



#437

OV1-13

CONCATENATED DATA TAPES

68-026A-02B + 04B



Table of Contents

1. Introduction
2. Errata/Change Log
3. LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC
INFORMATION SYSTEM
4. Catalog Materials
 - a. Associated Documents
 - b. Core Catalog Materials

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

OV1-13

HI TIME RES ELCTRNT CNT RTES, TAPE

68-026A-02A SPMS-00335

68-026A-04A

This data set has been restored. There were originally 12 7-track, 800 BPI tapes written in Binary. There are two restored tapes. The DR tapes are 3480 cartridges and the DS tapes are 9-track, 6250 BPI. The original tapes were created on a MODCOMP computer and the restored tapes were created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D numbers are as follows:

DR#	DS#	D#	FILES
-----	-----	-----	-----
DR004761	DS004761	D011420	1 (a)
		D011421	2
		D011422	3
		D011423	4
		D011424	5
		D012594	6
DR004762	DS004762	D011312	1
		D011313	2 (b)
		D011314	3
		D011315	4
		D011316	5
		D009978	6 (c)

(a) D011420: Read errors occurred in records 138, 139, 143, 150, 151, 157, & 484 of file 1.

(b) D011313: Read error occurred in record 130 of file 1.

(c) D009978: Read errors occurred in records 41, 229, 404, 407, 409, 420, 425, 452, 455, 461, & 466 of file 1.

REQ. AGENT

CMP

RAND NO.

RD1887

ACQ. AGENT

MJT

OV1-13

CONCATENATED DATA TAPES

68-026A-02B & 04B

This data set contains 3 data tapes. They are 9 track, 1600 BPI, multi-filed and were created on the MODCOMP. They are written in binary.

<u>D#</u>	<u>C#</u>	<u>FILES</u>	<u>TIME SPAN</u>
D-33385	C-20450	5	05/13/68 - 05/21/68
D-33386	C-20451	3	07/09/68 - 07/11/68
D-33387	C-20452	6	06/07 68 - 07/06/68

OV1-13 Concatenated Data Tapes #1, 2, and 3

The OV1-13 Concatenated Data Tapes #1, 2, and 3 contain the data from the electron magnetic analyzer (e-MA) (0.1 to 1.0 MeV) and from the electron scintillation spectrometer (e-S) aboard the Air Force OV1-13 satellite. These tapes were produced on a MODCOMP IV computer. They are 9 track, 1600 b.p.i., binary tapes containing 5, 6, and 3 files respectively. The data are from 15 separate orbits between March and July, 1968, as listed in Table 1. These tapes were generated through several steps from, and contain the same data as do, the earliest unpacked OV1-13 data tapes available at the NSSDC.

The first logical record of each file is a header record containing twenty-two 32-bit words of ephemeris data, as listed in Table 2.

All remaining logical records in each file are data records of 2444 32-bit words each. Each data record contains data and ephemeris information for each of 12 one-second time intervals. For each second, and for both the e-MA and the e-S, there are 24 measurements from a particular channel, and a 25th number that is not used. (This 25th number may be due to the way the original packed experimenter tapes were unpacked.) The data for the 12 seconds are not in separate sections and the format of the data record is given in Tables 3 and 4. The first two 32-bit words are integers (INTEGER*4), and all other words are single precision real numbers (REAL*4). In Tables 3 and 4, L denotes the experiment index (1=e-MA, 2=e-S), M=index of seconds (12 per record), K=measurement index (25 per second).

TABLE 1. OV1-13 Concatenated Taped Contents

TAPE #	FILE #	DAY OF 1968	ORBIT #	NUMBER OF LOGICAL RECORDS	DESIGNATION OF EARLIEST NSSDC TAPE USED
1	1	134	269	486	D-11420
	2	135	276	800	D-11421
	3	137	291	802	D-11422
	4	139	298	776	D-11423
	5	141,142	319	632	D-11424
2	1	159	449	717	P-12
	2	166	494	744	D-12594
	3	174	559	751	P-16
	4	185	636	182	D-11312
	5	186	638	705	D-11313
	6	188	653	418	DC-794
3	1	191	679	744	D-11314
	2	192	687	767	D-11315
	3	193	688	276	D-11316

TABLE 2. Header Record Format
for OV1-13 Concatenated Tapes

<u>WORD NUMBER</u>	<u>QUANTITY</u>	<u>UNITS</u>	<u>FORMAT</u>
1 and 2	Satellite	-	2A*4
3	Orbit Number	-	R*4 ?
4 and 5	Receiving Station	-	2A*4
6	Day of Month	-	R*4 I*4
7	Date of Merge Run	-	R*4 I*4
8	Start Time of Orbit	hours	I*4
9	Start Time of Orbit	mins.	I*4
10	Start Time of Orbit	secs.	I*4
11	Stop Time of Orbit	hours	I*4
12	Stop Time of Orbit	mins.	I*4
13	Stop Time of Orbit	secs.	I*4
14	Semi-major Axis (A)	km	R*4
15	Eccentricity (E)	-	R*4
16	Inclination (I)	degs.	R*4
17	Longitude of Ascending Node	degs. east	R*4
18	Arg. of Perigee (w)	degs.	R*4
19	? (Kx1)	?	I*4
20	? (Kx2)	?	I*4
21	Beginning L-Value of Magnetosphere Fit (L1)	e.r.	R*4
22	Ending L-Value of Magnetosphere Fit (L2)	e.r.	R*4

TABLE 3. Data Record Format
for OV1-13 Concatenated Tapes

L = experiment index (1=e-MA, 2=e-S)
M = index of seconds (1 to 12)
K = measurement index (1 to 25)

WORD #	VARIABLE NAME AND ORDERING	DEFINITIONS
1	NFT	Integers that count the number of seconds of data that have been fitted.
2	NFTB	
3 - 26	((ENERGY(L,M),L=1,2)M=1,12)	A voltage from which the channel number is determined.
27 - 926	$\left\{ \begin{array}{l} ((ALCRM(K,M,1), \\ TH(K,M,1), \\ DELTH(K,M,1), \\ K-1,25),M=1,12) \end{array} \right\}$	For e-MA: ALCRM = a voltage from which is determined the log10 the number of counts; TH=aspect angle w.r.t. the B-field; DELTH=error in aspect angle due to uncertainties in fitting magnetospheric data.
927-1826	((ALCRM(K,M,2),THCK,M,2), DELTH(K,M,2),M=1,12)	same as words 27-926 for e-S (1,2)
1827-2174	((R(N,M),N=1,29),M=1,12)	R = ephemeris information, see TABLE 4.
2175-2198	((A(I,J),DELA(I,J),I=1,3), J=1,4)	For each Cartesian coordinate (I=1,2,3=x,y,z), the A's are parameter values for magnetosphere fits, where $B = A(I,1) + A(I,2) \times [\cos\{A(I,3) \times (t - A(I,4))\}]$; DELA = error in A
2199-2438	((GC(I,M),THC(I,M),I=1,10), M=1,12)	GC=Geigercounter rate meter data THC=Geigercounter aspect angle
2428-2444	ANOMT(NN),NN=16	ANOMT(1)=e-MA temperature monitor ANOMT(2)=Geiger counter temperature ANOMT(3)=e-MA high voltage monitor ANOMT(4)=e-S high voltage monitor ANOMT(5)=e-MA magnetic field monitor ANOMT(6)=Geiger counter high voltage monitor

TABLE 4. Ephemeris Array Contents

This table lists the probable contents of the ephemeris information variable R(N,M), words 1827 - 2174 of a data record. There are 29 quantities for each of the 12 seconds (M) in the data record.

R(1,M)=GMT days	R(16,M)=geocentric latitude
R(2,M)=GMT hours	R(17,M)=right ascension
R(3,M)=GMT mins.	R(18,M)=VI velocities (km/sec)
R(4,M)=GMT secs.	R(19,M)=B (gauss)
R(5,M)=elapsed sec.	R(20,M)=L (earth radii)
R(6,M)=local time days	R(21,M)=geomagnetic latitude
R(7,M)=local time hours	R(22,M)=geomagnetic longitude
R(8,M)=local time mins.	R(23,M)=inclination (deg)
R(9,M)=local time secs.	R(24,M)=declination (deg)
R(10,M)=mean anomaly	R(25,M)=Dx
R(11,M)=altitude above earth's surface	R(26,M)=Dy
R(12,M)=geodetic latitude	R(27,M)=Dz
R(13,M)=LO longitude (east)	} velocity vector components (km/sec)
R(14,M)=VF velocity (km/sec)	
R(15,M)=earth centered range to vehicle	R(28,M)=sun-shadow indicator, sun=0, no sun=1
	R(29,M)= ?

D. 33385
DUMP OF TAPE ~~X-418~~ *tape #1*

*R*4*
08/07/70

INPUT TAPE X-418 ON MS3
DATA INPUT H9 NF 5 FL 1 1 1 SR 5 1 1 SR 5 LAST 1

FILE 10 RECORD 1332020 LENGTH 88 BYTES 39312020
(0) 4F56312D 31332020 0000010D 5354412E 39312020 0000000D 00013BE6 00000010 0000001C 0000003A
(40) 00000013 0000002F 00000021 43AC3284 3FF19390 41F1FC22 41B107B2 4226AB8E 00000000 00003A98
(80) 40600000 41280000

FILE 1 RECORD 486 LENGTH 9776 BYTES
(0) 000031F2 000031E7 40A7AF5E 402AD5AB 40B1C387 4C6850A1 40BC78F1 407B366C 40E2F5EB 40A7AF5E
(40) 3F6850A1 40B264C9 402AD5AB 40BC78F1 406850A1 4CE3468D 407C78F1 3F2850A1 40A7AF5E 402AD5AB
(80) 40B1C387 406850A1 40BC78F1 407B366C 40E2F5EB 4CA7AF5E 00000000 41E4D005 4030A401 00000000
(120) 41E4BA41 403568CF 00000000 41E4A59B 403A2E42 00000000 41E49216 403EEA4C 00000000 41E47FB4
(160) 4061CF79 00000000 41E46E78 406425A1 00000000 41E45E63 40667728 00000000 41E44F77 4068C39C
(200) 00000000 41E441B6 40680A8D 00000000 41E43521 406D488E 00000000 41E429BB 406F8633 00000000
(240) 41E41F85 4071BA12 4063468D 41E4167F 4073E6C2 00000000 41E3F8FB 40A11B23 00000000 41E3F998
(280) 40A20DFC 00000000 41E3FB6C 40A2FB9E 406850A1 41E3FE75 40A3E3E3 00000000 41E402B3 40A4C6A4
(320) 00000000 41E40826 40A5A3BE 00000000 41E40ECE 40A67B0F 00000000 41E416A9 40A74C76 00000000
(360) 41E41FB8 40A817D3 00000000 41E429F8 40A80D0A 00000000 41E43569 40A99C00 4065CB97 41E4FB60
(400) 4027B8F7 403C78F1 41E4B211 40AE6DDA 4020C183 41E4C774 40AEF3E3 3FE3468D 41E4DDF5 40AF7304
(440) 3FFC78F1 41E4F592 40AFEB36 4020C183 41E50E48 40BC5C72 402AD5AB 41E52814 40B0C6B5 4025CB97
(480) 41E542F2 40B129FA 3FF264C9 41E55EE1 40B18642 3FA850A1 41E57BDC 40B1D88C 4063468D 41E599DF
(520) 40B229DB 403264C9 41E588E7 40B27131 3FE850A1 41E5D8F0 40B2B193 402D5AB5 41E5F9F6 40B2EB07
(560) 4025CB97 41E6FB51 40B3BE15 402FDFBF 41E72399 40B3C179 3FF76EDD 41E74CB2 40B3BE56 3FA850A1
(600) 41E77697 40B3B4BC 3F2850A1 41E7A143 40B3A4BC 3FFC78F1 41E77CAE 40B38E68 3FB264C9 41E7F8D4
(640) 40B371D2 402D5AB5 41E825AE 40B34F0E 403264C9 41E85337 40B3262F 406850A1 41E88167 40B2F748
(680) 403264C9 41E8B037 40B2C271 3FED5AB5 41E48D5B 40AD62BD 3FB264C9 41EA245A 40B07A97 3F6850A1
(720) 41EA5774 40B0167E 00000000 41EA8AEC 40AFAD5A 00000000 41EABEBA 40AF3F45 40670E1C 41EAF2D6
(760) 40AECC5B 40670E1C 41EB2739 40AE54B7 403264C9 41EB5BDA 40AD0877 3FE850A1 41EB90B2 40AD57B7
(800) 3F7C78F1 41EB05BA 40ACD294 3FFC78F1 41EBFAEB 40AC492D 3FB264C9 41EC3036 40ABBB9F 402AD5AB
(840) 41EC659B 40AB2A0A 4025CB97 41EC9B0F 40AA948C 3FE850A1 41EE1052 40A61B39 3F7C78F1 41EE4524
(880) 40A56BC5 40376EDD 41EE79BD 40A4B810 3FE850A1 41EEAE18 40A4027C 403264C9 41EEE22B 40A34A6C
(920) 4020C183 41EF15EF 40A29001 3FB264C9 41EF495D 4CA1D35F 3F6850A1 41EF7C6D 40A114A8 00000000
(960) 41EFAF17 40A053FE 00000000 41EFE155 407F230A 4C2850A1 41F01320 407D9ABE 4065CB97 41E9C682
(1000) 40B126C0 3FB264C9 41F17A98 4071B00E 3F6850A1 41F1A767 40701640 00000000 41F1D383 406E7BB6
(1040) 402FDFBF 41F1FEE4 406CE0B7 403264C9 41F22986 4C68458B 3FE850A1 41F25362 4069AA76 3F7C78F1
(1080) 41F27C74 40680FC2 00000000 41F2A4B5 406675B3 00000000 41F2CC1F 4064DC93 00000000 41F2F2AF
(1120) 406344A9 00000000 41F3185E 4061AE3C 00000000 41F33D29 40601997 00000000 41F36109 4C3DCE02
(1160) 3F285CA1 41F4411D 4027AEAE 40285CA1 41F45D12 4C24C004 3FBC78F1 41F477F8 4021DB18 3F6850A1
(1200) 41F491CB 3FFE015A 00000000 41F4AA8A 3FF86336 4C620408 41F4C230 3FF2DDAE 3FF264C9 41F4D8BB
(1240) 3FED7309 3FA850A1 41F4EE27 3FE8261E 3F2850A1 41F50273 3FE2FABA 402850A1 41F5159C 3FB8ECB5
(1280) 3FBC78F1 41F5279F 3FB24342 403C78F1 41F12599 4C74A63E 3FA850A1 41F589FE 3F7C7D13 3F2850A1
(1320) 41F591E1 3FA510AC 00000000 41F59890 3FAC1FC5 00000000 41F59E08 3FB32F2B 00000000 41F5A24A
(1360) 3FBA2307 00000000 41F5A555 3FE074D5 00000000 41F5A729 3FE3BC5C 00000000 41F5A7C4 3FE6E4AD
(1400) 00000000 41F5A728 3FE9EB64 00000000 41F5A555 3FECCEBF 00000000 41F5A249 3FEF8D66 00000000
(1440) 41F59EC6 3FF22646 00000000 41F5988D 3FF49885 00000000 41F55078 4020A859 00000000 41F54168
(1480) 40213E6C 00000000 41F5312B 4021BFAD 00000000 41F51FC3 40222BF3 00000000 41F50D33 40228368
(1520) 00000000 41F4F97D 4022C609 00000000 41F4E4A2 4C22F3E4 00000000 41F4CEA7 40230D0F 00000000
(1560) 41F4B78C 402311A3 00000000 41F49F55 402301C0 00000000 41F48605 4022D088 40B8B162 41F57829
(1600) 3F688206 4039F3E7 41F3A418 3FFE95E2 407264C9 41F381EE 3FFD0159 4063468D 41F35ECE 3FB487B
(1640) 40776EDD 41F33ABE 3FF96BE2 406850A1 41F315C2 3FF76C2C 4039F3E7 41F2EFED 3FF54A00 406850A1
(1680) 41F2C91B 3FF30609 406850A1 41F2A17A 3FFBA0FA 4C74E9D3 41F27901 3FEE1B89 4074E9D3 41F24FB6
(1720) 3FEB7678 40670E1C 41F2259F 3FE8B28E 4060C183 41F1FAC1 3FE5D09D 403264C9 41F1CF22 3FE2D183
(1760) 40670E1C 41F08AC5 3F6C5949 4074E9D3 41F05A05 3F3BFCF2 40376EDD 41F028BF 3F222D92 40699326
(1800) 41EFF6FA 3EF52997 40648912 41EFC4BF 3F306044 4C7264C9 41EF9213 3F675754 40670E1C 41EF5EFE
(1840) 3F779F2D 40670E1C 41EF2B88 3FA43B5D 402FDFBF 41EEF7B9 3FACD948 403C78F1 41EEC398 3FB59FE6
(1880) 40699326 41EE8F2C 3FB8E9D9 3F6850A1 41F3E0F2 4C2C916B 3FE850A1 41ECFC11 40215495 4025CB97
(1920) 41ECC66E 4023BEFF 4060C183 41EC90CD 40262C4C 4C6850A1 41EC5B37 40289C29 403EFDDB 41EC25B2
(1960) 40280E05 40712244 41EBF048 402D815F 3FFC78F1 41EBBAFF 402FF5B7 406850A1 41EB85E1 40326A8B
(2000) 4063468D 41EB5CF5 4034DF5D 4039F3E7 41EB1C43 4C3753AA 4023468D 41EAE7D2 4039C6F5 3FB878F1
(2040) 41EAB3AB 403C38BD 3F6850A1 41EA7FD6 403EA884 4C3264C9 41E92056 4067AAAC 4063468D 41E8F015
(2080) 4068D1AF 403C78F1 41E8C067 4069F57D 406D5AB5 41E89153 406B15DA 403C78F1 41E862DF 406C3287

(7720)	40E2A09D	3EF9E36A	40A6078A	BED3BF44	423C3720	BE92079A	41251F88	3FA6E065	BFC0497C	40E1AD5E
(7760)	00000000	442CA8F2	416A0000	00000000	41300000	41AFC000	42AFF000	41680000	412C0000	41A2C000
(7800)	41748780	4239E37C	43ACC9AA	BF158B9D	422A9A78	4CE2A18D	43B9B3A6	BF15AAD9	41B3619B	40E2A18D
(7840)	3EF9E4B1	40A605B5	BED3CE32	423C367F	BE921577	41251D2C	3FA6978C	BFC031E8	40E1ADB6	00000000
(7880)	442CA8EE	416A0000	00000000	41300000	41B00000	428C0000	41680000	412C0000	41A20000	41732940
(7920)	4239E568	43A0C895	BF15AC7C	422A9A05	40E2A27C	43B9B290	BF15CBA0	41B3619B	40E2A27C	3EF9E5F9
(7960)	40A603DF	BED3DD21	423C35DD	BE922356	41251ACD	3FA64EAE	BFC01A53	40E1AE0F	00000000	442CA8EA
(8000)	416A0000	00000000	41300000	41B10000	428C1000	41680000	412C0000	41A20000	4171CB80	4239E755
(8040)	43A0C77F	BF15CD5C	422A9992	40E2A36C	43B9B17B	BF15EC69	41B3619B	40E2A36C	3EF9E741	40A6C20A
(8080)	BED3EC10	423C353B	BE923137	4125186E	3FA605CC	BFC002BD	40E1AE66	00000000	442CA8E6	416A0000
(8120)	00000000	41300000	41B20000	428C2000	41680000	412C0000	41A20000	41706E00	4239E941	43A0C669
(8160)	BF15EE3E	422A991F	40E2A45C	43B9B066	BF160D33	41B3619C	40E2A45C	3EF9E88B	40A60035	BED3FB00
(8200)	423C349A	BE923F19	41251610	3FA5BCE6	BF9FF594	4CE1AE8E	00000000	442CA8E2	416A0000	00000000
(8240)	41300000	41B30000	428C3000	41680000	412C0000	41A20000	416F1000	4239EB2E	43A0C553	BF160F20
(8280)	422A98AC	40E2A54C	43B9AF50	BF162DFF	41B3619C	4CE2A54C	3EF9E9D6	40A5FE61	BED409F0	423C33F8
(8320)	BE924CFD	412513B1	3FA573FB	BF9FE9C8	40E1AF16	00000000	442CA8DE	416A0000	00000000	41300000
(8360)	41B40000	428C4000	41680000	412C0000	41A20000	416DB240	4239ED1B	43A0C43D	BF163004	422A9839
(8400)	40E2A63C	43B9AE3A	BF164ECB	41B3619C	40E2A63C	3EF9EB21	40A5FC8C	BED418E1	423C3356	BE925AE3
(8440)	41251152	3FA52B0C	BF9FDDFC	40E1AF6D	00000000	442CA8DA	416A0000	00000000	41300000	41B50000
(8480)	42B05000	41680000	412C0000	41A20000	416C5480	4239EF07	43A0C327	BF1650E9	422A97C7	40E2A72C
(8520)	43B9AD24	BF166F99	41B3619C	40E2A72C	3EF9EC6E	4CA5FAB8	BED427D3	423C32B5	BE9268CA	41250EF4
(8560)	3FA4E218	BF9FD230	40E1AFC4	00000000	442CA8D6	416A0000	00000000	41300000	41B60000	428C6000
(8600)	41680000	412C0000	41A20000	416AF680	4239F0F4	43ACC211	BF1671D0	422A9754	40E2A81C	43B9AC0E
(8640)	BF169068	41B3619D	40E2A81C	3EF9EDBC	40A5F8E4	BED436C6	423C3213	BE9276B3	41250C96	3FA49920
(8680)	BF9FC663	40E1B01A	00000000	442CA8D2	40ADCE86	3EEBA353	407FE26F	3E6E6B65	40AF16F2	3EEC8930
(8720)	4023653A	3EFA548F	00000000	00000000	40233D9D	3EFF3EB5	4036215C	3EE398B4	00000000	00000000
(8760)	4036FEF1	3EBA3288	BF4D96ED	3FB35451	00000000	00000000	BF9B32F9	3FA0CF3D	4039F3E7	4220FDD1
(8800)	3FFC78F1	42211DAA	4034E9D3	42213C1C	3FE850A1	4221591A	3FAB50A1	42217495	3FFC78F1	42218E7F
(8840)	3FBC78F1	4221A6C8	40670E1C	4221BD62	3FF76E0D	4221D23F	3FB264C9	4221E551	402D5AB5	4220C61C
(8880)	402850A1	42209F7E	3FE3468D	42207750	3F7C78F1	42204DA3	4063468D	42202285	3FF264C9	41FFE0D0
(8920)	402D5AB5	41FF906D	4020C183	41FF324A	40648912	41FED1C3	402D5AB5	41FE6EF4	3F6850A1	41F1C3FE
(8960)	406C1830	41F14627	40670E1C	41F0C847	4020C183	41FC4A68	4025CB97	41EFC093	402FDFBF	41EF4ED1
(9000)	4023468D	41EED12B	40648912	41EE53A9	3FF264C9	41EDD652	4063468D	41ED592E	3FE850A1	41EC8DE9
(9040)	402D5AB5	41E02109	402FDFBF	41BF6A56	40670E1C	41BE94AE	402AD5AB	41BDC135	3FE850A1	41BCF001
(9080)	403264C9	41BC212C	403264C9	41BB54D2	406FDFBF	41BA8B0E	402D5AB5	41B9C3FF	403264C9	41AAF9A0
(9120)	402850A1	41AAC9DA	4063468D	41AA243	3FF264C9	41AA82FA	403264C9	41AA6C1D	3FE850A1	41AA5DC1
(9160)	406C1830	41AA57FA	4065CB97	41AA5AD2	402850A1	41AA6652	402850A1	41AA7A79	40670E1C	41B8C19C
(9200)	4063468D	41B8CCBD	4023468D	41B99B3D	3FBC78F1	41BA6CED	3F7C78F1	41B041A3	4060C183	41BC1933
(9240)	4023468D	41BCF374	402AD5AB	41BDD03E	3FE3468D	41EEAF6B	403C78F1	41BF90D6	3FF264C9	41EC051D
(9280)	402D5AB5	41ED5118	3FE850A1	41EDCCF8	4034E9D3	41EE48B7	403C78F1	41EEC44D	4023468D	41EF3FB4
(9320)	4023468D	41EFBAE6	403C78F1	41F035DD	3FED5AB5	41FCB091	40670E1C	41F12AFB	402AD5AB	41FD67E8
(9360)	402850A1	41FDC4AF	4063468D	41FE2B04	403C78F1	41FE89F3	402FDFBF	41FEE704	40670E1C	41FF4220
(9400)	406850A1	41FF9B2E	4062C408	41FFF216	4060C183	4220235E	406850A1	42204C83	40376EDD	42222081
(9440)	40670E1C	4222143E	4034E9D3	422205E3	4023468D	4221F57A	406850A1	4221E30B	3FF264C9	4221CEA2
(9480)	403264C9	4221B84A	402D5AB5	4221A010	4039F3E7	42218600	402D5AB5	42216A29	402FDFBF	41F8FD8F
(9520)	406850A1	41F88B96	3FF264C9	41F818BB	4025CB97	41F7A50A	4039F3E7	41F73091	3FFC78F1	41F6BB5B
(9560)	3FFC78F1	41F64573	40376EDD	41F5CEE5	4020C183	41F5578A	3FE3468D	41F4DFFD	403264C9	41E792D4
(9600)	40712244	41E7178F	403C78F1	41E69C99	403C78F1	41E621FB	4025CB97	41E5A7BF	40670E1C	41E52DED
(9640)	403C78F1	41E4B492	402850A1	41E43BB6	403264C9	41E3C364	403C78F1	41E34BA9	40670E1C	41B07E39
(9680)	4020C183	41AFEAA3	3FBC78F1	41AF5D1A	3F6850A1	41AE5D08	402AD5AB	41AE5517	4023468D	41ADB810
(9720)	4023468D	41AD67FA	4023468D	41ACFC0E	402850A1	41AC977D	3FE3468D	41AC3A7C	40A52A54	40AB76ED
(9760)	40B6CD9B	4065CB97	40ACC183	40B1C387						

FILE	INPUT	DATA RECORDS	MAX.	READ ERROR SUMMARY				INPUT RETRIES	
	RECS.	INPUT	SIZE	PERM	ZERO	B	SHORT	UNDEF.	#RECS. TOTAL#
5	632	633	9776	0	1	0	0	1	1

EOJ DUMP STOPPED AFTER FILE 5 # OF PERMANENT READ ERRORS 0

START TIME 02/14/79 17:51:22 STOP TIME 02/14/79 17:55:12

D-33387
DUMP OF TAPE ~~X-416~~ tape #2

INPUT TAPE X-416 ON MS4
DATA INPUT H9 NF 6 FL 1 1 1 SR 6 1 1 SR 6 LAST 1

FILE	1 RECORD	1 LENGTH	88BYTES
(0)	4F56312D	31332020	000001C1 48415720 20202020 00000007 00007DA9 0000000F 00000019 0000 019
(4)	00000012	0000002C	00000000 43AC3266 3FF18562 41F1FB6A 41B90879 4221C379 00000000 00003A98
(8)	40600000	40FC0000	

FILE	1 RECORD	717 LENGTH	9776BYTES
(0)	000030D8	000030CD	406850A0 407DBB76 40A850A1 40A7AF5E 40B264C9 40B1C387 40BC78F1
(40)	40BC78F1	40E3972E	40E2F5EB 3F6850A0 402AD5AB 40699326 406850A0 407DBB76
(80)	407DBB76	40A850A1	40A7AF5E 40B264C9 40B1C387 40BC78F1 00000000 41BE78CF 40E85B56 00000000
(120)	41BF5ACC	40E7E9D3	00000000 41E01F9D 40E77827 00000000 41E092F4 40E70686 00000000 41E10754
(160)	40E69518	3FFC78F1	41E17CA5 40E623F9 3FB264C9 41E1F2D2 40E5B33E 3F6850A0 41E269C4 40E542F1
(200)	00000000	41E2E166	40E4D316 00000000 41E359A6 40E463AD 00000000 41E3D270 40E3F4AD 00000000
(240)	41E448B1	40E3860C	00000000 41E4C558 40E317BB 40C7C78F0 41E6458C 40E1BE5A 00000000 41E81EDD
(280)	40E016EB	402850A1	41E7295D 40E0F299 3FBC78F1 41E91429 40BE755E 3F6850A0 41E98E9F 40BD989E
(320)	00000000	41EA08E8	40C8B885 00000000 41EA82FA 40B8DE1D 00000000 41EAFCCB 40B80076 3FFC78F1
(360)	41EB7653	40BA22A6	3FB264C9 41EBEF8A 40B944C9 3F6850A0 41EC6868 40B86704 3F6850A0 41BCDC47
(400)	40E92CDD	3FB264C9	41FC6272 40B119DF 3F2850A1 41FCD6BF 40B0475D 00000000 41F14A76 40AF774A
(440)	00000000	41F1BD93	40AEA9DF 3FFC78F1 41F23011 40ADD5F3 3FB264C9 41F2A1EC 40AD17D9 3F2850A1
(480)	41F3131F	40AC539D	00000000 41F383A7 40AB92C6 00000000 41F3F37F 40AAD573 00000000 41F462A3
(520)	40AA1BB0	00000000	41F4D10E 40A965AF 00000000 41F53EBC 40A8B352 00000000 41F5ABA8 40A8C4A1
(560)	40A7AF5E	41F6FCD6	40A5F694 00000000 41F88F38 40A39A50 00000000 41F7C038 40A4CEB0 00000000
(600)	41F95A79	40A26E0A	00000000 41F9BEA0 40A1D9F9 00000000 41FA21C0 40A146B6 00000000 41FA83D0
(640)	40A0B3CC	00000000	41FAE4C8 40A020C1 00000000 41FB449E 407F1A30 00000000 41FBA347 407DF0A4
(680)	00000000	41FC00B8	407CC3E2 4079F3E6 41EF88F9 40B2A670 00000000 41FEE83B 4071B110 00000000
(720)	41FF3742	40703DE6	00000000 41FF846E 406EC186 00000000 41FFCFAA 406D3C50 00000000 42200C71
(760)	40BBAEF6	00000000	42202FFF 406A1A7A 00000000 42205274 40688048 00000000 422073C6 4066E240
(800)	00000000	422093E6	406542D0 00000000 4220B2CA 40C3A4FC 00000000 4220D064 40620C82 00000000
(840)	4220ECA7	40607DE6	00000000 42210787 403DFD1E 40B1C387 4221525E 4035F161 00000000 4221986C
(880)	40311AF4	00000000	42217741 4032BCB8 00000000 4221B26F 4031987A 00000000 4221BCA5 40329CC2
(920)	00000000	4221C4F0	4034158D 00000000 4221CB49 4035F251 00000000 4221CFA5 4038207B 00000000
(960)	4221D200	403A8D01	00000000 4221D252 403D257A 00000000 4221D096 403FD8D2 3FED5AB5 41FE50CA
(1000)	407449A6	00000000	42216CF5 406A2F4C 00000000 4221579C 406AF766 00000000 42214052 4068A16E
(1040)	00000000	4221271E	406C2C90 00000000 42210C0B 406C985C 00000000 4220EF24 406CE4B2 00000000
(1080)	4220D075	406D11CC	00000000 4220B00A 406D2020 00000000 42208DF1 406D1066 00000000 42206A36
(1120)	406CE38E	00000000	422044E7 406C9AB0 00000000 42201E13 406C370C 00000000 41FFEB8F 4068BA00
(1160)	40BC78F1	41FEDC76	40699C2C 00000000 41FD6EE6 406606DE 00000000 41FE309F 40680060 00000000
(1200)	41FCA50E	4063D8C0	00000000 41FC3D5A 4062B172 00000000 41FBD3EF 40618108 00000000 41FB68E7
(1240)	406D48B0	00000000	41FAFC58 403E12FB 3FFC78F1 41FA8E63 403B88DF 3FB264C9 41FA1F17 4038F4D4
(1280)	3F6850A0	41F9AE8E	40365872 3FED5AB5 42218F53 4068707C 00000000 41F5C308 3FFE7303 00000000
(1320)	41F54AA7	3FF8F57F	00000000 41F4D1D2 3FF37488 00000000 41F45895 3FEDF037 41F3DF01 00000000
(1360)	3FE868B7	00000000	41F36523 3FE2DE7C 00000000 41F2EB07 3FBAA53F 00000000 41F270BB 3FAF8FA4
(1400)	00000000	41F1F64A	3FA489A9 00000000 41F17BC0 3F73750A 00000000 41F10127 3F3EE693 00000000
(1440)	41F068B8	3F272A69	00000000 41F00BF4 3FA670C 40E3468D 41EE8B3B 3FB0FF3C 00000000 41EC63E9
(1480)	3FEFBDAF	00000000	41EDA89A 3FE38D36 00000000 41EBC356 3FFC3063 00000000 41EB4AC9 402140E2
(1520)	00000000	41EAD298	4024718D 00000000 41EA5AC8 4027AA36 00000000 41E9E360 402AEAEB 00000000
(1560)	41E96C66	402E33BC	00000000 41E8F5E0 403184BF 00000000 41E87FD4 4034DE10 3FED5AB5 41F6A12B
(1600)	40244DCA	00000000	41E4A2B9 40698002 00000000 41E43260 40685964 00000000 41E3C2C1 406D383E
(1640)	00000000	41E353E2	406F1CC0 00000000 41E2E5CA 4071071C 00000000 41E27882 4072F786 00000000
(1680)	41E20C11	4074EE38	00000000 41E1A07F 4076EB62 00000000 41E135D5 4078EF3A 00000000 41E0CC1C
(1720)	407AF9FD	00000000	41E0635E 407DDBAE 00000000 41E0FF748 407F249E 00000000 41BF29F1 40A0A26F
(1760)	3F6850A0	41BCB35F	40A411E2 00000000 41B9CFB4 40A87A95 00000000 41BB4A32 40A62AC0 00000000
(1800)	41B860FF	40AAD761	00000000 41B7AE63 40AC0A0F 00000000 41B6FF1F 40AD3FC2 00000000 41B6535A
(1840)	40AE7656	00000000	41B5AB39 40AFAF1A 00000000 41B506E5 40B0E8F6 00000000 41B46689 40B22356
(1880)	00000000	41B3CA4F	40B35D94 3F6850A0 41E57534 40661EB8 403C78F1 41AF536C 40BD62E9 3FE850A1
(1920)	41AEE841	40BE6DC5	3F7C78F0 41AE8342 40BF6DA8 3F2850A1 41AE24A1 40E030A5 00000000 41ADCC91
(1960)	40ECA3B2	00000000	41AD7B42 40E10F55 00000000 41AD30E3 40E172F0 00000000 41ACEDA2 40E1CDE6
(2000)	00000000	41ACB1A7	40E21FA4 00000000 41AC7D1D 40E267A0 00000000 41AC5027 40E2A55E 00000000
(2040)	41AC2AE6	40E2D86C	00000000 41ACDD79 40E3006B 402AD5AB 41ABE4F1 40E33330 00000000 41AC20B3
(2080)	40E2D32A	00000000	41ABF296 40E31A99 00000000 41AC6F37 40E25EE6 00000000 41ACA27C 40E214ED

(7720)	40E5B60F	3F3659E6	412822A4	BE40F543	426955DE	BE1AD114	41A111B1	40657B66	40BC5F94	BF56DC97
(7760)	00000000	42B48DD8	40F00000	40A00000	41BA0000	41BE0000	43A9BA00	40F00000	41660000	413C0000
(7800)	41687A0C	41F5F36A	437ABF12	BE1BE19C	423D14D0	4CE5B4B2	43B6364F	BE1BE823	41E11744	40E5B4B2
(7840)	3F365758	41283043	BE4CF0A3	4269556E	BE1ACF9F	41A11A25	40657F8E	40BC60FD	BF56E4A9	00000000
(7880)	42B48ED9	40F00000	40A00000	41BA0000	41BF0000	43A9B800	40F00000	41660000	413C0000	41304C00
(7920)	41F5F742	437AC21C	BE1BDFA0	423D126B	40E5B355	43B637D3	BE1BE632	41E11744	40E5B355	3F3654CA
(7960)	41283DE9	BE40EC02	426954FE	BE1ACE2B	41A1229C	4C658416	40BC6266	BF56ECBB	000C0000	42B48FD7
(8000)	40F00000	40A00000	41BA0000	41E00000	43A9BC00	4CEFC000	41660000	40BE5800	413C0000	41F5FB1B
(8040)	437AC526	BE1BDD80	423D0FF8	40E5B1F8	43B63957	BE1BE441	41E11744	40E5B1F8	3F36523C	41284B97
(8080)	BE40E762	4269548E	BE1ACCB7	41A12B17	4065886E	4C8C63CE	BF56F4CC	00000000	42B490D9	40F00000
(8120)	40A00000	41BA0000	41E08000	43A9B000	40F00000	41660000	41380000	41B7B4C0	41F5FEF4	437AC82E
(8160)	BE1BDBC1	423D0D85	4CE5B09B	43B63ADB	BE1BE25C	41E11744	40E5B09B	3F364FAF	4128594C	BE40E2C3
(8200)	4269541E	BE1ACB43	41A13396	40658CC4	40BC6535	BF56FCDD	00000000	42B491D7	40F00000	40A00000
(8240)	41BA0000	41E10000	43A9BE00	40F00000	41660000	41380000	41AF8080	41F602CD	437ACB38	BE1BD9D2
(8280)	423D0B11	40E5AF3F	43B63C5F	BE1BE05F	41E11744	4CE5AF3F	3F364D22	41286709	BE40E23	426953AE
(8320)	BE1AC9CF	41A13C18	4065911A	40BC669B	BF5704ED	00000000	42B492D4	40F00000	40A00000	41BA0000
(8360)	41E18000	43A9BF00	40F00000	41660000	41380000	41A748C0	41F606A6	437ACE40	BE1BD7E3	423D089B
(8400)	40E5ADE2	43B63DE3	BE1BDE6F	41E11744	40E5ADE2	3F364A95	412874CE	BE40D984	4269533C	BE1AC85B
(8440)	41A1449E	4065956E	40BC6801	BF570CFE	00000000	42B493D7	40F00000	40A00000	41BA0000	41E20000
(8480)	43A9C000	40F00000	41660000	41380000	417E1B8C	41F60A7F	437AD14A	BE1BD5F4	423D0625	40E5AC86
(8520)	43B63F66	BE1BDC7F	41E11744	40E5AC86	3F364809	4128829A	BE40D4E5	426952CC	BE1AC6E7	41A14D27
(8560)	406599C2	40BC6966	BF57150E	00000000	42B494D4	4CFC0000	40A00000	41BA0000	41E28000	43A9C100
(8600)	40F00000	41660000	41380000	416D9E80	41F60E58	437AD452	BE1BD406	423D03AE	40E5AB2A	43B640E9
(8640)	BE1BDABF	41E11744	40E5AB2A	3F36457D	41289060	BE4CD046	4269525C	BE1AC574	41A155B4	40659E16
(8680)	40BC6ACA	BF571D1E	00000000	42B495D7	40ADF850	3EEC1BC1	40B0F9F3	3E3B7E2A	40AE9694	3EEBE0F4
(8720)	4064A7CA	3EFE2F87	00000000	00000000	40641B9A	3EFC4147	40346A1B	3E7A1C2E	00000000	00000000
(8760)	40348519	3E7CD8C4	406C65FE	3F350D1D	00000000	00000000	BF1D646A	3F73436C	3F2850A1	41BE788A
(8800)	00000000	41BD6795	00000000	41BC57E1	00000000	41BB497F	00000000	41BA3C7E	00000000	41B930F1
(8840)	00000000	41B826EB	00000000	41B71E81	00000000	41B617C9	00000000	41B512DB	00000000	417CE7F2
(8880)	40620408	417BFF2E	3FF264C9	417B2C20	3FB264C9	417A6FBE	3F6850A0	4179CAFA	00000000	41793EAC
(8920)	00000000	4178CB9C	4020C183	41787272	3FBC78F1	417833BC	3F7C78F0	41780FE4	00000000	41AB42A3
(8960)	00000000	41AC3669	00000000	41AD2DCA	00000000	41AE288A	3F2850A1	41AF2671	3FFC78F1	41BC0274B
(9000)	3FBC78F1	41B12AE5	3F6850A0	41B23113	3F2850A1	41B339A8	4020C183	41B4447C	00000000	41E96D17
(9040)	00000000	41E9FE99	00000000	41EA9D1A	00000000	41EB2196	00000000	41EBB309	00000000	41EC446D
(9080)	00000000	41ED05BF	00000000	41ED66FB	00000000	41EDF81B	00000000	41EE891C	00000000	41FDB328
(9120)	00000000	41FE3899	00000000	41FEBD35	00000000	41FF40EF	00000000	41FFC3B9	00000000	422C22C2
(9160)	00000000	42206320	4060C182	4220A2EF	3FF264C9	4220E224	3FA850A1	422120B7	00000000	4225D666
(9200)	00000000	4225E125	00000000	4225E88A	00000000	4225EC89	4063468C	4225ED1B	3FF264C9	4225EA3D
(9240)	3FB264C9	4225E3F1	3F6850A0	4225DA40	00000000	4225CD35	00000000	4225BC0E	00000000	4220938B
(9280)	00000000	422051C4	00000000	42200F67	00000000	41FF98F9	00000000	41FF121E	00000000	41FE8A4E
(9320)	00000000	41FE0199	00000000	41FD78CF	00000000	41FCEDC0	00000000	41FC62B8	00000000	41ECDE23
(9360)	00000000	41EC4CB8	00000000	41EBB86E	00000000	41EB2A40	00000000	41EA9934	00000000	41EAC850
(9400)	00000000	41E97797	00000000	41E8E70E	00000000	41E856B8	4020C183	41E7C69B	00000000	41B1D61C
(9440)	00000000	41B0D779	00000000	41AFDB4E	00000000	41AEE1C4	00000000	41ADEB05	00000000	41ACF742
(9480)	00000000	41AC06AC	00000000	41AB197A	00000000	41AA2FE6	00000000	41A94A2E	00000000	417861A2
(9520)	00000000	4178B5D6	00000000	41792466	00000000	4179ACC2	00000000	417A4E3C	00000000	417B080C
(9560)	00000000	417BD954	00000000	417CC128	3FFC78F1	417DBE90	3FBC78F1	417ED08A	00000000	41B7A091
(9600)	00000000	41B8B0A5	00000000	41B9C248	00000000	41BAD561	00000000	41BBE9D9	00000000	41BCFF97
(9640)	00000000	41BE1688	00000000	41BF2E96	00000000	41EC23D7	00000000	41E0B0DF	3FFC78F1	41FC3B89
(9680)	3FBC78F1	41F0CC45	3F6850A0	41F158DC	3F2850A1	41F1ED4B	00000000	41F27D8D	00000000	41F3D09C
(9720)	00000000	41F39D75	00000000	41F42D12	00000000	41F4BC6E	00000000	41F54B85	40A99326	40ADF8F7
(9760)	40B6CD9B	40648912	407EFDFA	40B12244						

FILE	INPUT	DATA RECORDS	MAX.	READ ERROR SUMMARY				INPUT RETRIES	
	RECS.	INPUT	SIZE	PERM	ZERO B	SHORT	UNDEF.	#RECS.	TOTAL#
6	418	419	9776	0	C	0	0	0	0

EOJ DUMP STOPPED AFTER FILE 6 # OF PERMANENT READ ERRORS 0

START TIME 02/14/79 17:47:18 STOP TIME 02/14/79 17:51:09