomi - University of Wisconsin*

EXPERIMENT

Instrumentation and Measurements

The experiment was designed to measure thermal radiation from three sources. These sources were: (1) direct radiation from the sun; (2) the fraction of solar radiation that is diffusely reflected by earth, clouds, and atmosphere; and (3) the fraction of radiation that is converted into heat by the earth and is ultimately reradiated back to space in the far infrared portion of the spectrum.⁵

The primary instrumentation for the thermal radiation experiment consisted of bolometers in the form of hollow silver hemispheres thermally isolated from, but in close proximity to, specially aluminized mirrors. Attached to each bolometer was a glass-coated bead thermistor. These sensors were in all cases variable resistance elements for measurement of temperature or erosion. The mirrors made the sensors look like a full sphere while coating as shields between the bolometers and the satellite. The hemispheres thereby behaved very much like isolated spheres in space.⁶

* Address: Department of Meteorology, U. of Wisconsin, Madison, Wisconsin.

**FIGURE 1
EXPLORER 7 EXPERIMENTS**

No.	Experiment	Investigator(s)	Affiliation
01	Thermal Radiation	V. Suomi	University of Wisconsin
02	Solar Radiation	T. Chubb H. Friedman R. Kreplin	Naval Research Laboratory
03	Heavy Cosmic Radiation	G. Grotzinger M. Pomerantz P. Schwed	Martin Company Bartol Research Foundation Martin Company
04	Radiation and Solar Proton	L. Frank G. Ludwig* J. Van Allen H. Whelpley	University of Iowa** University of Iowa** University of Iowa** University of Iowa**
05	Micrometeorite	H. LaGow	Goddard Space Flight Center
06	Ground-Based Ionospheric	W. Dyke R. Jones C. Little R. Parthasarathy W. Ross G. Swenson O. Villiard, Jr.	Lenfield Research Lenfield Research NBS*** University of Alaska Penn. State University University of Illinois Stanford University

* Now at Goddard Space Flight Center.

** Formerly known as State University of Iowa.

*** National Bureau of Standards.

The instruments included two black hemispheres that responded to solar and terrestrial radiation, one white hemisphere that was more sensitive to terrestrial radiation, and one gold hemisphere designed to absorb short-wave radiation. In addition, a Tabor surfaced bolometer, shaded from direct sunlight, was mounted on the equator of the satellite, and a black sphere at the top of the satellite was used to determine any deterioration of the mirror surfaces.⁶

More detailed specifications regarding the sensitivities of the instruments are given in Figures 2 and 3.

FIGURE 2
VALUES OF ABSORPTIVITY FOR VARIOUS COATINGS⁵

Surface	Short-Wave Beam Radiation	Short-Wave Diffuse Radiation	Long-Wave Radiation
Black Paint	0.95	0.95	0.95
PbCO ₃ White Paint	0.05	0.95	0.95
Tabor Coating	0.90	0.90	0.10

FIGURE 3
SENSOR PARAMETERS FOR THE RADIATION
BALANCE EXPERIMENT^{2,3}

Sensor	α	ϵ	K	H
Black Hemisphere No. 1	0.91	0.91	0.004*	0.0085
White Hemisphere	0.20(est.)	0.93	0.004	0.0083
Shaded Hemisphere	0.77	0.28	0.012**	unknown
Black Hemisphere No. 2	0.91	0.91	0.004	0.00847
Gold Hemisphere	0.34	0.04	0.004	0.0088
Black Sphere	0.91	0.91	0.003	0.00885

α - Absorptivity of solar radiation (approximately 0.3 to 3 μ)

ϵ - Emissivity for long-wave radiation (approximately 3 to 60 μ)

K - Conduction per cm² of surface per °C of temperature difference between sensor and mount

H - Heat capacity, calories per cm² of exposed surface per °C

* Measured at -50°C.

** Calculated.

Telemetry

The pertinent information for the measurement of the radiation currents was derived from the radiation equilibrium temperatures of the satellite instruments. The temperature sensors were thermistors whose output changed the frequency

of a blocking oscillator built by the University of Wisconsin. In order to evaluate the earth's radiation budget, it was necessary to know these temperatures as a function of position in the orbit about the earth. Temperature data were stored at a low rate on a miniature tape recorder and subsequently played back at a high rate when the satellite was over a telemetering station. The number of counts per sec during a 5-sec interval was converted to binary digits and telemetered in the form of pulses.^{6,7}

The ten-stage binary scalers in the telemetry system counted output pulses from the blocking oscillator during a 5-sec interval, formed a ten-digit binary number representing the count of blocking oscillator pulses, and stored this information until readout which occurred every 378 sec.^{6,8} A complete data frame, contained in the 730-cps subcarrier oscillator, was 378 sec long and was made up of nine subframes. Each subframe was 42 sec long and contained 7 ten-bit binary words, each 6 sec in length, for a total of 63 ten-bit words.³

A complete set of four temperature observations and one reference sample required 30 sec. Thus, in one orbit, about 180 complete data sets could be obtained. This is approximately one set of measurements every 150 miles.⁷

The sampling order of the 730-cps subcarrier is given in Figure 4. Also included are abbreviations for the sensors and their locations.

Operational Experience

Explorer 7 made 4000 radiation observations daily and 400 to 1000 readings were collected for analysis.⁶ On the night side of the earth, useful signals were received for 15 to 20 min, or up to 1/5 the distance around the earth. The night-side signals were received more clearly than signals on the sunlit side, which were received about 1/2 to 2/3 the distance of the night-side signals.

The radius of the circle of coverage was about 23 deg of equatorial latitude (~2500 km) at perigee and 31.5 deg (~3500 km) at apogee. Half the radiation power was received from an area below the satellite with a radius of 5.3 deg (545 km) at perigee and 9 deg (~1015 km) at apogee.⁴ Explorer 7 was normally above the F-2 layer in daylight and the F layer in darkness. Telemetry contact was most reliable in the middle latitudes. Since telemetry contact was not as good over the tropical Pacific, data from that area required individual interpretation.

DATA

Reduction Techniques

The telemetry tapes were recorded at 1-7/8 ips and subsequently edited and rerecorded by the Martin Company and then played at 60 ips, a time speedup of 32. In addition to the time speedup, manipulations were included within the computer program for reasonability tests, calibration equations, and smoothing

FIGURE 4
SAMPLING ORDER FOR THE 730-cps SUBCARRIER

Sensor Position	Auxiliary Data (1)	Black Hemisphere (1) (2)	White Hemisphere (3)	Tabor (4)	Black Hemisphere (2) (5)	Gold Hemisphere (6)	Black sphere (7)
(1)	High Reference (970-1000)	B ₁	W ₂	T ₃	B ₄	G ₅	B ₆
(2)	ABMA 1 Skin Temp	B ₁	W ₂	T ₃	B ₄	G ₅	B ₆
(3)	ABMA 2 Solar Cell Temp	B ₁	W ₂	T ₃	B ₄	G ₅	B ₆
(4)	ABMA 3 Transmitter Temp	B ₁	W ₂	T ₃	B ₄	G ₅	B ₆
(5)	ABMA 4 Battery Temp	B ₁	W ₂	T ₃	B ₄	G ₅	B ₆
(6)	ABMA 5 Geiger Tube Temp	B ₁	W ₂	T ₃	B ₄	G ₅	B ₆
(7)	Mirror 1 Temp for B ₁ and W ₂	B ₁	W ₂	T ₃	B ₄	G ₅	B ₆
(8)	Mirror 2 Temp for B ₄ and G ₅	B ₁	W ₂	T ₃	B ₄	G ₅	B ₆
(9)	Low Reference (63-67)	B ₁	W ₂	T ₃	B ₄	G ₅	B ₆

techniques.⁹ The temperature recordings obtained through telemetry were used in heat balance equations to determine radiation current measurements.⁶

The initial treatment of the measurements obtained in telemetry consisted of the following procedures:

- (1) Fixing in time of the material for decoding

- (2) Locating the groups of 10 binary units referring to a single parameter
- (3) Gathering the measurements telemetered in binary code
- (4) Translating the binary code into decimal form
- (5) Using calibration curves to determine the temperatures of the hemispheres and various parts of the satellite. These curves are available at NSSDC or can be found in reference 3.

Timespan of Data

The radiation balance experiment continued from October 13, 1959, until August 19, 1961. It was considered at that time that a sufficient amount of data had been collected.⁴ The binary tapes held at NSSDC include selected white sensor data from November 15, 1959, to May 24, 1960, and the BCD mode tape includes selected data from all sensors from October 19, 1959, to June 4, 1960.

Format of Available Data

NSSDC has on hand one tape in BCD mode and two binary tapes containing Explorer 7 thermal radiation data. The BCD mode tape (EXPVIIRAD) contains white sensor temperatures at night, long-wave radiation, and orbit position data. The two binary tapes (EXPVIITEMPS #1 and #2) contain sensor temperatures for all Explorer 7 readouts which were processed. The BCD and the binary tapes have 200 bpi and one file per tape, terminated with EOF. The computer formats for the tapes, data inventories, and a list of tracking stations are given in Figures 5-12.

FIGURE 5 EXPVIIRAD TAPE (BCD) FORMAT DESCRIPTION

CONTROL CHARACTERS:

- REC. 5: 1 - PAGE RESTORE, HEADING RECORD*
- 6: 0 - DOUBLE SPACE, HEADING RECORD*
- 7: 0 - DOUBLE SPACE, HEADING RECORD*
- 8: 0 - DOUBLE SPACE, HEADING RECORD*
- 9 to n: - (BLANK) - SINGLE SPACED DATA RECORDS
- n + 1: 2 - HALF PAGE RESTORE
- n + 2: 0 - See rec. 6
- n + 3: 0 - See rec. 7
- n + 4: 0 - See rec. 8
- n + 5 to n + j: - See recs. 9 to n

* Heading records 5-8 include days after launch, station number, date, universal time. Records 1-4 are blank.

Repeat groups from $n + 1$ through $n + j$ for length of tape.

NOTES: Record 5 is the only record causing a page re-store. All other station readouts begin with a half page skip.

The number of data records per station readout is variable. A breakdown of the 80 characters in each record is given in Figure 6.

There are a few readouts from some stations for which one or more of the heading records is missing. Some of these have been noted on the data inventory sheets for tape EXPVIRAD.

FIGURE 6
EXPVIRAD RECORD (80 Characters)

Character	Symbol in Heading	Meaning
1	ISPACE	Carriage control
2-7	E - LONG	Longitude in deg east (decimal in 6)
8-15	N - LAT	Latitude in deg north (decimal in 14)
16-22	RAD	Long-wave radiation in Langleys/Min (decimal in 18)
23-28	BETA	Solid angle to earth in ster (decimal in 26)
29-37	SENSOR	Temperature of white sensor in °K (decimal in 35)
38-46	MIRROR	Temperature of mirror-averaged value from REFS column in °K (decimal in 44)
47-55	REFS	Low freq. ref., 65.00 ±2.00 High freq. ref., 985.00 ±15.00 AMBA 1 (skin temp) °K AMBA 2 (solar cell temp) °K AMBA 3 (transmitter temp) °K AMBA 4 (battery temp) °K Mirror 1 (for black hemis. 1 & white) °K Mirror 2 (for black hemis. 4 and gold) °K (decimal in 53)
56-80	BLANK	

FIGURE 7

EXPLORER VII RADIATION DATA 117 DAYS AFTER LAUNCH

LIBRARY RECORD 1130 1 STATION 5

DATE 7/ 2/1960 TIME 7 23 42 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-100.9	44.8	.2938	3.79	194.65	270.5	295.81
-97.7	43.5	.2895	3.77	194.78	270.2	285.25
-94.8	42.2	.3170	3.76	194.65	269.9	328.70
-91.9	40.8	.3201	3.75	195.10	269.6	263.58
-89.2	39.4	.3167	3.74	195.50	269.3	.00
-86.6	37.8	.3268	3.74	195.73	268.9	64.00
-84.2	36.2	.3317	3.72	196.10	268.6	982.00
-81.8	34.6	.3436	3.71	196.46	268.3	264.95
-79.6	32.9	.3657	3.70	196.97	268.0	253.13
-77.4	31.1	.3762	3.68	197.80	267.7	295.81
-75.3	29.4	.3835	3.67	198.64	267.4	285.35
-73.4	27.6	.3776	3.65	199.42	267.1	321.85
-71.4	25.7	.3937	3.64	199.88	266.8	267.37
-69.6	23.9	.3842	3.62	200.53	266.5	.00
-67.9	22.0	.3802	3.60	200.80	266.2	64.00
-66.2	20.1	.4023	3.59	200.89	265.8	977.00
-64.5	18.2	.3934	3.57	201.36	265.5	256.39
-62.9	16.3	.3971	3.55	201.50	265.2	251.11
-61.3	14.4	.3802	3.54	201.64	264.9	294.80
-60.5	13.4	.0000	3.51	201.36	264.6	285.35

EXPLORER VII RADIATION DATA 117 DAYS AFTER LAUNCH

LIBRARY RECORD 1163 4 STATION 9

DATE 7/ 2/1960 TIME 20 39 40 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
16.8	50.4	.2981	3.82	205.03	274.7	.00
20.8	50.4	.3018	3.81	203.30	274.4	64.00
24.8	50.4	.2899	3.82	202.00	274.0	984.00
28.8	50.1	.2875	3.82	200.71	273.7	272.32
32.7	49.7	.2838	3.81	199.61	273.4	256.58
36.5	49.2	.2867	3.82	198.64	273.1	295.73
40.3	48.5	.2763	3.81	197.91	272.8	285.63
42.1	48.1	.0000	3.81	197.08	272.5	333.63

FIGURE 8a
EXPLORER 7 THERMAL RADIATION DATA DISTRIBUTION

		Longitude East (Degrees)																		
		0	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180
L A T I T U D E I N D E G R E E S	50N	165	177	166	156	175	67	9	3	0	0	0	11	58	85	83	87	58	17	6
	45N	150	91	119	113	48	43	8	0	3	3	2	13	54	77	52	75	52	15	16
	40N	28	105	75	44	51	8	0	0	0	0	2	44	53	48	83	32	55	20	0
	35N	60	45	64	45	30	2	0	0	0	0	4	23	60	52	58	63	34	17	37
	30N	53	20	47	49	9	3	0	0	0	0	1	5	47	59	34	84	28	24	36
	25N	13	28	8	20	1	0	0	0	1	0	0	1	18	45	60	40	33	3	15
	20N	1	9	0	2	0	0	0	2	1	0	0	0	8	36	55	6	23	3	8
	15N	0	0	0	0	1	0	0	2	0	0	0	1	4	13	26	1	3	5	11
	10N	0	0	0	0	0	0	0	1	0	0	0	2	1	2	1	6	0	6	5
	5N	0	0	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	4	2
	0	203	2	7	3	1	9	0	0	0	0	0	2	3	0	0	0	1	0	6
	5S	1	9	11	26	12	0	0	0	0	0	1	2	0	2	0	2	0	0	4
	10S	4	27	10	35	12	13	3	0	0	0	3	0	2	9	11	3	3	0	0
	15S	5	29	37	50	16	29	0	0	0	0	2	0	9	7	23	7	0	0	0
	20S	8	14	58	63	35	25	0	0	0	0	4	11	24	13	12	3	0	0	0
	25S	16	41	51	53	53	17	6	0	0	0	0	12	15	29	11	17	14	0	0
	30S	13	75	36	55	56	17	22	2	0	0	0	13	25	18	25	18	22	3	1
	35S	10	46	62	47	36	46	7	1	0	0	0	7	35	19	27	31	6	9	3
	40S	8	21	58	39	35	43	8	0	1	1	1	11	15	46	31	25	1	6	0
45S	2	33	36	53	38	19	4	7	6	0	2	25	10	31	43	15	26	0	9	
50S	0	9	43	61	45	27	3	4	2	1	1	4	27	63	47	33	15	2	0	

FIGURE 8b

		Longitude West (Degrees)																		
		180	170	160	150	140	130	120	110	100	90	80	70	60	50	40	30	20	10	0
L A T I T U D E I N D E G R E E S	50N	6	15	11	17	37	70	74	97	131	149	111	103	87	62	15	27	115	165	165
	45N	16	12	65	38	26	73	44	83	137	68	124	92	67	77	18	22	42	74	150
	40N	9	69	58	50	77	40	71	52	54	139	61	86	84	27	16	3	33	59	28
	35N	37	65	70	67	62	73	49	69	89	80	105	102	46	40	6	3	18	29	60
	30N	36	28	95	55	36	100	21	66	97	48	131	58	47	51	0	0	1	19	53
	25N	15	80	68	63	61	44	71	57	64	110	89	68	63	9	0	0	0	5	13
	20N	8	77	47	50	58	12	94	42	36	107	42	66	68	7	0	0	0	1	1
	15N	11	38	45	36	43	31	44	45	20	71	39	45	40	16	0	0	0	2	0
	10N	5	11	37	23	21	17	8	19	5	9	55	13	20	5	0	0	0	0	0
	5N	2	4	27	14	6	2	2	6	2	8	36	5	9	5	0	0	0	0	0
	0	6	2	6	16	5	3	0	3	3	5	21	11	3	3	0	2	0	0	203
	5S	4	0	0	4	0	1	0	0	1	2	16	11	2	0	0	3	0	0	1
	10S	0	0	0	2	0	0	0	0	0	4	9	7	6	0	1	1	0	0	4
	15S	0	0	0	0	0	0	0	0	0	0	5	0	6	0	3	0	0	0	5
	20S	0	0	0	0	0	0	0	0	0	3	2	9	5	0	2	0	0	0	8
	25S	0	0	0	0	0	0	0	0	0	1	7	10	8	7	1	0	0	0	16
	30S	1	0	0	0	0	0	0	0	0	1	4	14	14	15	3	0	0	0	13
	35S	3	0	0	2	1	0	0	0	0	3	16	20	11	13	3	0	0	1	10
	40S	0	4	0	0	0	0	0	0	1	1	29	17	22	6	2	0	0	0	8
45S	0	3	7	2	0	0	0	0	0	3	12	34	9	3	3	0	0	0	2	
50S	0	0	1	3	0	0	0	0	8	25	9	5	3	4	0	0	0	0	0	

TOTAL OBSERVATIONS = 15887

FIGURE 9
 EXPLORER 7 DATA INVENTORY - UNIV. OF WIS.
 BCD TAPE (1 ONLY) - TAPE EXPVIRAD

Days From Launch	Station Readouts	Days From Launch	Station Readouts	Days From Launch	Station Readouts
33*	13	87	7	123	11
34	7	88	9	124	10
35	8	89	9	125	9
36	9	90	12	126	5
37	5	91	11	127	3
38	8	92	9	128	8
39	7	93	9	129	9
40	1	94	10	130	9
42	9	95	10	131	9
43	10	96	12	132	5
44	7	97	10	133	10
45	5	98	9	134	4
46	1	99	9	135	1
47	7	100	11	136	2
48	4	101	16	137	1
49	4	102	18	138	5
50	3	103	14	139**	3
54	2	104	19	140	3
55	2	105	14	141	3
56	2	106	17	142	4
57	3	107	16	143	3
58	3	108	14	145	3
59	6	109	19	146	1
60	6	110	19	147	2
61	6	111	18	148	2
62	8	112	15	149	3
63	5	113	16	150	1
64	6	114	17	151	2
65	3	115	14	152	6
66	4	116	17	153	5
68	2	117	15	154	8
82	2	118	14	155	3
83	1	119	14	156	9
84	4	120	11	157	3
85	3	121	12	158	14
86	5	122	10	159	14

FIGURE 9 (Continued)
 EXPLORER 7 DATA INVENTORY - UNIV. OF WIS.
 BCD TAPE (1 ONLY) - TAPE EXPVIRAD

Days From Launch	Station Readouts	Days From Launch	Station Readouts	Days From Launch	Station Readouts
160	12	180	6	205	4
161	9	186	6	206	6
162	11	187	5	207	8
163	17	188	8	208	12
164	15	189	9	209	7
165**	12	190	8	210	3
166	11	191	4	211	2
167	9	192	6	212	5
168	6	193	7	213	9
169	9	194	14	214	8
170	12	195	12	215	12
171	10	196	12	216	9
172	13	197	8	217	9
173	8	198	7	218	10
174	12	199**	6	219	10
175	5	200	4	220	6
176	11	201	5	221	10
177	10	202	4	222	10
178	12	203	5	223	6
179	14	204	4	224	5

* Days not listed had no nighttime readouts.

** At these points there are, in addition to the number of readouts given, readouts for which the days from launch information or other heading information is missing.

FIGURE 10
 EXPVITTEMPS #1 AND #2 (BINARY)
 FORMAT DESCRIPTION

No. Recs./Tape - Tape #1, 2627; Tape #2, 727

No. Wds./Record - 274 Including Check Sum Word, + 24 Bits⁽⁴⁾

No. Bits/Word - 36

The 7 documentation words are fixed point. The temperature data, originally computed in floating point, have been multiplied by 100 and fixed. Temperatures are given in degrees Kelvin.

**FIGURE 10 (Continued)
EXPVITEMPS #1 AND #2 (BINARY)
FORMAT DESCRIPTION**

WORD	NOTES
S	packed: decr., rec. no. part 1; addr., rec. no. part 2
S + 1	days from launch. Oct. 13 = 0 days ⁽¹⁾
S + 2	hour Z time ⁽²⁾
S + 3	minute
S + 4	second
S + 5	tracking station code ⁽³⁾
S + 6	unused
1	high frequency reference
2	black hemisphere - 1
3	white - 2
4	tabor - 3
5	black hemisphere - 4
6	gold - 5
7	black sphere - 6
8	ABMA 1*
9 - 14	See 2 - 7
15	ABMA 2*
16 - 21	See 2 - 7
22	ABMA 3*
23 - 28	See 2 - 7
29	ABMA 4*
30 - 35	See 2 - 7
36	ABMA 5*
37 - 42	See 2 - 7
43	Mirror 1*
44 - 49	See 2 - 7
50	Mirror 2*
51 - 56	See 2 - 7
57	low frequency reference
58 - 63	See 2 - 7
64 - 126	See 1 - 63
127 - 189	See 1 - 63
190 - 252	See 1 - 63
253 - 266	See 1 - 14
267	check sum

* See Figure 4.

FIGURE 10 (Continued)
EXPVIITEMPS #1 AND #2 (BINARY)
FORMAT DESCRIPTION

- (1) Day 1 begins at 00 hr, 00 min, 01 sec Z, Oct. 14, 1959.
- (2) Z time is given for the black-1 sensor, even if zero, in the first 7-sensor cycle containing any non-zero data. It is calculated to the center of the 6-second time span during which black-1 was recorded in the satellite.
- (3) Tracking station code sheet attached.
- (4) These tapes, produced on the CDC 1604, contain 206 48-bit words, which is equivalent to 274 36-bit words plus 24 bits. The last 24 bits are zeros. In all other respects, these tapes are standard IBM 704 - 7090 format, except that a binary count word is not included.

- NOTES: 1. On tape EXPVIITEMPS #1, record number 1 is 460 48-bit words long. It does not contain satellite data and should be skipped.
2. On tape EXPVIITEMPS #2, records 552 through 556 contain errors and should be skipped. They are 115 48-bit words long. Record 546 is in error. It contains 184 48-bit words. Record 557 is also in error, but is 206 words long.
 3. Note that temperature data are set into the block so that the first word in the auxiliary data column is always reserved for the High Frequency Reference, whether or not an actual value is present. The auxiliary data then follow in the sequence given in Figure 4. Read from left to right.
 4. The time given is for the first B-1 sensor in the first row in which there are any non-zero data, calculated for the center of the sensor sample span time. It should be noted that this may cause the time to be associated with a B-1 position for which there is no actual value.

The cycle in Figure 4 is repeated until the block is filled. Passes shorter than full record length cause the block to be completed with zeros. A positive zero indicates the absence of data. A negative zero which has zeros above and below it in a column indicates a data word was eliminated by the computer program on the assumption that the sensor had cooled so that it ceased to register and that any pulses present did not represent actual sensor values. A negative zero not flanked by zeros indicates a signal fade. Negative temperatures indicate questionable data caused by partial fades.

FIGURE 11
EXPLORER 7 DATA INVENTORY - EXPVITTEMPS

Days From Launch	Station Readouts	Days From Launch	Station Readouts	Days From Launch	Station Readouts
6	1	90	23	127	12
54	5	91	27	128	20
55	2	92	22	129	19
56	3	93	23	130	23
57	5	94	19	131	22
58	1	95	23	132	21
59	6	96	27	133	19
60	6	97	24	134	20
61	7	98	21	135	11
62	7	99	23	136	11
63	8	100	31	137	7
64	7	101	28	138	17
65	8	102	34	139	14
66	10	103	30	140	17
67	8	104	33	141	11
68	4	105	30	142	11
69	8	106	38	143	13
70	9	107	32	144	12
71	12	108	37	145	15
72	8	109	40	146	10
73	10	110	41	147	15
74	9	111	35	148	11
75	4	112	22	149	13
76	9	113	25	150	12
77	17	114	33	151	16
78	13	115	27	152	22
79	17	116	30	153	23
80	15	117	26	154	22
81	6	118	21	155	17
82	4	119	26	156	23
83	11	120	27	157	23
84	18	121	22	158	23
85	23	122	20	159	25
86	20	123	20	160	22
87	23	124	16	161	23
88	19	125	10	162	25
89	22	126	12	163	31

FIGURE 11 (Continued)
EXPLORER 7 DATA INVENTORY - EXPVITTEMPS

Days From Launch	Station Readouts	Days From Launch	Station Readouts	Days From Launch	Station Readouts
164	27	Tape #2		207	25
165	23			208	28
166	28	186	2	209	22
167	24	187	9	210	10
168	17	188	14	211	13
169	25	189	15	212	15
170	32	190	17	213	19
171	29	191	5	214	18
172	35	192	12	215	24
173	34	193	14	216	17
174	29	194	24	217	20
175	29	195	26	218	19
176	25	196	29	219	19
177	29	197	21	220	18
178	29	198	22	221	18
179	28	199	24	222	25
180	24	200	25	223	18
181	34	201	21	224	21
182	29	202	19	225	5
183	31	203	20	226	1
184	28	204	10	227	1
185	17	205	12	234	3
186	14	206	18	235	3

FIGURE 12
EXPLORER 7 TRACKING STATION CODES

Code	Location
00	Error
01	Unknown
02	St. Johns, Antigua
03	Antofagasta, Chile
04	Azores
05	Blossom Point, Maryland
06	Chula Vista, California
07	Fort Myers, Florida
08	Hawaii
09	Heidelberg, Germany
10	Huntsville, Alabama
11	Japan
12	Johannesburg, Republic of South Africa
13	Pine Bluff, Arkansas
14	Quito, Ecuador
15	San Diego, California
16	Santiago, Chile
17	Woomera, Australia
18	Lima, Peru
19	Caribou, Maine
20	Canton Islands
21	Guam, Mariana Islands

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1 EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD 233 3 STATION 9

ODATE 15/11/1959 TIME 1 38 32 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-26.9	37.0	.3479	3.23	198.23	273.9	285.55
-24.6	38.4	.3397	3.25	198.02	278.5	292.57
-22.2	39.8	.3299	3.26	197.71	278.0	278.41
-19.7	41.2	.3364	3.28	197.29	277.6	277.76
-17.1	42.4	.3273	3.29	197.08	277.2	576.00
-14.3	43.6	.3236	3.32	196.76	276.7	986.00
-11.5	44.8	.3183	3.33	196.45	276.3	265.76
-8.4	45.8	.3255	3.34	196.10	275.9	261.65
-5.3	46.8	.3305	3.37	195.97	275.5	291.06
-2.1	47.6	.3171	3.38	195.98	275.0	286.19
1.2	48.4	.3081	3.40	195.74	274.6	289.45
4.7	49.0	.2975	3.41	195.38	274.2	274.09
8.3	49.5	.3044	3.44	194.90	273.7	273.45
11.9	50.0	.3017	3.45	194.66	273.3	64.00
15.7	50.2	.3052	3.47	194.42	272.9	989.00
19.5	50.4	.3097	3.48	194.30	272.4	261.06
23.3	50.4	.3144	3.50	194.30	272.0	257.22
27.1	50.2	.3147	3.53	194.42	271.6	290.98
30.9	50.0	.3154	3.54	194.54	271.2	286.09
34.6	49.6	.3101	3.56	194.66	270.7	286.56
38.3	49.1	.3122	3.57	194.66	270.3	270.07
40.1	48.8	.0000	3.50	194.72	269.9	269.05

2 EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD 209 1 STATION 5

ODATE 15/11/1959 TIME 3 12 25 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-65.4	26.7	.3291	3.15	197.91	281.7	283.09
-63.7	28.4	.3414	3.16	197.39	281.3	63.00
-61.9	30.0	.3560	3.17	197.19	280.9	990.00
-60.0	31.6	.3565	3.18	197.29	280.4	271.46
-59.0	32.4	.0000	3.20	197.39	280.0	267.21

2 EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD 233 4 STATION 9

ODATE 15/11/1959 TIME 3 25 40 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-26.4	47.9	.3067	3.38	196.67	274.9	289.73
-23.0	48.6	.3173	3.41	196.10	274.4	274.25
-19.5	49.2	.3078	3.42	195.86	274.0	273.67
-15.9	49.7	.3171	3.44	195.49	273.6	64.00
-12.2	50.1	.3208	3.45	195.38	273.1	991.00
-8.4	50.3	.3133	3.48	195.38	272.7	261.50
-4.6	50.4	.2997	3.50	195.26	272.3	257.85
-.8	50.3	.3140	3.51	194.90	271.9	290.90
2.9	50.2	.3015	3.53	194.90	271.4	286.01
6.7	49.8	.2985	3.54	194.66	271.0	286.86
10.4	49.4	.3014	3.57	194.42	270.6	270.59
12.2	49.1	.0000	3.58	194.30	270.1	269.63

2 EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD 209 2 STATION 5

ODATE 15/11/1959 TIME 4 55 58 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-88.8	28.8	.3579	3.16	200.16	281.2	999.00
-87.0	30.5	.3522	3.18	199.71	280.8	272.13
-85.1	32.1	.3332	3.18	199.25	280.3	268.09

1

BCD listing of tape D-00022.
Note carriage control characters given
in column 1. Full tape listing
available in 2 volumes in storage
(see enclosed sample)

-83.1	33.6	.3288	3.20	198.54	279.9	291.14
-81.0	35.2	.3111	3.22	197.91	279.5	286.37
-78.8	36.7	.2993	3.23	197.09	279.0	293.30
-76.6	38.1	.2850	3.25	196.22	278.6	279.22
-74.2	39.5	.2944	3.26	195.26	278.2	278.69
-71.7	43.8	.2751	3.28	194.66	277.8	64.00
-69.1	42.1	.2991	3.29	193.82	277.3	989.00
-66.4	43.3	.2884	3.30	193.58	276.9	266.76
-63.5	44.5	.3040	3.32	193.19	276.5	262.40
-62.1	45.0	.0000	3.34	193.18	276.0	290.50

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD 209 3 STATION 5

ODATE 15/11/1959 TIME 6 41 45 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-109.8	32.8	.3425	3.19	198.13	280.1	291.06
-107.8	34.4	.3274	3.20	197.81	279.7	286.19
-105.7	35.9	.3209	3.22	197.29	279.3	293.21
-103.4	37.3	.3068	3.24	196.77	278.9	279.22
-101.1	38.8	.3028	3.25	196.16	278.4	278.51
-98.7	40.2	.3032	3.27	195.49	278.0	64.00
-95.2	41.5	.2990	3.28	195.01	277.6	669.00
-93.5	42.7	.2934	3.29	194.54	277.1	266.56
-90.7	43.9	.2879	3.31	194.06	276.7	262.77
-87.8	46.0	.2660	3.33	193.58	276.3	291.06
-84.8	46.0	.2933	3.34	192.78	275.8	286.28
-81.6	47.0	.2835	3.36	192.65	275.4	290.02
-78.3	47.8	.2743	3.38	192.37	275.0	274.75
-74.9	48.5	.2762	3.39	191.97	274.6	274.11
-71.4	49.1	.2668	3.42	191.69	274.1	65.00
-67.9	49.6	.2762	3.43	191.29	273.7	987.00
-64.2	50.0	.2742	3.45	191.15	273.3	261.50
-60.4	50.3	.2798	3.47	191.01	272.8	258.07
-56.6	50.4	.2861	3.48	191.01	272.4	290.98
-52.8	50.4	.2997	3.51	191.15	272.0	286.09
-50.9	50.3	.0000	3.52	191.55	271.5	286.86

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD 219 2 STATION 6

ODATE 15/11/1959 TIME 6 30 13 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-128.7	13.3	.3788	3.07	203.52	285.1	969.00
-127.3	15.1	.3666	3.08	202.73	284.7	278.61
-125.8	16.9	.3678	3.08	202.23	284.2	273.81
-124.4	18.6	.3718	3.09	201.50	283.8	290.90
-122.8	20.4	.3847	3.10	200.99	283.4	285.26
-121.3	22.1	.3608	3.11	200.81	282.9	297.73
-119.7	23.8	.3720	3.12	200.25	282.5	283.35
-118.0	25.5	.3617	3.13	200.00	282.1	283.66
-116.3	27.2	.3608	3.15	199.63	281.6	47.00
-114.5	28.8	.3585	3.16	199.33	281.2	990.00
-112.7	30.5	.3477	3.18	199.06	280.8	272.18
-110.8	32.1	.3371	3.18	198.65	280.4	267.75
-108.8	33.6	.3414	3.20	198.13	279.9	291.06
-107.8	34.4	.0000	3.22	197.81	279.5	286.19

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD 219 3 STATION 6

ODATE 15/11/1959 TIME 8 16 43 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-144.5	24.7	.3581	3.13	200.63	282.3	284.23
-142.8	26.3	.3466	3.14	200.07	281.9	61.00
-141.1	28.0	.3371	3.16	199.43	281.5	988.00
-139.3	29.7	.3089	3.16	198.75	281.0	272.90
-137.4	31.3	.3383	3.18	197.70	280.6	268.63
-135.5	32.9	.3294	3.19	197.39	280.2	291.14
-133.6	34.0	.3246	3.20	196.98	279.7	312.27

-131.3	35.9	.3418	3.22	196.57	279.3	293.95
-129.1	37.4	.3353	3.24	196.57	278.9	279.77
-126.7	38.8	.3456	3.25	196.46	278.4	279.15
-124.3	40.2	.3343	3.27	196.57	278.0	64.00
-121.8	41.5	.3257	3.28	196.46	277.6	986.00
-119.1	42.7	.3099	3.30	195.22	277.2	267.51
-116.3	43.9	.3179	3.31	195.74	276.7	263.15
-113.4	45.0	.3019	3.32	195.50	276.3	290.98
-110.4	46.1	.2837	3.35	195.02	275.9	285.09
-107.2	47.0	.2763	3.36	194.30	275.4	290.50
-104.0	47.8	.2634	3.38	193.58	275.0	274.91
-102.3	48.2	.3000	3.39	192.75	274.6	274.79

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD		223	4	STATION 8		
ODATE 15/11/1955		TIME 10 0 21 GMT				
OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-171.2	23.6	.4032	3.13	202.51	282.6	285.69
-169.5	25.3	.3935	3.14	202.37	282.2	63.00
-167.8	27.0	.3827	3.14	202.08	281.7	989.00
-166.1	28.7	.3741	3.15	201.65	281.3	274.49
-164.2	30.3	.3685	3.17	201.17	280.9	270.39
-162.3	31.9	.3597	3.18	200.70	280.4	296.28
-160.3	33.5	.3465	3.19	200.17	280.0	288.03
-158.2	35.0	.3426	3.21	199.52	279.6	294.91
-156.1	36.5	.3161	3.23	198.95	279.1	280.99
-153.8	38.0	.3221	3.24	198.02	278.7	280.44
-152.7	38.7	.0000	3.26	197.39	278.3	.00

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD		219	4	STATION 6		
ODATE 15/11/1955		TIME 10 4 51 GMT				
OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-150.4	39.9	.3193	3.26	196.77	278.1	988.00
-147.9	41.3	.3053	3.28	196.34	277.7	268.88
-145.3	42.5	.3186	3.29	195.74	277.2	264.65
-142.5	43.7	.3280	3.30	195.50	276.8	291.46
-139.6	44.8	.3334	3.33	195.50	276.4	286.28
-136.6	45.9	.3347	3.34	195.62	276.0	291.46
-133.5	46.8	.3349	3.35	195.74	275.5	276.71
-130.2	47.7	.3100	3.38	195.86	275.1	276.16
-126.8	48.4	.3117	3.39	195.50	274.7	64.00
-123.3	49.1	.3037	3.41	195.25	274.2	989.00
-119.7	49.6	.2990	3.42	194.90	273.8	261.94
-117.9	49.8	.0000	3.45	194.54	273.4	259.77

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD		209	5	STATION 5		
ODATE 15/11/1955		TIME 10 15 9 GMT				
OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-105.9	50.4	.2618	3.50	192.91	272.2	285.55
-102.1	50.3	.2624	3.51	192.23	271.8	288.26
-98.3	50.1	.2708	3.53	191.69	271.3	272.53
-94.5	49.7	.2678	3.54	191.42	270.9	271.47
-90.8	49.2	.2712	3.57	191.15	270.5	64.00
-89.0	48.9	.0000	3.58	191.01	270.0	984.00

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD		209	5	STATION 5		
ODATE 15/11/1955		TIME 10 15 17 GMT				
OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-109.0	50.4	.2626	3.48	192.91	272.5	285.55
-105.2	50.4	.2628	3.49	192.23	272.1	288.26
-101.4	50.3	.2709	3.52	191.69	271.7	272.53
-97.6	50.0	.2682	3.53	191.42	271.3	271.47
-93.8	49.6	.2720	3.55	191.15	270.8	64.00
-92.0	49.4	.0000	3.56	191.01	270.4	984.00

OLIBRARY RECORD		219	5	STATION 6		
ODATE 16/11/1959		TIME 11 56 46 GMT				
OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-140.0	50.0	.3168	3.44	194.90	273.3	291.38
-137.2	50.3	.3159	3.47	194.90	272.9	286.47
-133.4	50.4	.3215	3.48	194.90	272.4	288.85
-129.6	50.3	.3157	3.50	195.02	272.0	272.88
-125.8	50.2	.3032	3.52	195.02	271.6	271.87
-122.0	49.9	.2882	3.53	194.78	271.1	64.00
-118.3	49.5	.2830	3.56	194.30	270.7	985.00
-114.7	48.9	.2779	3.57	193.82	270.3	259.74
-112.8	48.6	.0000	3.59	193.33	269.8	255.91

1EXPLORER VII RADIATION DATA 34 DAYS AFTER LAUNCH

OLIBRARY RECORD		233	1	STATION 9		
ODATE 16/11/1959		TIME 1 17 47 GMT				
OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-23.0	39.1	.3184	3.23	198.00	278.7	311.31
-20.5	40.5	.3263	3.25	197.29	278.3	278.41
-18.0	41.8	.3084	3.26	196.87	277.9	278.15
-15.3	43.0	.3100	3.29	196.22	277.5	64.00
-12.5	44.2	.2919	3.30	195.74	277.1	989.00
-9.6	45.3	.3162	3.32	195.02	276.6	266.36
-6.5	46.2	.3082	3.33	194.90	276.2	262.03
-3.3	47.2	.3118	3.35	194.66	275.8	290.90
-1	48.0	.3034	3.36	194.54	275.4	286.19
3.3	48.7	.3128	3.39	194.30	275.0	290.11
6.8	49.3	.2999	3.40	194.30	274.5	274.09
10.4	49.7	.2905	3.42	194.06	274.1	273.45
14.1	50.1	.2934	3.43	193.69	273.7	64.00
17.8	50.3	.2884	3.46	193.46	273.3	856.00
21.6	50.4	.2993	3.47	193.19	272.9	261.72
25.4	50.3	.3059	3.49	193.19	272.4	257.43
29.2	50.1	.2923	3.50	193.33	272.0	291.06
32.9	49.8	.3102	3.53	193.19	271.6	285.91
36.6	49.4	.3246	3.54	193.45	271.2	287.16
40.2	48.8	.3179	3.56	193.96	270.8	270.41
43.8	48.1	.3196	3.57	194.25	270.3	269.49
45.6	47.7	.0000	3.60	194.54	269.9	63.00

2EXPLORER VII RADIATION DATA 34 DAYS AFTER LAUNCH

OLIBRARY RECORD		211	1	STATION 5		
ODATE 16/11/1959		TIME 2 46 39 GMT				
OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-78.1	11.7	.3857	3.05	203.73	285.9	289.01
-76.7	13.5	.3943	3.06	203.01	285.5	64.00
-75.3	15.2	.3938	3.07	202.59	285.0	991.00
-73.9	17.0	.3872	3.07	202.24	284.6	278.37
-72.4	18.8	.3701	3.08	201.84	284.2	273.52
-70.9	20.5	.3739	3.10	201.24	283.8	309.61
-69.3	22.2	.3692	3.11	200.84	283.4	285.45
-67.7	23.9	.3719	3.12	200.44	282.9	299.95
-66.0	25.6	.3630	3.13	200.17	282.5	283.00
-64.3	27.3	.3706	3.13	199.79	282.1	283.57
-62.6	28.9	.3470	3.14	199.61	281.7	64.00
-60.7	30.6	.3762	3.16	199.06	281.3	986.00
-58.8	32.1	.3687	3.17	199.15	280.8	272.33
-56.8	33.7	.3680	3.19	199.10	280.4	228.17
-54.7	35.2	.3525	3.20	199.06	280.0	291.14
-52.5	36.7	.3662	3.21	198.75	279.6	286.19
-50.3	38.2	.3540	3.22	198.75	279.2	294.24
-47.9	39.6	.3566	3.24	198.54	278.7	278.81
-45.4	40.9	.3499	3.25	198.43	278.3	278.69
-42.8	42.2	.3407	3.27	198.23	277.9	63.00
-41.5	42.8	.0000	3.28	197.91	277.5	734.00

2EXPLORER VII RADIATION DATA 34 DAYS AFTER LAUNCH

OLIBRARY RECORD 266 1 STATION 9

ODATE 16/11/1955 TIME 3 3 22 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-25.1	48.1	.3140	3.36	195.62	275.4	313.33
-21.7	40.8	.3087	3.39	195.38	275.0	274.91
-18.1	49.4	.3092	3.40	195.10	274.6	274.34
-14.5	49.8	.3119	3.42	194.89	274.2	129.00
-10.8	50.1	.3094	3.43	194.76	273.7	988.00
-7.1	50.3	.3069	3.46	194.66	273.3	226.82
-3.3	50.4	.3115	3.48	194.54	272.9	258.28
.4	50.3	.2989	3.49	194.54	272.5	290.90
4.2	50.1	.3023	3.51	194.30	272.1	285.82
7.9	49.8	.2824	3.52	194.18	271.6	287.76
11.6	49.3	.2822	3.53	193.70	271.2	270.95
15.2	48.7	.2839	3.56	193.32	270.8	267.53
17.0	48.4	.0000	3.58	193.05	270.4	65.00

2EXPLORER VII RADIATION DATA 34 DAYS AFTER LAUNCH

OLIBRARY RECORD 211 2 STATION 5

ODATE 16/11/1955 TIME 4 31 42 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-98.9	17.8	.4085	3.08	202.51	284.5	272.19
-97.4	19.5	.3907	3.09	202.44	284.1	290.98
-95.9	21.2	.3839	3.10	202.08	283.7	286.28
-94.3	23.0	.3978	3.10	201.65	283.3	299.17
-92.7	24.7	.3795	3.12	201.57	282.9	283.81
-91.0	26.3	.3842	3.13	201.20	282.4	284.39
-89.3	28.0	.3675	3.14	200.99	282.0	64.00
-87.4	29.6	.3717	3.15	200.53	281.6	989.00
-85.6	31.2	.3538	3.17	200.25	281.2	273.19
-83.6	32.8	.3466	3.17	199.71	280.8	268.97
-81.6	34.4	.3543	3.19	199.15	280.3	291.06
-80.6	35.1	.0000	3.20	198.85	279.9	286.28

2EXPLORER VII RADIATION DATA 34 DAYS AFTER LAUNCH

OLIBRARY RECORD 211 3 STATION 5

ODATE 16/11/1955 TIME 6 18 50 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-108.5	33.4	.3372	3.18	198.23	280.7	291.14
-106.4	35.0	.3448	3.20	197.81	280.3	286.28
-104.3	36.5	.3360	3.20	197.61	279.9	295.11
-102.0	37.9	.3321	3.22	197.29	279.4	280.03
-99.7	39.3	.3229	3.24	196.98	279.0	279.61
-97.2	40.7	.3148	3.25	196.57	278.6	64.00
-94.6	42.0	.2971	3.27	196.10	278.2	988.00
-91.9	43.2	.2944	3.28	195.40	277.8	268.02
-89.1	44.3	.3017	3.29	194.78	277.3	262.03
-87.7	44.9	.0000	3.31	194.42	276.9	289.54

2EXPLORER VII RADIATION DATA 34 DAYS AFTER LAUNCH

OLIBRARY RECORD 211 4 STATION 5

ODATE 16/11/1955 TIME 8 5 56 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-113.8	44.7	.2974	3.30	196.50	277.3	252.69
-110.8	45.8	.2911	3.31	195.74	276.9	286.19
-107.7	46.7	.2768	3.34	195.02	276.4	291.92
-104.5	47.6	.2745	3.35	194.18	276.0	276.39
-101.1	48.3	.2699	3.36	193.45	275.6	275.66
-97.7	49.0	.2624	3.39	192.78	275.2	64.00
-95.9	49.3	.0000	3.40	192.10	274.8	983.00

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

OLIBRARY RECORD 233 5 STATION 9

ODATE 15/11/1955 TIME 23 31 26 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-10.5	29.6	.3672	3.16	199.15	281.2	281.79
-8.6	31.2	.3604	3.16	199.05	280.8	64.00

-6.6	32.8	.3576	3.18	198.85	280.4	987.00
-4.6	34.3	.3376	3.19	198.65	279.9	270.60
-2.5	35.8	.3450	3.20	198.13	279.5	265.97
-.3	37.3	.3451	3.22	197.91	279.1	291.30
1.2	38.7	.3259	3.24	197.70	278.7	284.96
4.4	40.1	.3304	3.25	197.19	278.2	293.30
6.9	41.4	.3276	3.27	196.87	277.8	277.53
9.5	42.7	.3089	3.28	196.57	277.4	277.26
12.3	43.8	.3277	3.29	195.98	276.9	63.00
15.2	45.0	.3063	3.31	195.86	276.5	990.00
18.2	46.0	.3011	3.33	195.38	276.1	265.56
21.3	46.9	.3024	3.34	194.90	275.6	261.25
24.6	47.7	.3043	3.36	194.54	275.2	291.22
28.0	48.5	.3016	3.38	194.30	274.8	286.37
31.5	49.1	.3104	3.39	194.06	274.4	289.73
35.0	49.6	.3038	3.42	194.05	273.9	273.41
38.7	50.0	.3027	3.43	193.93	273.5	272.77
42.4	50.3	.2943	3.45	193.82	273.1	64.00
44.3	50.4	.0000	3.47	193.58	272.6	988.00

2EXPLORER VII RADIATION DATA 35 DAYS AFTER LAUNCH

OLIBRARY RECORD	228	4	STATION	6			
ODATE	17/11/1959	TIME	12 58	9 GMT			
OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS	
-135.2	48.1	.2863	3.55	193.58	271.8	257.43	
-131.8	47.2	.2753	3.56	193.33	271.4	310.60	
-128.5	46.3	.2722	3.58	192.91	271.0	286.47	
-126.8	45.8	.0000	3.59	192.51	270.6	288.46	

1EXPLORER VII RADIATION DATA 35 DAYS AFTER LAUNCH

OLIBRARY RECORD	266	3	STATION	9			
ODATE	17/11/1959	TIME	0 55	3 GMT			
OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS	
-23.3	38.7	.3182	3.21	198.02	279.7	284.76	
-19.6	40.7	.3146	3.22	197.30	279.3	294.53	
-15.7	42.6	.3294	3.25	196.67	278.8	278.61	
-13.0	43.8	.3056	3.27	196.46	278.4	64.00	
-10.1	44.9	.3051	3.28	195.86	278.0	986.00	
-7.1	45.9	.2866	3.31	195.38	277.6	266.76	
-4.0	46.8	.2923	3.32	194.66	277.2	262.77	
-.8	47.7	.2931	3.33	194.18	276.7	291.30	
2.5	48.4	.2952	3.36	193.82	276.3	286.01	
6.0	49.1	.2924	3.37	193.58	275.9	291.65	
9.5	49.6	.3090	3.38	193.33	275.5	274.75	
13.1	50.0	.2955	3.41	193.46	275.1	274.34	
16.9	50.2	.2934	3.43	193.33	274.6	63.00	
20.6	50.4	.2989	3.44	193.19	274.2	860.00	
24.4	50.4	.2914	3.46	193.19	273.8	262.36	
28.1	50.2	.2893	3.47	193.05	273.4	258.67	
31.9	50.0	.2813	3.50	192.91	273.0	290.98	
35.6	49.6	.2771	3.51	192.65	272.5	285.91	
39.3	49.1	.2961	3.53	192.36	272.1	288.16	
42.8	48.4	.3026	3.54	192.51	271.7	254.32	
46.3	47.6	.3106	3.57	192.78	271.3	269.75	
48.0	47.2	.0000	3.58	193.18	270.9	65.00	

2EXPLORER VII RADIATION DATA 35 DAYS AFTER LAUNCH

OLIBRARY RECORD	266	4	STATION	9			
ODATE	17/11/1959	TIME	2 42	9 GMT			
OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS	
-28.6	47.2	.3197	3.33	196.10	276.7	291.30	
-25.3	48.0	.3236	3.34	195.86	276.3	286.19	
-21.9	48.7	.3088	3.35	195.74	275.9	292.11	
-18.4	49.3	.2981	3.38	195.38	275.4	275.40	
-14.8	49.7	.3126	3.39	194.90	275.0	275.13	
-11.1	50.1	.2969	3.41	194.90	274.6	64.00	

-7.4	50.3	.3058	3.42	194.42	271.2	989.00
-3.7	50.4	.2973	3.45	194.30	273.8	262.96
.0	50.3	.2946	3.47	194.06	273.3	258.91
3.8	50.2	.2931	3.48	193.82	272.9	309.54
7.5	49.9	.2966	3.50	193.70	272.5	286.01
11.2	49.4	.3007	3.51	193.58	272.1	289.06
14.8	48.8	.2999	3.54	193.58	271.7	271.47
18.4	48.2	.3054	3.55	193.58	271.2	270.68
20.1	47.8	.0000	3.57	193.70	270.8	63.00

2EXPLORER VII RADIATION DATA 35 DAYS AFTER LAUNCH

LIBRARY RECORD 234 2 STATION 5

DATE 17/11/1955 TIME 4 8 52 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-97.5	18.8	.4032	3.08	204.24	285.1	275.45
-96.0	20.5	.3939	3.08	203.73	284.7	290.98
-94.5	22.2	.3944	3.09	203.16	284.3	246.09
-92.9	23.9	.3895	3.10	202.72	283.9	301.09
-91.2	25.6	.3848	3.11	202.29	283.4	284.56
-89.5	27.3	.3689	3.12	201.87	283.0	282.51
-87.8	28.9	.3811	3.13	201.26	282.6	64.00
-85.9	30.5	.3614	3.14	200.99	282.2	988.00
-84.0	32.1	.3646	3.16	200.44	281.8	274.49
-82.0	33.7	.3559	3.17	200.07	281.3	269.85
-80.0	35.2	.3456	3.17	199.61	280.9	291.14
-77.8	36.7	.3457	3.19	199.06	280.5	286.37
-75.6	38.1	.3411	3.21	198.64	280.1	296.25
-73.2	39.5	.3163	3.22	198.23	279.7	280.71
-70.7	40.8	.3365	3.23	197.45	279.2	280.26
-68.2	42.1	.3131	3.24	197.19	278.8	64.00
-65.5	43.3	.3083	3.26	196.56	278.4	.00
-62.6	44.4	.3004	3.28	195.98	278.0	268.71
-61.2	45.0	.0000	3.30	195.38	277.6	264.65

Nov. 15, 1959 - MAY 24, 1960

D-0022

1 EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

0 LIBRARY RECORD 233 3 STATION 9

0 DATE 15/11/1959 TIME 1 38 32 GMT

0 E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-26.9	37.0	.3479	3.23	198.23	278.9	285.55
-24.6	38.4	.3397	3.25	198.02	278.5	292.57
-22.2	39.8	.3299	3.26	197.71	278.0	278.41
-19.7	41.2	.3364	3.28	197.29	277.6	277.75
-17.1	42.4	.3273	3.29	197.08	277.2	576.00
-14.3	43.6	.3236	3.32	196.76	276.7	586.00
-11.5	44.8	.3183	3.33	196.45	276.3	255.75
-8.4	45.8	.3255	3.34	196.10	275.9	261.65
-5.3	46.8	.3305	3.37	195.97	275.5	291.06
-2.1	47.6	.3171	3.38	195.98	275.0	286.13
1.2	48.4	.3081	3.40	195.74	274.6	289.45
4.7	49.0	.2975	3.41	195.38	274.2	274.09
8.3	49.5	.3044	3.44	194.90	273.7	273.45
11.9	50.0	.3017	3.45	194.66	273.3	64.00
15.7	50.2	.3052	3.47	194.42	272.9	989.00
19.5	50.4	.3097	3.48	194.30	272.4	261.05
23.3	50.4	.3144	3.50	194.30	272.0	257.22
27.1	50.2	.3147	3.53	194.42	271.6	290.93
30.9	50.2	.3154	3.54	194.54	271.2	286.02
34.6	49.6	.3101	3.56	194.66	270.7	286.56
38.3	49.1	.3122	3.57	194.66	270.3	270.07
40.1	48.8	.3000	3.60	194.72	269.9	259.05

2 EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

0 LIBRARY RECORD 209 1 STATION 5

0000	REC	1. LENGTH	84
0000	REC	2. LENGTH	84
0000	REC	3. LENGTH	84
0000	REC	4. LENGTH	84
0000	REC	5. LENGTH	84
0000	REC	6. LENGTH	84
0000	REC	7. LENGTH	84
0000	REC	8. LENGTH	84
0000	REC	9. LENGTH	84
0000	REC	10. LENGTH	84
0000	REC	11. LENGTH	84
0000	REC	12. LENGTH	84
0000	REC	13. LENGTH	84
0000	REC	14. LENGTH	84
0000	REC	15. LENGTH	84
0000	REC	16. LENGTH	84
0000	REC	17. LENGTH	84
0000	REC	18. LENGTH	84
0000	REC	19. LENGTH	84
0000	REC	20. LENGTH	84
0000	REC	21. LENGTH	84
0000	REC	22. LENGTH	84
0000	REC	23. LENGTH	84
0000	REC	24. LENGTH	84
0000	REC	25. LENGTH	84
0000	REC	26. LENGTH	84
0000	REC	27. LENGTH	84
0000	REC	28. LENGTH	84
0000	REC	29. LENGTH	84
0000	REC	30. LENGTH	84
0000	REC	31. LENGTH	84
0000	REC	32. LENGTH	84

SAFETY ▲

DDATE 15/11/1959 TIME 3 12 25 GMT

QE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-65.4	26.7	.3291	3.15	197.91	281.7	283.09
-63.7	28.4	.3414	3.16	197.39	281.3	63.00
-61.9	30.0	.3560	3.17	197.19	280.9	990.00
-60.0	31.6	.3565	3.18	197.29	280.4	271.46
-59.0	32.4	.3600	3.20	197.39	280.0	267.21

LEFT PAGE

FILM

0000	REC	33. LENGTH	84
0000	REC	34. LENGTH	84
0000	REC	35. LENGTH	84
0000	REC	36. LENGTH	84
0000	REC	37. LENGTH	84
0000	REC	38. LENGTH	84
0000	REC	39. LENGTH	84

D-0022

1 EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 233 3 STATION 9

DATE 15/11/1959 TIME 1 38 32 GMT

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-26.9	37.0	.3479	3.23	198.23	278.5	285.55
-24.6	38.4	.3397	3.25	198.02	276.5	292.57
-22.2	39.8	.3299	3.26	197.71	278.0	278.41
-19.7	41.2	.3364	3.26	197.29	277.6	277.76
-17.1	42.4	.3273	3.29	197.08	277.2	576.00
-14.3	43.6	.3236	3.32	196.76	276.7	986.00
-11.5	44.8	.3183	3.33	196.45	276.3	265.76
-8.4	45.8	.3255	3.34	196.10	275.4	261.65
-5.3	46.8	.3305	3.37	195.97	275.5	291.06
-2.1	47.6	.3171	3.38	195.58	275.0	286.19
1.2	48.4	.3081	3.40	195.74	274.6	289.45
4.7	49.0	.2975	3.41	195.38	274.2	274.09
8.3	49.5	.3044	3.44	194.90	273.7	273.45
11.0	50.0	.3017	3.45	194.66	273.3	64.00
15.7	50.2	.3052	3.47	194.42	272.9	989.00
19.5	50.4	.3097	3.48	194.30	272.4	261.06
23.3	50.4	.3144	3.50	194.30	272.0	257.22
27.1	50.2	.3147	3.53	194.42	271.6	290.98
30.9	50.0	.3154	3.54	194.54	271.2	286.09
34.6	49.6	.3101	3.56	194.66	270.7	286.56
38.3	49.1	.3122	3.57	194.66	270.3	270.97
40.1	48.8	.3000	3.60	194.72	269.6	269.05

2 EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 209 1 STATION 5

DATE 15/11/1959 TIME 3 12 25 GMT

REC	1. LENGTH	80
REC	2. LENGTH	80
REC	3. LENGTH	80
REC	4. LENGTH	80
REC	5. LENGTH	80
REC	6. LENGTH	80
REC	7. LENGTH	80
REC	8. LENGTH	80
REC	9. LENGTH	80
REC	10. LENGTH	80
REC	11. LENGTH	80
REC	12. LENGTH	80
REC	13. LENGTH	80
REC	14. LENGTH	80
REC	15. LENGTH	80
REC	16. LENGTH	80
REC	17. LENGTH	80
REC	18. LENGTH	80
REC	19. LENGTH	80
REC	20. LENGTH	80
REC	21. LENGTH	80
REC	22. LENGTH	80
REC	23. LENGTH	80
REC	24. LENGTH	80
REC	25. LENGTH	80
REC	26. LENGTH	80
REC	27. LENGTH	80
REC	28. LENGTH	80
REC	29. LENGTH	80
REC	30. LENGTH	80
REC	31. LENGTH	80
REC	32. LENGTH	80
REC	33. LENGTH	80

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-65.4	26.7	.3291	3.15	197.91	281.7	283.09
-63.7	28.4	.3414	3.16	197.39	281.3	63.00
-61.9	30.0	.3560	3.17	197.19	280.9	990.00
-60.0	31.5	.3565	3.18	197.29	280.4	271.46
-59.0	32.4	.3000	3.20	197.39	280.0	267.21

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 233 4 STATION 5

DATE 15/11/1959 TIME 3 25 40 GMT

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-25.4	47.9	.3067	3.36	196.67	274.9	289.73
-23.0	48.5	.3173	3.41	196.10	274.4	274.25
-19.5	49.2	.3078	3.42	195.86	274.0	273.67
-15.5	49.7	.3171	3.44	195.49	273.6	64.00
-12.2	50.1	.3208	3.45	195.38	273.1	991.00
-8.4	50.3	.3133	3.48	195.38	272.7	261.50
-4.6	50.4	.2997	3.50	195.26	272.3	257.65
-.8	50.3	.3140	3.51	194.90	271.5	290.90
2.9	50.2	.3015	3.53	194.90	271.4	286.01
6.7	49.8	.2985	3.54	194.66	271.0	286.86
10.4	49.4	.3014	3.57	194.42	270.6	270.59
12.2	49.1	.3000	3.58	194.30	270.1	269.63

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 209 2 STATION 5

DATE 15/11/1959 TIME 4 55 58 GMT

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-88.8	28.8	.3579	3.16	200.16	281.2	990.00
-87.0	30.5	.3522	3.18	199.71	280.8	272.18
-85.1	32.1	.3332	3.18	199.25	280.3	268.09
-83.1	33.5	.3288	3.20	198.54	279.5	291.14
-81.0	35.2	.3111	3.22	197.91	279.5	286.37
-78.8	36.7	.2993	3.23	197.09	279.0	293.30

REC	34. LENGTH	80
REC	35. LENGTH	80
REC	36. LENGTH	80
REC	37. LENGTH	80
REC	38. LENGTH	80
REC	39. LENGTH	80
REC	40. LENGTH	80
REC	41. LENGTH	80
REC	42. LENGTH	80
REC	43. LENGTH	80
REC	44. LENGTH	80
REC	45. LENGTH	80
REC	46. LENGTH	80
REC	47. LENGTH	80
REC	48. LENGTH	80
REC	49. LENGTH	80
REC	50. LENGTH	80
REC	51. LENGTH	80
REC	52. LENGTH	80
REC	53. LENGTH	80
REC	54. LENGTH	80
REC	55. LENGTH	80
REC	56. LENGTH	80
REC	57. LENGTH	80
REC	58. LENGTH	80
REC	59. LENGTH	80
REC	60. LENGTH	80
REC	61. LENGTH	80
REC	62. LENGTH	80
REC	63. LENGTH	80
REC	64. LENGTH	80
REC	65. LENGTH	80

-76.6	18.1	.2850	3.25	166.22	278.6	275.22
-74.2	39.5	.2944	3.26	155.26	278.2	278.69
-71.7	40.8	.2751	3.28	154.66	277.8	64.00
-69.1	42.1	.2991	3.29	193.82	277.3	989.00
-66.4	43.3	.2884	3.30	153.58	276.9	266.76
-63.5	44.5	.3040	3.32	193.19	276.5	262.40
-62.1	45.0	.0000	3.34	153.18	276.0	290.50

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 209 3 STATION E

DATE 15/11/1959 TIME 6 41 45 GMT

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-109.8	32.8	.3425	3.15	198.13	280.1	291.06
-107.8	34.4	.3274	3.20	157.81	279.7	286.19
-105.7	35.9	.3209	3.22	197.29	279.3	293.21
-103.4	37.3	.3068	3.24	156.77	278.9	279.22
-101.1	38.8	.3028	3.25	196.10	278.4	278.51
-98.7	40.2	.3032	3.27	155.49	278.0	64.00
-96.2	41.5	.2990	3.28	195.01	277.6	669.00
-93.5	42.7	.2934	3.29	154.54	277.1	266.56
-90.7	43.9	.2879	3.31	194.06	276.7	262.77
-87.8	45.0	.2660	3.33	153.58	276.3	291.06
-84.8	46.0	.2933	3.34	192.78	275.8	286.28
-81.6	47.0	.2835	3.36	152.65	275.4	290.02
-78.3	47.8	.2743	3.38	192.37	275.0	274.75
-74.0	48.5	.2762	3.39	151.97	274.6	274.11
-71.4	49.1	.2668	3.42	191.69	274.1	65.00
-67.9	49.6	.2762	3.43	151.29	273.7	987.00
-64.2	50.0	.2742	3.45	191.15	273.3	261.50
-60.4	50.3	.2798	3.47	191.01	272.8	258.07
-56.5	50.4	.2861	3.48	191.01	272.4	296.98
-52.8	50.4	.2997	3.51	151.15	272.0	286.09
-50.9	50.3	.0000	3.52	191.55	271.5	286.86

REC	66. LENGTH	80
REC	67. LENGTH	80
REC	68. LENGTH	80
REC	69. LENGTH	80
REC	70. LENGTH	80
REC	71. LENGTH	80
REC	72. LENGTH	80
REC	73. LENGTH	80
REC	74. LENGTH	80
REC	75. LENGTH	80
REC	76. LENGTH	80
REC	77. LENGTH	80
REC	78. LENGTH	80
REC	79. LENGTH	80
REC	80. LENGTH	80
REC	81. LENGTH	80
REC	82. LENGTH	80
REC	83. LENGTH	80
REC	84. LENGTH	80
REC	85. LENGTH	80
REC	86. LENGTH	80
REC	87. LENGTH	80
REC	88. LENGTH	80
REC	89. LENGTH	80
REC	90. LENGTH	80
REC	91. LENGTH	80
REC	92. LENGTH	80
REC	93. LENGTH	80
REC	94. LENGTH	80
REC	95. LENGTH	80
REC	96. LENGTH	80
REC	97. LENGTH	80

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 219 2 STATION 6

DATE 15/11/1959 TIME 6 30 13 GMT

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-128.7	13.3	.3788	3.07	203.52	285.1	969.00
-127.3	15.1	.3866	3.08	202.73	284.7	278.61
-125.8	16.9	.3678	3.08	202.23	284.2	273.81
-124.4	18.5	.3718	3.09	201.50	283.8	290.90
-122.8	20.4	.3847	3.10	200.99	283.4	285.26
-121.3	22.1	.3608	3.11	200.81	282.5	297.73
-119.7	23.8	.3720	3.12	200.25	282.5	283.35
-118.0	25.5	.3617	3.13	200.00	282.1	283.66
-116.3	27.2	.3608	3.15	199.63	281.6	47.03
-114.5	28.8	.3585	3.16	199.33	281.2	990.00
-112.7	30.5	.3477	3.18	199.06	280.8	272.18
-110.8	32.1	.3371	3.18	198.65	280.4	267.75
-108.8	33.6	.3414	3.20	198.13	279.9	291.06
-107.8	34.4	.3000	3.22	197.81	279.5	286.19

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 219 3 STATION 6

DATE 15/11/1959 TIME 8 16 43 GMT

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-144.5	24.7	.3581	3.13	200.63	282.3	284.23
-142.8	26.3	.3466	3.14	200.07	281.5	61.00
-141.1	28.0	.3371	3.16	199.43	281.5	989.00
-139.3	29.7	.3089	3.16	198.75	281.0	272.90
-137.4	31.3	.3383	3.18	197.70	280.6	258.63
-135.5	32.9	.3294	3.19	197.39	280.2	291.14
-133.4	34.4	.3246	3.20	196.98	279.7	312.27
-131.3	35.9	.3418	3.22	196.57	279.3	293.95
-129.1	37.4	.3353	3.24	196.57	278.9	279.77
-126.7	38.8	.3456	3.25	196.46	278.4	279.15

REC	58.	LENGTH	80
REC	99.	LENGTH	80
REC	100.	LENGTH	80
REC	101.	LENGTH	80
REC	102.	LENGTH	80
REC	103.	LENGTH	80
REC	104.	LENGTH	80
REC	105.	LENGTH	80
REC	106.	LENGTH	80
REC	107.	LENGTH	80
REC	108.	LENGTH	80
REC	109.	LENGTH	80
REC	110.	LENGTH	80
REC	111.	LENGTH	80
REC	112.	LENGTH	80
REC	113.	LENGTH	80
REC	114.	LENGTH	80
REC	115.	LENGTH	80
REC	116.	LENGTH	80
REC	117.	LENGTH	80
REC	118.	LENGTH	80
REC	119.	LENGTH	80
REC	120.	LENGTH	80
REC	121.	LENGTH	80
REC	122.	LENGTH	80
REC	123.	LENGTH	80
REC	124.	LENGTH	80
REC	125.	LENGTH	80
REC	126.	LENGTH	80
REC	127.	LENGTH	80
REC	128.	LENGTH	80
REC	129.	LENGTH	80

-124.3	40.2	.3343	3.27	156.57	278.0	64.00
-121.8	41.5	.3257	3.26	156.46	277.6	586.00
-119.1	42.7	.3099	3.30	156.22	277.2	267.51
-116.3	43.9	.3179	3.31	195.74	276.7	263.15
-113.4	45.0	.3019	3.32	155.50	276.3	290.98
-110.4	46.1	.2837	3.35	195.02	275.9	286.09
-107.2	47.0	.2763	3.36	154.30	275.4	290.50
-104.0	47.8	.2634	3.38	193.58	275.0	274.91
-102.3	48.2	.0000	3.39	152.75	274.6	274.79

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 223 4 STATION 6

DATE 15/11/1959 TIME 10 0 21 GMT

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-171.2	23.6	.4032	3.13	202.51	282.6	285.68
-169.5	25.3	.3935	3.14	202.37	282.2	63.00
-167.8	27.0	.3827	3.14	202.08	281.7	989.00
-166.1	28.7	.3741	3.15	201.65	281.3	274.49
-164.2	30.3	.3685	3.17	201.17	280.9	270.39
-162.3	31.9	.3597	3.18	200.70	280.4	296.28
-160.3	33.5	.3465	3.19	200.17	280.0	288.03
-158.2	35.0	.3426	3.21	199.52	279.6	294.91
-156.1	36.5	.3161	3.23	198.95	279.1	280.99
-153.8	38.0	.3221	3.24	198.02	278.7	280.44
-152.7	38.7	.0000	3.26	197.39	278.3	.00

2EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 219 4 STATION 6

DATE 15/11/1959 TIME 10 4 51 GMT

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-150.4	39.9	.3193	3.26	156.77	278.1	988.00
-147.9	41.3	.3053	3.28	196.34	277.7	268.88
-145.3	42.5	.3186	3.29	155.74	277.2	264.65
-142.5	43.7	.3280	3.30	195.50	276.8	291.46

REC	130.	LENGTH	80
REC	131.	LENGTH	80
REC	132.	LENGTH	80
REC	133.	LENGTH	80
REC	134.	LENGTH	80
REC	135.	LENGTH	80
REC	136.	LENGTH	80
REC	137.	LENGTH	80
REC	138.	LENGTH	80
REC	139.	LENGTH	80
REC	140.	LENGTH	80
REC	141.	LENGTH	80
REC	142.	LENGTH	80
REC	143.	LENGTH	80
REC	144.	LENGTH	80
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REC	146.	LENGTH	80
REC	147.	LENGTH	80
REC	148.	LENGTH	80
REC	149.	LENGTH	80
REC	150.	LENGTH	80
REC	151.	LENGTH	80
REC	152.	LENGTH	80
REC	153.	LENGTH	80
REC	154.	LENGTH	80
REC	155.	LENGTH	80
REC	156.	LENGTH	80
REC	157.	LENGTH	80
REC	158.	LENGTH	80
REC	159.	LENGTH	80
REC	160.	LENGTH	80
REC	161.	LENGTH	80

-139.6	44.8	.3334	3.33	195.50	276.4	286.28
-136.6	45.9	.3347	3.34	195.62	276.0	291.46
-133.5	46.8	.3349	3.35	195.74	275.5	276.71
-130.2	47.7	.3100	3.38	195.86	275.1	276.16
-126.8	48.4	.3117	3.39	195.50	274.7	64.00
-123.3	49.1	.3037	3.41	195.25	274.2	989.00
-119.7	49.6	.2990	3.42	194.90	273.8	261.94
-117.9	49.8	.0000	3.45	194.54	273.4	259.77

2 EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 209 5 STATION E

DATE 15/11/1959 TIME 10 15 9 GMT

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-105.9	50.4	.2618	3.50	192.91	272.2	285.55
-102.1	50.3	.2624	3.51	192.23	271.8	288.26
-98.3	50.1	.2708	3.53	191.59	271.3	272.53
-94.5	49.7	.2678	3.54	191.42	270.9	271.47
-90.8	49.2	.2712	3.57	191.15	270.5	64.00
-89.0	48.9	.0000	3.58	191.01	270.0	584.00

2 EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 209 5 STATION E

DATE 15/11/1959 TIME 10 15 17 GMT

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-109.0	50.4	.2626	3.48	192.91	272.5	285.55
-105.2	50.4	.2628	3.45	192.23	272.1	288.26
-101.4	50.3	.2709	3.52	191.69	271.7	272.53
-97.6	50.0	.2682	3.53	191.42	271.3	271.47
-93.8	49.6	.2720	3.55	191.15	270.8	64.00
-92.0	49.4	.0000	3.56	191.01	270.4	584.00

2 EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 219 5 STATION E

DATE 15/11/1959 TIME 11 56 46 GMT

DE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
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REC	162.	LENGTH	80
REC	163.	LENGTH	80
REC	164.	LENGTH	80
REC	165.	LENGTH	80
REC	166.	LENGTH	80
REC	167.	LENGTH	80
REC	168.	LENGTH	80
REC	169.	LENGTH	80
REC	170.	LENGTH	80
REC	171.	LENGTH	80
REC	172.	LENGTH	80
REC	173.	LENGTH	80
REC	174.	LENGTH	80
REC	175.	LENGTH	80
REC	176.	LENGTH	80
REC	177.	LENGTH	80
REC	178.	LENGTH	80
REC	179.	LENGTH	20
REC	180.	LENGTH	80
REC	181.	LENGTH	80
REC	182.	LENGTH	80
REC	183.	LENGTH	80
REC	184.	LENGTH	80
REC	185.	LENGTH	80
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REC	187.	LENGTH	80
REC	188.	LENGTH	80
REC	189.	LENGTH	80
REC	190.	LENGTH	80
REC	191.	LENGTH	80
REC	192.	LENGTH	80
REC	193.	LENGTH	20

-140.6	50.0	.3168	3.44	194.90	271.1	251.38
-137.2	50.3	.3159	3.47	194.60	272.9	286.47
-133.4	50.4	.3215	3.48	194.90	272.4	288.85
-129.6	50.3	.3157	3.50	195.02	272.0	272.88
-125.8	50.2	.3032	3.52	195.02	271.6	271.67
-122.0	49.9	.2882	3.53	194.78	271.1	64.00
-118.3	49.5	.2830	3.56	194.30	270.7	585.00
-114.7	48.9	.2779	3.57	193.82	270.3	259.74
-112.8	48.6	.0000	3.59	193.33	269.8	255.51

REC	194.	LENGTH	80
REC	195.	LENGTH	80
REC	196.	LENGTH	80
REC	197.	LENGTH	80
REC	198.	LENGTH	80
REC	199.	LENGTH	80
REC	200.	LENGTH	80
REC	201.	LENGTH	80
REC	202.	LENGTH	80
REC	203.	LENGTH	80

DDATE 24/ 5/1960 TIME 14 21 11 GMT

OE-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
120.2	-49.2	.2939	3.02	200.71	289.1	291.13
123.5	-48.6	.3018	3.03	199.15	288.6	287.84
125.1	-48.4	0.3000	3.03	198.02	288.1	294.91

REC	1. LENGTH	80
REC	2. LENGTH	80
REC	3. LENGTH	80
REC	4. LENGTH	80
REC	5. LENGTH	80
REC	6. LENGTH	80
REC	7. LENGTH	80
REC	8. LENGTH	80
REC	9. LENGTH	80
REC	10. LENGTH	80

FILE 0001 REC 335 C4 1648

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0327	000000000000	000000000000	000000000000	000000000000
0145	000000000000	000000000000	000000000000	000000000000
0193	000000000000	000000000000	000000000000	000000000000
0241	000000000000	000000000000	000000000000	000000000000
0289	000000000000	000000000000	000000000000	000000000000
0337	000000000000	000000000000	000000000000	000000000000
0385	000000055131	000000054401	000000060655	000000057525
0433	000000056755	000000061036	000000066152	000000000000
0481	000000061135	000000065763	000000070000	000000071241
0529	000000070742	000000000000	000000073415	000000071061
0577	000000065263	000000073200	000000067523	000000070722
0625	000000073525	000000070533	000000071237	000000053222
0673	000000064441	000000071527	000000063453	000000061557
0721	000000071731	000000063651	000000061704	000000072377
0769	000000064004	000000052052	000000072545	000000077124
0817	000000062220	000000072663	000000077531	000000072573
0865	000000073064	000000000000	000000075143	000000057331
0913	000000100523	000000075315	000000067325	000000072607
0961	000000057250	000000067567	000000072607	000000060344
1009	000000074207	000000052453	000000057245	000000053307
1057	000000000000	000000000000	000000000000	000000000000
1105	000000000000	000000000000	000000000000	000000076227
1153	000000000000	000000000000	0000000101232	000000000000
1201	000000000000	000000000000	000000000000	000000000000
1249	000000000000	000000000000	000000000000	000000000000
1297	000000000000	000000000000	000000000000	000000000000
1345	000000000000	000000000000	000000000000	000000000000
1393	000000000000	000000000000	000000000000	000000000000
1441	000000000000	000000000000	000000000000	000000000000
1489	000000000000	000000000000	000000000000	000000000000
1537	000000000000	000000000000	000000000000	000000000000
1585	000000000000	000000000000	000000000000	000000000000
1532	000000000000	401177764754	00000000	

FILE 0001 REC 335 C4 1648

0001	001161000004	000000000000	000000000010	000000000022
0049	000000000000	000000000000	000000000000	000000000000
0097	000000000000	000000000000	000000000000	000000000000
0145	000000000000	000000000000	000000000000	000000000000
0193	000000000000	000000000000	000000000000	000000000000
0241	000000000000	000000000000	000000000000	000000000000
0289	000000000000	000000000000	000000000000	000000000000

FILE 0001 REC 0002 CH 1548

1249	000000000000	000000055625	000000063541	400000000000	4
1297	000000055505	400000058457	400000000000	400000000000	4
1345	000000000000	000000000000	000000000000	000000000000	0
1393	000000000000	000000000000	000000000000	000000000000	0
1441	000000000000	000000000000	000000000000	000000000000	0
1489	000000000000	000000000000	000000000000	000000000000	0
1537	000000000000	000000000000	000000000000	000000000000	0
1585	000000000000	000000000000	000000000000	000000000000	0
1633	000000000000	404032377533	00000000		

FILE 0001 REC 0003 CH 1548

0001	004013000000	000000000272	000000000016	000000000045	0
0142	000000000000	000000000000	000000000000	000000000000	0
0297	000000000000	000000000000	000000000000	000000000000	0
0145	000000000000	000000000000	000000000000	000000000000	0
0193	000000000000	000000000000	000000000000	000000000000	0
0241	000000000000	000000000000	000000000000	000000000000	0
0289	000000000000	000000000000	000000000000	000000000000	0
0337	400000066646	400000071177	400000063754	400000057275	0
0385	400000071206	000000053741	000000054535	400000071377	0
0433	400000063612	400000067561	000000055771	400000101413	0
0481	400000065047	000000071361	400000065263	400000073541	4
0529	000000071351	400000104577	400000072250	400000072321	4
0577	000000010144	000000073513	000000070202	400000071144	0
0625	400000074237	400000070406	400000070006	400000062655	0
0673	000000064617	000000055025	000000057646	000000064460	0
0721	400000061611	000000056052	000000051152	000000061141	0
0769	000000054175	400000065603	000000055050	000000055253	0
0817	400000053542	000000054305	000000065263	000000057641	0
0865	400000000000	000000065263	400000055442	000000062443	0
0913	400000000000	000000055245	000000072340	400000000000	0
0961	000000053614	400000071255	400000000000	400000045604	0
1009	400000101105	000000000000	000000047543	000000062555	4
1057	000000000000	400000047275	000000052455	400000000000	0
1105	400000047102	000000062356	000000000000	400000000000	0
1153	000000062304	000000000000	000000000000	000000000000	0
1201	000000000000	000000000000	000000000000	000000065433	4
1249	000000000000	000000000000	400000053132	400000000000	0
1297	400000000000	000000072356	400000000000	400000042045	0
1345	400000071046	400000000000	400000045652	400000051520	4
1393	400000000000	400000043603	000000000000	000000000000	0
1441	000000000000	000000000000	000000000000	000000000000	0
1489	000000000000	000000000000	000000000000	000000000000	0
1537	000000000000	000000000000	000000000000	000000000000	0
1585	000000000000	000000000000	000000000000	000000000000	0
1633	000000000000	004030617343	00000000		

FILE 0001 REC 0004 CH 1548

0001	003544000000	000000000272	000000000016	000000000064	0
0142	000000000000	000000000000	400000051357	400000053354	4
0297	400000057246	400000067263	400000052777	400000000000	0
0145	400000057567	400000053116	400000000000	400000000010	4
0193	400000052777	400000000000	400000000000	400000074047	4
0241	400000000000	400000000000	400000065030	400000000000	0
0289	400000000000	000000066131	000000000000	000000042007	0
0337	000000000000	400000000000	000000045433	400000051520	0
0385	400000000000	400000000000	400000061652	000000000000	0
0433	000000041751	400000061252	000000000000	000000000000	0
0481	000000057275	000000000000	000000000000	000000000000	0
0529	000000000000	000000000000	400000000000	000000066125	0
0577	000000000000	000000000000	000000071131	000000000000	0
0625	400000000000	400000075546	000000000000	000000051050	0
0673	000000065705	000000055467	000000054370	000000062135	0
0721	000000062715	000000055561	000000062020	400000055371	0
0769	400000057305	400000062503	000000067036	400000000000	0

FILE 0001 REC 0004 CH 1548

0817	400000054127	400000000000	400000000000	4000000000
0865	400000056552	400000115010	400000070527	4000000535
0913	400000105763	400000070440	400000077154	4000000703
0961	000000071654	000000057473	000000070572	0000000625
1009	400000077241	400000070515	000000061233	4000000543
1057	400000054124	400000057763	400000053547	4000000555
1105	000000000000	000000000000	000000000000	0000000000
1153	000000000000	000000000000	000000000000	0000000000
1201	000000000000	000000000000	000000000000	0000000000
1249	000000000000	000000000000	000000000000	0000000000
1297	000000000000	000000000000	000000000000	0000000000
1345	000000000000	000000000000	000000000000	0000000000
1393	000000000000	000000000000	000000000000	0000000000
1441	000000000000	000000000000	000000000000	0000000000
1489	000000000000	000000000000	000000000000	0000000000
1537	000000000000	000000000000	000000000000	0000000000
1585	000000000000	000000000000	000000000000	0000000000
1533	000000000000	003557176111	00000000	

U.S. GOVERNMENT PRINTING OFFICE: 1969 O-316-578

Octal dump

April 24

FILE 0001 REC 0001 CH 1648

16

0001	33401330002	300003000272	000000000020	300000000030	0
0047	000000000000	300000000000	000000000000	000000000000	0
0097	000000000000	000000000000	000000000000	000000000000	0
0145	000000000000	000000000000	000000000000	000000000000	0
0193	000000000000	000000000000	000000000000	000000000000	0
0241	000000000000	300000000000	000000000000	000000000000	0
0289	000000073265	000000064617	000000070121	400000062410	0
0337	000000070737	000000061323	000000057455	000000054355	0
0385	000000060705	000000055305	000000064107	000000057411	4
0433	000000053572	000000053371	000000055354	400000065263	0
0481	000000063474	000000000000	000000000000	000000057303	4
0529	000000000000	000000000000	000000056063	400000072302	4
0577	000000000000	000000055010	000000071131	000000000000	4
0625	000000053734	000000100251	400000000000	000000047753	0
0673	000000066305	000000000000	000000047341	000000062503	0
0721	000000000000	000000047257	000000052356	400000000000	4
0769	000000046571	000000062331	000000000000	000000000000	4
0817	000000062220	000000000000	400000000000	000000000000	0
0865	000000000000	400000000000	000000000000	000000063155	0
0913	400000000000	000000000000	000000072340	000000000000	0
0961	000000000000	000000071213	400000000000	000000046374	0
1009	000000077041	400000000000	400000065322	000000061735	0
1057	000000000000	400000045361	000000061704	400000000000	0
1105	000000045374	000000061704	000000000000	000000000000	4
1153	000000061520	000000000000	400000000000	400000000000	0
1201	400000000000	400000000000	400000000000	400000064324	0
1249	000000000000	000000000000	000000061537	000000000000	0
1297	400000000000	000000066033	400000000000	400000045715	0
1345	0000000155163	400000000000	4000000042235	400000050474	4
1393	400000000000	400000042177	000000060020	400000000000	4
1441	400000042443	400000053307	000000000000	000000000000	0
1489	000000000000	000000000000	000000000000	000000000000	0
1537	000000000000	000000000000	000000000000	000000000000	0
1585	000000000000	000000000000	000000000000	000000000000	0
1633	000000000000	404025726726	00000000		

FILE 0001 REC 0002 CH 1648

0001	334013300003	0000000000272	0000000000022	0000000000012	0
0047	000000000000	000000000000	000000000000	000000000000	0
0097	000000000000	000000000000	000000000000	000000000000	0
0145	000000000000	000000000000	000000000000	000000000000	0
0193	000000000000	000000000000	000000000000	000000000000	0
0241	400000000000	400000054551	400000077516	000000000000	4
0289	0000000653117	000000067200	400000000000	000000047707	4
0337	000000067527	400000000000	000000047405	000000062456	4
0385	000000000000	000000047203	000000062335	000000000000	4
0433	000000046760	400000062252	000000000000	000000000000	4
0481	000000062157	400000000000	000000000000	400000000000	4
0529	000000000000	000000000000	400000000000	000000072721	0
0577	000000000000	000000000000	000000071152	000000000000	0
0625	400000000000	000000077125	000000000000	400000045152	0
0673	400000066351	000000000000	000000045745	000000051552	0
0721	400000000000	000000046041	000000061620	000000000000	4
0769	000000045026	400000050610	000000000000	000000000000	4
0817	000000061220	400000000000	000000000000	400000000000	0
0865	400000000000	400000000000	000000000000	000000062543	0
0913	400000000000	000000000000	400000072321	000000000000	4
0961	400000000000	000000060073	400000000000	400000000000	4
1009	400000057753	400000000000	400000000000	400000000000	4
1057	400000000000	400000000000	400000067211	400000000000	4
1105	400000000000	400000057211	400000000000	400000000000	4
1153	400000000000	400000000000	400000000000	400000000000	4
1201	400000000000	400000000000	400000000000	400000054176	4

April 17, 1960 - June 4, 1960

D-0024

0	000000000000	000000000021	000000000013	000000000000	000000000000
0	000000000000	000000000000	000000000000	000000000000	000000000000
0	000000000000	000000000000	000000000000	000000000000	000000000000
0	000000000000	000000000000	000000000000	000000000000	000000000000
2	000000000000	000000000000	000000000000	000000000000	000000000000
0	000000000000	000000000000	4000000065000	000000071254	000000101524
1	400000002410	0000000064665	000000006263	400000077124	400000071136
5	0000000054355	0000000052252	0000000074651	0000000052505	000000014544
7	0000000057411	4000000074303	4000000055072	0000000000760	0000000056721
4	4000000065263	0000000056561	4000000066340	0000000055243	0000000052472
2	0000000057307	4000000063403	0000000000000	4000000040010	0000000063300
3	4000000072302	4000000000000	0000000051020	4000000063347	0000000000000
1	0000000033300	4000000050352	0000000062754	0000000000000	0000000000000
0	0000000047753	0000000062652	4000000000000	4000000000000	4000000000000
1	0000000062503	0000000000000	4000000000000	0000000000000	0000000067507
6	4000000000000	4000000000000	0000000000000	0000000014234	4000000000000
0	0000000000000	4000000000000	0000000000760	0000000000000	0000000046713
0	0000000000000	0000000065433	0000000000000	4000000045555	0000000062167
0	0000000063135	0000000000000	0000000046446	0000000052052	0000000000000
0	0000000000000	0000000046374	4000000062167	0000000000000	0000000000000
0	0000000046374	0000000051757	4000000000000	4000000000000	0000000000000
2	0000000051735	0000000000000	0000000000000	4000000000000	4000000066333
4	4000000000000	0000000000000	0000000000000	0000000000000	0000000000000
0	0000000000000	4000000000000	0000000014400	4000000000000	4000000050420
0	4000000000000	000000001124	0000000000000	4000000046460	0000000061620
0	4000000064321	0000000000000	4000000046472	0000000057456	0000000000000
7	0000000000000	0000000045505	4000000056527	4000000000000	0000000000000
0	4000000045715	0000000060542	0000000000000	0000000000000	4000000000000
5	4000000057474	4000000000000	4000000000000	0000000000000	4000000075414
0	4000000000000	4000000000000	4000000000000	4000000055451	4000000000000
0	0000000000000	0000000000000	0000000000000	0000000000000	0000000000000
0	0000000000000	0000000000000	0000000000000	0000000000000	0000000000000
0	0000000000000	0000000000000	0000000000000	0000000000000	0000000000000
0	0000000000000	0000000000000	0000000000000	0000000000000	0000000000000
0	0000000000000	0000000000000	0000000000000	0000000000000	0000000000000
2	0000000000012	0000000000056	0000000000013	0000000000000	0000000000000
0	0000000000000	0000000000000	0000000000000	0000000000000	0000000000000
0	0000000000000	0000000000000	0000000000000	0000000000000	0000000000000
0	0000000000000	0000000000000	0000000000000	0000000000000	0000000000000
0	0000000000000	0000000000000	4000000050650	0000000063054	0000000000000
6	0000000000000	4000000050255	0000000062702	0000000000000	0000000000000
0	0000000047707	4000000062456	0000000000000	4000000000000	0000000000000
5	0000000062456	4000000000000	4000000000000	0000000000000	0000000014400
5	0000000033000	4000000000000	0000000000000	0000000134614	0000000000000
0	0000000000000	4000000000000	0000000065506	4000000000000	4000000046603
0	4000000000000	4000000067360	0000000000000	4000000046406	0000000062104
0	0000000072321	0000000000000	0000000046335	0000000062052	4000000000000
2	0000000000000	0000000046232	4000000061735	0000000000000	0000000000000
0	4000000045152	0000000061735	0000000000000	0000000000000	0000000000000
5	0000000061652	0000000000000	0000000000000	4000000000000	0000000000000
0	0000000000000	4000000000000	0000000000000	0000000014710	0000000000000
0	0000000000000	4000000000000	00000000275350	4000000000000	4000000045652
0	4000000000000	0000000056232	4000000000000	0000000045715	0000000061167
0	0000000062543	0000000000000	4000000045732	4000000056267	0000000000000
1	0000000000000	4000000045752	0000000060427	4000000000000	4000000000000
0	4000000000000	4000000060474	4000000000000	4000000000000	4000000000000
0	4000000000000	4000000000000	4000000000000	4000000000000	4000000000000
1	4000000000000	4000000000000	4000000000000	4000000000000	4000000000000
0	4000000000000	4000000000000	4000000000000	4000000000000	4000000000000
0	4000000000000	4000000000000	4000000000000	4000000000000	4000000000000
0	4000000000000	4000000000000	4000000000000	4000000000000	4000000000000
0	4000000000000	4000000000000	4000000000000	4000000000000	4000000000000

FILE 0001 REC 0004 CH 164F

0317	000000064723	000000071351	000000101525	000000073457
0355	000000070007	000000100623	000000072204	000000064141
0313	000000076645	000000057147	000000072131	000000061611
0751	000000064373	400000070575	000000057431	000000054325
1009	000000082263	000000055713	000000057102	000000063477
1057	000000064347	000000047125	400000161652	400000000000
1125	400000055007	400000000000	400000000000	400000000000
1153	400000070033	400000000000	400000000000	400000062625
1201	400000000000	400000000000	000000051053	400000055055
1249	000000000000	400000000000	000000063360	400000000000
1297	400000000000	000000071635	400000000000	400000041301
1345	000000071046	000000000000	000000074256	000000062334
1393	400000000000	000000000000	400000062220	400000000000
1441	400000041227	400000062167	400000000000	400000000000
1489	400000063325	000000000000	000000000000	000000000000
1537	000000000000	000000000000	000000000000	000000000000
1585	000000000000	000000000000	000000000000	000000000000
1633	000000000000	403602314167	00000000	

FILE 0001 REC 0005 CH 164F

0001	003544000010	000000000273	000000000007	000000000024
0049	000000000000	000000000000	000000000000	000000000000
0097	000000000000	000000000000	000000000000	000000000000
0145	000000000000	000000000000	000000000000	000000000000
0193	000000000000	000000000000	000000000000	000000000000
0241	000000000000	000000000000	000000000000	000000000000
0289	000000000000	000000000000	000000000000	000000000000
0337	000000000000	000000000000	000000000000	000000000000
0385	400000057145	400000060273	400000053547	000000072157
0433	000000065043	400000051035	000000072172	000000102472
0481	400000065442	000000066152	000000102314	000000074371
0529	400000070717	000000102347	000000067431	000000072047
0577	000000102314	000000074237	000000070555	000000071632
0625	000000074170	000000103071	000000071551	000000060265
0673	000000061400	000000071511	000000064355	000000065221
0721	000000071455	000000064177	000000055135	000000067722
0769	000000064310	000000065151	400000070074	000000102022
0817	000000065117	000000071555	000000010202	0000000573751
0865	000000071534	000000102022	000000072344	000000064226
0913	000000101755	400000072336	000000072114	000000071331
0961	000000073723	000000070743	000000071334	400000062667
1009	400000057442	400000064523	400000054213	400000063441
1057	400000071073	400000057525	400000053427	400000053116
1105	000000000000	000000000000	000000000000	000000000000
1153	000000000000	000000000000	000000000000	000000000000
1201	000000000000	000000000000	000000000000	000000000000
1249	000000000000	000000000000	000000000000	000000000000
1297	000000000000	000000000000	000000000000	000000000000
1345	000000000000	000000000000	000000000000	000000000000
1393	000000000000	000000000000	000000000000	000000000000
1441	000000000000	000000000000	000000000000	000000000000
1489	000000000000	000000000000	000000000000	000000000000
1537	000000000000	000000000000	000000000000	000000000000
1585	000000000000	000000000000	000000000000	000000000000
1633	000000000000	403560725601	00000000	

FILE 0001 REC 0006 CH 164F

0001	003641000000	000000000273	000000000007	000000000024
0049	000000000000	000000000000	000000000000	000000000000
0097	000000000000	000000000000	000000000000	000000000000
0145	000000000000	000000000000	000000000000	000000000000
0193	000000000000	000000000000	000000000000	000000000000
0241	400000000000	000000000000	400000065113	400000000000
0289	000000000000	400000066702	400000000000	400000045713

FILE 0001 REC 0005 CH 1698

0337	000000066712	000000000000	000000042557	40000006211
0385	000000000000	000000000000	000000052152	00000000000
0433	000000046544	000000000000	000000000000	00000000000
0481	000000061757	000000000000	000000000000	00000000000
0529	000000000000	000000000000	400000000000	00000007227
0577	000000000000	000000000000	000000070774	00000000000
0625	000000000000	000000076286	000000000000	00000004557
0673	000000066067	400000000000	000000043571	00000006167
0721	000000000000	000000046556	000000051535	00000000000
0769	000000046532	000000061533	000000031000	00000000000
0817	000000061135	000000000000	000000000000	00000000000
0865	400000000000	400000000000	400000000000	4000000534

U.S. GOVERNMENT PRINTING OFFICE: 1963

0000062135	00000000000	00000000000	00000000000	00000000000	000000014544
0000000000	00000000000	40000000000	000000300750	00000000000	000000000000
0000000000	00000000000	00000065175	00000000000	000000046544	000000046544
0000000000	00000062767	00000000000	000000046544	000000061704	000000061704
0000072237	00000000000	000000046571	000000061704	000000061704	000000000000
0000000000	000000046571	000000061552	00000000000	00000000000	000000000000
0000045571	00000061520	00000000000	00000000000	00000000000	000000000000
0000061620	00000000000	00000000000	00000000000	00000000000	000000000000
0000000000	00000000000	00000000000	00000014400	00000000000	000000000000
0000000000	00000000000	00000217124	00000000000	400000046505	400000046505
0000000000	40000068473	00000000000	000000046505	400000053667	400000053667
0000053453	40000000000	400000046071	40000000000	40000000000	400000000000

FILE 0001 REC 0002 CH 1648

1249	000000000000	000000000000	000000000000	000000000000
1297	000000000000	000000000000	000000000000	000000000000
1345	000000000000	000000000000	000000000000	000000000000
1393	000000000000	000000000000	000000000000	000000000000
1441	000000000000	000000000000	000000000000	000000000000
1489	000000000000	000000000000	000000000000	000000000000
1537	000000000000	000000000000	000000000000	000000000000
1585	000000000000	000000000000	000000000000	000000000000
1633	000000000000	404372500026	00000000	

FILE 0001 REC 0003 CH 1648

0001	004356000011	000000000353	000000000000	000000000000
0049	000000000000	000000000000	000000000000	000000000000
0097	000000000000	000000000000	000000000000	000000000000
0145	000000000000	000000000000	000000000000	000000000000
0193	400000063241	400000000000	000000057415	000000000000
0241	000000000000	000000063033	000000055230	000000000000
0289	000000065255	000000065077	000000054717	000000000000
0337	000000000000	400000067535	000000063676	400000000000
0385	000000070142	400000064244	000000061420	400000000000
0433	000000064474	000000051504	000000071033	400000000000
0481	400000051535	400000071535	000000000000	000000000000
0529	400000071245	000000010100	000000071021	000000000000
0577	0000000101755	400000071121	4000000057271	400000000000
0625	400000054551	000000000000	000000000000	000000000000
0673	000000000000	000000000000	000000000000	000000000000
0721	000000000000	000000000000	000000000000	000000000000
0769	000000000000	000000000000	000000000000	000000000000
0817	000000000000	000000000000	000000000000	000000000000
0865	000000000000	000000000000	000000000000	000000000000
0913	000000000000	000000000000	000000000000	000000000000
0961	000000000000	000000000000	000000000000	000000000000
1009	000000000000	000000000000	000000000000	000000000000
1057	000000000000	000000000000	000000000000	000000000000
1105	000000000000	000000000000	000000000000	000000000000
1153	000000000000	000000000000	000000000000	000000000000
1201	000000000000	000000000000	000000000000	000000000000
1249	000000000000	000000000000	000000000000	000000000000
1297	000000000000	000000000000	000000000000	000000000000
1345	000000000000	000000000000	000000000000	000000000000
1393	000000000000	000000000000	000000000000	000000000000
1441	000000000000	000000000000	000000000000	000000000000
1489	000000000000	000000000000	000000000000	000000000000
1537	000000000000	000000000000	000000000000	000000000000
1585	000000000000	000000000000	000000000000	000000000000
1633	000000000000	004365701057	00000000	

FILE 0001 REC 0004 CH 1648

0001	004356000012	000000000353	000000000000	000000000000
0049	000000000000	000000000000	000000000000	000000000000
0097	000000000000	000000000000	000000000000	000000000000
0145	000000000000	000000000000	000000000000	000000000000
0193	000000000000	000000000000	400000054551	000000000000
0241	000000000000	000000051057	400000066161	000000000000
0289	000000064154	000000065013	000000066174	000000000000
0337	000000000000	000000057202	000000053341	000000000000
0385	000000067532	000000064021	000000061420	000000000000
0433	000000064274	000000061504	000000070702	000000000000
0481	000000051534	000000071065	000000103200	400000000000
0529	000000071234	000000010104	000000070666	400000000000
0577	0000000101461	000000071075	000000057757	000000000000
0625	400000070245	000000057055	000000071355	000000000000
0673	000000065420	000000071520	400000065621	000000000000
0721	000000071541	400000065720	000000052220	400000000000
0769	000000066075	000000052356	000000066021	000000000000

FILE 0001 REC 0004 CH 1548

0917	400000056127	000000072241	400000104243	400000075471	40
0965	400000057227	000000104552	000000072175	400000055113	40
0913	400000110547	400000000000	400000054505	400000000000	40
0961	400000000000	400000055721	000000000000	000000000000	00
1009	000000000000	000000000000	000000000000	000000000000	00
1057	000000000000	000000000000	000000000000	000000000000	00
1105	000000000000	000000000000	000000000000	000000000000	00
1153	000000000000	000000000000	000000000000	000000000000	00
1201	000000000000	000000000000	000000000000	000000000000	00
1249	000000000000	000000000000	000000000000	000000000000	00
1297	000000000000	000000000000	000000000000	000000000000	00
1345	000000000000	000000000000	000000000000	000000000000	00
1393	000000000000	000000000000	000000000000	000000000000	00
1441	000000000000	000000000000	000000000000	000000000000	00
1489	000000000000	000000000000	000000000000	000000000000	00
1537	000000000000	000000000000	000000000000	000000000000	00
1585	000000000000	000000000000	000000000000	000000000000	00
1533	000000000000	004373337453	00000000		

FILE 0001 REC 0005 CH 1548

JUNE 4, 1960

353
 8
 24
 3
 29
 28
 23
 2
 3
 1
 535

0901	004356000013	000000000000	000000000004	000000000001	00
0949	000000000000	000000000000	000000000000	000000000000	00
0997	000000000000	000000000000	000000000000	000000000000	00
1045	000000000000	000000000000	000000000000	000000000000	00
0193	000000000000	000000000000	000000000000	000000000000	00
0241	000000000000	000000000000	000000000000	000000000000	00
0289	000000000000	000000000000	000000000000	000000000000	00
0337	000000000000	400000057475	400000057325	400000061335	40
0385	400000067321	000000063612	400000061432	000000070370	00
0433	000000066177	000000061504	000000070547	400000075643	40
0481	000000061535	000000071033	000000076734	400000071206	40
0529	400000074200	000000100510	000000073606	000000070341	00
0577	000000101165	000000071021	000000076770	000000071224	00
0625	400000071144	400000057103	000000071331	000000065464	00
0673	000000065420	000000071455	000000055552	000000062104	00
0721	000000071557	400000065661	000000062220	000000071741	00
0769	000000066705	000000062331	000000072037	400000105247	40
0817	000000062456	400000071335	000000104063	400000072011	40
0865	400000000000	400000000000	400000075137	400000000000	00
0913	400000000000	400000000000	400000000000	400000054011	40
0961	400000053356	400000000000	400000064721	400000057246	40
1009	400000000000	400000000000	400000000000	400000000000	00
1057	400000053565	400000057246	400000000000	400000000000	00
1105	400000057246	400000000000	400000053116	400000000000	00
1153	400000000000	400000054047	400000000000	400000000000	00
1201	000000000000	000000000000	000000000000	000000000000	00
1249	000000000000	000000000000	000000000000	000000000000	00
1297	000000000000	000000000000	000000000000	000000000000	00
1345	000000000000	000000000000	000000000000	000000000000	00
1393	000000000000	000000000000	000000000000	000000000000	00
1441	000000000000	000000000000	000000000000	000000000000	00
1489	000000000000	000000000000	000000000000	000000000000	00
1537	000000000000	000000000000	000000000000	000000000000	00
1585	000000000000	000000000000	000000000000	000000000000	00
1633	000000000000	404371513771	00000000		

EXPLORER VII

UNIVERSITY OF WISCONSIN
EXPERIMENT

VOL. I OF II

Printed from tape EXPVIIRAD

White sensor temp., long wave radiation,
orbit position data

Long., degrees, E+

Lat., degrees, N+

Rad., LNR, ly/min.

Beta, solid angle, steradians

Sensor (white), degrees K

Mirror, averaged value from refs. column,
degrees K

- Refs., Low freq. ref., 65.00 ± 2.00
- High freq. ref., 985.00 ± 15.00
- ABMA 1 (skin temp.) degrees K
- ABMA 2 (solar cell temp) "
- ABMA 3 (transmitter temp.) "
- ABMA 4 (battery temp.) "
- ABMA 5 (geiger tube temp.) "
- Mirror 1 (for bl. hemis. 1 & white)
degrees K
- Mirror 2 (for bl. hemis. 4 & gold)
degrees K

EXPLORER VI: RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 233 3 STATION 9

DATE 15/11/1959 TIME 1 38 32 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-26.7	37.0	.3479	3.23	198.23	278.9	235.55
-24.6	38.4	.3397	3.25	198.02	278.5	292.57
-22.2	39.6	.3299	3.26	197.71	278.0	278.41
-19.7	41.2	.3364	3.28	197.29	277.6	277.76
-17.1	42.4	.3273	3.29	197.08	277.2	576.00
-14.3	43.6	.3236	3.32	196.76	276.7	988.00
-11.5	44.8	.3183	3.33	196.45	276.3	265.76
-8.4	45.8	.3255	3.34	196.10	275.9	261.65
-5.3	46.8	.3305	3.37	195.97	275.5	291.06
-2.1	47.6	.3171	3.38	195.98	275.0	286.19
1.2	48.4	.3081	3.40	195.74	274.6	289.45
4.7	49.0	.2975	3.41	195.38	274.2	274.09
8.3	49.5	.3044	3.44	194.90	273.7	273.45
11.9	50.0	.3017	3.45	194.66	273.3	64.00
15.7	50.2	.3052	3.47	194.42	272.9	989.00
19.5	50.4	.3097	3.48	194.30	272.4	261.06
23.3	50.4	.3144	3.50	194.30	272.0	257.22
27.1	50.2	.3147	3.53	194.42	271.6	290.98
30.9	50.0	.3154	3.54	194.54	271.2	286.09
34.6	49.6	.3101	3.56	194.66	270.7	286.56
38.3	49.1	.3122	3.57	194.66	270.3	270.07
40.1	48.8	.0000	3.60	194.72	269.9	269.05

EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 209 1 STATION 5

DATE 15/11/1959 TIME 3 12 25 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-65.4	26.7	.3291	3.15	197.91	281.7	283.09
-63.7	28.4	.3414	3.16	197.39	281.3	63.00
-61.9	30.0	.3560	3.17	197.19	280.9	990.00
-60.0	31.6	.3565	3.18	197.29	280.4	271.46
-59.0	32.4	.0000	3.20	197.39	280.0	267.21

EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 233 4 STATION 9

DATE 15/11/1959 TIME 3 25 40 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-26.4	47.9	.3057	3.38	196.67	274.9	289.73
-23.0	48.6	.3173	3.41	196.10	274.4	274.25
-19.5	49.2	.3078	3.42	195.86	274.0	273.67
-15.9	49.7	.3171	3.44	195.49	273.6	64.00
-12.2	50.1	.3208	3.45	195.38	273.1	991.00
-8.4	50.3	.3133	3.48	195.38	272.7	261.50
-4.6	50.4	.2997	3.50	195.26	272.3	257.85
-.8	50.3	.3140	3.51	194.90	271.9	290.90
2.9	50.2	.3015	3.53	194.90	271.4	286.01
6.7	49.8	.2985	3.54	194.66	271.0	286.86
10.4	49.4	.3014	3.57	194.42	270.6	270.59
12.2	49.1	.0000	3.58	194.30	270.1	269.63 59

EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 209 2 STATION 5

DATE 15/11/1959 TIME 4 55 58 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-88.8	28.8	.3579	3.16	200.16	281.2	990.00
-87.0	30.5	.3522	3.18	199.71	280.8	272.18
-85.1	32.0	.3332	3.18	199.25	280.3	268.09
-83.1	33.6	.3288	3.20	198.54	279.9	291.14
-81.0	35.2	.3111	3.22	197.91	279.5	286.37
-78.8	36.7	.2993	3.23	197.09	279.0	293.30
-76.6	38.1	.2850	3.25	196.22	278.6	279.22
-74.2	39.5	.2944	3.26	195.26	278.2	278.69
-71.7	40.8	.2751	3.28	194.66	277.8	64.00
-69.1	42.1	.2991	3.29	193.82	277.3	989.00
-66.4	43.3	.2884	3.30	193.58	276.9	266.76
-63.5	44.5	.3040	3.32	193.19	276.5	262.40
-62.1	45.0	.0000	3.34	193.18	276.0	290.50 52

EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 209 3 STATION 5

DATE 15/11/1959 TIME 6 41 45 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-109.8	32.8	.3425	3.19	198.13	280.1	291.06
-107.8	34.4	.3274	3.20	197.81	279.7	286.19
-105.7	35.9	.3209	3.22	197.29	279.3	293.21
-103.4	37.3	.3068	3.24	196.77	278.9	279.22
-101.1	38.8	.3028	3.25	196.10	278.4	278.51
-98.7	40.2	.3032	3.27	195.49	278.0	64.00
-96.2	41.5	.2990	3.28	195.01	277.6	689.00
-93.5	42.7	.2934	3.29	194.54	277.1	266.56
-90.7	43.9	.2879	3.31	194.06	276.7	262.77
-87.8	45.0	.2660	3.33	193.58	276.3	291.06
-84.8	46.0	.2933	3.34	192.78	275.8	286.28
-81.6	47.0	.2835	3.36	192.65	275.4	290.02
-78.3	47.8	.2743	3.38	192.37	275.0	274.75
-74.9	48.5	.2762	3.39	191.97	274.6	274.11
-71.4	49.1	.2668	3.42	191.69	274.1	65.00
-67.9	49.6	.2762	3.43	191.29	273.7	987.00
-64.2	50.0	.2742	3.45	191.15	273.3	251.50
-60.4	50.3	.2798	3.47	191.01	272.8	258.07
-56.6	50.4	.2861	3.48	191.01	272.4	290.98
-52.8	50.4	.2997	3.51	191.15	272.0	286.09
-50.9	50.3	.0000	3.52	191.55	271.5	286.86

EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 219 2 STATION 6

DATE 15/11/1959 TIME 6 30 13 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-128.7	13.3	.3788	3.07	203.52	285.1	969.00
-127.3	15.1	.3866	3.08	202.73	284.7	278.61
-125.8	16.9	.3678	3.08	202.23	284.2	273.81
-124.4	18.6	.3718	3.09	201.50	283.8	290.90
-122.8	20.4	.3847	3.10	200.99	283.4	285.26
-121.3	22.1	.3608	3.11	200.81	282.9	297.73
-119.7	23.8	.3720	3.12	200.25	282.5	283.35
-118.0	25.5	.3617	3.13	200.00	282.1	283.66
-116.3	27.2	.3608	3.15	199.63	281.6	47.00
-114.5	28.8	.3565	3.16	199.33	281.2	990.00
-112.7	30.5	.3477	3.18	199.06	280.8	272.18
-110.8	32.1	.3371	3.18	198.65	280.4	267.75
-108.8	33.6	.3414	3.20	198.13	279.9	291.06
-107.8	34.4	.0000	3.22	197.81	279.5	286.19

EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 219 3 STATION 6

DATE 15/11/1959 TIME 8 16 43 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-144.5	24.7	.3581	3.13	200.63	282.3	284.23
-142.8	26.3	.3466	3.14	200.07	281.9	61.00
-141.1	28.0	.3371	3.16	199.43	281.5	988.00
-139.3	29.7	.3089	3.16	198.75	281.0	272.90
-137.4	31.3	.3383	3.18	197.70	280.6	268.63
-135.5	32.9	.3294	3.19	197.39	280.2	291.14
-133.4	34.4	.3246	3.20	196.98	279.7	312.27
-131.3	35.9	.3418	3.22	196.57	279.3	293.95
-129.1	37.4	.3353	3.24	196.57	278.9	279.77
-126.7	38.8	.3456	3.25	196.46	278.4	279.15
-124.3	40.2	.3343	3.27	196.57	278.0	64.00
-121.8	41.5	.3257	3.28	196.46	277.6	986.00
-119.1	42.7	.3099	3.30	196.22	277.2	267.51
-116.3	43.9	.3179	3.31	195.74	276.7	263.15
-113.4	45.0	.3019	3.32	195.50	276.3	290.98
-110.4	46.1	.2837	3.35	195.02	275.9	286.09
-107.2	47.0	.2763	3.36	194.30	275.4	290.50
-104.0	47.8	.2634	3.38	193.58	275.0	274.91
-102.3	48.2	.0000	3.39	192.75	274.6	274.79

EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 223 4 STATION 8

DATE 15/11/1959 TIME 10 0 21 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-171.2	23.6	.4032	3.13	202.51	282.6	285.68
-169.5	25.3	.3935	3.14	202.37	282.2	63.00
-167.8	27.0	.3827	3.14	202.08	281.7	989.00
-166.1	28.7	.3741	3.15	201.65	281.3	274.49
-164.2	30.3	.3685	3.17	201.17	280.9	270.39
-162.3	31.9	.3597	3.18	200.70	280.4	296.28
-160.3	33.5	.3465	3.19	200.17	280.0	288.03
-158.2	35.0	.3426	3.21	199.52	279.6	294.91
-156.1	36.5	.3161	3.23	198.95	279.1	280.99
-153.8	38.0	.3221	3.24	198.02	278.7	280.44
-152.7	38.7	.0000	3.26	197.39	278.3	.00

EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 219 4 STATION 6

DATE 15/11/1959 TIME 10 4 51 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-150.4	39.9	.3193	3.26	196.77	278.1	988.00
-147.9	41.3	.3053	3.28	196.34	277.7	258.88
-145.3	42.5	.3186	3.29	195.74	277.2	264.65
-142.5	43.7	.3280	3.30	195.50	276.8	291.46
-139.6	44.8	.3334	3.33	195.50	276.4	286.28
-136.6	45.9	.3347	3.34	195.62	276.0	291.46
-133.5	46.8	.3349	3.35	195.74	275.5	276.71
-130.2	47.7	.3100	3.38	195.86	275.1	276.16
-126.8	48.4	.3117	3.39	195.50	274.7	64.00
-123.3	49.1	.3037	3.41	195.25	274.2	989.00
-119.7	49.6	.2990	3.42	194.90	273.8	261.94
-117.9	49.8	.0000	3.45	194.54	273.4	259.77

EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 209 5 STATION 5

DATE 15/11/1959 TIME 10 15 9 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-105.9	50.4	.2618	3.50	192.91	272.2	285.55
-102.1	50.3	.2624	3.51	192.23	271.8	288.26
-98.3	50.1	.2708	3.53	191.69	271.3	272.53
-94.5	49.7	.2678	3.54	191.42	270.9	271.47
-90.8	49.2	.2712	3.57	191.15	270.5	64.00
-89.0	48.9	.0000	3.58	191.01	270.0	984.00

EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 209 5 STATION 5

DATE 15/11/1959 TIME 10 15 17 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-109.0	50.4	.2626	3.48	192.91	272.5	285.55
-105.2	50.4	.2628	3.49	192.23	272.1	288.26
-101.4	50.3	.2709	3.52	191.69	271.7	272.53
-97.6	50.0	.2682	3.53	191.42	271.3	271.47
-93.8	49.6	.2720	3.55	191.15	270.8	64.00
-92.0	49.4	.0000	3.56	191.01	270.4	984.00

EXPLORER VII RADIATION DATA 33 DAYS AFTER LAUNCH

LIBRARY RECORD 219 5 STATION 6

DATE 15/11/1959 TIME 11 56 46 GMT

E-LONG	N-LAT	RAD	BETA	SENSOR	MIRROR	REFS
-140.9	50.0	.3168	3.44	194.90	273.3	291.38
-137.2	50.3	.3159	3.47	194.90	272.9	286.47
-133.4	50.4	.3215	3.48	194.90	272.4	288.86
-129.6	50.3	.3157	3.50	195.02	272.0	272.88
-125.8	50.2	.3032	3.52	195.02	271.6	271.87
-122.0	49.9	.2882	3.53	194.78	271.1	64.00
-118.3	49.5	.2830	3.56	194.30	270.7	985.00
-114.7	48.9	.2779	3.57	193.82	270.3	259.74
-112.8	48.6	.0000	3.59	193.33	269.8	255.91

FORMAT DESCRIPTION
EXPLORER VII BCD TAPE (1 ONLY) (Data set A)
LABELED EXPVIIRAD
UNIVERSITY OF WISCONSIN EXPERIMENT

MODE: BCD
DENSITY: 200 bpi
FILES - 1, TERMINATED WITH EOF
CHAR./REC.: 80
CONTROL CHARACTERS:

- REC. 1: 1 - PAGE RESTORE, HEADING RECORD
2: 0 - DOUBLE SPACE, " "
3: 0 - " " " "
4: 0 - " " " "
5 to n: - BLANK, SINGLE SPACED DATA RECORDS
n + 1: 2 - HALF PAGE RESTORE
n + 2: 0 - See rec. 2
n + 3: 0 - See rec. 3
n + 4: 0 - See rec. 4
n + 5 to n + j - See recs. 5 - n

Repeat groups from n + 1 through n + j for length of tape.

Note: Record 1 is the only record causing a page restore. All other station readouts begin with a half page skip.

The number of data records per station readout is variable.

For descriptions of column headings and units of measure see the title pages in the printed volumes accompanying this tape, which are titled Explorer VII, University of Wisconsin Experiment, Vol. I and II, printed from tape EXPVIIRAD.

There are a few read-outs from some stations for which one or more of the heading records is missing. Some of these have been noted on the data inventory sheets for tape EXPVIIRAD.

Additional information on the methods by which the averaged mirror values were obtained, the missing white sensor temperature values inserted, and the radiation values were computed is available from Dr. Frederick B. House, CCA Corp., Burlington Road, Bedford, Mass.

The first four records are blank.

EXPLORER VII DATA INVENTORY - UNIV. OF WIS.
BCD TAPE (1 ONLY) - TAPE KXPVIIRAD

DAYS FROM LAUNCH	STATION READ-OUTS	DAYS FROM LAUNCH	STATION READ-OUTS
33 ⁽¹⁾	13	59	6
34	7	60	6
35	8	61	6
36	9	62	8
37	5	63	5
38	8	64	6
39	7	65	3
40	1	66	4
42	9	68	2
43	10	82	2
44	7	83	1
45	5	84	4
46	1	85	3
47	7	86	5
48	4	87	7
49	4	88	9
50	3	89	9
54	2	90	12
55	2	91	11
56	2	92	9
57	3	93	9
58	3	94	10

EXPVII BOD TAPE DATA INVENTORY - TAPE EXPVIDEAD

DAYS FROM LAUNCH	STATION READ-OUTS	DAYS FROM LAUNCH	STATION READ-OUTS
95	10	119	14
96	12	120	11
97	10	121	12
98	9	122	10
99	9	123	11
100	11	124	10
101	16	125	9
102	18	126	5
103	14	127	3
104	19	128	8
105	14	129	9
106	17	130	9
107	16	131	9
108	14	132	5
109	19	133	10
110	19	134	4
111	18	135	1
112	16	137	1
114	17	138	5
115	14	139 ⁽²⁾	3
116	17	140	3
117	15	141	3
118	14	142	4

EXPVII BCD TAPS DATA INVENTORY - TAPS EXPVII RAD

DAYS FROM LAUNCH	STATION READ-OUTS	DAYS FROM LAUNCH	STATION READ-OUTS
143	3	168	6
145	3	169	9
146	1	170	12
147	2	171	10
148	2	172	13
149	3	173	8
150	1	174	12
151	2	175	5
152	6	176	11
153	5	177	10
154	8	178	12
155	3	179	14
156	9	180	6
157	3	186	6
158	14	187	5
159	14	188	8
160	12	189	9
161	9	190	8
162	11	191	4
163	17	192	6
164	15	193	7
165(2)	12	194	14
166	11	195	12
167	9	196	12

EXPVII BGD TAPE DATA INVENTORY - TAPE EXPVII RAD

DAYS FROM LAUNCH	STATION READ-OUTS	DAYS FROM LAUNCH	STATION READ-OUTS
197	8	221	10
198	7	222	10
199 ⁽²⁾	6	223	6
200	4	224	5
201	5		
202	4		
203	5		
204	4	(1) Days not listed had no	
205	4	night time read-outs.	
206	6	(2) At these points there	
207	8	are, in addition to the	
208	12	number of read-outs	
209	7	given, read-outs for	
210	3	which the days from	
211	2	launch information or	
212	5	other heading information	
213	9	is missing.	
214	8		
215	12		
216	9		
217	9		
218	10		
219	10		
220	6		