

Data Set Catalog #144

Explorer 34, Encyclopedia IMP-F
67-051A-07C 22 tapes

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1. INTRODUCTION:

The documentation for this data set was originally on paper, kept in NSSDC's Data Set Catalogs (DSCs). The paper documentation in the Data Set Catalogs have been made into digital images, and then collected into a single PDF file for each Data Set Catalog. The inventory information in these DSCs is current as of July 1, 2004. This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system. The information existing in the DSCs is now not needed for locating the data files, but we did not remove that inventory information.

The offline tape datasets have now been migrated from the original magnetic tape to Archival Information Packages (AIP's).

A prior restoration may have been done on data sets, if a requestor of this data set has questions; they should send an inquiry to the request office to see if additional information exists.

2. ERRATA/CHANGE LOG:

NOTE: Changes are made in a text box, and will show up that way when displayed on screen with a PDF reader.

When printing, special settings may be required to make the text box appear on the printed output.

Version	Date	Person	Page	Description of Change
01				
02				

3 LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC
INFORMATION SYSTEM:

<http://nssdc.gsfc.nasa.gov/nmc/>

[NOTE: This link will take you to the main page of the NSSDC Master Catalog. There you will be able to perform searches to find additional information]

4. CATALOG MATERIALS:

- a. Associated Documents To find associated documents you will need to know the document ID number and then click here.
<http://nssdcftp.gsfc.nasa.gov/miscellaneous/documents/>

- b. Core Catalog Materials

IMP-F

COUNT RATES ON ENCYCLOPEDIA TAPES

67-051A-07C

THIS DATA SET HAS BEEN RESTORED. THERE WERE ORIGINALLY 22
 7-TRACK 800 BPI TAPES, WRITTEN IN BINARY. THERE ARE 4 RESTORED
 TAPES. THE DR TAPES ARE 3480 CARTRIDGES AND THE DS TAPES ARE
 9-TRACK, 6250 BPI. THE TAPES WERE CREATED ON A IBM 360 COMPUTER.
 THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBERS ARE
 AS FOLLOWS:

DR#	DS#	DD#	FILES	TIME SPANS
-----	-----	-----	-----	-----
DR02725	DS02725	D06794	1	05/24/67 - 06/26/67
		D06795	2	06/26/67 - 07/28/67
		D06796	3	07/28/67 - 08/29/67
		D06797	4	08/29/67 - 10/05/67
		D06798	5	10/05/67 - 11/07/67
DR02726	DS02726	D06799	1	11/07/67 - 12/09/67
		D06800	2	12/09/67 - 01/11/68
		D06801	3	01/11/68 - 02/13/68
		D06802	4	02/13/68 - 03/20/68
		D06803	5	03/20/68 - 04/22/68
DR02727	DS02727	D06804	1	04/22/68 - 05/25/68
		D06805	2	05/25/68 - 06/14/68
		D06806	3	06/14/68 - 07/17/68
		D06807	4	07/17/68 - 08/19/68
		D06808	5	08/19/68 - 09/22/68
		D06809	6	09/22/68 - 10/26/68
DR02728	DS02728	D06810	1	10/26/68 - 11/29/68
		D06811	2	11/29/68 - 12/31/68
		D06812	3	12/31/68 - 02/01/69
		D06813	4	02/01/69 - 03/08/69
		D06814	5	03/08/69 - 04/11/69
		D06815	6	04/11/69 - 05/03/69

IMP-F
Count Rates on Encyclopedia tapes
65-051A-07C

DR/DS 02725 DD 06794-98 DC 05217-21
TOTAL Bkts Lg Bkt TOTAL Bytes Lg Byte
 9tr, 6250, BIN, 5 Files, 4251, 851, 60m, 12m,
 05/24/67 - 11/07/67 Remarks: All Good

DR/DS 02726 DD 06799-06803, DC 05222-26
TOTAL Bkts Lg Bkt TOTAL Bytes Lg Byte
 9tr, 6250, BIN, 5 Files, 4254, 852, 60m, 12m,
 11/07/67 - 04/22/68 Remarks: All Good

DR/DS 02727 DD 068204-09, DC 05227-32
TOTAL Bkts Lg Bkt TOTAL Bytes Lg Byte
 9tr, 6250, BIN, 6 Files, 4775, 851, 67m, 12m,
 04/22/68 - 10/26/68 Remarks: All Good

DR/DS 02728 DD 06810-15 DC 05233-38
TOTAL Bkts Lg Bkt TOTAL Bytes Lg Byte
 9tr, 6250, BIN, 6 Files, 4793, 852, 67m, 12m,
 10/26/68 - 05/03/69 Remark: All Good.

Sept. 10, 1971

To: Data Repository

From: ADP Services

Subject: Explorer 34 Encyclopedia IMP-F tapes

Please release the following "T" tapes and numbers: T-709
to T-730 to be sent back to Johns Hopkins University -
Applied Physics Laboratory to Mr. R. L. McCutcheon.
These "T" tapes have been successfully duped and "D" and
"C" numbers made.

Sept. 14, 1971

Mr. R. L. McCutcheon
Applied Physics Laboratory
The Johns Hopkins University
3621 Georgia Avenue
Silver Spring, Md. 20910

Dear Mr. McCutcheon,

We are returning under separate cover 22 Explorer 34
Encyclopedia IMP-F tapes. These tapes have been
successfully duped and assigned numbers for the
Data Center library.

Very truly yours,

Joseph R. Johns
Manager A.D.P. Services

Under Separate Cover:
Magnetic tapes containing
Explorer 34 data (22)

EXPLORER 34
ENCYCLOPEDIA IMP-F

67-051A-07C

This data set consists of 22 binary, 800 B.P.I., 9 track tapes making up the 'D' numbers. the 'C' numbers are 800 B.P.I., binary, 7 track tapes. All of these tapes were made on the IBM 360/75 computer. The tapes contain one file only. These tapes have a fixed length, blocked records having a logical record length of 704 bytes and a block size of 14080 bytes.

On the tapes are two types
of records each 176 words long.
if first word = 1 then record is ID
if first word = 2 then record is DATA
each l.r. of 176 words
each P.R. = 20 l.r.

JSK
6/7/72

EXPLORER 34
 ENCyclopedia IMP-F
 67-051A-07C

<u>Imp</u>	<u>C#</u>	<u>ORBIT #1s</u>	<u>START</u>	<u>STOP</u>
D-06794	C-05217	1-8	5-24-1967	6-26-1967
D-06795	C-05218	8-16	6-26-1967	7-28-1967
D-06796	C-05219	16-23	7-28-1967	8-29-1967
D-06797	C-05220	23-32	8-29-1967	10-05-1967
D-06798	C-05221	32-39	10-05-1967	11-07-1967
D-06799	C-05222	39-46	11-07-1967	12-09-1967
D-06800	C-05223	46-54	12-09-1967	1-11-1968
D-06801	C-05224	54-62	1-11-1968	2-13-1968
D-06802	C-05225	62-69	2-13-1968	3-20-1968
D-06803	C-05226	69-77	3-20-1968	4-22-1968
D-06804	C-05227	77-85	4-22-1968	5-25-1968
D-06805	C-05228	85-90	5-25-1968	6-14-1968
D-06806	C-05229	90-97	6-14-1968	7-17-1968
D-06807	C-05230	97-105	7-17-1968	8-19-1968
D-06808	C-05231	105-112	8-19-1968	9-22-1968
D-06809	C-05232	112-120	9-22-1968	10-26-1968
D-06810	C-05233	120-128	10-26-1968	11-29-1968
D-06811	C-05234	128-136	11-29-1968	12-31-1968
D-06812	C-05235	136-144	12-31-1968	2-01-1969
D-06813	C-05236	144-152	2-01-1969	3-08-1969
D-06814	C-05237	152-159	3-08-1969	4-11-1969
D-06815	C-05238	159-	4-11-1969	5-03-1969

67-051A-070

FORMAT FOR FIRST TEN WORDS OF FILE

Attachment D

ID record for Output

Word No.	Identification	Format
1	1 (ID record)	1
2	Unused	1
3	ID record/data record link	1
4	Start record unique number	1
5	Stop record unique number	1
6	Start pseudo-sequence count	1
7	Stop pseudo-sequence count	1
8	Unused	1
9	Unused	1
10	Unused	1
* 11 - 50	Same as Attachment A (1-40)	1
51 - 996	Unused	1

* SEE ATTACHMENT A FOR NEXT 40 WORDS

Attachment A

IMP-F EXPERIMENTER BINARY TAPE ID RECORD FORMAT

<u>Word No.</u>	<u>Identification</u>	<u>Format</u>
1	Experimenter ID	I
2	Satellite ID	I
3	Orbit number	I
4	Telemetry recording station number	I
5	Analog tape number	I
6	Analog-to-digital line ID (1 = F9, 2 = F8)	I
7	Day of year	I
8	Milliseconds of day	I
9	Day of year	I
10	Milliseconds of day	I
11	Average sequence time (milliseconds)	I
12	Quick-look data flag	I
13	Orbit/no orbit data flag	I
14	Decom process date year	I
15	Decom process date month	I
16	Decom process date day	I
17	Decom process date hour	I
18	Orbit tape ID reel number	I
19	Orbit tape date of generation year	I
20	Orbit tape date of generation month	I
21	Orbit tape date of generation day	I
22	Average spin period (milliseconds)	I
23	Year of start time (right adjusted, 2 digits)	I
24	Year of stop time (right adjusted, 2 digits)	I
25 - 135	Room for expansion	

Orbit/No Orbit Data Flag for Experimenter Tape ID Records

- 0 = no orbit data included on this file. Fill characters are used in orbit item locations.
- 1 = "final" orbit data included on this file.
- 2 = preliminary orbit data included on this file.
- 3 = predicted orbit data included on this file.

Quick-Look Data Flag for Experimenter Tape ID Records

- 0 = no sequence clock corrections, no frame time corrections applied to this file, therefore data is quick-look.
- 1 = Phase I sequence clock corrections and frame time corrections have been applied to this file, but final corrections have not been made, therefore, data is quick-look.

SEE ATTACHMENT E FOR DATA RECORD
FORMAT

Attachment E

Data Record for Output

<u>Item No.</u>	<u>Identification</u>	<u>Format</u>
1	=2, (data record)	I
2	=1, no other record has overlapped with this one	I
	=5, overlap, choice made on time quality	
	=3, overlap, choice made on data quality	
	=4, overlap, choice made on missing data	
3	IO record/data record link	I
4	On/off flags all 8 sequences	I
5	Number of bad time quality flags in record	I
6	Number of bad data quality flags in record	I
7	Number of missing data in record	I
8	Data quality index for record	I
9	Unique number for record	I
10 - 14	Unlabeled	
15 - 22	Standard deviation for eight sequences	I

Attachment E

<u>Item No.</u>	<u>Identification</u>	<u>Format</u>							
23 - 153	Eight consecutive sequences of 17 words each of telemetry data arranged as follows:								
<u>Definition</u>	<u>Seq-1</u>	<u>Seq-2</u>	<u>Seq-3</u>	<u>Seq-4</u>	<u>Seq-5</u>	<u>Seq-6</u>	<u>Seq-7</u>	<u>Seq-8</u>	<u>Format</u>
✓ Day of Year	1	18	35	52	69	86	103	120	I
✓ Milliseconds of Day	2	19	36	53	70	87	104	121	I
Time Quality Flag	3	20	37	54	71	88	105	122	I
✓ Data Quality Flag-1	4	21	38	55	72	89	106	123	I
✓ Data Quality Flag-2	5	22	39	56	73	90	107	124	I
✓ Data Quality Flag-3	6	23	40	57	74	91	108	125	I
✓ Data Quality Flag-4	7	24	41	58	75	92	109	126	I
✓ Detector Reading	8	25	42	59	76	93	110	127	F
Pseudo-Seq-Cr of	9	26	43	60	77	94	111	128	I
Pseudo-Seq-Ct	10	27	44	61	78	95	112	129	I
-ID-QF	11	28	45	62	79	96	113	130	I
Seq-ID	12	29	46	63	80	97	114	131	I
Satellite Clock	13	30	47	64	81	98	115	132	I
Volts	14	31	48	65	82	99	116	133	F
Temperature	15	32*	49	66*	83	100*	117	134*	F
Accumulation Mode	16	33	50	67	84	101	118	135	I
-Unused-	17	34	51	68	85	102	119	136	

*10 Hz

159 - 176 Orbital Information - identical to Attachment B
 information words 118 through 135.

Attachment B

APL -- GSFC

Item No.	Units	Identification	8 Bit	
			Bytes	Format
31	msec	Milliseconds of day, frame 0, channel 0	4	I
32		Time quality flag (sequence 3)	1	I
33		Data quality flag for channel 14a	1	I
34		Data quality flag for channel 14b	1	I
35		Data quality flag for channel 15a	1	I
36		Data quality flag for channel 15b	1	I
37	counts	Detector 3 (channels 14, 15, frame 0	4	I
38		Pseudo-sequence count quality flag	1	I
39	counts	Pseudo-sequence count	4	I
40		Sequence ID quality flag	1	I
41		Sequence ID (sequence 3)	1	I
42		Satellite clock	4	I
43	volts	PP 7 (sequence 3)	4	F
44	deg	PP 17 (BTL temperature, near APL experiment)	4	F
45	days	Day of frame 0, channel 0, sequence 4	4	I
46	msec	Milliseconds of frame 0, channel 0	4	I
47		Time quality flag (sequence 4)	1	I
48		Data quality flag, channel 14a	1	I
49		Data quality flag, channel 14b	1	I
50		Data quality flag, channel 15a	1	I
51		Data quality flag, channel 15b	1	I
52	counts	Detector 2 (channels 14, 15, frame 0)	4	I
53		Pseudo-sequence count quality flag	1	I
54	counts	Detector 2 (channels 14, 15, frame 0)	4	I
55		Sequence ID quality flag	1	I
56	counts	Sequence ID (sequence 4)	1	I
57		Satellite clock	4	I
58	volts	PP 7 (sequence 4)	4	F
59-116		Four more sequences (5-8) of data in same format as items 1-59		
117		On/off flags all 8 sequences	1	I
118	days	Day of orbit data	4	I
119	msec	Milliseconds of day	4	I
120	deg	Geocentric longitude satellite position	4	F
121	deg	Geocentric latitude satellite position	4	F
122	km	Radial distance from center of earth	4	F

Attachment B

APL - GSFC

Item No.	Units	Identification	8 Bit	
			Bytes	Format
164 123		X Solar ecliptic satellite position	4	F
165 124		Y Solar ecliptic satellite position	4	F
166 125		Z Solar ecliptic satellite position	4	F
167 126	km/sec	Magnitude of velocity	4	F
168 127		R ₀ geomagnetic coordinate	4	F
169 128		Latitude geomagnetic coordinate	4	F
170 129		L McIlwain magnetic shell radius	4	F
171 130		B magnetic field strength	4	F
172 131		B/B ₀	4	F
173 132	deg	LSEP (Sun-earth-probe angle)	4	F
174 133		X Solar magnetosphere satellite position	4	F
175 134		Y Solar magnetosphere satellite position	4	F
176 135		Z Solar magnetosphere satellite position	4	F

$$\Lambda = \cos^{-1}(\sqrt{R/L})$$

[illegible]

[illegible]

00000001	00000003	00000004	00000005	00000006	00000007	00000008	00000009	00000010	00000011	00000012	00000013	00000014	00000015	00000016	00000017	00000018	00000019	00000020	00000021	00000022	00000023	00000024	00000025	00000026	00000027	00000028	00000029	00000030	00000031	00000032	00000033	00000034	00000035	00000036	00000037	00000038	00000039	00000040	00000041	00000042	00000043	00000044	00000045	00000046	00000047	00000048	00000049	00000050	00000051	00000052	00000053	00000054	00000055	00000056	00000057	00000058	00000059	00000060	00000061	00000062	00000063	00000064	00000065	00000066	00000067	00000068	00000069	00000070	00000071	00000072	00000073	00000074	00000075	00000076	00000077	00000078	00000079	00000080	00000081	00000082	00000083	00000084	00000085	00000086	00000087	00000088	00000089	00000090	00000091	00000092	00000093	00000094	00000095	00000096	00000097	00000098	00000099	00000100	00000101	00000102	00000103	00000104	00000105	00000106	00000107	00000108	00000109	00000110	00000111	00000112	00000113	00000114	00000115	00000116	00000117	00000118	00000119	00000120	00000121	00000122	00000123	00000124	00000125	00000126	00000127	00000128	00000129	00000130	00000131	00000132	00000133	00000134	00000135	00000136	00000137	00000138	00000139	00000140	00000141	00000142	00000143	00000144	00000145	00000146	00000147	00000148	00000149	00000150	00000151	00000152	00000153	00000154	00000155	00000156	00000157	00000158	00000159	00000160	00000161	00000162	00000163	00000164	00000165	00000166	00000167	00000168	00000169	00000170	00000171	00000172	00000173	00000174	00000175	00000176	00000177	00000178	00000179	00000180	00000181	00000182	00000183	00000184	00000185	00000186	00000187	00000188	00000189	00000190	00000191	00000192	00000193	00000194	00000195	00000196	00000197	00000198	00000199	00000200	00000201	00000202	00000203	00000204	00000205	00000206	00000207	00000208	00000209	00000210	00000211	00000212	00000213	00000214	00000215	00000216	00000217	00000218	00000219	00000220	00000221	00000222	00000223	00000224	00000225	00000226	00000227	00000228	00000229	00000230	00000231	00000232	00000233	00000234	00000235	00000236	00000237	00000238	00000239	00000240	00000241	00000242	00000243	00000244	00000245	00000246	00000247	00000248	00000249	00000250	00000251	00000252	00000253	00000254	00000255	00000256	00000257	00000258	00000259	00000260	00000261	00000262	00000263	00000264	00000265	00000266	00000267	00000268	00000269	00000270	00000271	00000272	00000273	00000274	00000275	00000276	00000277	00000278	00000279	00000280	00000281	00000282	00000283	00000284	00000285	00000286	00000287	00000288	00000289	00000290	00000291	00000292	00000293	00000294	00000295	00000296	00000297	00000298	00000299	00000300	00000301	00000302	00000303	00000304	00000305	00000306	00000307	00000308	00000309	00000310	00000311	00000312	00000313	00000314	00000315	0000
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