#426

IMP-H & J

FOUR ALBUM AVERAGE DATA

72-073A-05B/73-078A-05D

IMP-H

FOUR ALBUM AVERAGE DATA

72-073A-05B

THIS DATA SET HAS BEEN RESTORED. THERE WERE ORIGINALLY 12 9-TRACK, 800 BPI TAPES. THERE ARE NOW 2 RESTORED TAPES. THE RESTORED DR TAPES ARE ON 3480 CARTRIDGES AND THE DS TAPES ARE 9-TRACK, 6250 BPI. THE TAPES WERE CREATED ON AN IBM 360 COMPUTER. THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR02974	DS02974	D31004	1	10/10/73 - 10/18/73
		D31005	2	10/18/73 - 11/03/73
		D31006	3	11/03/73 - 11/19/73
		D31007	4	11/19/73 - 12/05/73
		D31008	5	12/05/73 - 12/21/73
		D31009	6	12/21/73 - 01/06/74
DR02975	DS02975	D31010	1	01/06/74 - 01/22/74
		D31011	2	01/22/74 - 02/07/74
		D31012	3	02/07/74 - 02/23/74
		D31013	4	02/23/74 - 03/11/74
		D31014	5	03/11/74 - 03/27/74
		D31015	6	03/27/74 - 04/13/74

IMP-H

IMP-J

FOUR ALARM AVERAGE DATA

72-073A-05B

73-078A-05D

This data set has been restored. There was originally 1 Binary 7-Track, 800 BPI tape. There is one restored tape. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The tape was created on an CDC 6600 computer. The DR and DS numbers along with the corresponding D numbers and the time spans are as follows:

DR#	DS#	D#	FILES	TIME SPAN	DATA
DR03252	DS03252	D31987	1	12/01/77 - 12/02/77	H
			2	12/11/77 - 12/12/77	H
			3	12/01/77 - 12/02/77	J
			4	12/11/77 - 12/12/77	J

REQ. AGENT	RAND NO.	ACQ. AGENT
WKD	RD0040	JIV
VJP	RD0721	JIV

IMP H & J

FOUR ALBUM AVERAGE DATA

72-073A-05B/73-078A-05D

This data set consists of 12 IMP H and 1 IMP H & J data tapes. The IMP H tapes are 9 track, 800 BPI, binary, with one file of data created on an IBM 360 computer. The IMP H & J tape is 7 track, 800 BPI, binary, with 4 files of data, created on an CDC 6600 computer.

IMP-H

D#	C#	TIME SPAN
D-31004	C-19868	10/01/73 - 10/18/73
D-31005	C-19869	10/18/73 - 11/03/73
D-31006	C-19870	11/03/73 - 11/19/73
D-31007	C-19871	11/19/73 - 12/05/73
D-31008	C-19872	12/05/73 - 12/21/73
D-31009	C-19873	12/21/73 - 01/06/74
D-31010	C-19874	01/06/74 - 01/22/74
D-31011	C-19875	01/22/74 - 02/07/74
D-31012	C-19876	02/07/74 - 02/23/74
D-31013	C-19877	02/23/74 - 03/11/74
D-31014	C-19878	03/11/74 - 03/27/74
D-31015	C-19879	03/27/74 - 04/13/74

IMP-H & J

D#	C#	FILES	DATA	DATE
D-31987	C-20077	4	H	12/01/77 - 12/02/77
			H	12/11/77 - 12/12/77
			J	12/01/77 - 12/02/77
			J	12/11/77 - 12/12/77

IMP-7 and IMP-8

TABLE 2. EPE NORMAL DISCRIMINATOR LEVELS AND OUTPUT LOGIC

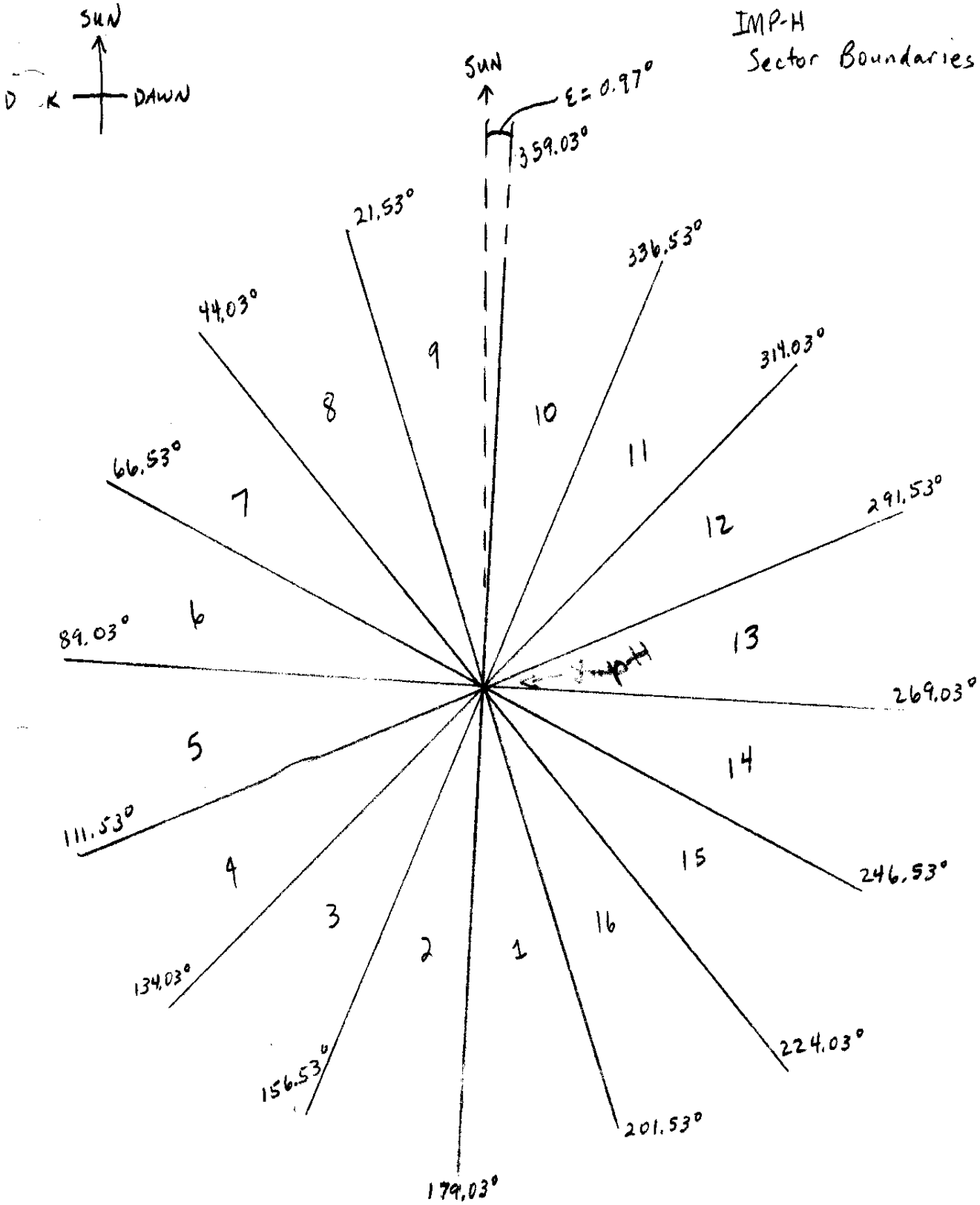
Detector	Discriminator* Levels (MeV)		Logic	Output Channels (MeV)	Designation	Nuclear Charge Range	Samples per spin
A	A1	0.03	$A_1\bar{A}_2\bar{B}_1$	0.05 - 0.22	L_1	$Z \geq 1$	16
	A2	0.20	$A_2\bar{A}_4\bar{B}_1$	0.22 - 0.80	L_2	$Z \geq 1$	16
	A3	0.50	$A_3\bar{A}_4B_2\bar{B}_3C$	4.5 - 8.5	L_5	$Z = 1$	8
	A4	0.80	$A_4\bar{A}_5\bar{B}_1$	0.80 - 2.1	L_3	$Z \geq 1$	16
	A5	2.5	$A_4\bar{A}_5B_1\bar{B}_2C$	2.1 - 4.5	L_4	$Z = 1$	16
	A6	3.5	$A_6B_1\bar{C}$	8.4 -16.0	L_{11}	$Z = 2$	8
			$\bar{A}_2B_1\bar{C}$	background	L_9		8
B	B1	0.10	$A_5\bar{B}_1$	2.2 - 8.4	L_{10}	$Z \geq 2$	8
	B2	3.6	$A_5\bar{A}_6B_2\bar{C}$	16.0 -35.0	L_{12}	$Z = 2$	8
	B3	9.0					
C	C	0.10	A_2B_1C	8.5 -25.0	L_6	$Z = 1$	8
D	D1	0.030	$D_1\bar{D}_2$	0.03 - 0.10	L_7	electrons	16
	D2	0.100					
E	E1	0.100	$E_1\bar{E}_2$	0.10 - 0.20	L_8	electrons	16
	E2	0.200					
F	F1	0.015	F_1	>0.015	F	electrons and ions	16
G	G1	0.60	G_1	>0.6	G_1	$Z \geq 2$	16
	G2	1.0	G_2	>1.0	G_2	$Z \geq 2$	8
	G3	2.0	G_3	>2.0	G_3	$Z \geq 3$	8

* Levels A_1 and D_1 are commandable to 50 keV. Level F_1 is commandable to 30 keV.

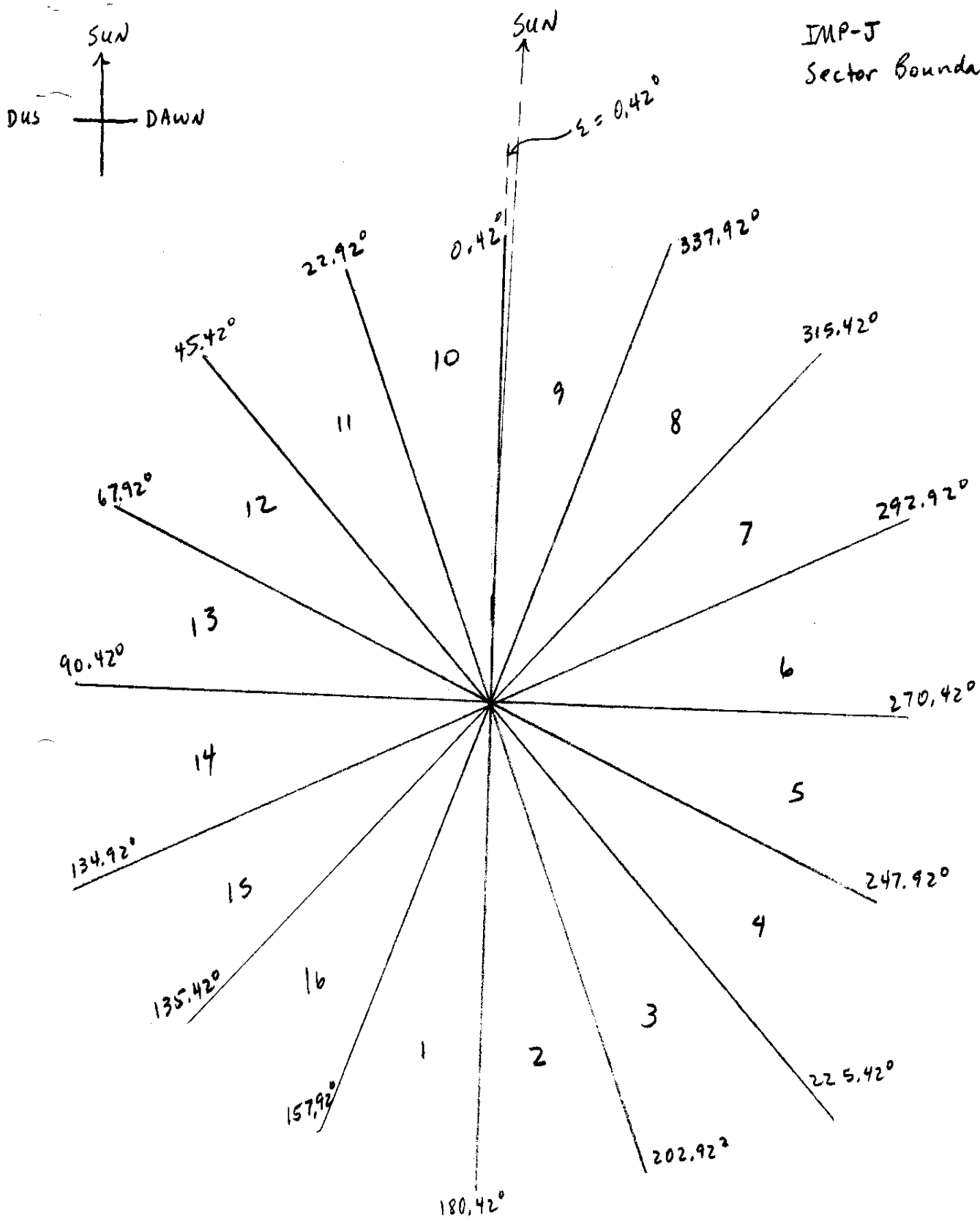
**Low energy proton response is 50 keV due to aluminum dead layer. For the same reason, detector F low energy proton response is 0.024 MeV and 0.038 MeV on IMP 7 and 8 respectively.

As a safeguard against possible failure in the logic circuitry, a commandable mode was incorporated into the EPE whereby all discriminator levels could be routed to the multiplexers, thereby giving discriminator output counts only. Further safeguards include commandable low-level discriminators on detectors A, D, and F to protect against possible detector noise increases, and bias voltages commandable in four steps from normal operating bias to one-half that value to guard against excessive detector bias current. None of these safeguard modes has been required to date. For reference, routinely monitored EPE status and housekeeping functions are listed in Tables 3 and 4.

IMP-H
Sector Boundaries



IMP-J
Sector Boundaries



Aug 78 p. 1

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
ENVIRONMENTAL RESEARCH LABORATORIES
Boulder, Colorado 80302

RECEIVED NSSDC
DATE 8-15-78
By

August 10, 1978

Dr. James I. Vette
Code 601.
GSFC
Greenbelt, MD 20771

Dear Dr. Vette:

This is to inform you that I am sending a magnetic tape of IMP-7 and IMP-8 data for the December Coordinated Data Analysis Workshop. Attached is a format for the tape. This format, the "4-album average", is a part of our regular IMP production, but I have written a special tape containing only the time periods requested for the workshop.

Also included in the shipment is microfilm for histogram plots produced from this tape. My letter to you of April 12, 1978, explained the 4-album average histograms. To recapitulate, the counts per second are averaged over four "albums" (about 6 minutes) and over the spin sectors.

I hope this will fill the need for IMP data for your workshop, and that our exceeding the parameter limit does not cause great problems. If you need more information or assistance, please let me know.

Sincerely,

Linda M. Bath

Linda M. Bath
Space Environment Laboratory

Enc.

Tapes 72-073A - 05B IMP-H N
73-078A - 05D IMP-J mounting

Film 72-073A - 05D IMP-H
73-078A - 05C IMP-J

Aug 78 p.2

This tape is 7-track, unlabelled, 800BPI, binary, (odd parity) with 23Ø 60-bit words per physical (and logical) record. It contains four files as follows:

1)	415 records	IMP-H for 12/1/77 @ 1500 - 12/2/77 @ 2400
2)	130 records	IMP-H for 12/11/77 @ 2100 - 12/12/77 @ 0730
3)	353 records	IMP-J for 12/1/77 @ 1500 - 12/2/77 @ 2400
4)	114 records	IMP-J for 12/11/77 @ 2100 - 12/12/77 @ 0730

Each file is terminated by a single EOF, except file 4, which is followed by at least two EOFs.

All words are 60-bit CDC-6600 floating point except words 1-4 and 197-212, which are 60-bit CDC integers.

Aug 78 ?, p. 3

Words	Item	
1	Satellite ID	(1=IMP-H, 2=IMP-J)
2	Year (yy)	
3	Day of year	(1=Jan. 1)
4	Time of day,	(in seconds)
5-20	L_1 sectors	(counts/seconds)
21-36	L_2 "	"
37-52	L_3 "	"
53-68	L_4 "	"
69-76	L_5 "	"
77-84	L_6 "	"
85-100	L_7 "	"
101-116	L_8 "	"
117-124	L_9 "	"
125-132	L_{10} "	"
133-140	L_{11} "	"
141-148	L_{12} "	"
149-164	F "	"
165-180	G_1 "	"
181-188	G_2 "	"
189-196	G_3 "	"
197-212	Number of pages for each channel average (L_1-L_{12},F,G_1,G_2,G_3)	

Coordinate information

213	Longitude (deg.)	
214	Latitude (deg.)	Geocentric Coordinates
215	Longitude (deg.)	
216	Latitude (deg.)	Geomagnetic Coordinates
217	R (earth radii)	geomagnetic coordinate of satellite
218	r, radial dist. of satellite from center of earth	
219	GSE	Geocentric Solar Ecliptic Coordinates (in earth radii)
220	GSE^x	
221	GSE^y	
222	GSM^z	Geocentric Solar Magnetospheric Coordinates (in earth radii)
223	GSM^m	
224	GSM^y	
225	Latitude of sub-solar point in geomagnetic coordinates (deg.)	
226	Satellite-earth-sun angle, Lsep (deg.)	
227	Spin period (seconds)	
228	Right Ascension	Spin vector in celestial inertial (deg.)
229	Declination	
230	Unused	

Feb 78 p. 1

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
ENVIRONMENTAL RESEARCH LABORATORIES
Boulder, Colorado 80302

February 8, 1978

Ralph Post
GSFC Code 601
NSSDC
Greenbelt, MD 20771

Dear Ralph:

Enclosed is the master list of 4-album average tapes for both IMP-7(H) and IMP-8(J). The "tape title" listed as IMPHAVEnnn, etc., will appear on your tapes as IHnnn.

I apologize for the delay in getting this information to you. If you have any other questions, feel free to call.

Sincerely,

Linda Bath

Linda M. Bath
Space Environment Laboratory

Enc.

Jan 31, 1978

Attached is a master list of the inclusive dates and times for all 4-Album Average Tapes. Please keep this list for your files.

(Note - the Catalog number is for our own records - please ignore.)

Rosemary Miller
SEL, NOAA/ERL

Feb 78 p.3

Tr 9 Title	Catalog Number	Thru Decom Run	Begin Time	Begin Date	End Time	End Date	Drv 12 Run	Sent to Don
HAVE001	D21774	3	23:02	9/25/72	01:07	10/11/72	✓	
002	D21778	7	01:06	[illegible]/72	12:12	10/27/72	✓	
003	D21241	11	12:12	10/27/72	17:23	11/12/72	✓	
004	D21780	15	17:17	11/12/72	22:56	11/28/72	✓	
005	D21781	19	22:56	11/28/72	04:02	12/15/72	✓	
006	D21784	23	04:01	12/15/72	07:18	12/31/72	✓	
007	D21785	27	07:14	12/31/72	[illegible]	1/16/73	✓	
008	D21786	31	10:36	1/16/73	[illegible]	2/01/73	✓	
009	D21787	35	13:23	2/01/73	20:06	2/17/73	✓	
010	D21788	39	20:13	2/17/73	[illegible]	3/05/73	✓	
011	D21789	43	23:43	3/05/73	02:02	3/22/73	✓	
012	D21790	47	02:07	3/22/73	07:35	4/07/73	✓	
013	D21791	51	07:33	4/07/73	13:52	4/23/73	✓	
014	D21792	55	13:57	4/23/73	11:19	5/09/73	✓	
015	D21822	59	15:45	5/09/73	21:52	5/25/73	✓	
016	D21824	63	21:51	5/25/73	[illegible]	[illegible]	✓	
017	D21825	67	02:21	6/11/73	04:47	6/27/73	✓	
[illegible]	D21827	71	04:47	6/27/73	[illegible]	[illegible]	✓	
[illegible]	D21828	75	04:15	7/13/73	07:59	7/29/73	✓	
[illegible]	D21829	79	07:57	7/29/73	11:04	8/14/73	✓	
021	D21830	83	11:02	8/14/73	16:40	8/30/73	✓	
022	D21831	87	16:30	8/30/73	19:10	9/15/73	✓	
023	D21832	91	19:06	9/15/73	23:46	10/01/73	✓	
024	D21834	95	23:55	10/01/73	02:00	10/18/73	✓	
025	D21835	99	02:04	10/18/73	00:32	11/03/73	✓	
026	D21836	103	00:35	11/03/73	01:16	11/19/73	✓	
027	D21308	107	01:26	11/19/73	05:54	12/05/73	✓	
028	D21309	111	05:51	12/05/73	12:00	12/21/73	✓	
029	D21310	115	12:02	12/21/73	11:43	1/06/74	✓	
030	D21667	119	11:45	1/06/74	12:52	1/22/74	✓	
031	D21668	123	14:27	1/22/74	16:00	2/07/74	✓	
032	D21669	127	16:12	2/07/74	13:16	2/23/74	✓	
033	D21670	131	13:20	2/23/74	11:49	3/11/74		
034	D21671	135	11:55	3/11/74	16:44	3/27/74		
035	D21672	139	16:46	3/27/74	00:22	4/13/74		
036	D21673	143	00:27	4/13/74	09:22	4/29/74		
037	D31565	147	09:28	4/29/74	01:22	5/15/74		
038	D21682	151	01:29	5/15/74	10:28	5/31/74		
039	D21683	155	10:33	5/31/74	04:44	6/16/74		
040	D21659	[illegible]	04:50	6/16/74	04:12	7/02/74		
[illegible]	H40318	16[illegible]	04:21	7/02/74	10:56	7/12/74		
042	D21660	167	11:43	7/12/74	01:12	8/04/74		
043	D21661	171	01:12	8/04/74	16:39	8/20/74		
044	D31662	175	16:46	8/20/74	17:01	9/05/74		
045	H40307	179	17:05	9/05/74	23:24	9/21/74		

Feb 78 p.4

VER	Title	Catalog Number	Decom Run	Begin Time	Begin Date	End Time	End Date	Dro 12 Run	Sent to Dan
HAVE	046	H40312	183	23:29	9/21/74	20:34	10/07/74		
	047	H40313	187	22:33	10/07/74	15:29	10/23/74		
	048	D32488	191	15:34	10/23/74	17:59	11/08/74		
	049	D32493	195	18:04	11/08/74	05:34	11/25/74		
HAVE	050	D20044	196-199	5:44	11/25/74	18:02	12/11/74	✓	Bnd 1
	051	D20045	203	18:13	12/11/74	06:29	12/28/74	✓	
	052	D20045	207	06:31	12/28/74	05:45	1/13/75	✓	
	053	D20146	211	05:49	1/13/75	06:51	1/29/75	✓	
	054	D20146	215	07:13	1/29/75	05:21	2/14/75	✓	
	055	D22664	219	05:29	2/14/75	12:40	3/02/75	✓	
	056	D22667	223	12:43	3/02/75	21:02	3/18/75	✓	
	057	D22695	227	20:56	3/18/75	12:10	4/04/75	✓	
	058	D22807	231	00:03	4/04/75	17:51	4/20/75	✓	
	059	D22807	235	06:55	4/20/75	15:18	5/06/75	✓	
	060	D22438	239	00:23	5/06/75	22:02	5/22/75	✓	
	061	D22526	243	00:03	5/22/75	17:40	6/07/75	✓	
	062	D22534	247	00:46	6/07/75	02:46	6/24/75	✓	
	063	D22535	251	00:48	6/24/75	12:40	7/10/75	✓	
	064	D22538	255	00:47	7/10/75	06:02	7/27/75	✓	
	065	D12007	259	00:16	7/27/75	12:03	8/12/75	✓	X
	066	D12008	263	00:04	8/12/75	15:35	8/28/75	✓	
	067	D12009	267	00:39	8/28/75	11:46	9/13/75	✓	
	068	D12010	271	00:40	9/13/75	13:13	9/29/75	✓	
	069	D22741	275	00:21	9/29/75	19:46	10/15/75	✓	
	070	D22862	279	00:59	10/15/75	09:14	11/01/75	✓	
	071	D22863	283	00:24	11/01/75	16:19	11/17/75	✓	
	072	D22864	287	00:37	11/17/75	23:50	12/02/75	✓	
	073	H20422	291	00:31	12/03/75	23:08	12/19/75	✓	
	074	H10373	295	00:13	12/20/75	23:24	1/04/76	✓	Bnd 3
	075	H10371	299	00:31	1/04/76	04:34	1/21/76	✓	
	076	H20963	303	00:46	1/21/76	03:41	2/06/76	✓	
	077	H20966	307	00:44	2/06/76	23:41	2/22/76	✓	
	078	D31609	311	00:40	2/22/76	02:46	3/10/76	✓	
	079	D31637	315	00:14	3/10/76	14:08	3/26/76	✓	
	080	D31649	319	00:12	3/26/76	14:52	4/11/76	✓	
	081	D31675	323	00:13	4/11/76	14:35	4/27/76	✓	
	082	D40767	327	00:43	4/27/76	19:35	5/13/76	✓	
	083	D40768	331	00:40	5/13/76	03:08	5/29/76	✓	
	084	D40770	335	00:15	5/29/76	13:13	6/15/76	✓	
	085	D40771	339	00:24	6/15/76	00:57	7/02/76	✓	
		D40791	343	00:06	7/02/76	06:02	7/18/76	✓	
	087	D41182	347	00:04	7/18/76	06:52	8/03/76	✓	Bnd 4
	088	D41170	351	00:53	8/03/76	05:19	8/19/76	✓	
	089	D41181	355	00:23	8/19/76	13:03	9/04/76	✓	
	090	D41190	359	00:22	9/04/76	23:03	9/20/76	✓	
	091	D41192	363	[illegible]	[illegible]	[illegible]	[illegible]	✓	

Feb 78 p.5

Tape 9 Title	Catalog Number	Decom Run	Begin Time	Begin Date	End Time	End Date	Drv 12 Run	Sent to Don			
PHAVE 092	D20367	367	02:09	10/07/76	10:12	10/23/76					
093	D20368	371	11:13	10/23/76	15:30	11/08/76					
094	D20369	375	16:03	11/08/76	17:08	11/24/76					
095	D20370	379	19:28	11/24/76	00:19	12/11/76					
096	D20371	383	00:41	12/11/76	05:52	12/27/76					
097	D20501	387	06:37	12/27/76	14:52	1/12/77					
098	D20503	391	15:16	1/12/77	18:57	1/28/77					
099	D20504	395	19:02	1/28/77	05:24	2/14/77					
100	D20505	399	05:35	2/14/77	08:08	3/02/77					
101	D21448	403	08:13	3/02/77	11:24	3/18/77					
102	D21449	407	11:35	3/18/77	15:19	4/03/77					
103	D21450	411	15:27	4/03/77	19:13	4/19/77					
104	D21464	415	19:13	4/19/77	04:57	5/06/77					
105	D21465	419	05:08	5/06/77	10:14	5/22/77					
106	D21470	423	10:51	5/22/77	15:43	6/07/77					
107	D21484	427									
108	D21525	431									
1	D21526	435									
110	D21527	439									
111	D21[illegible]	443									
112		447									

Feb 78 p.6

ER 1 Title	Catalog Number	Through Decom Run	Begin Time	Begin Date	End Time	End Date	Drv 12 Run	Sent to Dem
JAVE 001	D21751	4	14:12	10/30/73	18:34	11/15/73		
002	D21752	8	18:42	11/15/73	01:46	12/02/73		
003	D21764	12	01:53	12/02/73	18:10	12/18/73		
004	D21766	16	18:11	12/18/73	06:21	1/04/74		
005	D21732	20	06:22	1/04/74	10:45	1/20/74		
006	D21734	24	10:51	1/20/74	05:16	2/05/74		
007	D21735	28	05:10	2/05/74	00:19	2/21/74		
008	D21736	32	00:27	2/21/74	22:43	3/06/74		
009	D21728	36	22:54	3/06/74	09:25	3/25/74		
010	D21729	40	09:46	3/25/74	20:00	4/10/74		
011	D21730	44	20:07	4/10/74	06:57	4/27/74		
012	D21731	48	07:05	4/27/74	14:11	5/13/74		
013	D21767	52	14:16	5/13/74	11:25	5/29/74		
014	D21768	56	11:30	5/29/74	05:55	6/14/74		
015	D21773	60	06:17	6/14/74	01:25	7/01/74		
016	H40316	64	01:35	7/01/74	15:12	7/16/74		
017	D21666	68	15:23	7/16/74	17:42	8/01/74		
	D21665	72	17:46	8/01/74	02:34	8/18/74		
019	D21664	76	02:34	8/18/74	05:53	9/03/74		
020	H4[illegible]404	80	06:04	9/03/74	03:29	9/19/74		
021	H40482	84	03:38	9/19/74	23:10	10/04/74		
022	D21663	88	23:14	10/04/74	23:29	10/[illegible]/74		
023	H4[illegible]486	92	23:29	10/25/74	05:32	11/06/74		
024	H40547	96	05:32	11/06/74	13:57	11/22/74		
WC 025	D[illegible]	97-100	14:06	11/22/74	18:32	12/[illegible]/74		
[illegible]	[illegible]	101-104	19:05	12/[illegible]/74	20:13	12/[illegible]/74	✓	Dev 2
[illegible]	[illegible]	108	20:16	12/24/75	20:49	1/09/75	✓	
028	D21514	112	20:51	1/09/75	16:[illegible]	1/25/75	✓	
029	D2[illegible]	116	17:02	1/25/75	16:38	2/10/75	✓	
030	D2[illegible]	120	16:38	2/10/75	13:25	2/26/75	✓	
031	D2[illegible]6	124	13:24	2/26/75	14:[illegible]	3/14/75	✓	
032	D[illegible]	128	14:01	3/14/75	14:47	3/29/75	✓	
033	D[illegible]9	132	[illegible]	3/29/75	[illegible]	4/15/75	✓	
034	D[illegible]4	136	00:03	4/15/75	10:41	5/04/75	✓	
035	D[illegible]7	140	00:45	5/01/75	04:55	5/17/75	✓	
036	D[illegible]	144	00:53	5/17/75	03:[illegible]	6/03/75	✓	
037	[illegible]	148	00:47	6/03/75	01:44	6/18/75	✓	
038	D[illegible]	152	00:46	6/18/75	01:04	7/04/75	✓	
[illegible]	[illegible]	156	23:58	7/03/75	[illegible]	7/[illegible]/75	✓	
[illegible]	[illegible]	160	00:14	7/20/75	[illegible]	[illegible]/75	✓	
[illegible]	[illegible]	164	00:[illegible]	8/02/75	18:07	[illegible]/75	✓	
042	D13[illegible]	168	00:14	8/20/75	11:[illegible]	9/[illegible]/75	✓	
043	D18[illegible]	172	00:42	9/02/75	12:18	9/21/75	✓	
044	D22[illegible]	176	00:50	9/21/75	09:[illegible]	10/07/75		#2
045	D2[illegible]07	180	00:59	10/07/75	11:07	10/23/75		

Feb 78 p. 7

9	Catalog Number	Thru Decom Run	Begin Date	Begin Time	End Date	End Time	Dru 12 Run	Sent to Den
WE 046	D22868	184	10/23/75	00:23	11/08/75	11:34	✓	
047	D22869	188	11/08/75	00:55	11/24/75	07:35	✓	
048	H10425	192	11/24/75	00:45	12/10/75	04:59	✓	2
049	H10426	196	12/10/75	00:59	12/25/75	21:40	✓	
050	H10427	200	12/26/75	00:56	1/11/76	02:54	✓	
051	H30704	204	1/11/76	00:53	1/27/76	01:02	✓	Box E 3
052	H30705	208	1/27/76	00:01	2/11/76	23:48	✓	
053	D31031	212	2/11/76	00:52	2/28/76	01:02	✓	
054	D31032	216	2/28/76	01:00	3/14/76	19:43	✓	
055	D31033	220	3/14/76	00:54	3/30/76	20:46	✓	
056	D21481	224	3/30/76	00:55	4/15/76	22:21	✓	
057	D41482	228	4/15/76	22:21	5/01/76	23:24	✓	
058	D31487	232	5/01/76	00:32	5/17/76	18:37	✓	
059	D41456	236	5/17/76	00:32	6/03/76	03:13	✓	
060	D41474	240	6/03/76	00:40	6/19/76	02:38	✓	
061	D41475	244	6/19/76	00:47	7/05/76	04:08	✓	
062	D41488	248	7/05/76	00:44	7/21/76	10:10	✓	
063	D41489	252	7/21/76	00:24	8/06/76	11:19	✓	
064	D41534	256	8/06/76	00:36	8/22/76	10:05	✓	
065	[illegible]	260	8/22/76	00:20	9/07/76	10:35	✓	
066	D41538	264	9/07/76	00:57	9/23/76	17:38	✓	
067	D41563	268	9/23/76	00:39	10/09/76	20:57	✓	
068	D41637	272	10/09/76	01:00	10/25/76	23:00	✓	
069	D20374	276	10/25/76	23:05	11/11/76	02:46		
070	D20375	280	11/11/76	03:56	11/27/76	03:00		
071	D20376	284	11/27/76	04:00	12/13/76	02:30		
072	D20506	288	12/13/76	03:24	12/29/76	02:05		
073	D20507	292	12/29/76	02:15	1/14/77	09:52		
074	D20508	296	1/14/77	10:24	1/30/77	14:28		
075	D20509	300	1/30/77	14:32	2/15/77	21:46		
076	D20372	304	2/15/77	21:51	3/04/77	03:11		
077	D20373	308	3/04/77	03:10	3/20/77	01:46		
078	D21528	312	3/20/77	02:24	4/05/77	00:05		
079	D21530	316	4/05/77	00:15	4/21/77	03:24		
080	D21531	320	4/21/77	03:35	5/07/77	08:54		
081	D21533	324	5/07/77	09:51	5/23/77	18:35		
082	D21535	328	5/23/77	18:46	6/09/77	04:00		
083	D21537	332	6/09/77	04:05	6/25/77	04:13		
084	D21538	336						
085	D21539	340						
086	D21540	344						
087	D21541	348						
088	D21551	352						
089	D03814	356						

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
ENVIRONMENTAL RESEARCH LABORATORIES
Boulder, Colorado 80302

Jan 78 p.1

January 27, 1978

Mr. Ralph Post
GSFC Code 601
NSSDC
Greenbelt, MD 20771

Mr. Post:

Enclosed is a format description for the IMP-7 and IMP-8 "Four-Album Average" tapes which you will be receiving from us and from Ed Roelof at APL. The hi-lited paragraph is specific to the particular format you will receive. In addition, you should know that the fixed-length blocks were written on our CDC machine as 123 60-bit words, so they represent 7380 bits or 230.63 32-bit words per block. If you have any other questions concerning the format, please feel free to call or write me about them.

We are copying the IMP-7 tapes numbered 24 through 35, covering the third six-month period from launch, and Ed should supply you with IMP-7 tapes 1 through 12 and IMP-8 tapes 1 through 25, per our agreement with Joe King.

We are also preparing copies of the microfilm for the "Four-Album Average histograms", which will be complete for launch through May 1977, and for the "Poorman's contours", which will cover the first half of 1976 for both satellites. Enclosed are descriptions for these two displays, and examples of each.

This film plus the tapes should fulfill your data request. We hope to have them sent to you some time within the next month. Again if you have questions, please write or call me at 8-323-3693.

Sincerely,

Linda M. Bath

Linda M. Bath
Space Environment Laboratory, R43

Enc.

Four-Album- :rage
Output-Tape Description

Jan 78 p.2
52

Words	Item	
1	Satellite ID	(1=IMP-H, 2=IMP-J)
2	Year (yy)	
3	Day of year	(1=Jan. 1)
4	Time of day,	(in seconds)
5-20	L_1 sectors	(counts/seconds)
21-36	L_2 "	"
37-52	L_3 "	"
53-68	L_4 "	"
69-76	L_5 "	"
77-84	L_6 "	"
85-100	L_7 "	"
101-116	L_8 "	"
117-124	L_9 "	"
125-132	L_{10} "	"
133-140	L_{11} "	"
141-148	L_{12} "	"
149-164	F "	"
165-180	G_1 "	"
181-188	G_2 "	"
189-196	G_3 "	"
197-212	Number of pages for each channel average (L_1-L_{12},F,G_1,G_2,G_3)	

Coordinate information

213	Longitude (deg.)	
214	Latitude (deg.)	Geocentric Coordinates
215	Longitude (deg.)	
216	Latitude (deg.)	Geomagnetic Coordinates
217	R (earth radii)	geomagnetic coordinate of satellite
218	r, radial dist. of satellite from center of earth	
219	GSE_x	Geocentric Solar Ecliptic Coordinates (in earth radii)
220	GSE_y	
221	GSE_z	
222	GSM_m	Geocentric Solar Magnetospheric
223	GSM_y	Coordinates (in earth radii)
224	GSM_z	
225	Latitude of sub-solar point in geomagnetic coordinates (deg.)	
226	Satellite-earth-sun angle, Lsep (deg.)	
227	Spin period (seconds)	
228	Right Ascension	Spin vector in celestial
229	Declination	inertial (deg.)
230	Unused	

The TI tapes are 9-track, 800 bpi, fixed-block, unlabelled. All words are 32-bit IBM-360 floating-point, except words 1-4 and 197-212 which are 32-bit IBM-360 integers.

The SEL tapes are 7-track, 556 bpi, labelled, F=S. All words are 60-bit CDC-6600 floating-point, except words 1-4 and 197-212 which are 60-bit CDC-6600 integers.

D-31987

$EXE DUMPTP BS

DUMP OF TAPE KZOUT-1 10/1/73 - 10/18/73 D-31004

INPUT TAPE KZOUT-1 ON MS1
DATA INPUT H9 FL 1 1 1

FILE 1 RECORD 173 LENGTH 923BYTES

(0)	00000001	00000049	00000112	00015084	408077AA	00000000	41100EF1	40807784	408077BD	4118166B	
(40)	40807784	40807784	41100EF7	41201DE5	4118166C	4118166C	00000000	00000000	00000000	00000000	256
(80)	00000000	40807784	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(120)	00000000	00000000	00000000	40807797	00000000	00000000	00000000	00000000	00000000	00000000	
(160)	00000000	00000000	00000000	00000000	00000000	00000000	4080774B	00000000	00000000	00000000	16
(200)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	2
(240)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	274
(280)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(320)	00000000	00000000	00000000	00000000	00000000	00000000	4118166C	00000000	00000000		
(360)	00000000	00000000	4080774B	436DA60A	00000000	00000000	00000000	00000000	41100EEE	41100EF2	
(400)	41100EF1	41100EFC	40807784	00000000	408077AA	00000000	00000000	00000000	408077BD	00000000	
(440)	00000000	40807797	408077D0	40807784	00000000	00000000	41100EEF	40807797	411C1A2A	40C0B376	
(480)	41201DE1	411412A8	4118166C	411412A7	00000000	00000000	00000000	00000000	00000000	00000000	
(520)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(560)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	41201DE7	40807797	
(600)	41100EF1	00000000	41201DE8	408077D0	41100EF2	41100EF6	4118166F	41181672	41100EF7	00000000	
(640)	41100EF6	40807797	41181671	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(680)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(720)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(760)	00000000	00000000	00000000	00000000	00000000	00000000	00000008	00000008	00000008	00000008	
(800)	00000008	00000008	00000008	00000008	00000008	00000008	00000008	00000008	00000008	00000008	
(840)	00000008	00000008	C23E22D8	4173DE4D	41733782	4212F381	4229EF9E	453A6A06	C2125A4E	421C7DB5	
(880)	4212D99	C2125A4E	421F43CD	419CBFAC	C17CCD0E	42774166	4353079C	425B63D7	C240EE14	00000000	
(920)	000000										

FILE 1 RECORD 4322 273 LENGTH 923BYTES

(0)	00000001	00000049	00000123	00001AD9	41484392	413C384F	4138348E	41544ED3	41403C0A	41302D0D	
(40)	413C384B	41787C9B	41645DDF	413C3850	41504B1A	41403C11	41403C12	41645DDD	414C4754	413C384A	256
(80)	00000000	00000000	00000000	00000000	00000000	00000000	40C0B42F	40403BFE	00000000		
(120)	00000000	40403C14	40403C14	40403C21	40C0B40F	00000000	00000000	00000000	00000000	00000000	32
(160)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(200)	00000000	00000000	00000000	40403BFE	00000000	00000000	00000000	00000000	00000000	00000000	3
(240)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(280)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	291
(320)	00000000	00000000	00000000	00000000	427C2FD5	427A0BB3	4280781C	42753A67	42706919	42739F4B	
(360)	42720432	4279C730	42149BCC	4388036E	00000000	00000000	00000000	4212BC2E	426E8979	4277A30B	
(400)	4044843D	408908C2	40890885	4044844E	4044844B	40448465	41112115	40448465	40448448	00000000	
(440)	408908C2	4044845C	41156958	408908A2	00000000	41112115	41201E06	411A1864	40E0D23C	40C0B42C	
(480)	411412C3	411C1A46	41221FE5	411412C5	00000000	00000000	00000000	00000000	00000000	00000000	
(520)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(560)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	423542DB	42302D0A	
(600)	422F1AF9	4232DA35	4231C824	422A8E2F	4229C0A2	422AD2B4	4229C0A4	422FA402	422A0528	422D7EDF	
(640)	422ED674	42313F1B	423A9D32	423654ED	00000000	00000000	00000000	00000000	00000000	00000000	
(680)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(720)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(760)	00000000	00000000	00000000	00000000	00000000	00000000	00000010	00000010	00000010	00000010	
(800)	00000010	00000010	0000000F	0000000F	00000010	00000010	00000010	00000010	0000000F	0000000F	
(840)	00000010	00000010	4180EE49	C150CA12	424C50D5	C1252C10	421F1A53	45305A3E	C2170D29	C1FF50B8	
(880)	C1D6D739	C2170D29	C212BB10	C192B7DA	C212C80A	4289DD22	43530786	425B1EB8	C242BD70	00000000	
(920)	000000										

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	4322	4323	923	0	0	0	0	0	0

EOJ DUMP STOPPED AFTER FILE 1 # OF PERMANENT READ ERRORS 0

START TIME 03/23/78 12:47:00 STOP TIME 03/23/78 12:49:00

D-31009

DUMP OF TAPE KZOUT-6

12/21/73 - 1/6/74

D 31009

INPUT TAPE KZOUT-6 ON MS1
DATA INPUT H9 FL 1 1 1

FILE 1 RECORD 1 LENGTH 923BYTES

(0)	00000001	00000049	00000163	0000A970	00000000	00000000	421761FD	41CD73AC	42403425	43161FDE	1
(40)	431610A5	425FD46D	428E9868	428C4BF0	41A8AC29	00000000	00000000	00000000	00000000	4219AE75	256
(80)	00000000	00000000	00000000	424A4146	00000000	00000000	00000000	00000000	00000000	00000000	
(120)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	96
(160)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(200)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	3
(240)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(280)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	355
(320)	00000000	00000000	00000000	00000000	00000000	422D8AC3	4216C561	00000000	4267ECC1	41CD73AC	
(360)	00000000	00000000	4216C561	44522E54	00000000	00000000	00000000	4216C561	00000000	00000000	
(400)	00000000	00000000	00000000	00000000	00000000	41AF28F4	00000000	00000000	00000000	00000000	
(440)	00000000	00000000	00000000	00000000	00000000	00000000	41CD73AC	41478812	41AE41E8	00000000	
(480)	41478812	4217BB59	41478812	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(520)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(560)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	4216C561	41CD73AC	
(600)	423073D7	423073D7	4288A049	42B4F821	42FAFE6F	42915B85	41CD73AC	41CD73AC	00000000	4219AE75	
(640)	41CD73AC	4219AE75	4216C561	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(680)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(720)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(760)	00000000	00000000	00000000	00000000	00000000	00000000	00000002	00000001	00000002	00000003	
(800)	00000002	00000002	00000002	00000003	00000002	00000002	00000003	00000003	00000002	00000001	
(840)	00000001	00000001	C257C29C	4022F87B	C2132532	41B4CF63	42262F30	45392D26	411A5B89	C224B719	
(880)	40A9ED45	411A5B89	C223CD90	41829192	C212AE37	42576E6F	4247D318	42580CCC	C242828F	00000000	
(920)	000000										

FILE 1 RECORD 4254 LENGTH 923BYTES

(0)	00000001	0000004A	00000006	0000A3B6	40807E75	40403F3D	411413C2	40403F3D	40807E72	40403F3A	
(40)	40403F3C	00000000	40C0BDB0	40C0BDB3	41100FCE	40403F3C	40403F3B	41100FCE	40403F38	00000000	
(80)	00000000	00000000	00000000	00000000	00000000	00000000	40403F3D	00000000	40403F3B	00000000	
(120)	00000000	40807E77	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(160)	40403F3D	00000000	00000000	00000000	00000000	00000000	00000000	40403F3C	00000000	00000000	
(200)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(240)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(280)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(320)	00000000	00000000	00000000	00000000	40807E75	40403F3C	40403F39	00000000	41100FCE	00000000	
(360)	41100FCE	40403F3C	00000000	4398962C	00000000	00000000	00000000	00000000	00000000	40807E71	
(400)	40403F3B	40403F3B	40403F3D	40C0BDB2	40403F3D	40403F3D	40807E77	00000000	00000000	40403F3D	
(440)	40403F3B	40C0BDB6	00000000	00000000	00000000	41100FCE	411E1DA3	411413C2	411C1BA9	411211C8	
(480)	41222197	411211C8	411C1BAA	411413C2	00000000	00000000	00000000	00000000	00000000	40201F9C	
(520)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(560)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	411817B6	40403F38	
(600)	41100FCF	40807E78	40807E77	40C0BDAD	411413C2	40403F3C	40807E75	41100FCF	40C0BDB2	40C0BDB3	
(640)	41100FCE	411413C2	40807E76	40403F38	00000000	00000000	00000000	00000000	00000000	00000000	
(680)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(720)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	
(760)	00000000	00000000	00000000	00000000	00000000	00000000	00000010	00000010	00000010	00000010	
(800)	00000010	00000010	00000010	00000010	00000010	00000010	00000010	00000010	00000010	00000010	
(840)	00000010	00000010	C0A89152	416235D9	4245F1D2	41A5A186	4226B0A5	453A4CFD	42208A92	C132F963	
(880)	421252BA	42208A92	C116F56A	42128AED	C21350D5	421DBFBF	43530354	4258CA3D	C2424F5C	00000000	
(920)	000000										

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	4254	4255	923	0	0	0	0	0	0

EOJ DUMP STOPPED AFTER FILE 1 # OF PERMANENT READ ERRORS 0

START TIME 03/23/78 14:08:30 STOP TIME 03/23/78 14:10:14 ~~7:30~~ 10:14 ~~7:44~~