DATA SET CATALOG #104

DV1-2

THIS CATALOG NO LONGER EXITS

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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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

EPHEMERIS DATA

65-078A-00D

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY IT CONTAINED SIX 7-TRACK, 556 BPI TAPES WRITTEN IN BINARY WITH A BCD HEADER. THERE IS ONE RESTORED TAPE WRITTEN IN BINARY WITH AN ASCII HEADER. THE TAPE WAS NOT STACKED IN TIME SEQUENTIAL ORDER. THE DR TAPE IS A 3480 CARTRIDGE AND THE DS TAPE IS 9-TRACK, 6250 BPI. THE ORIGINAL TAPES WERE CREATED ON A 7094 COMPUTER AND THEY WERE RESTORED ON THE SHAFFSTALL SYSTEM. THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR004250	DS004250	D001932	1-5	11/19/65 - 11/24/65
		D001933	6-13	10/27/65 - 11/02/65
		D001934	14-24	11/03/65 - 11/18/65 (a)
		D001935	25-32	10/18/65 - 10/22/65
		D001936	33-37	11/26/65 - 12/01/65
		D001937	38-48	10/05/65 - 10/17/65

(a) READ ERRORS OCCURRED IN RECORDS 132,162,179,322,339,340,398 486, AND 775, F2

65-078A-00D

This data set consits of 6, 556 PBI, 7-track BINARY EPHEMERIS tapes. The first file has one record of identification. The following files have one record of identification and a various number of data records.

D#	C#	FILES	START	STOP
D-01932	C-02197	5	11/19/65	11/24/65
D-01933	C-02198	8	10/27/65	11/02/65
D-01934	C-02199	11	11/03/65	11/18/65
D-01935	C-02200	8	10/18/65	10/22/65
D-01936	C-02201	5	11/26/65	12/01/65
D-01937	C-02202	11	10/05/65	10/18/65

OV1-2 EPHEMERIS 3/12/70

D-01932 - C-02197 OV1-2 EPHEM. EPH-6
11/19/65 TO 11/24/65 5 FILES TAPE HAS 350.82 FEET OF DATA

D-01933 - C-02198 OV1-2 EPHEM. EPH-4B (RAN TWICE)
10/27/65 TO 11/2/65 8 FILES 445.43 FEET OF DATA

D-01934 - C-02199 OV1-2 EPHEM. EPH-5
11/3/65 TO 11/18/65 11 FILES 760.18 FEET OF DATA

D-01935 - C-02200 OV1-2 EPHEM. EPH-4A (RAN TWICE)
10/18/65 TO 10/22/65 8 FILES 445.43 FEET OF DATA

D-01936 - C-02201 OV1-2 EPHEM. EPH-7
11/26/65 TO 12/1/65 5 FILES 400.43 FEET OF DATA

D-01937 - C-02202 OV1-2 EPHEM. EPH-3
10/12/65 TO 10/17/65 11 FILES 1285.67 FEET OF DATA

65-0789-00D

31 wd/logical 248 w/block

8 wd/phys

OV1-2 Ephemeris Tape (7094 Version)

The OV1-2 ephemeris tapes are multi-file ~~7 track 556 bpi~~ 9 track 6250 binary tapes written by Fortran IV on an IBM 7094 computer. The first file of each tape contains one BINARY record consisting of 13 BCD words or 78 BCD characters. This record contains tape identification information an example of which follows:

Convert to ASCII.

FILE0100V1-2U04216999901000000XXXXXX051065XX007E092600 XXXXXX000000Tape 1000000.

CHARACTER	DATA
28-30	Orbit number
37-38	Day
39-40	Month
41-42	Year

In the second file and all subsequent files, the first BINARY record consists of 13 BCD words containing the same tape identification information as the first file. The second and all subsequent records are binary records of 14 words each containing the following floating point information:

Word Number	Information
1	running time (do not use)
2	latitude in degrees
3	longitude in degrees

Word Number	Information
4	altitude in kilometers
5	B in gauss
6	B_r
7	B_φ
8	B_θ
9	L
10	θ_B in degrees
11	Λ in degrees
12	$X = \sqrt{1 - B_0/B}$
13	R in kilometers
14	data time in days

The information on these tapes may be retrieved using a Fortran IV binary READ (unit) list statement. Note the 7094 adds an instruction word at the beginning of each record. This word may be ignored by those using a 7094. However, others will have to take this into account.

The number of files on each of the ephemeris tapes is given in the following table.

Tape Name	Reel Number	Files
UCLA EPH 3	3577	11
UCLA EPH 4A	6727	8
UCLA EPH 4B	3900	8
UCLA EPH 5	3507	11
UCLA EPH 6	2586	5
UCLA EPH 7	0735	5

In the following table the orbits are given to the right of the file number in which the corresponding ephemeris data is to be found. No ephemeris data exists for orbits 73 and 532.

TAPE NO.	FILE	ORBIT
3577	1	Identification
	2	0, 1, 5, 6
	3	7, 8, 17
	4	19, 21, 28
	5	30, 32
	6	42, 44
	7	75, 76
	8	88, 89
	9	99, 100
	10	111, 112, 118
	11	150
6727	1	Identification
	2	150
	3	163
	4	165
	5	173, 175
	6	175
	7	185
	8	196

TAPE NO.	FILE	ORBIT
3900	1	Identification
	2	No data corresponding to this ephemeris data
	3	266
	4	267
	5	278
	6	279
	7	312
	8	323
3507	1	Identification
	2	334
	3	No data corresponding to this ephemeris data
	4	358
	5	392
	6	404
	7	415, 417
	8	439
	9	472
	10	484, 485
	11	506, 507
2586	1	Identification
	2	No data corresponding to this ephemeris data
	3	553

TAPE NO.	FILE	ORBIT
2586	4	569
	5	575, 577
0735	1	Identification
	2	598, 600
	3	633, 635
	4	644, 646
	5	656, 658

TABLE I. PRIMARY DATA ASSIGNMENTS

(Commutator Format)

M1 Channel 15 A	M1 Channel 16 B		M2 D
1. Magnetometer 1	Proton Event	NO SYNCHRONIZATION	Subcommutator M2-A
2. Magnetometer 2	Electron Event		Subcommutator M2-B
3. Magnetometer 3	ΔE_2 Event		Proton Spectrum, S-1
4. Dosimeter 1	ΔE_1 Event		Proton Spectrum, S-2
5. Dosimeter 2	Electron Spectrum 1		Proton Spectrum, S-3
6. Dosimeter 3	Electron Spectrum 2		Proton Spectrum, S-4
7. Electron Spectrum 3	Electron Spectrum 4		Omni 1 - 1 Electron
8. Proton Event	Electron Spectrum 5		1 - 2 Electron
9. Electron Spectrum 6	Electron Spectrum 7		1 - 3 Electron
10. ΔE_2 Event	Electron Spectrum 8		2 - 6 Electron
11. Magnetometer 1	ΔE_1 Event		2 - 7 Electron
12. Magnetometer 2	Electron Event		Omni 2 - 8 Electron
13. Magnetometer 3	AFWL-IC-1		Proton Spectrum, S-1
14. AFWL-IC-2	Dosimeter 1		Proton Spectrum, S-2
15. Proton Event	Dosimeter 2		Proton Spectrum, S-3
16. Proton Spectrum, S-1	Dosimeter 3		Proton Spectrum, S-4
17. ΔE_2 Event	Proton Spectrum, L-1		Omni 1 - 5 Proton
18. ΔE_1 Event	Proton Spectrum, L-2		2 - 10 Proton
19. Proton Spectrum, S-2	Proton Spectrum, L-3		3 - 13 Proton
20. Proton Spectrum, S-3	Proton Spectrum, L-4		3 - 14 Proton
21. Proton Spectrum, S-4	Magnetometer 1		1 - 4 Proton
22. Electron Event	Magnetometer 2		2 - 9 Proton
23. Proton Event	Magnetometer 3		3 - 11 Proton
24. Dosimeter 1	ΔE_2 Event		Omni 3 - 12 Proton
25. Dosimeter 2	ΔE_1 Event		Magnetometer 1
26. Dosimeter 3	X-Ray Event		Magnetometer 2
27. AFWL-IC-1	Electron Event		Magnetometer 3
28. GDA, 0% Calib.	GDA, 0% Calib.		GDA, 0% Calib.
29. GDA Master Pulse	GDA Master Pulse		GDA Master Pulse
30. GDA Master Pulse	GDA Master Pulse		GDA Master Pulse

ΔE_1 10-20 mev
ΔE_2 20-50

OV1-2 Ephemeris Tape [illegible]

The OV1-2 ephemeris tapes are multi-file 7 [illegible] 556 bp binary tapes written by Fortran [illegible] on an [illegible] 594 computer. The first file of each tape contains one record consisting of 13 BCD words or 78 BCD characters. This record contains tape identification information an example of which follows:

FIL[illegible]V1-2U0421699[illegible] [illegible]7E092600 XXXXXX000000Tape 1000000.

CHARACTER	DATA
28-30	orbit number
37-38	Day
39-40	Month
41-42	Year

In the second file and all subsequent files, the first record consists of 13 BCD words containing the same tape identification information as the first file. The second and all subsequent records are binary records of 14 words each containing the following floating point information:

Word Number	Information
1	running time (do not use)
2	Latitude in degrees
3	Longitude in degrees

Word Number	Information
4	altitude in kilometers
5	B in [illegible]
6	[illegible]
7	[illegible]
8	[illegible]
9	L
10	θ_B in degrees
11	Λ in degrees
12	$X = \sqrt{1 - B_0/B}$
13	R in kilometers (x_0)
14	data time in days

The information on these tapes may be retrieved using a Fortran IV binary READ (unit) list statement. Note the 7094 adds an instruction word at the beginning of each record. This word may be ignored by those using a 7094, however, others will have to take this into account.

The number of files on each of the ephemeris tapes is given in the following table.

Tape Name	Reel Number	Files
UCLA EPH 3	3577	11
UCLA EPH 4A	6727	8
UCLA EPH 4B	3900	8
UCLA EPH [illegible]	3507	11
UCLA EPH [illegible]	2586	5
UCLA EPH 7	0735	5

In the following table the [illegible] given to the right of the file number in which the corresponding ephemeris data is to be found. No ephemeris data exists for orbits 73 and 532.

TAPE NO.	FILE	ORBIT
3577	1	Identification
	2	0, 1, 5, 6
	3	7, 8, 17
	4	19, 21, 28
	5	30, 32
	6	42, 44
	7	75, 76
	8	88, 89
	9	99, 100
	10	111, 112, 116
	11	150
6727	1	Identification
	2	150
	3	163
	4	165
	5	173, 175
	6	175
	7	185
	8	196

TAPE NO.	FILE	ORBIT
3900	1	[illegible]
	2	No data corresponding to this ephemeris data
	3	266
	4	267
	5	278
	6	279
	7	312
	8	323
3907	1	Identification
	2	334
	3	No data corresponding to this ephemeris data
	4	358
	5	392
	6	404
	7	415, 417
	8	439
	9	472
	10	484, 485
	11	506, 507
2586	1	Identification
	2	No data corresponding to this ephemeris data
	3	553

TAPE NO.	FILE	CROSS
2586	4	569
	5	575, 577
6735	1	Identification
	2	598, 600
	3	632, 635
	4	644, 646
	5	656, 658

TABLE I PRIMARY DATA [illegible]

(Commutator Form[illegible]

Channel [illegible] A	M1 Channel 16 B	M2 [illegible]
1. Magnetometer 1	Proton Event	[illegible] Commutator M2-A
2. Magnetometer 2	→ Electron Event	Subcommutator M[illegible]-3
3. Magnetometer 3	△ E_2 Event	Proton Spectrum, S-1
4. Dosimeter 1	△ E_1 Event	Proton Spectrum, S-2
5. Dosimeter 2	Electron Spectrum 1	Proton Spectrum, S-3
6. Dosimeter 3	Electron Spectrum 2	Proton Spectrum, S-4
7. Electron Spectrum 3	Electron Spectrum 4	Omni [illegible] - 1 Electron
8. Proton Event	Electron Spectrum [illegible]	1 - 2 Electron
9. Electron Spectrum 6	Electron Spectrum [illegible]	1 - 3 Electron
10. △ E_2 Event	Electron Spectrum 8	2 - 6 Electron
11. Magnetometer 1	△ E_1 Event	2 - 7 Electron
12. Magnetometer 2	→ Electron Event	Omni 2 - 8 Electron
13. Magnetometer 3	AFWL-IC-1	Proton Spectrum, [illegible]
14. AFWL-IC-2	Dosimeter 1	Proton Spectrum, [illegible]
15. Proton Event	Dosimeter 2	Proton Spectrum, S-3
16. Proton Spectrum, S-1	Dosimeter 3	Proton Spectrum, S-4
17. △ E_2 Event	Proton Spectrum, L-1	Omni 1 - 5 Proton
18. △ E_1 Event	Proton Spectrum, L-[illegible]	2 - 10 Proton
19. Proton Spectrum, S-2	Proton Spectrum, L-3	3 - 13 Proton
20. Proton Spectrum, S-3	Proton Spectrum, L-4	3 - 14 Proton
21. Proton Spectrum, S-4	Magnetometer 1	1 - 4 Proton
→ 22. Electron Event	Magnetometer 2	2 - 9 Proton
23. Proton Event	Magnetometer 3	3 - 11 Proton
24. Dosimeter 1	△ E_2 Event	Omni 3 - 11 Proton
25. Dosimeter 2	△ E_1 Event	Magnetometer 1
26. Dosimeter 3	X-Ray Event	Magnetometer 2
27. AFWL-IC-1	→ Electron Event	Magnetometer 3
28. GDA, [illegible] Calib.	GDA, 0% Calib.	GDA, 0% Calib.
29. GDA Master Pulse	GDA Master Pulse	GDA Master Pulse
30. GDA Master Pulse	GDA Master Pulse	GDA Master Pulse

[illegible], 10-20 min
[illegible] 20-50