ISEE 1 AND 2
HIGH RESOLUTION BOW SHOCK MAGNETOMETER
77-102A-04J, 77-102B-04H

ISEE 3
3 CHANNEL FLUX, 256 SECOND OMNI SECTOR
78-079A-08A

ISEE 1 & 2

HIGH RESOL. BOW SHOCK MAGNETOMETER

77-102A-04J

77-102B-04H

These data sets have been restored. There was originally one 9-track, 1600 BPI tape written in Binary. There is one restored tape. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tape was created on an IBM 3081 computer and the restored tape was created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D number are as follows:

DR#	DS#	D#	FILES	TIME SPAN
DR005320	DS005320	D047101	1 - 92	10/25/77 - 12/25/78

ISEE 3

3-CH PROTN FLUX, 256-S OMNI&SECTOR

78-079A-08A

This data set has been restored. There was originally one 9-track, 800 BPI tape written in Binary. There is one restored tape. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tape was created on an IBM 3081 computer and the restored tape was created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D number are as follows:

DR#	DS#	D#	FILES	TIME SPAN
DR005301	DS005301	D047399	1 - 139	08/15/78 - 12/31/78

REQ AGENT	REQ NUMBER	ACQ NUMBER
DEW	V0126	HKH

ISEE 3

3 CHANNEL FLUX 256 SECOND SECTOR DATA

78-079A-08A

THIS DATA SET CONSISTS OF 1 MAGNETIC TAPE. THE TAPE IS BINARY, 9 TRACK, 800 BPI, AND HAS 139 FILES. THE D AND C NUMBER ARE AS FOLLOWS:

D#	C#	TIME SPAN
D-47399	C-22164	08/15/78-12/31/78

REQ AGENT	REQ NUMBER	ACQ AGENT
DEW	V0128	HKH

ISEE 1 AND 2

HIGH RESOLUTION BOW SHOCK MAGNETOMETER

77-102A-04J AND 77-102B-04H

THIS DATA SET CONSISTS OF 1 MAGNETIC TAPE. THE TAPE IS BINARY. 9 TRACK, 1600 BPI, AND HAS 92 FILES. THE TAPE WAS CREATED ON AN IBM 360/91 COMPUTER. THE D AND C NUMBER ARE AS FOLLOWS:

D#	C#	TIME SPAN
D-47107	C-22180	10/25/77-12/25/78

78-079A-08A
ISEE 3

The Data Tape for the Energetic Proton Anisotropy Spectrometer (EPAS) on the ISEE-3 Spacecraft

The details of this experiment may be found in Balogh et al 1978 and van Rooijen et al 1979. From a data handling viewpoint the essential factor is that the experiment records data over an integral number of spacecraft spins, so that the data collection time is asynchronous with respect to the (fixed) telemetry sampling period, since the telemetry sampling period is not equivalent to an integral number of spin periods. To deal with the variability between these two time periods, the internal, on-board data processing 'adjusts' the number of spin periods over which data is sampled, so that two periods remain approximately in phase. Thus the telemetry sampling period is 16 seconds while the spin period is $\sim$ 3 seconds, so that a typical sequence of data sampling times would be 15 seconds (5 spins), 15 seconds (5 spins), 18 seconds (6 spins), corresponding to a total of 48 seconds ($\equiv$ 3 telemetry sampling periods).

This non-constancy of the data sampling time causes some complication in the production of a data tape containing data 'averaged' over 256 seconds. An additional problem is the desire to avoid explicit floating point numbers on the tape which would give a consequent machine dependence for reading the tape.

A complete cycle of the telemetry sampling procedure takes 128 seconds i.e. 8 x 16 or 8 Minor Frames $\equiv$ 1 Major Frame. To produce the output tape, data is sampled over 2 Major Frames, corresponding to the nearest integral number of spacecraft spins to 256 seconds. If there is a time break, or bad data in one of the Major Frames, then data may be averaged only over 128 seconds i.e. one complete Major Frame, but data is never averaged over less than a complete Major Frame.

The format of the data record is given in Table 2. To provide an exact time sampling period, the number of spin periods over which the data have been averaged is given for each telescope. It is possible that the number of spin periods 'sampled' will vary between telescopes, although this is rare. The spin period of the spacecraft varies slowly with time, but may be taken as 3.04 seconds in 1978.

The sector counts given for each telescope, for the energy channel 91-147 keV, have not been normalised in any way, i.e. they represent the number of counts that occurred within the given number of spin periods. Since they are expressed in integer form overflow is possible. If this occurs in any of the 24 values, an overflow flag is set, and the overflowed value is replaced by zeros.

The isotropic component values obtained by averaging over the 3 telescope of the experiment could conceivably overflow if expressed in integer form. To cope with this situation the values have been expressed as two integer values which are converted into floating point by the formula given in Table 2. It has been normalised and expressed in units of particles cm^{-2} $sterad^{-1}$ sec^{-1} keV^{-1}.

The method by which the isotropic component was calculated is given in Appendix I.

Format of the ISEE-3 (EPAS) tape

The tape is 9 track, 800 bytes per inch.

There is one file per day.

Each file contains equally organised physical records, with length of 1280 words (= 2560 bytes), in integer form.

Each physical record contains 32 logical records (each 40 words long).

The first logical record of the physical record is a record label. The remaining logical records are either data records or buffer records. Where buffer records exist, they are always at the end of the last physical record of the file (i.e. day).

Record Label

Index	Content	Length (16 bit word)
1	Year	1
2	+Day Number	1
3,4	*Time of the first data record in the physical record	2
5,6	*Time of the last data record in the physical record	2
7	Number of logical records containing data in the physical record	1
8-40	Spare	33
		40

TABLE 1

* Time is expressed in two integers. The first is the hours of the day, the second is the seconds of the hour.

\+ January 1st ≡ Day Number 1

Data Record

Index	Content	Length (16 bit word)
1,2	*Start time of data record	2
3	Number of spins, telescope 1	1
4	Number of spins, telescope 2	1
5	Number of spins, telescope 3	1
6	+Overflow flag 1 if overflow occurred in the counts, 0 otherwise	1
7,8	**Isotropic component, 35-56 keV	2
9,10	Isotropic component, 91-147 keV	2
11,12	Isotropic component, 384-620 keV	2
13-20	8 sector counts, 91-147 keV, telescope 1	8
21-28	8 sector counts, 91-147 keV, telescope 2	8
29-36	8 sector counts, 91-147 keV, telescope 3	8
37-40	Spare	4
		40

TABLE 2

** The isotropic component is a floating point number, stored in two integers as follows : if I1 and I2 are the first and second integers respectively, R the floating point number can be obtained by the FORTRAN statement :

```
R = FLOAT(I1)*2.0**I2
```

+ This flag is set if overflow occurs in any of the sector counts. If overflow does occur the number is replaced by zeros.

Appendix I

Spherical harmonic analysis shows that the isotropic component of the counting rate is given by the formula

$$I = \frac{1}{\Sigma} [a_1 F_1 + a_2 F_2 + a_3 F_3]$$

where $F_i \equiv$ sum of the sector counts of telescope i

$a_i \equiv$ weighting factor for telescope i

$\Sigma = a_1 + a_2 + a_3$

and $a_1 = -0.12448$

$a_2 = 2.23879$

$a_3 = 1.43060$

PA

5

February 13,1986

Note on Data Set 78-079A-08A

In the data records the "istropic components", words 7 to 12, are expressed in units of differential flux, particles/cm^2-sterad-sec-Kev. They are caculated by computing the isotropic component of the counting rate as in Appendix I and dividing this by the geometrical factor (0.05 cm^2-sterad) and by the time period (number of spins x 3 sec/spin).

77-102A-04J,77-102B-04H
ISEE 1 AND 2

National Aeronautics and
Space Administration

Goddard Space Flight Center
Greenbelt, Maryland
20771

NASA

Reply to Attn of: 601

Dr. C. T. Russell
Institute of Geophysics and Planetary Physics
University of California, Los Angeles
Los Angeles, CA 90024

Dear Dr. ~~Russell~~ Chris:

Thank you for the magnetic tape containing the highest resolution magnetometer data for ISEE 1 and 2 data across the bow shock together with documentation. As you have indicated in your letter of November 16, 1981, we will maintain this as a proprietary data set for all non-ISEE investigators. Since the ISEE community is rather large, we may occasionally send someone to you who is considered a member of that group. However, we would rather err on that side of criterion.

In response to your question concerning submissions by Paschmann, I am enclosing two data set brief descriptions that contain the information you wish. Notice the first is ISEE 1 data and the second is ISEE 2 data; the time period is in excess of one year. If you wish these data, please let us know.

I have heard the pre-CDAW (or CDAW 6.0, as I call it) went well. I would like your impressions at some convenient time.

Sincerely,

Jim

James I. Vette
Director, NSSDC

Enclosure

UNIVERSITY OF CALIFORNIA, LOS ANGELES

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SANTA BARBARA · SANTA CRUZ

Institute of Geophysics and Planetary Physics
Los Angeles, California 90024

November 16, 1981

Dr. J.A. Vette
Code 601/NSSDC
Goddard Space Flight Center
Greenbelt, Maryland 20771

Dear Jim:

Enclosed please find a magnetic tape containing our highest resolution magnetometer data for 46 intervals of both ISEE-1 and -2 data across the bow shock together with documentation. I intend this for full release to the scientific community. However, for the time being I would like to restrict its distribution to the ISEE community. If there are requests from non-ISEE investigators I would like to deal with them on a case by case basis.

Also, could you tell me whether Paschmann has submitted summary plots or tapes of his fast plasma analyzer for a significant period of time?

Hope all is well with NSSDC.

Sincerely,

C.T. Russell

CTR:pr
enclosure

P.S. Also find enclosed a dump of the first and last record of each file.

The ISEE 1 and 2 Shock Tape

C.T. Russell and W.A. Livesey

Institute of Geophysics and Planetary Physics

University of California

Los Angeles, California 90024

Institute of Geophysics and Planetary Physics

Publication No. 2264

October 1981

Introduction

One of the most important attributes of the ISEE 1 and 2 missions is its dual spacecraft nature which allows timing of boundary motions, etc. However, to utilize this capability access to high resolution data on both spacecraft is necessary. To this end and to encourage the study of the bow shock, we have selected 46 intervals of high resolution ISEE 1 and 2 magnetometer data and placed them on a single tape. This report documents that tape and the solar wind conditions at the time of those shocks to the best of our knowledge at the time. We have used the NSSDC Interplanetary Data Book, the MIT Imp 7 and 8 solar wind data, data from the Los Alamos Solar Wind Experiment and/or the CNR/LPS Frascati Solar Wind Experiment whenever available. We are very grateful to these experimenters for their sharing of their data files with us. On the other hand, some of these data were preliminary and <u>all plasma parameters should be rechecked before publication</u>. The values in this document should be used only as a guide. The angles between the shock normal and the IMF, θ_{BN}, has been calculated using both a model normal and coplanarity and should be accurate to within $\pm 5°$. However, users of these data are encouraged to make their independent estimates also.

Included in this report are 4 second resolution plots covering the intervals on the tape plus intervals on either side for reference. The 4 second data are 12 second averages overlapped by 2/3 so they contain little high frequency information. The sample rate on the tape is either 4 or 16 samples per second. (These samples are overlapped by one-half in the instrument).

While providing this tape is meant to encourage work on the shock, it is not meant to discourage cooperation. We ourselves plan to continue study of these (and other) shocks and welcome interchange of data and ideas and stand willing to assist in the analysis.

The Tape

The tape is a 9-track 1600 BPI odd parity tape. Each block contains 100 logical records. Each logical record contains 12 32-bit integers.

Word	Description
1	Year eg '77
2	Day (1=Jan 1)
3	Month
4	Day of month
5	Hour
6	Minute
7	Second
8	Millisecond
9	Magnetic field x component in milligammas
10	Magnetic field Y "
11	Magnetic field Z "
12	Total magnetic field "

Missing data are filled with -9999999. The coordinate system is spacecraft coordinates which is close to solar ecliptic but is slightly ($\lesssim 2°$) different as well as slightly different from each other.

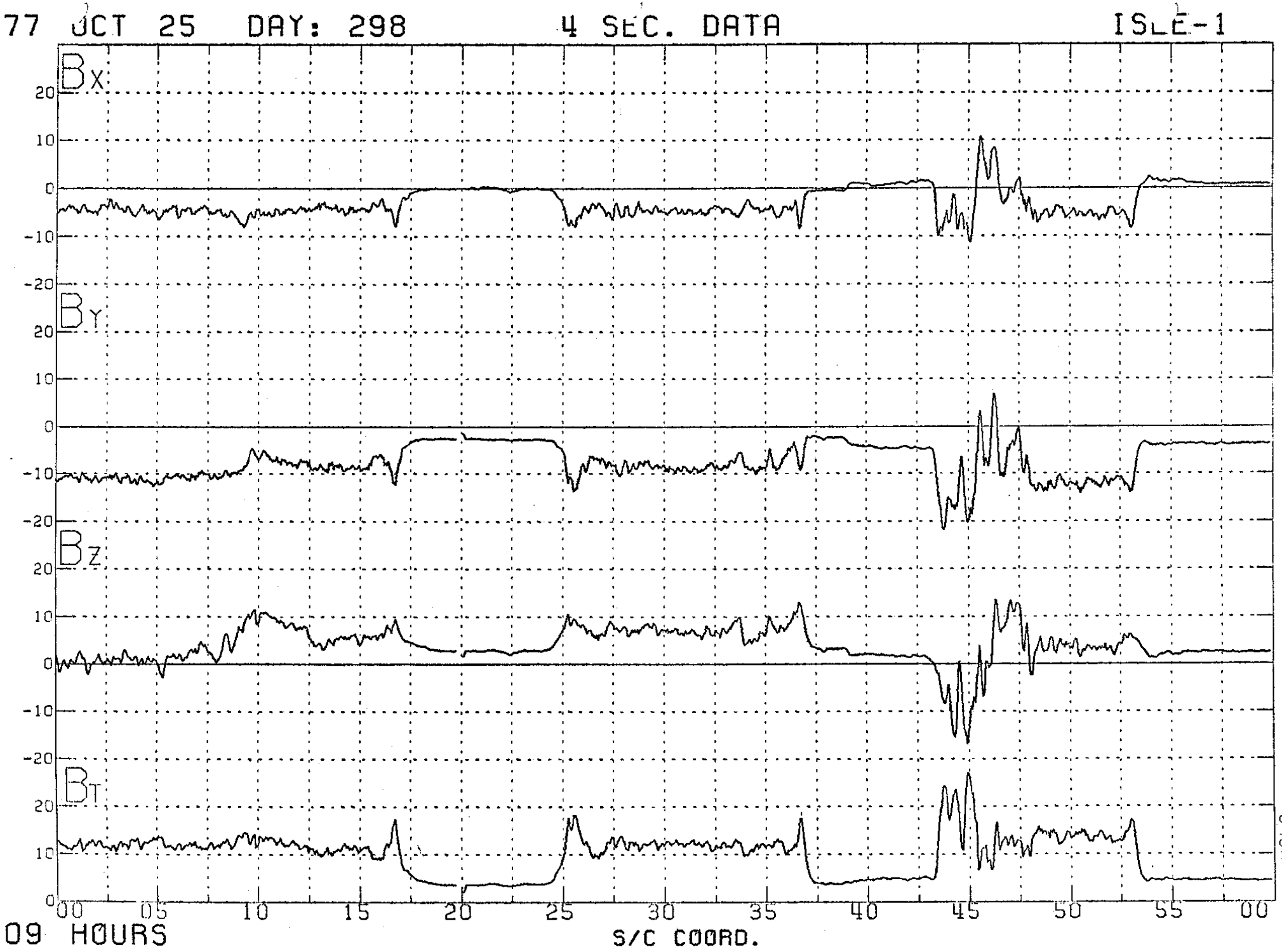
The Intervals

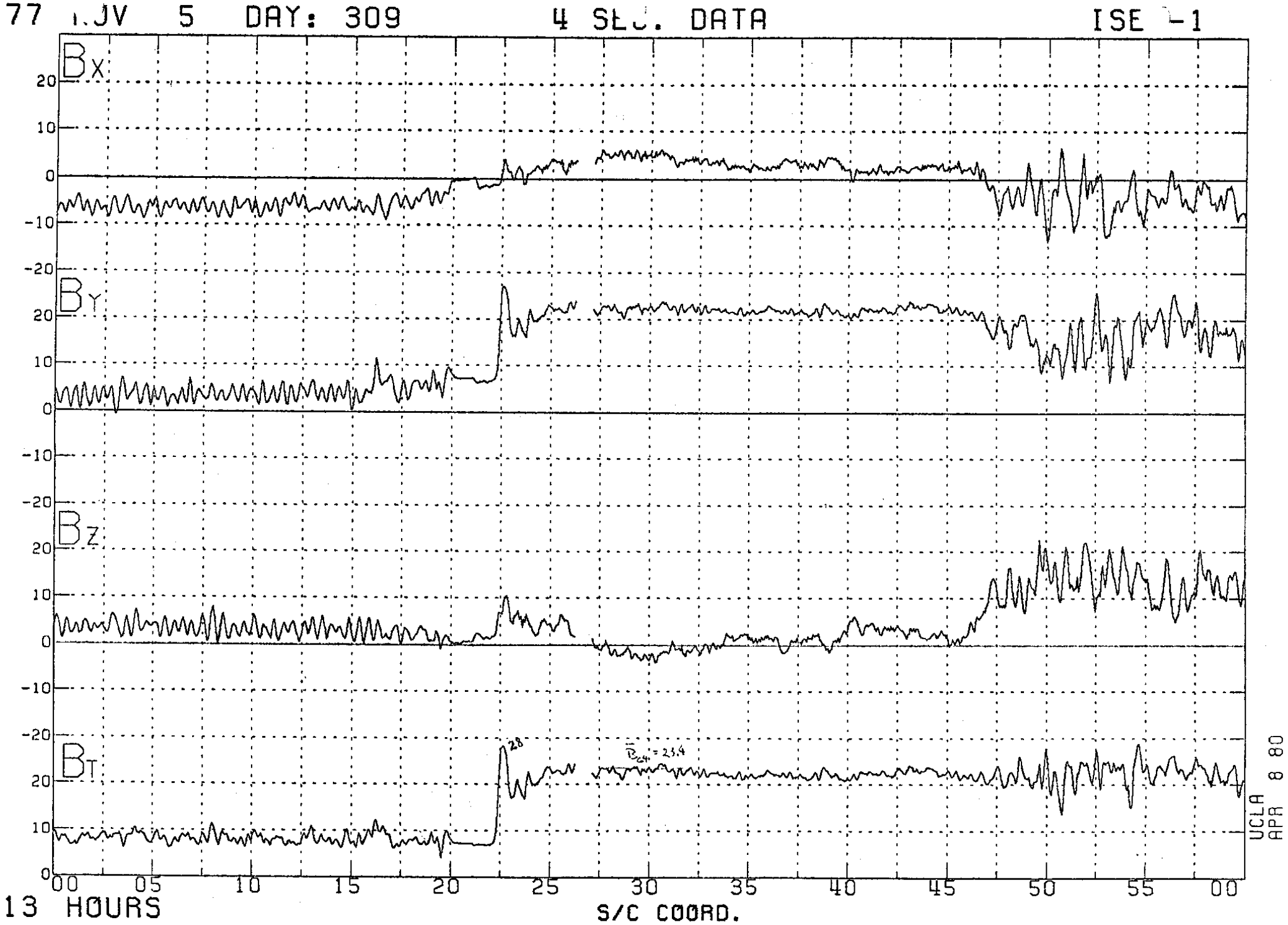
The following table gives the start and stop time, the bit rate, the magnetosonic Mach number, beta (the ratio of thermal to magnetic energy density) and θ_{BN} (the angle between the magnetic field upstream and the shock normal.) There are 92 files. The first 46 are ISEE 1 and the next 46 are ISEE 2 for the approximate same time intervals. Thus, files 1 and 47 form a pair and 46 and 92 form a pair.

							Preliminary Solar Wind Conditions		
File	Year	Day of Year	Date	Start	Stop	Bit Rate	Mms	β	θ_{BN}
1.	77	298	10/25	0910	0949	L	6.0	4.0	62°
2.	77	309	11/5	1320	1325	L	4.4	1.0	69°
3.	77	311	11/7	2250	2255	H	2.0	12.0	82°
4.	77	312	11/8	1850	1855	L	4.0	10.0	61°
5.	77	320	11/16	0305	0310	H	3.5	1.0	76°
6	77	322	11/18	1148	1154	L	3.5	2.5	52°
7.	77	324	11/20	1946	1952	L	3.7	1.9	54°
8.	77	324	11/20	2043	2048	L	3.7	1.9	40°
9.	77	330	11/26	0617	0622	H	2.3	0.7	66°
10.	77	335	12/1	2217	2233	L	5.2	2.1	58°
11.	77	335	12/1	2250	2300	L	5.4	2.9	56°
12.	77	336	12/2	1907	1913	L	2.9	1.0	83°
13.	77	336	12/2	2011	2016	L	2.6	0.4	72°
14	77	336	12/2	2021	2033	L	2.9	0.5	63°
15.	77	339	1215	0532	0538	L	2.7	0.6	54°
16.	77	344	12/10	0630	0635	L	2.7	1.4	50°
17.	77	347	12/13	1705	1720	H	5.1	0.8	45°
18.	77	349	12/15	0307	0313	L	3.4	1.6	59°

File	Year	Day of Year	Date	Start	Stop	Bit Rate	Preliminary Solar Wind Conditions Mms	β	θ_{BN}
19.	77	363	12/29	0913	0923	L	1.6	0.2	66°
20.	78	1	1/1	1739	1754	H	6.0	6.5	87°
21.	78	6	1/6	0327	0333	L	4.0	0.5	65°
22.	78	6	1/6	0342	0347	L	4.0	0.5	75°
23.	78	6	1/6	0429	0436	L	3.0	0.2	53°
24.	78	6	1/6	0518	0523	L	3.0	0.2	52°
25.	78	6	1/6	0533	0546	L	4.0	0.2	42°
26.	78	6	1/6	0622	0627	L	3.5	0.4	49°
27.	78	6	1/6	0700	0705	L	3.7	0.3	49°
28.	78	6	1/6	0717	0722	L	3.5	0.6	50°
29.	78	204	7/23	0020	0050	H	3.8	0.8	71°
30.	78	206	7/25	0345	0400	L	4.4	1.2	86°
31.	78	216	8/4	1710	1725	H	4.4	1.0	87°
32.	78	239	8/27	2003	2010	H	2.1	0.1	70°
33.	78	239	8/27	2022	2028	H	1.9	0.1	65°
34.	78	239	8/27	2042	2048	H	2.0	0.1	64°
35.	78	239	8/27	2051	2057	H	2.0	0.1	65°
36.	78	239	8/27	2102	2116	H	2.0	0.1	65°
37.	78	240	8/28	0006	0012	H	1.7	0.03	62°
38.	78	240	8/28	0151	0157	H	2.0	0.1	84°
39.	78	240	8/28	0348	0354	H	2.3	0.1	63°
40.	78	248	9/5	0003	0019	L	5.8	1.9	65°
41.	78	251	9/8	0530	0544	H	4.1	1.0	78°

File	Year	Day of Year	Date	Start	Stop	Bit Rate	Preliminary Solar Wind Conditions Mms	β	θ_{BN}
42	78	251	9/8	0558	0612	H	4.1	1.0	78°
43	78	269	9/26	1545	1615	L	4.0	0.4	58°
44.	78	269	9/26	1635	1645	L	4.8	0.6	63°
45.	78	275	10/2	0325	0355	H	5.7	1.0	64°
46.	78	359	12/25	1340	1410	H	2.2	0.3	85°


77 OCT 25 DAY: 298
4 SEC. DATA
ISEE-1
BX
BY
BZ
BT
20
10
0
-10
-20
00
05
10
15
20
25
30
35
40
45
50
55
00
09 HOURS
S/C COORD.


77 NOV 5 DAY: 309
4 SEC. DATA
ISE -1
BX
BY
BZ
BT
28
$\bar{B}_{24} = 23.4$
20
10
0
-10
-20
00
05
10
15
20
25
30
35
40
45
50
55
00
13 HOURS
S/C COORD.
UCLA
APR 8 80

S 379 IS A 9-TRACK, 1600-BPI, ODD-PARITY TAPE. 81 289 OCT 16 15:41:04.860
-- UCLA --

A RECORD (BLOCK) CONTAINS 100 LOGICAL RECORDS.
EACH LOGICAL RECORD CONTAINS 12 32-BIT INTEGER WORDS.

```
WORD   1 ...YEAR, E.G., 77
WORD   2 ...DAY OF YEAR, E.G., 234 (JAN 1 = 1)
WORD   3 ...MONTH OF YEAR, E.G., 8
WORD   4 ...DAY OF MONTH, E.G., 22
WORD   5 ...HOUR OF DAY, E.G., 13
WORD   6 ...MINUTE OF HOUR, E.G., 56
WORD   7 ...SECOND OF MINUTE, E.G., 59
WORD   8 ...MILLISECOND, E.G., 678
WORD   9 ...MAG. FIELD COMPONENT BX IN MILLIGAMMAS
WORD  10 ...MAG. FIELD COMPONENT BY IN MILLIGAMMAS
WORD  11 ...MAG. FIELD COMPONENT BZ IN MILLIGAMMAS
WORD  12 ...MAG. FIELD MAGNITUDE BT IN MILLIGAMMAS
```

MISSING DATA ARE FILLED WITH -9999999 .

THE FOLLOWING IS THE PARTIAL DUMP OF THIS TAPE
PRINTED BY FORTRAN FORMAT: (1X,8I4,4I8).

files 1-46 contain ISEE-1 data

files 47-92 contain ISEE-2 data

---------- FILE 1 ----------

>>>>>>> BLOCK # 1 <<<<<<<<

77	298	10	25	9	10	0	84	5395	7356	5499	10652
77	298	10	25	9	10	0	334	5989	7048	7445	11873
77	298	10	25	9	10	0	584	6573	6311	8850	12703
77	298	10	25	9	10	0	834	7206	5524	10083	13569
77	298	10	25	9	10	1	84	6938	4946	10320	13383
77	298	10	25	9	10	1	334	6985	4822	9169	12495
77	298	10	25	9	10	1	584	7488	5663	8740	12827
77	298	10	25	9	10	1	834	7977	6160	9568	13897
77	298	10	25	9	10	2	84	8613	6270	10401	14889
77	298	10	25	9	10	2	334	8868	6005	10716	15151
77	298	10	25	9	10	2	584	8723	5665	10649	14886
77	298	10	25	9	10	2	834	8299	5744	10912	14865
77	298	10	25	9	10	3	84	8067	5333	12043	15446
77	298	10	25	9	10	3	334	8214	4251	13693	16450
77	298	10	25	9	10	3	584	8388	4310	13766	16687
77	298	10	25	9	10	3	834	7906	5468	13087	16239
77	298	10	25	9	10	4	84	7406	6826	12805	16292
77	298	10	25	9	10	4	334	6930	7588	12573	16239
77	298	10	25	9	10	4	584	6957	7753	12471	16249
77	298	10	25	9	10	4	834	7114	7752	12470	16316
77	298	10	25	9	10	5	84	7041	7522	12137	15920
77	298	10	25	9	10	5	334	6893	6670	11550	15013
77	298	10	25	9	10	5	584	7255	5692	11231	14532
77	298	10	25	9	10	5	834	7964	4950	11098	14530
77	298	10	25	9	10	6	84	8511	4302	11036	14586
77	298	10	25	9	10	6	334	8691	3765	10940	14471
77	298	10	25	9	10	6	584	8527	3514	10733	14177
77	298	10	25	9	10	6	834	8086	3567	10522	13742
77	298	10	25	9	10	7	84	7753	3406	10501	13490
77	298	10	25	9	10	7	334	7672	3092	10991	13685
77	298	10	25	9	10	7	584	7872	2807	11487	14206
77	298	10	25	9	10	7	834	7776	2671	11590	14211
77	298	10	25	9	10	8	84	7297	2309	11641	13932
77	298	10	25	9	10	8	334	6823	2068	11873	13849
77	298	10	25	9	10	8	584	6621	2438	11845	13787
77	298	10	25	9	10	8	834	6409	2946	11639	13605
77	298	10	25	9	10	9	84	6176	3242	11180	13178
77	298	10	25	9	10	9	334	6016	3731	10846	12952
77	298	10	25	9	10	9	584	5848	4017	10958	13054
77	298	10	25	9	10	9	834	6082	4091	11411	13563
77	298	10	25	9	10	10	84	6273	4687	11472	13890
77	298	10	25	9	10	10	334	6170	4549	10738	13194
77	298	10	25	9	10	10	584	6647	4007	10093	12732
77	298	10	25	9	10	10	834	6748	3813	9459	12229
77	298	10	25	9	10	11	84	6460	3405	8908	11519
77	298	10	25	9	10	11	334	6554	3489	9078	11725
77	298	10	25	9	10	11	584	7021	3913	9333	12318
77	298	10	25	9	10	11	834	7641	3709	9530	12766
77	298	10	25	9	10	12	84	8074	3114	9852	13113
77	298	10	25	9	10	12	334	7977	2749	10248	13274
77	298	10	25	9	10	12	584	7346	2599	10365	12968
77	298	10	25	9	10	12	834	6660	2576	9962	12257
77	298	10	25	9	10	13	84	6407	2912	9763	12035
77	298	10	25	9	10	13	334	6059	3261	9937	12087
77	298	10	25	9	10	13	584	5715	3085	10361	12228
77	298	10	25	9	10	13	834	5597	2892	10828	12528
77	298	10	25	9	10	14	84	5426	3027	10851	12504
77	298	10	25	9	10	14	334	5383	3354	10858	12575

ISEE-1

77	298		25	9	10	14	584	5742	3979	11399	13369
77	298	10	25	9	10	14	834	5799	4410	12175	14153
77	298	10	25	9	10	15	84	5537	4296	11843	13761
77	298	10	25	9	10	15	334	5712	4259	10865	12993
77	298	10	25	9	10	15	584	5952	4108	10791	12990
77	298	10	25	9	10	15	834	6468	3785	11273	13537
77	298	10	25	9	10	16	84	6517	3772	11396	13659
77	298	10	25	9	10	16	334	6121	3841	10994	13157
77	298	10	25	9	10	16	584	5687	3666	10866	12801
77	298	10	25	9	10	16	834	5689	2791	10894	12603
77	298	10	25	9	10	17	84	5762	2227	11061	12669
77	298	10	25	9	10	17	334	5419	1922	11471	12828
77	298	10	25	9	10	17	584	5988	1990	11920	13113
77	298	10	25	9	10	17	834	4318	2225	11554	12534
77	298	10	25	9	10	18	84	4267	2213	10761	11786
77	298	10	25	9	10	18	334	4604	2289	11176	12450
77	298	10	25	9	10	18	584	4566	3480	11984	13289
77	298	10	25	9	10	18	834	4853	3975	11579	13169
77	298	10	25	9	10	19	84	5369	4577	10585	12721
77	298	10	25	9	10	19	334	6019	4853	9983	12623
77	298	10	25	9	10	19	584	6693	4958	9812	12871
77	298	10	25	9	10	19	834	7479	4773	9868	13270
77	298	10	25	9	10	20	84	8599	4268	9776	13639
77	298	10	25	9	10	20	334	9434	3711	9589	13955
77	298	10	25	9	10	20	584	9919	3315	9552	14164
77	298	10	25	9	10	20	834	9763	2993	9797	14152
77	298	10	25	9	10	21	84	9674	2540	10399	14429
77	298	10	25	9	10	21	334	9903	2545	10903	14948
77	298	10	25	9	10	21	584	9671	2856	10976	14905
77	298	10	25	9	10	21	834	9251	3033	11135	14791
77	298	10	25	9	10	22	84	8685	3224	11296	14609
77	298	10	25	9	10	22	334	8092	3195	11248	14220
77	298	10	25	9	10	22	584	7532	2906	11360	13936
77	298	10	25	9	10	22	834	7318	2766	11807	14164
77	298	10	25	9	10	23	84	6946	3202	11844	14100
77	298	10	25	9	10	23	334	6594	3552	11421	13658
77	298	10	25	9	10	23	584	6478	3989	11438	13737
77	298	10	25	9	10	23	834	6144	4059	11553	13701
77	298	10	25	9	10	24	84	6027	4270	11336	13530
77	298	10	25	9	10	24	334	5548	4889	10852	13132
77	298	10	25	9	10	24	584	5233	4816	10329	12541
77	298	10	25	9	10	24	834	5251	4465	9099	11415

>>>>>>> BLOCK # 97 (THE LAST BLOCK)

77	298	10	25	9	49	58	948	-6489	-4665	8068	11357
77	298	10	25	9	49	59	198	-5858	-10412	10253	15744
77	298	10	25	9	49	59	448	-4957	-14697	10025	18468
77	298	10	25	9	49	59	698	-4792	-16865	7672	19138
77	298	10	25	9	49	59	948	-4310	-17253	5132	18509
77	298	10	25	9	50	0	198	-4697	-16757	2067	17525
77	298	10	25	9	50	0	448	-5104	-16744	-644	17516
77	298	10	25	9	50	0	698	-4586	-14723	-1721	15517
77	298	10	25	9	50	0	948	-4455	-11157	66	12014
77	298	10	25	9	50	1	198	-5633	-8512	2254	10453
77	298	10	25	9	50	1	448	-6666	-7045	2495	10015
77	298	10	25	9	50	1	698	-6148	-6269	5460	10340
77	298	10	25	9	50	1	948	-4153	-9171	9110	13578
77	298	10	25	9	50	2	198	-1699	-13382	9313	16391
77	298	10	25	9	50	2	448	-2087	-17061	8352	19110
77	298	10	25	9	50	2	698	-3289	-19336	4790	20190

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------------------- FILE 2 -----------------

>>>>>>> BLOCK # 1 <<<<<<<<

77	309	11	5	13	20	0	200	-1298	8363	399	8472
77	309	11	5	13	20	0	450	-1334	8375	526	8497
77	309	11	5	13	20	0	700	-1202	8351	669	8464
77	309	11	5	13	20	0	950	-1164	8346	534	8444
77	309	11	5	13	20	1	200	-1130	8132	259	8214
77	309	11	5	13	20	1	450	-842	8433	261	8479
77	309	11	5	13	20	1	700	-941	8486	573	8558
77	309	11	5	13	20	1	950	-1032	7923	530	8008
77	309	11	5	13	20	2	200	-1145	7617	346	7710
77	309	11	5	13	20	2	450	-1132	7583	600	7690
77	309	11	5	13	20	2	700	-579	7738	517	7777
77	309	11	5	13	20	2	950	66	8307	97	8308
77	309	11	5	13	20	3	200	22	8581	169	8583
77	309	11	5	13	20	3	450	-99	8214	442	8226
77	309	11	5	13	20	3	700	-196	7972	422	7986
77	309	11	5	13	20	3	950	-216	7913	664	7943
77	309	11	5	13	20	4	200	69	8071	736	8105
77	309	11	5	13	20	4	450	152	7934	387	7945
77	309	11	5	13	20	4	700	-37	7699	407	7710
77	309	11	5	13	20	4	950	-216	7812	704	7847
77	309	11	5	13	20	5	200	-131	8059	563	8080
77	309	11	5	13	20	5	450	-30	8112	529	8129
77	309	11	5	13	20	5	700	-76	7965	620	7989
77	309	11	5	13	20	5	950	-162	7711	283	7718
77	309	11	5	13	20	6	200	14	7705	174	7707
77	309	11	5	13	20	6	450	66	7769	204	7772
77	309	11	5	13	20	6	700	-39	7796	149	7798
77	309	11	5	13	20	6	950	-342	7647	256	7659
77	309	11	5	13	20	7	200	-294	7514	405	7531
77	309	11	5	13	20	7	450	-257	7617	274	7626
77	309	11	5	13	20	7	700	-211	7581	340	7591
77	309	11	5	13	20	7	950	108	7596	258	7601
77	309	11	5	13	20	8	200	-113	7760	173	7763
77	309	11	5	13	20	8	450	-288	7482	392	7498
77	309	11	5	13	20	8	700	-231	7454	361	7466
77	309	11	5	13	20	8	950	-518	7259	540	7297
77	309	11	5	13	20	9	200	-184	7380	652	7411
77	309	11	5	13	20	9	450	-224	7589	215	7595
77	309	11	5	13	20	9	700	-340	7351	333	7366
77	309	11	5	13	20	9	950	-197	7585	565	7609
77	309	11	5	13	20	10	200	-166	7338	439	7353
77	309	11	5	13	20	10	450	-76	7053	179	7055

77	309		5	13	20	10	700	-153	7269	-4	7270
77	309	11	5	13	20	10	950	-258	7252	181	7259
77	309	11	5	13	20	11	200	-257	7171	99	7177
77	309	11	5	13	20	11	450	-390	7127	-92	7138
77	309	11	5	13	20	11	700	-336	7075	-197	7085
77	309	11	5	13	20	11	950	-250	7173	-170	7180
77	309	11	5	13	20	12	200	-126	7274	56	7275
77	309	11	5	13	20	12	450	42	7536	206	7539
77	309	11	5	13	20	12	700	-145	7588	143	7591
77	309	11	5	13	20	12	950	-119	7443	69	7444
77	309	11	5	13	20	13	200	-34	7440	8	7441
77	309	11	5	13	20	13	450	-205	7345	70	7348
77	309	11	5	13	20	13	700	-281	7291	232	7300
77	309	11	5	13	20	13	950	-300	7276	270	7287
77	309	11	5	13	20	14	200	-466	7164	48	7176
77	309	11	5	13	20	14	450	-568	7120	134	7144
77	309	11	5	13	20	14	700	-514	7117	396	7147
77	309	11	5	13	20	14	950	-371	7157	334	7174
77	309	11	5	13	20	15	200	-372	7109	292	7124
77	309	11	5	13	20	15	450	-618	7150	396	7188
77	309	11	5	13	20	15	700	-787	7202	576	7268
77	309	11	5	13	20	15	950	-662	7280	420	7322
77	309	11	5	13	20	16	200	-468	7331	194	7348
77	309	11	5	13	20	16	450	-360	7314	165	7325
77	309	11	5	13	20	16	700	-307	7294	274	7306
77	309	11	5	13	20	16	950	-358	7321	320	7337
77	309	11	5	13	20	17	200	-461	7318	341	7340
77	309	11	5	13	20	17	450	-643	7310	423	7350
77	309	11	5	13	20	17	700	-634	7284	459	7326
77	309	11	5	13	20	17	950	-524	7366	423	7397
77	309	11	5	13	20	18	200	-630	7334	390	7372
77	309	11	5	13	20	18	450	-684	7315	454	7361
77	309	11	5	13	20	18	700	-902	7353	440	7421
77	309	11	5	13	20	18	950	-907	7192	498	7267
77	309	11	5	13	20	19	200	-769	7242	430	7296
77	309	11	5	13	20	19	450	-645	7196	248	7229
77	309	11	5	13	20	19	700	-597	7204	247	7233
77	309	11	5	13	20	19	950	-441	7224	201	7240
77	309	11	5	13	20	20	200	-371	7314	74	7324
77	309	11	5	13	20	20	450	-310	7302	-85	7310
77	309	11	5	13	20	20	700	-425	7313	-162	7327
77	309	11	5	13	20	20	950	-508	7135	118	7155
77	309	11	5	13	20	21	200	-544	7166	306	7193
77	309	11	5	13	20	21	450	-782	7170	497	7230
77	309	11	5	13	20	21	700	-779	7165	962	7272
77	309	11	5	13	20	21	950	-529	7452	943	7531
77	309	11	5	13	20	22	200	-660	7379	692	7441
77	309	11	5	13	20	22	450	-573	7075	563	7121
77	309	11	5	13	20	22	700	-471	7173	435	7202
77	309	11	5	13	20	22	950	-373	7167	519	7196
77	309	11	5	13	20	23	200	-259	7328	665	7363
77	309	11	5	13	20	23	450	-374	7340	474	7365
77	309	11	5	13	20	23	700	-285	7256	441	7275
77	309	11	5	13	20	23	950	-171	7342	263	7349
77	309	11	5	13	20	24	200	-272	7324	-104	7330
77	309	11	5	13	20	24	450	-223	7348	-51	7352
77	309	11	5	13	20	24	700	-325	7502	2	7510
77	309	11	5	13	20	24	950	-349	7386	194	7396

>>>>>>> BLOCK # 13 (THE LAST BLOCK)

77	309	11	5	13	25	0	80	4836	21023	4639	22065
77	309	11	5	13	25	0	330	4944	20552	5650	21880
77	309	11	5	13	25	0	580	4451	20706	6860	22263

D 47399
8/15/78 - 12/31/78
78-079A-08A

DUMP OF TAPE D01

INPUT TAPE D01 ON TD3
DATA INPUT H9 NF 139 FL 1 1 1 SR 139 1 1 SR 139 LAST 1

FILE 1 RECORD 1 LENGTH 2560BYTES

YR Day

(0)	07BA00E3	001300B1	0015070D	00200000	00000000	00000000	00000000	00000000	00000000	00000000
(40)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(80)	001300B1	00520053	00530000	3965FFEF	36C9FFEC	3816FFE7	00030000	00000003	00010002	00020001
(120)	00000000	00000003	00000001	00010002	00030002	00010003	00000002	00030000	00000000	00000000
(160)	001301B1	00540055	00550000	2360FFF0	248EFFED	3704FFE6	00020000	00010001	00010000	00010001
(200)	00010002	00030001	00020003	00000001	00010000	00020003	00020001	00010002	00000000	00000000
(240)	001302B0	00260026	00260000	224BFFEE	26C6FFED	213BFFEA	00000001	00000000	00000002	00010000
(280)	00000000	00020000	00000000	00000000	00040002	00000002	00010001	00000002	00000000	00000000
(320)	001303B0	00540054	00540000	0000FFCE	2F78FFED	3347FFE7	00000002	00000002	00000001	00000002
(360)	00030001	00020001	00030001	00050001	00030002	00020003	00010000	00030002	00000000	00000000
(400)	001304B0	003F0040	00400000	22BBFFEF	2B70FFED	268DFFE8	00000000	00000000	00000002	00010002
(440)	00010003	00010001	00000002	00010003	00000001	00020002	00010001	00010002	00000000	00000000
(480)	00130A30	00540055	00550000	3228FFF0	3B33FFEC	2922FFE7	00030002	00020001	00010001	00010001
(520)	00010000	00010002	00000000	00010004	00000000	00070001	00020000	00010002	00000000	00000000
(560)	00130B2F	00550055	00550000	2760FFF0	2151FFED	3304FFE8	00020001	00000001	00010002	00020000
(600)	00030000	00020000	00000001	00040002	00010001	00040000	00010001	00030000	00000000	00000000
(640)	00130C2F	00530054	00540000	3B65FFEF	21B7FFED	367BFFE6	00050000	00010000	00010001	00020000
(680)	00030001	00020000	00000000	00040003	00030000	00020001	00020000	00010002	00000000	00000000
(720)	00130D2F	00540055	00550000	20FEFFF0	2D8BFFED	2030FFE7	00030000	00030001	00030000	00000000
(760)	00030001	00010004	00010002	00010003	00050002	00020001	00000000	00040003	00000000	00000000
(800)	0014001F	00550055	00550000	252AFFF0	2839FFED	2A77FFE8	00010001	00010001	00010002	00020001
(840)	00020003	00010001	00000000	00010001	00020003	00020000	00020006	00030003	00000000	00000000
(880)	0014011F	00540054	00540000	22CBFFF0	2714FFED	3B6EFFE7	00020000	00030001	00010000	00010001
(920)	00020001	00010002	00040002	00020000	00040000	00010001	00020002	00020001	00000000	00000000
(960)	0014021F	00540055	00550000	35E4FFF0	23F5FFED	3704FFE6	00030000	00010001	00010001	00020001
(1000)	00030001	00010002	00030001	00010002	00010002	00010002	00000002	00000002	00000000	00000000
(1040)	0014031F	00540055	00550000	22ECFFF0	38A2FFEC	3706FFE5	00000000	00000002	00010000	00100002
(1080)	00000001	00020001	00000000	00020002	00020000	00030000	00010002	00040001	00000000	00000000
(1120)	0014041F	00540054	00540000	2610FFF0	3754FFED	28DDFFE7	00000000	00000001	00010002	00010002
(1160)	00030003	00030003	00020003	00010003	00050003	00010001	00000003	00010002	00000000	00000000
(1200)	0014051F	00540055	00550000	29CBFFF0	34CBFFEC	2E79FFE8	00000002	00020000	00010005	00010002
(1240)	00020000	00000001	00020002	00030000	00020002	00000001	00000001	00020001	00000000	00000000
(1280)	0014061E	00540055	00550000	21ABFFF0	3A52FFEC	2030FFE7	00000003	00010001	00030003	00020001
(1320)	00010000	00020000	00000000	00030003	00020000	00020001	00020002	00030001	00000000	00000000
(1360)	0014071E	00550055	00550000	269AFFF0	2925FFED	3818FFE5	00030000	00010001	00000000	00000002
(1400)	00010003	00000000	00020002	00050002	00010001	00000002	00030002	00020002	00000000	00000000
(1440)	0014081E	00530054	00540000	26ABFFF0	38F2FFEC	2A77FFE8	00000002	00020000	00020001	00010002
(1480)	00040001	00030000	00020000	00000001	00020002	00000002	00000000	00000003	00000000	00000000
(1520)	0014091E	00540055	00550000	27AEFFF0	2CC0FFED	2765FFE7	00020003	00020002	00010002	00010001
(1560)	00040001	00020000	00040005	00010003	00010001	00030001	00040000	00010000	00000000	00000000
(1600)	00140A1E	00550055	00550000	2285FFF0	3C9BFFEC	39B0FFE6	00030001	00010000	00000000	00010001
(1640)	00010001	00010002	00020001	00010003	00010004	00000002	00010000	00000001	00000000	00000000
(1680)	00140B1E	00540054	00540000	24AFFFF0	3D15FFEC	27BBFFE8	00000001	00010001	00020001	00000003
(1720)	00000001	00000002	00020000	00000002	00020001	00020002	00010003	00050000	00000000	00000000
(1760)	00140C1E	00540055	00550000	3818FFEF	205EFFED	2EDFFFE8	00020001	00040001	00000002	00010002
(1800)	00020001	00010003	00010002	00020004	00010000	00000001	00010001	00010000	00000000	00000000
(1840)	00140D1E	00540055	00550000	253BFFF0	2C1BFFED	2C11FFE7	00000000	00010003	00020003	00010001
(1880)	00020004	00020000	00030001	00020003	00010000	00020001	00030002	00020001	00000000	00000000
(1920)	0015000E	00540054	00540000	2D97FFF0	2C30FFED	0000FFCE	00010000	00010002	00020001	00020001
(1960)	00030002	00030001	00030001	00000003	00000002	00030002	00000003	00020001	00000000	00000000
(2000)	0015010D	00540055	00550000	234FFFF0	3D03FFEC	2151FFE8	00010000	00020001	00000002	00000003
(2040)	00000002	00010002	00010001	00000001	00000003	00020000	00010002	00010006	00000000	00000000
(2080)	0015020D	00540055	00550000	27AAFFF0	28C0FFED	2354FFE8	00010003	00020002	00010003	00010001
(2120)	00010001	00020002	00000005	00010000	00020006	00010001	00040002	00000002	00000000	00000000
(2160)	0015030D	00550055	00550000	3E21FFEF	2D9AFFED	23DAFFE9	00010001	00000002	00050002	00040000
(2200)	00030000	00020004	00030002	00010001	00030002	00030002	00020003	00010000	00000000	00000000
(2240)	0015040D	00530054	00540000	2ADBFFF0	2BFCFFED	39C2FFE8	00010002	00000000	00000001	00020001
(2280)	00030002	00020003	00010000	00000000	00010002	00020003	00030003	00030004	00000000	00000000

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( 2160)  00170DF6  002B002B  002B0000  3B46FFF2  3CA1FFF0  20A1FFED  000E0009  0007000F  0009C006  000C000E
( 2200)  0013000D  000A0007  00080010  000D000A  000F0006  000A0009  0002000A  000D0006  00000000  00000000
( 2240)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
( 2280)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
( 2320)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
( 2360)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
( 2400)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
( 2440)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
( 2480)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
( 2520)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000

        FILE   INPUT    DATA RECORDS    MAX.          READ ERROR SUMMARY          INPUT RETRIES
               RECS.      INPUT         SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
         139       9       10            2560        0       0       0       0       1       1

 EOJ        DUMP STOPPED AFTER FILE   139        # OF PERMANENT READ ERRORS  0

START TIME 03/04/82  08:24:46        STOP TIME 03/04/82  08:25:59

$$
$ASS IN MT4
$EXE TPNRCF BS
```

78-079A-08A

EXPERIMENT DFH, ISEE-3 FIRST 3 DAYS, LAST DAY. 1 FILE/DAY, DOUBLE EOF AT END OF TAPE

YEAR=1980	DAY= 95	TIME FROM=14:42:51				1 FORMATS FROM		1 FORMATS	SPIN=	5	5	5				
1.193	0.629	0.329	0.119	0.065		0.017	0.016	0.004		1.18	1.18	1.70	1.14	2.42	0.63	2.71
YEAR=1980	DAY= 95	TIME FROM=14:43: 7				1 FORMATS FROM		1 FORMATS	SPIN=	5	5	5				
1.270	0.667	0.323	0.148	0.088		0.025	0.011	0.001		1.19	1.27	1.34	1.05	2.17	1.38	13.00
YEAR=1980	DAY= 95	TIME FROM=14:43:23				1 FORMATS FROM		1 FORMATS	SPIN=	5	5	5				
1.316	0.629	0.417	0.141	0.079		0.021	0.013	0.002		1.30	0.93	1.82	1.11	2.33	1.00	3.75
YEAR=1980	DAY= 95	TIME FROM=14:43:39				1 FORMATS FROM		1 FORMATS	SPIN=	6	6	6				
1.173	0.691	0.387	0.139	0.062		0.044	0.008	0.002		1.06	1.10	1.72	1.39	0.87	3.45	2.75
YEAR=1980	DAY= 95	TIME FROM=14:43:55				1 FORMATS FROM		1 FORMATS	SPIN=	5	5	5				
1.086	0.610	0.300	0.155	0.081		0.025	0.008	0.002		1.11	1.25	1.19	1.19	2.00	2.00	2.25
YEAR=1980	DAY= 95	TIME FROM=14:44:11				1 FORMATS FROM		1 FORMATS	SPIN=	5	5	5				
1.224	0.543	0.247	0.116	0.047		0.022	0.008	0.007		1.40	1.36	1.31	1.52	1.31	1.78	0.64
YEAR=1980	DAY= 95	TIME FROM=14:44:27				1 FORMATS FROM		1 FORMATS	SPIN=	6	6	6				
1.122	0.723	0.323	0.148	0.079		0.036	0.009	0.003		0.97	1.38	1.35	1.17	1.35	2.58	2.00
YEAR=1980	DAY= 95	TIME FROM=14:44:43				1 FORMATS FROM		1 FORMATS	SPIN=	5	5	5				
0.887	0.620	0.376	0.163	0.059		0.026	0.013	0.001		0.89	1.02	1.42	1.73	1.37	1.27	15.00
YEAR=1980	DAY= 95	TIME FROM=14:44:59				1 FORMATS FROM		1 FORMATS	SPIN=	5	5	5				
1.209	0.582	0.329	0.195	0.061		0.025	0.017	0.004		1.30	1.09	1.04	2.00	1.50	0.90	2.86
YEAR=1980	DAY= 95	TIME FROM=14:45:15				1 FORMATS FROM		1 FORMATS	SPIN=	5	5	5				
1.346	0.610	0.335	0.188	0.077		0.031	0.015	0.003		1.38	1.12	1.10	1.53	1.55	1.29	3.40
YEAR=1980	DAY= 95	TIME FROM=14:45:31				1 FORMATS FROM		1 FORMATS	SPIN=	6	6	6				
0.854	0.612	0.382	0.136	0.058		0.048	0.012	0.007		0.87	0.99	1.73	1.45	0.76	2.56	1.00
YEAR=1980	DAY= 95	TIME FROM=14:45:47				1 FORMATS FROM		1 FORMATS	SPIN=	5	5	5				
1.040	0.524	0.300	0.112	0.077		0.015	0.016	0.001		1.24	1.08	1.65	0.91	3.09	0.58	9.50
YEAR=1980	DAY= 95	TIME FROM=14:46: 3				1 FORMATS FROM		1 FORMATS	SPIN=	5	5	5				
1.179	0.524	0.359	0.152	0.050		0.022	0.012	0.006		1.27	1.27	1.05	1.91	1.38	1.14	1.27

D 47107
10/25/77-12/25/78
77-102A-04T/04H

DUMP OF TAPE DE-1

INPUT TAPE DE-1 ON MT2
DATA INPUT H9 NF 92 FL 1 1 1 SR 92 1 1 SR 92 LAST 1

YR DAY

FILE 1 RECORD 1 LENGTH 4800BYTES

(0)	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000000	00000054	00001513	00001CBC
(40)	0000157B	0000299C	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000000	0000014E
(80)	00001765	00001B88	00001D15	00002E61	0000004D	0000012A	0000000A	00000019	00000009	0000000A
(120)	00000000	00000248	000019AD	00001BA7	00002292	0000319F	0000004D	0000012A	0000000A	00000019
(160)	00000009	0000000A	00000000	00000342	00001C26	00001594	00002763	00003501	0000004D	0000012A
(200)	0000000A	00000019	00000009	0000000A	00000001	00000054	00001B1A	00001352	00002850	00003447
(240)	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000001	0000014E	00001B49	00001206
(280)	000023D1	000030CF	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000001	00000248
(320)	00001D40	0000161F	00002224	00003213	0000004D	0000012A	0000000A	00000019	00000009	0000000A
(360)	00000001	00000342	00001F29	00001810	00002560	00003649	0000004D	0000012A	0000000A	00000019
(400)	00000009	0000000A	00000002	00000054	000021A5	0000187E	000028A1	00003A29	0000004D	0000012A
(440)	0000000A	00000019	00000009	0000000A	00000002	0000014E	000022A4	00001775	000029DC	0000382F
(480)	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000002	00000248	00002213	00001621
(520)	00002999	00003A26	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000002	00000342
(560)	0000206B	00001670	00002AA0	00003A11	0000004D	0000012A	0000000A	00000019	00000009	0000000A
(600)	00000003	00000054	00001F83	000014D5	00002F08	00003C56	0000004D	0000012A	0000000A	00000019
(640)	00000009	0000000A	00000003	0000014E	00002016	0000109B	00003523	00004042	0000004D	0000012A
(680)	0000000A	00000019	00000009	0000000A	00000003	00000248	000029C4	000010D6	000035C6	0000412F
(720)	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000003	00000342	00001EE2	0000155C
(760)	0000331F	00003F6F	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000004	00000054
(800)	00001CEE	00001AAA	00003205	00003FA4	0000004D	0000012A	0000000A	00000019	00000009	0000000A
(840)	00000004	0000014E	00001B12	00001DA4	00003110	00003F6F	0000004D	0000012A	0000000A	00000019
(880)	00000009	0000000A	00000004	00000248	00001B2D	00001E49	000030B7	00003F79	0000004D	0000012A
(920)	0000000A	00000019	00000009	0000000A	00000004	00000342	00001BCA	00001E48	00003056	00003FBC
(960)	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000005	00000054	00001B81	00001D62
(1000)	00002F69	00003E30	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000005	0000014E
(1040)	00001AED	00001A0E	00002D1E	00003AA5	0000004D	0000012A	0000000A	00000019	00000009	0000000A
(1080)	00000005	00000248	00001C57	0000163C	00002BDF	000038C4	0000004D	0000012A	0000000A	00000019
(1120)	00000009	0000000A	00000005	00000342	00001F1C	00001356	00002B5A	000038C2	0000004D	0000012A
(1160)	0000000A	00000019	00000009	0000000A	00000006	00000054	0000213F	000010CE	00002B1C	000036FA
(1200)	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000006	0000014E	000021F3	00000E85
(1240)	00002ABC	00003887	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000006	00000248
(1280)	0000214F	00000E1E	000029ED	00003761	0000004D	0000012A	0000000A	00000019	00000009	0000000A
(1320)	00000006	00000342	00001F96	00000DEF	0000291A	000035AE	0000004D	0000012A	0000000A	00000019
(1360)	00000009	0000000A	00000007	00000054	00001E49	00000D4E	00002905	000034B2	0000004D	0000012A
(1400)	0000000A	00000019	00000009	0000000A	00000007	0000014E	00001DF8	00000C14	00002A95	00003575
(1440)	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000007	00000248	00001EC0	00000AF7
(1480)	00002CDF	0000377E	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000007	00000342
(1520)	00001E60	00000A6F	00002D46	00003783	0000004D	0000012A	0000000A	00000019	00000009	0000000A
(1560)	00000008	00000054	00001C81	00000905	00002D79	0000366C	0000004D	0000012A	0000000A	00000019
(1600)	00000009	0000000A	00000008	0000014E	00001AA7	00000814	00002E61	00003619	0000004D	0000012A
(1640)	0000000A	00000019	00000009	0000000A	00000008	00000248	000019DD	00000986	00002E45	000035DB
(1680)	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000008	00000342	00001900	00000B82
(1720)	00002D77	00003525	0000004D	0000012A	0000000A	00000019	00000009	0000000A	00000009	00000054
(1760)	00001820	00000CAA	00002BAC	0000337A	0000004D	0000012A	0000000A	00000019	00000009	0000000A
(1800)	00000009	0000014E	00001780	00000E93	00002A5E	00003298	0000004D	0000012A	0000000A	00000019
(1840)	00000009	0000000A	00000009	00000248	00001608	00000FB1	00002ACE	000032FE	0000004D	0000012A
(1880)	0000000A	00000019	00000009	0000000A	00000009	00000342	000017C2	00000FFB	00002C93	000034FB
(1920)	0000004D	0000012A	0000000A	00000019	00000009	0000000A	0000000A	00000054	00001881	0000124F
(1960)	00002CD0	00003642	0000004D	0000012A	0000000A	00000019	00000009	0000000A	0000000A	0000014E
(2000)	0000181A	000011C5	000029F2	0000338A	0000004D	0000012A	0000000A	00000019	00000009	0000000A
(2040)	0000000A	00000248	000019F7	00000FA7	00002760	000031BC	0000004D	0000012A	0000000A	00000019
(2080)	00000009	0000000A	0000000A	00000342	00001A5C	00000EE5	000024F3	00002FC5	0000004D	0000012A
(2120)	0000000A	00000019	00000009	0000000A	0000000B	00000054	00001930	0000004D	000022CC	00002CFF
(2160)	0000004D	0000012A	0000000A	00000019	00000009	0000000A	0000000B	0000014E	00001996	00000D98
(2200)	00002376	00002DCD	0000004D	0000012A	0000000A	00000019	00000009	0000000A	0000000B	00000248
(2240)	00001B6D	00000F49	00002475	0000301E	0000004D	0000012A	0000000A	00000019	00000009	0000000A
(2280)	0000000B	00000342	00001DD9	00000E7D	0000253A	000031DE	0000004D	0000012A	0000000A	00000019

77-102B-04H

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(  2960)  FFFFF5EE  00000411  FFFFBE69  0000427B  0000004E  00000167  0000000C  00000019  0000000D  00000028
(  3000)  00000003  00000391  FFFFF5E8  0000040B  FFFFBE64  00004282  0000004E  00000167  0000000C  00000019
(  3040)  0000000D  00000028  00000003  000003D0  FFFFF5E5  000003DF  FFFFBE5E  00004285  0000004E  00000167
(  3080)  0000000C  00000019  0000000D  00000028  00000004  00000026  FFFFF5DB  000003B2  FFFF5E67  0000427D
(  3120)  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000004  00000065  FFFFF628  0000033A
(  3160)  FFFFBE89  00004248  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000004  000000A3
(  3200)  FFFFF696  000002E0  FFFFBE52  0000426A  0000004E  00000167  0000000C  00000019  0000000D  00000028
(  3240)  00000004  000000E2  FFFFF68F  000002E5  FFFFBE2B  00004292  0000004E  00000167  0000000C  00000019
(  3280)  0000000D  00000028  00000004  00000120  FFFFF6A8  000002BF  FFFFBE44  00004274  0000004E  00000167
(  3320)  0000000C  00000019  0000000D  00000028  00000004  0000015F  FFFFF706  00000279  FFFFBE56  00004253
(  3360)  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000004  0000019D  FFFFF754  00000281
(  3400)  FFFFBE2E  0000426F  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000004  000001DC
(  3440)  FFFFF71F  000002F9  FFFFBE0D  0000429C  0000004E  00000167  0000000C  00000019  0000000D  00000028
(  3480)  00000004  0000021A  FFFFF6C9  0000033A  FFFFBE1D  0000429B  0000004E  00000167  0000000C  00000019
(  3520)  0000000D  00000028  00000004  00000259  FFFFF698  0000034B  FFFFBDFE  000042C1  0000004E  00000167
(  3560)  0000000C  00000019  0000000D  00000028  00000004  00000297  FFFFF66C  0000035E  FFFFBDF8  000042CF
(  3600)  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000004  000002D6  FFFFF635  00000383
(  3640)  FFFFBE21  000042AF  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000004  00000314
(  3680)  FFFFF5FC  000003AB  FFFFBE3B  000042A1  0000004E  00000167  0000000C  00000019  0000000D  00000028
(  3720)  00000004  00000353  FFFFF5D3  000003D0  FFFFBE47  0000429E  0000004E  00000167  0000000C  00000019
(  3760)  0000000D  00000028  00000004  00000391  FFFFF5CF  000003E1  FFFFBE54  00004292  0000004E  00000167
(  3800)  0000000C  00000019  0000000D  00000028  00000004  000003D0  FFFFF5E6  000003E2  FFFFBE63  00004280
(  3840)  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000005  00000026  FFFFF5E9  00000412
(  3880)  FFFFBE73  00004273  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000005  00000065
(  3920)  FFFFF5D6  0000043E  FFFFBE5B  00004290  0000004E  00000167  0000000C  00000019  0000000D  00000028
(  3960)  00000005  000000A3  FFFFF5DA  0000044E  FFFFBE4D  0000429E  0000004E  00000167  0000000C  00000019
(  4000)  0000000D  00000028  00000005  000000E2  FFFFF5D8  0000044F  FFFFBE58  00004293  0000004E  00000167
(  4040)  0000000C  00000019  0000000D  00000028  00000005  00000120  FFFFF5C0  00000475  FFFFBE74  0000427E
(  4080)  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000005  0000015F  FFFFF5B5  00000483
(  4120)  FFFFBE78  00004286  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000005  000001BD
(  4160)  FFFFF565  000004B6  FFFFBE86  0000427F  0000004E  00000167  0000000C  00000019  0000000D  00000028
(  4200)  00000005  000001DC  FFFFF577  000004B7  FFFFBEC5  0000423E  0000004E  00000167  0000000C  00000019
(  4240)  0000000D  00000028  00000005  0000021A  FFFFF5A8  000004CA  FFFFBEBE  0000423F  0000004E  00000167
(  4280)  0000000C  00000019  0000000D  00000028  00000005  00000259  FFFFF5D3  000004D7  FFFFBEA7  00004250
(  4320)  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000005  00000297  FFFFF5C7  000004CA
(  4360)  FFFFBE7F  00004279  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000005  000002D6
(  4400)  FFFFF57C  000004BB  FFFFBE5E  000042A3  0000004E  00000167  0000000C  00000019  0000000D  00000028
(  4440)  00000005  00000314  FFFFF583  000004B2  FFFFBE67  00004299  0000004E  00000167  0000000C  00000019
(  4480)  0000000D  00000028  00000005  00000353  FFFFF5B5  000004AE  FFFFBE70  00004288  0000004E  00000167
(  4520)  0000000C  00000019  0000000D  00000028  00000005  00000391  FFFFF5A5  000004BA  FFFFBE66  00004274
(  4560)  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000005  000003D0  FFFFF599  000004B1
(  4600)  FFFFBE88  00004275  0000004E  00000167  0000000C  00000019  0000000D  00000028  00000006  00000026
(  4640)  FFFFF5C8  0000048C  FFFFBE6E  00004284  0000004E  00000167  0000000C  00000019  0000000D  00000028
(  4680)  00000006  00000065  FFFFF5FA  00000470  FFFFBE74  00004275  0000004E  00000167  0000000C  00000019
(  4720)  0000000D  00000028  00000006  000000A3  FFFFF5FF  00000486  FFFFBE72  00004278  0000004E  00000167
(  4760)  0000000C  00000019  0000000D  00000028  00000006  000000E2  FFFFF5EE  000004A5  FFFFBE66  00004256

FILE      92  RECORD      289  LENGTH     4800BYTES
(     0)  0000004E  00000167  0000000C  00000019  0000000E  0000000A  00000000  00000016  FFFFEF9E  FFFFDA0C
(    40)  FFFF5AE6  0000AA32  0000004E  00000167  0000000C  00000019  0000000E  0000000A  00000000  00000054
(    80)  FFFFEFA0  FFFFD7AB  FFFF5B02  0000AAA4  0000004E  00000167  0000000C  00000019  0000000E  0000000A
(   120)  00000000  00000093  FFFFEF84  FFFFD623  FFFF5ACC  0000AB37  0000004E  00000167  0000000C  00000019
(   160)  0000000E  0000000A  00000000  000000D1  FFFFEF03  FFFFD4E0  FFFF5AD8  0000AB69  0000004E  00000167
(   200)  0000000C  00000019  0000000E  0000000A  00000000  00000110  FFFFEE54  FFFFD343  FFFF5B31  0000ABB0
(   240)  0000004E  00000167  0000000C  00000019  0000000E  0000000A  00000000  0000014E  FFFFEE26  FFFFD1C8
(   280)  FFFF5B80  0000ABCD  0000004E  00000167  0000000C  00000019  0000000E  0000000A  00000000  0000016D
(   320)  FFFFEDDC  FFFFD08E  FFFF5BBB  0000ABF2  0000004E  00000167  0000000C  00000019  0000000E  0000000A
(   360)  00000000  000001CB  FFFFEDE2  FFFFCF39  FFFF5BDF  0000AC2E  0000004E  00000167  0000000C  00000019
(   400)  0000000E  0000000A  00000000  0000020A  FFFFEE05  FFFFCDE5  FFFF5BB2  0000AC37  0000004E  00000167
(   440)  0000000C  00000019  0000000E  0000000A  00000000  00000248  FFFFEDB4  FFFFCCB1  FFFF5B89  0000AD4E
(   480)  0000004E  00000167  0000000C  00000019  0000000E  0000000A  00000000  00000287  FFFFED84  FFFFCB9C
(   520)  FFFF5BB2  0000AD71  0000004E  00000167  0000000C  00000019  0000000E  0000000A  00000000  000002C5
(   560)  FFFFED73  FFFFCA66  FFFF5C1C  0000AD6E  0000004E  00000167  0000000C  00000019  0000000E  0000000A
(   600)  00000000  00000304  FFFFED03  FFFFC93C  FFFF5C66  0000AD92  0000004E  00000167  0000000C  00000019
(   640)  0000000E  0000000A  00000000  00000342  FFFFEC2D  FFFFC8AA  FFFF5C5A  0000ADE3  FF676981  FF676981
(   680)  FF676981  FF676981  FF676981  FF676981  FF676981  FF676981  FF676981  FF676981  FF676981  FF676981
```