#433

GROUND BASE

DATA SETS FOR CDWA

GG-24A/GG-75A, GG-32D, GG-75B, GN-11A

Table of Contents

---

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

REQ. AGENT	RAND NO.	ACQ. AGENT
VJP	RD0915	MJT

GROUND MAGNETOMETER AND RIOMETER

(8 STATIONS)

GG-24A

This data set catalog consists of 1 data tape. The tape is 9 track, 1600 BPI, Binary with 1 file of data. The tape was created on an AMDAHL 470V/6 computer, (but is IBM 360 compatible).

The time span is as follows:

D#	C#	TIME SPAN
D-32274	C-20149	11/24/77 - 12/01/77

GG-75B

N. AMERICAN MAG CHAIN DATA

GG-75B

This data set has been restored. There was originally one 7-track, 800 BPI tape written in BCD. There is one restored tape written in ASCII. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tape was created on an IBM 360 computer and the restored tape was created on a MRS computer. The DR and DS numbers along with the corresponding D number and time spans are as follows:

DR#	DS#	D#	FILES	TIME SPAN
DR006160	DS006160	D032339	1 - 34	12/01/77 - 12/12/77 (a)

(a) D032339: Read error occurred in record 51 of file 18.

INSTITUTE OF EARTH AND PLANETARY PHYSICS

THE UNIVERSITY OF ALBERTA
EDMONTON, CANADA
T6G 2E1

September 18, 1978

Dr. J. I. Vette
Code 601
NASA/GSFC
Greenbelt, Maryland 20771
USA

Dear Dr. Vette:

Enclosed with this letter is our data tape for CDAW along with documentation, dumps and listings to assist your programming staff. The details of the tape contents and formats are given below. We have made a duplicate tape for ourselves so that we can provide back-up or debugging advice as it is needed. Please do not hesitate to contact myself or Dr. Rostoker if you or your staff have any questions regarding the enclosed material.

Sincerely Yours,

John Olson

John V. Olson

University of Alberta Magnetometer/Riometer tape for CDAW

The enclosed tape is a 2400', unlabelled, 9 track tape written at 1600 bpi. All of the data is recorded in vs records in a single file. Further, for all records, there is only one logical record per physical block. Of course, the record lengths vary and are listed if the first attached printout. A detailed hexadecimal dump of the first and 25 records is also included. The tape was produced on an Amdahl 470V/6 computer which produces IBM compatible tapes.

Logically there are two types of records written on the tape. All records are written using standard unformatted FORTRAN write statements (e.g. WRITE(1) ...).

The first record type is a data record, usually of length greater than 5000 bytes (1byte=8bits). The contents of a data record are as follows:

JSTN,JAX,JYR,JDY,JHR,JMN,NOP,SINT,(DATA(i),i=1,NOP)

where

JSTN: the station mnemonic (character, 4 bytes) left

JAX: the data axis (character, 4 bytes, right justified)

JYR:
JDY:
JHR:
JMN: } the start time of the data record (1st point) (4 byte integers...I*4)

NOP: the number of data values in the record (I*4)

SINT: the sample spacing in seconds (REAL*4)

DATA(i),i=1,NOP the data values
(NOTE: in the first 21 blocks the data samples are 2 byte integers (I*2). In the subsequent blocks (record 22 to end) the data samples are real values (REAL*4))

The second type of record contains a time vector which allows proper timing of the data samples. These time vectors are only necessary for the data contained in blocks after block 21. The record structure is as follows:

TIME(i),i=1,100

where

TIME(1): =NB =number of data blocks processed

TIME(2*i): =NP =value of data index

TIME(2*i+1): =the time in minutes after the data start time that the value DATA(NP) occurred.

Starting with block 22 the records have the following sequence (see attached printout for complete listing):

H component data, D component data, Z component data, R component data, Time record for the preceding 4 blocks, H component data...etc.

Now, H D and Z are the magnetometer component samples and R is the riometer data mnemonic. When plotting the data one may simply use the start time given in the data record header as the location of the first data value and place subsequent values at multiples of the sample interval, SINT. For cases where it was necessary for us to pad out data blocks with zeros this process will lead to data errors in timing. For these blocks the time vector which immediately follows the four data blocks may be used to establish the timing of appropriate patches of the data. In these cases one must loop through the data selecting out the data segments and plotting them using TIME(2*i) as the first time of the i-th segment and TIME(2*i+1) as the first point of the i-th segment. After plotting the values of the i-th segment (there will be (TIME(2*i+3)-TIME(2*i+1)) values) one iterates to the (i+1)th segment.

The data mnemonics for the various stations are all 4 character labels and are:

PROV, HAYR, SMIT, URAN, LEDU, MCMU, FTCH.

The component mnemonics are: 'Hbbb','Dbbb','Zbbb','Rbbb'. (b=blank)

The blocks which require use of the time vector:

Note – after block 22 the data records are long enough to span two blocks on the tape. 17000 was set as max block size and some records were 17600 bytes long producing 2 tape blocks.

I apologize for ~~the~~ any confusion in these communications. I tried to complete this quickly so as to beat an impending Canadian ~~strike~~ postal strike.

Please call me as soon as you can to let me know if you can read our tape.

John Olson

D-32274

~~66 24A / 66 250~~

11/24/77 - 12/01/77

DUMP OF TAPE X-407

INPUT TAPE X-407 ON MS1
DATA INPUT H9 FL 1 1 2

FILE 1 RECORD 1 LENGTH 5924BYTES

(0)	17240000	172C0000	D7D9D6E5	C8404040	000007B9	0CC00148	00000000	00000000	000005BF	81818181
(40)	427F0000	427F0000	427E0000	427F0000	427E0000	427D0000	427D0000	427D0000	427C0000	427D0000
(80)	427D0000	427C0000	427D0000	427C0000	427D0000	427D0000	427D0000	427E0000	427F0000	42800000
(120)	427F0000	427E0000	427C0000	427C0000	427D0000	427E0000	427F0000	427F0000	427E0000	427E0000
(160)	427F0000	427F0000	427F0000	427F0000	42800000	427F0000	427F0000	427F0000	427F0000	427F0000
(200)	42800000	42800000	00000000	42840000	42860000	42860000	42870000	42850000	42840000	42800000
(240)	427F0000	42800000	42810000	42830000	42830000	42820000	42820000	42820000	42820000	42810000
(280)	42810000	42800000	427F0000	427F0000	42800000	42810000	42830000	42830000	42820000	42820000
(320)	42820000	42810000	42810000	42820000	42810000	42820000	42810000	42820000	42810000	42800000
(360)	42810000	42820000	42820000	42830000	42820000	00000000	42810000	42800000	42800000	427E0000
(400)	42800000	42810000	42820000	42820000	42820000	42820000	42830000	42830000	42840000	42840000
(440)	42840000	42850000	42850000	42860000	42850000	42840000	42820000	42830000	42850000	42840000
(480)	42840000	42830000	42820000	42830000	42840000	42860000	42860000	42860000	42860000	42850000
(520)	42840000	42840000	42830000	42830000	42810000	42810000	42810000	42800000	42810000	42820000
(560)	42820000	42840000	42860000	42860000	42860000	42850000	42830000	42830000	42830000	42860000
(600)	42860000	42870000	42860000	42850000	42870000	42870000	42860000	42850000	42860000	42820000
(640)	42800000	42800000	42800000	42810000	42810000	427F0000	427D0000	427B0000	427B0000	427C0000
(680)	427E0000	42800000	42800000	427E0000	427E0000	427E0000	42800000	42810000	42820000	42800000
(720)	427E0000	427C0000	427D0000	427F0000	42820000	42840000	42840000	42830000	42820000	42810000
(760)	42810000	42810000	42820000	42810000	42810000	42820000	42810000	42810000	42810000	427F0000
(800)	427E0000	427E0000	427E0000	42800000	42800000	42810000	42810000	42800000	42800000	42800000
(840)	42800000	42800000	42800000	42800000	42810000	42810000	42800000	42800000	427F0000	427F0000
(880)	427F0000	42800000	42800000	00000000	42800000	42810000	42810000	42810000	42800000	42800000
(920)	42800000	42800000	42800000	427E0000	427E0000	427C0000	427D0000	427B0000	427C0000	427D0000
(960)	427F0000	42800000	42800000	42810000	42810000	42810000	42810000	42820000	42820000	42820000
(1000)	42810000	42810000	42810000	42800000	42810000	42820000	42830000	42840000	42840000	42840000
(1040)	42840000	42830000	42830000	42830000	42830000	42830000	42820000	42820000	42810000	42810000
(1080)	42820000	42810000	42830000	42810000	42820000	42810000	42820000	42810000	42820000	42810000
(1120)	42800000	42810000	42800000	42800000	42800000	427F0000	42800000	42800000	42820000	427F0000
(1160)	42810000	42800000	42810000	42800000	42800000	42800000	42800000	42800000	42800000	42800000
(1200)	42810000	42800000	42810000	42810000	42820000	42830000	42840000	42830000	42830000	42820000
(1240)	42820000	42820000	42830000	42840000	42850000	42830000	42840000	42840000	42840000	42830000
(1280)	42830000	42840000	42840000	42850000	42840000	42850000	42840000	42840000	42830000	42840000
(1320)	42850000	42850000	42820000	42820000	42820000	42810000	42820000	42820000	42810000	42810000
(1360)	42810000	42810000	42810000	42810000	427F0000	427F0000	427F0000	42800000	42800000	42800000
(1400)	42810000	00000000	42800000	42800000	42810000	42810000	42820000	42820000	42810000	42810000
(1440)	42810000	42800000	427F0000	427F0000	427F0000	427F0000	427E0000	427E0000	427D0000	427E0000	427E0000
(1480)	427E0000	427F0000	427F0000	42800000	42800000	42800000	42800000	42810000	42820000	42810000
(1520)	42800000	42810000	42800000	42810000	42810000	42810000	42820000	42820000	42820000	42820000
(1560)	42820000	42830000	42830000	42820000	42820000	42820000	00000000	42820000	42810000	42820000
(1600)	42820000	42830000	42830000	42830000	42830000	42830000	42830000	42820000	42820000	42820000
(1640)	42820000	42820000	42830000	42830000	42830000	42830000	42840000	42830000	42830000	42830000
(1680)	42830000	42830000	42840000	42840000	42840000	42830000	42830000	42830000	42840000	42830000
(1720)	42830000	42840000	42830000	42830000	42830000	42830000	42830000	42830000	42840000	42840000
(1760)	42840000	42830000	42840000	42840000	42840000	42840000	42840000	42840000	42850000	42850000
(1800)	42850000	42860000	42860000	42860000	42870000	42880000	42880000	42870000	42880000	42880000
(1840)	42870000	42870000	42860000	428601EC	428603D9	428605C6	428607B3	4286099F	42860B8C	42860D79
(1880)	42860F66	42861152	4286133F	4286152C	42861719	42861905	42861AF2	42861CDF	42861ECC	428620B8
(1920)	428622A5	42862492	4286286B	42862A58	42862C45	42862E32	4286301E	428633F8	428635E5	
(1960)	428637D1	428639BE	42863BAB	42863D98	42863F84	42864171	4286435E	4286454B	42864737	42864924
(2000)	42864B11	42864CFE	42864EEA	428650D7	428652C4	428654B1	4286569D	4286588A	42865A77	42865C64
(2040)	42865E50	4286603D	4286622A	42866417	42866603	428667F0	428669DD	42866BCA	42866DB6	42866FA3
(2080)	42867190	4286737D	42867569	42867756	00000000	42867943	42867B30	42867D1C	42867F09	428680F6
(2120)	428682E3	428684CF	428686BC	428688A9	42868A96	42868C82	42868E6F	4286905C	42869249	42869435
(2160)	42869622	4286980F	428699FC	42869BE8	42869DD5	42869FC2	4286A1AF	4286A39C	4286A588	4286A775
(2200)	4286A962	4286AB4F	4286AD3B	4286AF28	4286B115	4286B302	4286B4EE	4286B6DB	4286B8C8	4286BAB5
(2240)	4286BCA1	4286BE8E	4286C07B	4286C268	4286C454	4286C641	4286C82E	4286CA1B	4286CC07	4286CDF4

(2360)	4286F660	4286F84D	4286FA39	4286FC26	4286FE13	42870000	428701EC	428703D9	428705C6	428707B3
(2400)	4287099F	4287088C	42870D79	42870F66	42871152	4287133F	4287152C	42871719	42871905	42871AF2
(2440)	42871ECC	42872CB8	428722A5	42872492	4287267F	4287286B	42872A58	42872C45	42872E32	4287301E
(2480)	428732CB	428733F8	428735E5	428737D1	428739BE	42873BAB	42873D98	42873F84	42874171	4287435E
(2520)	4287454B	42874737	42874924	42874B11	42874CFE	42874EEA	428750D7	428752C4	428754B1	4287569D
(2560)	4287588A	42875A77	42875C64	42875E50	4287603D	4287622A	42876417	42876603	428767F0	428769DD
(2600)	42876BCA	42876DB6	00000000	42876FA3	42877190	0CCC0000	4287737D	42877569	42877756	42877943
(2640)	42877B30	42877D1C	42877F09	428780F6	428782E3	428784CF	428786BC	428788A9	42878A96	42878C82
(2680)	42878E6F	4287905C	42879249	42879435	42879622	4287980F	42879BFC	42879BE8	42879DD5	42879FC2
(2720)	4287A1AF	4287A39B	4287A588	4287A775	4287A962	4287AB4E	4287AD3B	4287AF28	4287B115	4287B301
(2760)	4287B4EE	4287B6DB	4287B8C8	4287BAB5	4287BCA1	4287BE8E	4287C07B	4287C268	4287C454	4287C641
(2800)	4287C82E	4287CA1B	4287CC07	4287CDF4	4287CFE1	4287D1CE	4287D3BA	4287D5A7	4287D794	4287D981
(2840)	4287DB6D	4287DD5A	4287DF47	4287E134	4287E320	4287E50D	4287E6FA	4287E8E7	4287EAD3	4287ECC0
(2880)	4287EEAD	4287F09A	4287F286	4287F473	4287F660	4287F84D	4287FA39	4287FC26	4287FE13	42880000
(2920)	42880000	42880000	42870000	42860000	42860000	42880000	42890000	42880000	42890000	42880000
(2960)	42880000	42880000	42880000	42880000	42880000	42880000	42870000	42870000	42860000	42860000
(3000)	42850000	42840000	42860000	42860000	42850000	42840000	42820000	42820000	42830000	42840000
(3040)	42840000	42840000	42830000	42850000	42850000	42850000	42860000	42850000	42850000	42840000
(3080)	42840000	42840000	42840000	42830000	42820000	42810000	42800000	42800000	42810000	42810000
(3120)	42810000	42820000	42820000	42810000	42820000	42820000	42820000	42810000	42820000	42820000
(3160)	42830000	42820000	42820000	42830000	42820000	42830000	42820000	42830000	42820000	42830000
(3200)	42830000	42830000	42830000	42840000	42840000	42840000	42830000	42840000	42830000	42840000
(3240)	42830000	42840000	42830000	42820000	42820000	42810000	42810000	42810000	42810000	42820000
(3280)	42810000	42810000	42810000	42810000	42800000	42800000	42800000	42800000	42810000	42810000
(3320)	42810000	42810000	42800000	42800000	42800000	42800000	427F0000	427F0000	427E0000	427D0000
(3360)	427F0000	42800000	42810000	427F0000	427F0000	427F0000	427F0000	427E0000	427E0000	427E0000
(3400)	427D0000	427D0000	427E0000	427F0000	427F0000	42800000	42800000	427F0000	427F0000	427E0000
(3440)	427D0000	427C0000	427C0000	427C0000	427D0000	427D0000	427D0000	427D0000	427D0000	427D0000
(3480)	427C0000	427C0000	427C0000	427B0000	427B0000	427C0000	427D0000	427D0000	427E0000	427D0000
(3520)	427D0000	427B0000	427B0000	427B0000	427B0000	427B0000	427C0000	427C0000	427C0000	427B0000
(3560)	427B0000	427A0000	427A0000	427B0000	427A0000	42790000	42790000	42790000	427A0000	42790000
(3600)	427A0000	427A0000	427A0000	42790000	427A0000	427A0000	427A0000	427A0000	42790000	42780000
(3640)	42780000	42790000	42790000	42790000	427A0000	427A0000	427A0000	427A0000	427A0000	42790000
(3680)	42780000	42780000	42780000	42780000	42780000	42780000	42780000	42780000	42780000	42780000
(3720)	42790000	427A0000	427A0000	42790000	42780000	42790000	42790000	42790000	42790000	42770000
(3760)	42760000	42740000	42770000	42770000	42760000	42750000	42770000	42760000	42760000	42750000
(3800)	42750000	42760000	42750000	42760000	42760000	42760000	00000000	42760000	42760000	42760000
(3840)	42760000	42770000	42750000	42750000	42750000	42760000	42740000	42760000	42760000	42760000
(3880)	42760000	42770000	42760000	42750000	42750000	42760000	42750000	42750000	42750000	42750000
(3920)	42750000	42760000	42760000	42760000	42770000	42780000	42770000	42770000	42780000	42770000
(3960)	42760000	42760000	42760000	42770000	42770000	42780000	42780000	42780000	42770000	00000000
(4000)	42780000	42780000	42780000	42770000	42780000	42780000	42780000	42780000	42790000	42780000
(4040)	42780000	42780000	42780000	42780000	42780000	42790000	42780000	42780000	42790000	42790000
(4080)	42790000	42770000	42780000	42790000	42780000	42770000	42780000	42780000	42780000	42760000
(4120)	42770000	42770000	42760000	42760000	42760000	42760000	42750000	42760000	42760000	42740000
(4160)	42740000	42760000	42740000	42740000	42750000	42750000	42740000	42740000	42760000	42750000
(4200)	42750000	42750000	42750000	42750000	42750000	42740000	42750000	42740000	42740000	42750000
(4240)	42750000	42750000	42750000	42750000	42760000	42740000	42750000	42740000	42750000	42740000
(4280)	42750000	42740000	42750000	42760000	42750000	42750000	42750000	42750000	42750000	42740000
(4320)	42740000	42750000	42740000	42730000	42740000	42740000	42740000	42740000	42740000	42740000
(4360)	42740000	42750000	42750000	42740000	42750000	42750000	42750000	42740000	42760000	42750000
(4400)	42750000	42750000	42760000	42740000	42740000	42750000	42750000	42750000	42740000	42750000
(4440)	42750000	42760000	42740000	42760000	42760000	42750000	42760000	42760000	42760000	42760000
(4480)	42760000	42760000	42760000	42760000	42750000	42760000	42750000	00000000	42750000	42760000
(4520)	42750000	42750000	42750000	42740000	42740000	42750000	42760000	42760000	42760000	42770000
(4560)	42760000	42760000	42770000	42750000	42760000	42750000	42750000	42760000	42760000	42770000
(4600)	42760000	42770000	42770000	42770000	42770000	42780000	42770000	42770000	42770000	42770000
(4640)	42760000	42770000	42770000	42770000	42770000	42770000	42760000	42760000	42760000	42760000
(4680)	42760000	42770000	42780000	42780000	42780000	42780000	42770000	42780000	42770000	42780000
(4720)	42780000	42780000	42780000	42780000	42780000	42780000	42780000	42780000	42780000	42780000
(4760)	42780000	42780000	42780000	42790000	42780000	42780000	42780000	42780000	42780000	42780000
(4800)	42780000	42780000	42790000	42790000	42780000	42780000	42780000	42780000	42780000	42770000
(4840)	42780000	42780000	42780000	42780000	42790000	42790000	42790000	42790000	427A0000	427A0000
(4880)	427A0000	427A0000	42780000	42780000	427A0000	427B0000	427B0000	427B0000	427B0000	427B0000

(5000)	427B0000	427B0000	427A0000	427B0000	427B0000	00CC0000	427B0000	427B0000	00000000	427C0000
(5040)	427C0000	427B0000	427A0000	427A0000	427B0000	427A0000	427A0000	427A0000	427A0000	427A0000
(5080)	427A0000	427A0000	427A0000	427B0000	427B0000	427B0000	427C0000	427C0000	427C0000	427D0000
(5120)	427D0000	427C0000	427C0000	427C0000	427C0000	427C0000	427B0000	427B0000	427B0000	427B0000
(5160)	427B0000	427C0000	427D0000	427D0000	427C0000	427D0000	427C0000	427C0000	427D0000	427D0000
(5200)	427C0000	427C0000	427C0000	427B0000	426E0000	427C0000	427C0000	427C0000	427D0000	427E0000
(5240)	427F0000	427E0000	427F0000	427E0000	427E0000	427E0000	427E0000	427E0000	427E0000	427E0000
(5280)	427D0000	427D0000	427C0000	427D0000	427D0000	427D0000	427D0000	427E0000	427E0000	427D0000
(5320)	427E0000	427E0000	427D0000	427E0000	427D0000	427E0000	427D0000	427E0000	427D0000	427E0000
(5360)	427E0000	427E0000	427D0000	427D0000	427D0000	427C0000	427D0000	427D0000	427D0000	427E0000
(5400)	427F0000	427F0000	427E0000	42800000	42800000	42820000	42800000	427E0000	427F0000	427E0000
(5440)	427F0000	427F0000	427F0000	427F0000	427F0000	427F0000	427E0000	427E0000	427D0000	427D0000
(5480)	427D0000	427D0000	427D0000	42800000	42800000	42810000	42810000	42820000	42800000	427E0000
(5520)	427D0000	427E0000	427C0000	427C0000	427E0000	427F0000	427E0000	427F0000	427F0000	427F0000
(5560)	427F0000	42800000	42850000	42800000	42820000	42810000	42830000	42820000	42810000	42800000
(5600)	42800000	42800000	42810000	42810000	42810000	42800000	42820000	42800000	42800000	42810000
(5640)	427F0000	42800000	42800000	42800000	42810000	427E0000	42820000	42810000	42810000	42820000
(5680)	42820000	42820000	42820000	42810000	42810000	42810000	42800000	42820000	42820000	42820000
(5720)	42820000	42820000	42820000	42830000	42820000	42820000	42820000	42820000	42820000	42830000
(5760)	42830000	42830000	42830000	42840000	42840000	42850000	42850000	42850000	42850000	42850000
(5800)	42860000	42850000	42840000	42840000	42850000	42840000	42850000	42840000	42840000	42840000
(5840)	42830000	42840000	42810000	42820000	42820000	42830000	42830000	42840000	42840000	42840000
(5880)	42850000	42860000	42860000	42860000	42870000	42860000	42850000	42840000	42840000	42820000
(5920)	42820000									

FILE 1 RECORD 382 LENGTH 16912BYTES

(0)	42100000	420C0000	C6E3C3C8	D9404040	000007B9	0CCC014F	0000000C	00000000	0000107A	41A3D708
(40)	42880000	42850000	42870000	42820000	42810000	42840000	42870000	42880000	42830000	42820000
(80)	42840000	42860000	42870000	42840000	42850000	42820000	42850000	42830000	42880000	42880000
(120)	42820000	42840000	42800000	428A0000	42820000	42860000	42840000	42830000	42820000	42800000
(160)	42800000	42860000	42850000	42840000	42850000	42850000	42860000	42870000	427E0000	427F0000
(200)	42830000	42840000	42840000	42830000	42820000	42820000	42830000	42820000	42800000	42800000
(240)	42850000	42840000	42830000	42860000	42860000	427F0000	42820000	42830000	42800000	42840000
(280)	42840000	42850000	42870000	42820000	42820000	42800000	42810000	42840000	42880000	42820000
(320)	42840000	42860000	42840000	42850000	42850000	42800000	42810000	42830000	42820000	42820000
(360)	42840000	42840000	42860000	427E0000	42830000	42840000	42820000	42840000	42840000	42830000
(400)	42800000	42800000	42850000	427F0000	42830000	42860000	427F0000	427E0000	42810000	42800000
(440)	42800000	42830000	427D0000	427E0000	427D0000	42840000	42870000	42810000	42810000	42810000
(480)	42870000	42800000	42800000	42850000	42810000	42790000	42820000	427C0000	42820000	42820000
(520)	42830000	42830000	42800000	42810000	427C0000	42820000	427F0000	42840000	427B0000	42830000
(560)	42820000	427D0000	42800000	42800000	42800000	42800000	42810000	427E0000	427C0000	42840000
(600)	42840000	42810000	427F0000	42860000	42820000	42830000	427C0000	428B0000	42860000	42830000
(640)	42820000	427E0000	427E0000	427D0000	42810000	427F0000	42840000	42870000	42820000	42870000
(680)	427E0000	42810000	42840000	42810000	42820000	42820000	427E0000	427E0000	42800000	42800000
(720)	427D0000	427A0000	42800000	42850000	42810000	42810000	42830000	42830000	427D0000	427F0000
(760)	42820000	427F0000	42800000	42810000	42830000	42820000	427C0000	42840000	42820000	427F0000
(800)	42800000	42810000	42830000	42830000	427F0000	42810000	42840000	42790000	42800000	427E0000
(840)	42820000	42820000	42810000	42810000	42830000	42830000	427F0000	42810000	427E0000	42800000
(880)	42830000	42840000	42820000	42830000	427E0000	42820000	427E0000	42810000	427F0000	427C0000
(920)	427F0000	42800000	42890000	42830000	42820000	427F0000	42880000	427D0000	42810000	42840000
(960)	42800000	42870000	427F0000	427D0000	42820000	42810000	42850000	42810000	427E0000	427F0000
(1000)	427D0000	427E0000	42850000	42860000	427D0000	42830000	42810000	42810000	42800000	42840000
(1040)	42800000	42830000	42770000	42810000	427D0000	427E0000	427D0000	42790000	C1400000	C1500000
(1080)	C1500000	C1400000	C1500000	427E0000	427E0000	427F0000	42830000	427F0000	427F0000	427F0000
(1120)	427C0000	42820000	42820000	427F0000	427F0000	42820000	42810000	42800000	42810000	42800000
(1160)	42810000	427E0000	427E0000	42830000	427F0000	427C0000	42820000	427F0000	427A0000	427C0000
(1200)	42810000	42810000	427B0000	42820000	42810000	42800000	42800000	427D0000	427D0000	427F0000
(1240)	427E0000	42820000	427E0000	427E0000	427B0000	427B0000	427F0000	42760000	427F0000	427E0000
(1280)	42820000	427F0000	42810000	427B0000	427D0000	427E0000	42800000	42810000	427F0000	427E0000
(1320)	42770000	427D0000	42810000	427C0000	427D0000	427D0000	42810000	42820000	427E0000	42820000
(1360)	42810000	427C0000	427C0000	427A0000	42820000	42830000	42800000	42830000	42820000	427C0000
(1400)	427C0000	42820000	427D0000	42810000	42810000	427F0000	427F0000	427F0000	427D0000	42800000
(1440)	427E0000	42810000	427B0000	42820000	427D0000	427C0000	427B0000	427D0000	42810000	427F0000
(1480)	42810000	427D0000	427A0000	427D0000	427D0000	427F0000	427E0000	42830000	427E0000	427D0000

(14800)	42CD0000	42C60000	42CD0000	42CD0000	42C40000	42C30000	42CB0000	42C70000	42C70000	42D50000
(14840)	42C50000	42C90000	42C60000	42C50000	42C50000	42C60000	42C60000	42C30000	42BC0000	42BB0000
(14880)	42BF0000	42BE0000	42BC0000	42C50000	42BB0000	42C80000	42BF0000	42BE0000	42BE0000	42BF0000
(14920)	42BF0000	42B80000	42BD0000	42B70000	42C40000	42B40000	42B90000	42BC0000	42BC0000	42B50000
(14960)	42B20000	42BD0000	42BB0000	42BA0000	42C40000	42C00000	42BC0000	42C30000	42CA0000	42C40000
(15000)	42BC0000	42CA0000	42CC0000	42C30000	42C70000	42D40000	42C90000	42CE0000	42CC0000	42CC0000
(15040)	42C70000	42D60000	42D30000	42CE0000	42E20000	42CD0000	42D00000	C1400000	C1400000	C1500000
(15080)	C1400000	C1400000	42BC0000	42C20000	42C40000	42CC0000	42BF0000	42BA0000	42BA0000	42BD0000
(15120)	42B90000	42B70000	42B30000	42B70000	42C20000	42AA0000	42B90000	42B20000	42B40000	42B10000
(15160)	42AF0000	42AB0000	42A90000	42AB0000	42AC0000	42A70000	42B40000	42AD0000	42AD0000	42B80000
(15200)	42B10000	42B90000	42AA0000	42AC0000	42940000	42990000	42940000	42A20000	429A0000	42A00000
(15240)	42990000	42A00000	429F0000	429E0000	42980000	42980000	429D0000	42980000	429D0000	42980000
(15280)	42950000	42A20000	42980000	42990000	429A0000	42BC0000	42B20000	42A50000	429C0000	42A30000
(15320)	42A00000	42A20000	42A50000	42B20000	42BA0000	42BC0000	42C00000	42BC0000	42BC0000	42CA0000
(15360)	42BC0000	42CA0000	42C20000	42CA0000	42C40000	42D30000	42CB0000	42D60000	42D00000	42CF0000
(15400)	42CD0000	42C20000	42D10000	42C10000	42C80000	42CE0000	42CD0000	42CA0000	42C60000	42D30000
(15440)	42C50000	42CF0000	42C10000	42CC0000	42CD0000	42CF0000	42D50000	42CF0000	42D40000	42D60000
(15480)	42D80000	42D40000	42D40000	42D30000	42CD0000	42C40000	42C40000	42B80000	42B30000	42C10000
(15520)	42B80000	42B40000	42B90000	42B40000	42BA0000	42AC0000	42AD0000	42AA0000	42AC0000	42B50000
(15560)	42AA0000	42B70000	42B90000	42B90000	42C30000	42BC0000	42C10000	42BD0000	42D00000	42C20000
(15600)	42C10000	42C00000	42CC0000	42BC0000	42C10000	42D40000	42BD0000	42C50000	42C10000	42BF0000
(15640)	42C40000	42BF0000	42C90000	42C20000	42C60000	42BD0000	42BC0000	42D10000	42CD0000	42CA0000
(15680)	42CE0000	42C60000	42C20000	42BF0000	42C70000	42C70000	42CB0000	42C60000	42E90000	42CF0000
(15720)	42D00000	42CB0000	42E00000	42C30000	42D20000	42D10000	42DA0000	42CE0000	42CE0000	42CC0000
(15760)	42C90000	42D00000	42CA0000	42CE0000	42D40000	42D20000	42D50000	42C70000	42DF0000	42C70000
(15800)	42D50000	42DC0000	42CF0000	42DF0000	42CF0000	42E10000	42D90000	42DD0000	42C20000	42BD0000
(15840)	42C50000	42D70000	42C50000	42C90000	42C40000	42BF0000	42CB0000	42C00000	42D00000	42C10000
(15880)	42C00000	42C80000	42C40000	42CA0000	42C80000	42C80000	42BE0000	42CF0000	42C30000	42C80000
(15920)	42C10000	42C10000	42C90000	42C90000	42BF0000	42C30000	42C90000	42BC0000	42C90000	42CB0000
(15960)	42CC0000	42CA0000	42C50000	42DE0000	42C20000	42C30000	42C10000	42C00000	42D20000	42C30000
(16000)	42CF0000	42D20000	42CB0000	42C80000	42C70000	42CC0000	42C80000	42C00000	42C30000	42D20000
(16040)	42C60000	42C80000	42D30000	42C50000	42DF0000	42CF0000	42D80000	42CE0000	42C60000	42CB0000
(16080)	42CA0000	42C80000	42CE0000	42CF0000	42D90000	42CE0000	42D10000	42D30000	42D40000	42D10000
(16120)	42D10000	42DC0000	42D40000	42D20000	42CD0000	42DF0000	42D40000	42E20000	42CD0000	42DC0000
(16160)	42E20000	42D70000	42D40000	42D10000	42D30000	42D10000	42D80000	42D40000	42D70000	42F00000
(16200)	42C60000	42D70000	42D90000	42D60000	42CC0000	42D50000	42E50000	42D80000	42D40000	42D60000
(16240)	42D50000	42DA0000	42DB0000	42DC0000	42D80000	42D00000	42D50000	42E30000	42DA0000	42DD0000
(16280)	42D80000	42D80000	42DC0000	42D40000	42D20000	42DC0000	42D00000	42CE0000	42C60000	42CF0000
(16320)	42D10000	42D50000	42DB0000	42F50000	42DC0000	42E30000	42DB0000	42E10000	42DF0000	42D80000
(16360)	42DC0000	42E40000	42D90000	42D50000	42DC0000	42D10000	42D40000	42DD0000	42DB0000	42E50000
(16400)	42E00000	42D80000	42DE0000	42D90000	42D40000	42D30000	42F00000	42D90000	42DA0000	42D30000
(16440)	42DE0000	42DA0000	42E80000	42E20000	42E70000	42E20000	42E60000	42EC0000	C1500000	C1400000
(16480)	C1400000	C1400000	C1500000	C1400000	42DE0000	42D70000	42EA0000	42E20000	42D60000	42E60000
(16520)	42E40000	42CF0000	42DD0000	42D90000	42D90000	42E10000	42D40000	42D90000	42E30000	42DE0000
(16560)	42DA0000	42D90000	42DB0000	42E10000	42D80000	42D70000	42D80000	42E50000	42DF0000	42E20000
(16600)	42EA0000	42E10000	42D40000	42E20000	42D90000	42DF0000	42DD0000	42D50000	42D60000	42D50000
(16640)	42D80000	42ED0000	42DC0000	42DD0000	42DC0000	42E70000	42FA0000	42E00000	42EE0000	42DC0000
(16680)	42D30000	42E90000	42D90000	42DD0000	42F00000	42DD0000	42E50000	42E30000	42D60000	42D40000
(16720)	42D40000	42E20000	42E50000	42E40000	42DD0000	42D60000	42D20000	42D20000	42D90000	42D50000
(16760)	42E20000	42D50000	42D70000	42D20000	42D10000	42D30000	42D70000	42DE0000	42D40000	42DA0000
(16800)	42D90000	42D50000	42E50000	42E00000	42D70000	42DE0000	42E60000	42D80000	42E60000	42E00000
(16840)	42F20000	42E30000	42D60000	42E10000	42EB0000	42E10000	42E20000	42D50000	42E30000	42D60000
(16880)	42D90000	42E50000	42DF0000	42E50000	42DC0000	42D50000	42E90000	42DB0000		

FILE 1 RECORD 383 LENGTH 408BYTES

(0)	01980000	01940000	42130000	40400000	00000000	42AE8000	421DCA61	431AE800	42497D8A	432AE800
(40)	427530A6	432B6800	4277EBAC	433B6800	42A39ED6	434B6800	42CF5200	435B6800	42FB052A	436B6800
(80)	43126B85	437B6800	431526B7	438B6800	4317E1EA	439B6800	431A9D19	439BE800	431AC8C9	43ABE800
(120)	431D83FC	43BBE800	43203F2E	43CBE800	4322FA61	43DBE800	4325B594	43EBE800	43287DC6	43FBE800
(160)	432B2BF9	44107AC0	00000000	00000000	00000000	00000000	00000000	00000000	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	00000000	00000000	00000000	00000000	00000000	00000000

REQ. AGENT	RAPID NO.	ACQ. AGENT
VJP	RD2472	MJT

MAGNETOMETER DATA

REVISED FORMAT

GG-24B/81B

This data set catalog consists of 1 data tape. The tape is 9 track, EBCDIC, 1600 BPI, and has 3 files of data. The tape was created on an AMDAHL 470V/6 computer.

Time span is as follows:

D#	C#	TIME SPAN
D-34152	C-20660	7/27/77 - 7/29/77
D-34560	C-20666	7/29/77

GG-24 B 8/B
D-34152
7/27/77 - 7/29/77
GG-240 f 810

DUMP OF TAPE X402

INPUT TAPE X4 2 ON MS1
DATA INPUT H9 NF S FL S 1 1

FILE 1 RECORD 1 LENGTH 80BYTES

(0)	E5D6D3F1	C3C4C1E6	F2F2F840	40404040	40404040	40404040	40404040	40404040	40404040
(40)	40E4D5C9	E5D6C6C1	D3E3C140	40404040	40404040	40404040	40404040	40404040	40404040

FILE 1 RECORD 2 LENGTH 80BYTES

(0)	C6C4D9F2	C6F1F0F2	F4F0F0F0	F0F6F0F3	F0C4D6E4	C7404040	4061F8F7	F4F3F8F8	40404040	4040C240
(40)	4040F0F4	F9F4F940	40404040	40404040	40404040	4C404040	40404040	40404040	40404040	40404040

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	2	3	80	0	0	0	0	0	0

FILE 2 RECORD 1 LENGTH 1024BYTES

(0)	40404F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0
(40)	4C4040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	D7D9D6E5	C8F2F0F8	F2F3F4F3	F2F44BF1
(80)	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0
(120)	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	D7D9D6E5	C4F2F0F8	F2F3F4F3	F2F44BF1
(160)	40404060	F9F24BF0	40404060	F9F24BF0	40404060	F9F24BF0	40404060	F9F24BF0	40404060	F9F24BF0
(200)	40404060	F9F24BF0	40404060	F9F24BF0	40404060	F9F24BF0	D7D9D6E5	E9F2F0F8	F2F3F4F3	F2F44BF1
(240)	404040F2	F0F94BF0	404040F2	F0F54BF0	404040F2	F0F94BF0	404040F2	F1F14BF0	404040F2	F1F14BF0
(280)	404040F2	F1F34BF0	404040F2	F1F44BF0	404040F2	F1F14BF0	D7D9D6E5	D9F2F0F8	F2F3F4F3	F2F44BF1
(320)	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0
(360)	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	D7D9D6E5	C8F2F0F8	F2F3F4F3	F4F44BF6
(400)	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0
(440)	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	D7D9D6E5	C4F2F0F8	F2F3F4F3	F4F44BF6
(480)	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0
(520)	40404060	F9F24BF0	40404060	F9F14BF0	40404060	F9F14BF0	D7D9D6E5	E9F2F0F8	F2F3F4F3	F4F44BF6
(560)	404040F2	F0F64BF0	404040F2	F0F64BF0	404040F2	F0F74BF0	404040F2	F0F94BF0	404040F2	F0F44BF0
(600)	404040F2	F1F14BF0	404040F2	F1F54BF0	404040F2	F1F54BF0	D7D9D6E5	D9F2F0F8	F2F3F4F3	F4F44BF6
(640)	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0
(680)	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	D7D9D6E5	C8F2F0F8	F2F3F4F4	40F54BF1
(720)	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0
(760)	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	D7D9D6E5	C4F2F0F8	F2F3F4F4	40F54BF1
(800)	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0
(840)	40404060	F9F24BF0	40404060	F9F14BF0	40404060	F9F14BF0	D7D9D6E5	E9F2F0F8	F2F3F4F4	40F54BF1
(880)	404040F2	F0F64BF0	404040F2	F0F64BF0	404040F2	F1F14BF0	404040F2	F0F64BF0	404040F2	F0F64BF0
(920)	404040F2	F0F64BF0	404040F2	F0F74BF0	404040F2	F0F94BF0	D7D9D6E5	D9F2F0F8	F2F3F4F4	40F54BF1
(960)	404040F1	F0F54BF0	404040F1	F0F54BF0	404040F1	F0F54BF0	404040F1	F0F54BF0	404040F1	F0F44BF0
(1000)	404040F1	F0F44BF0	404040F1	F0F44BF0	404040F1	F0F44BF0	D7D9D6E5	C6F2F0F8	F2F3F4F4	F2F54BF6
(1040)	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0
(1080)	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	D7D9D6E5	C4F2F0F8	F2F3F4F4	F2F54BF6
(1120)	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0
(1160)	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	D7D9D6E5	E9F2F0F8	F2F3F4F4	F2F54BF6
(1200)	404040F2	F0F54BF0	404040F2	F1F14BF0	404040F2	F1F34BF0	404040F2	F0F64BF0	404040F2	F1F94BF0
(1240)	404040F2	F1F74BF0	404040F2	F1F44BF0	404040F2	F0F94BF0	D7D9D6E5	D9F2F0F8	F2F3F4F4	F2F54BF6
(1280)	404040F1	F0F44BF0	404040F1	F0F54BF0	404040F1	F0F54BF0	404040F1	F0F54BF0	404040F1	F0F54BF0
(1320)	404040F1	F0F54BF0	404040F1	F0F54BF0	404040F1	F0F54BF0	D7D9D6E5	C8F2F0F8	F2F3F4F4	F4F64BF0
(1360)	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0
(1400)	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	D7D9D6E5	C4F2F0F8	F2F3F4F4	F4F64BF0
(1440)	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0
(1480)	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	D7D9D6E5	E9F2F0F8	F2F3F4F4	F4F64BF0
(1520)	404040F2	F0F94BF0	404040F2	F1F44BF0	404040F2	F2F74BF0	404040F2	F0F94BF0	404040F2	F1F14BF0
(1560)	404040F2	F1F14BF0	404040F2	F0F64BF0	404040F2	F0F94BF0	D7D9D6E5	D9F2F0F8	F2F3F4F4	F4F64BF0
(1600)	404040F1	F0F54BF0	404040F1	F0F54BF0	404040F1	F0F54BF0	404040F1	F0F54BF0	404040F1	F0F54BF0
(1640)	404040F1	F0F54BF0	404040F1	F0F64BF0	404040F1	F0F54BF0	D7D9D6E5	C8F2F0F8	F2F3F4F5	40F64BF5
(1680)	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0
(1720)	40404060	F5F14BF0	40404060	F5F14BF0	40404060	F5F14BF0	D7D9D6E5	C4F2F0F8	F2F3F4F5	40F64BF5
(1760)	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0	40404060	F9F14BF0

```
( 10040)  4C4060F3  F4F74BFC  404060F3  F4F64BF0  4040c0F3  F4F74BFC  C6E3C3C8  C4F2F1F1  F2F3F4F9  F2F84BF1
( 10080)  4C4C4060  F7F94BFC  40404060  F7F94BF0  40404C60  F7F94BFC  40404C60  F7F94BF0  40404060  F7F94BF0
( 10120)  4C4C4060  F7F94BFC  40404060  F7F94BF0  4C4C4060  F7F94BFC  C6E3C3C8  E9E2F1F1  F2F3F4F9  F2F84BF1
( 10160)  4C4040F1  F5F64BF0  404040F1  F5F34BF0  4040C0F1  F5F84BF0  404040F1  F5F44BF0  404040F1  F5F44BF0
( 10200)  4C4040F1  F5F74BF0  404040F1  F5F84BF0  4040C0F1  F5F34BF0  C6E3C3C8  D9E2F1F1  F2F3F4F9  F2F84BF1

          FILE   INPUT     DATA RECORDS     MAX.          READ ERROR SUMMARY          INPUT RETRIES
                 RECS.       INPUT          SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
               2     763     764            10240         0     15       0      0      17      18

FILE      3  RECORD       1  LENGTH      80BYTES
(      3)  C5D6C6F1  E5C3C4C1  E6F2F348  C6F3F0F0  F1404040  40C3C4C1  E6F2F3F0  F0F0F1F0  F0F0F140  40404040
(     40)  4040F7F9  F2F2F840  F0F0F0F0  F0F0F0F0  F0F7F6F4  D4E3E240  C4C9E2E3  40E44BF1  40404040  40404040

FILE      3  RECORD       2  LENGTH      80BYTES
(      3)  C5D6C6F2  C6F1F7F2  F4F0F0F0  F0F8F0F3  F0C4D6E4  C7404040  4061F8F9  F7F1F7F1  40404040  40400240
(     40)  4040F0F6  F2F2F840  40404040  40404040  40404040  40404040  40404040  40404040  40404040  40404040

          FILE   INPUT     DATA RECORDS     MAX.          READ ERROR SUMMARY          INPUT RETRIES
                 RECS.       INPUT          SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
               3       2     3              80            0     0       0      0      0       0

EOJ          DUMP STOPPED AFTER FILE   3          # OF PERMANENT READ ERRORS   0

START TIME 09/10/79  13:45:14          STOP TIME 09/10/79  13:46:16
```

```
$$
$ASS 7 MS6 9 MS1
```

REQ. AGENT	RAND NO.	ACQ. AGENT
VJP	RD0930 RD1886 RD2466	KWC MJT

GROUND MAGNETOMETER AND RIOMETER

(30 STATIONS)

GG-25A

This data set catalog consists of 3 data tapes. The tapes are 1600 BPI, 9 track, EBCDIC with 1 file of data. The tapes were created on an IBM 3032 computer.

The time spans are as follows:

D#	C#	TIME SPAN
D-32273	C-20150	12/02/77
D-33394	C-20497	12/02/77 - 12/12/77
D-33863	C-20600	07/28/77 - 08/29/77

INSTITUT FÜR GEOPHYSIK
der Westfälischen Wilhelms-Universität
Dipl.-Phys. W. Baumjohann

44 MÜNSTER/WESTF.
Gievenbecker Weg 61
Telefon: (0251) 490-3591
Fernschreiber: 892529 unimsd

Institut f. Geophysik, Gievenbecker Weg 61, 4400 Münster

Dr. James I. Vette
Code 601
IMS/SSC
NASA/Goddard Space Flight Center
Greenbelt, Maryland 20771
U. S. A.

BY AIRMAIL

IHR ZEICHEN | IHRE NACHRICHT VOM | UNSER ZEICHEN | DURCHWAHL | DATUM

78-09-04

Dear Jim,

our new computer starts working today and I hope I get the datatape for the CDAW ready until tomorrow. Unfortunately I have to leave our institute to do some fieldwork in Scandinavia during the next 3 weeks, but at least our programmer will send you the tape and a printout of the first records, if I can't manage before my departure.

The data will be written onto 9-track tape with phase-encoded 1600 bpi and odd parity by an IBM 3032 computer. All data will be on the first and only file on that "no-label" tape with one end-of-file mark at the end of the dataset. ("no label" means "not standard IBM labels"). Each physical record (= block) will contain 16000 bytes, i.e. 200 logical records of each 80 bytes EBCDIC code in the format attached. The last block does not necessarily contain the full 100 logical records. I do not know the total number of records yet, but this information will be provided together with the data tape.

I hope you will not have too much trouble with our tape - if you have any questions please write me and I will answer as soon as possible. Thank you very much as well for the video-cassette and the hotel-list. I will play the cassette

just after coming back from fieldservice and I hope I can make arrangements regarding the accommodation during the Los Alamos conference.

With best regards,

Wolfg

(Wolfgang Baumjohann)

November 1977

Structure of Magnetogram Data Files in EBCDIC-Representation

One data file includes data of one or more magnetogram traces (= subdataset), each containing a certain Number (N) relative amplitude values in nT of either X-, Y-, or Z- component for one event for one station.

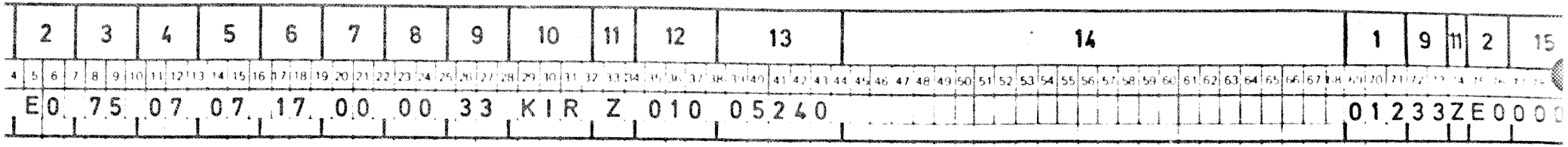
Each subdataset consists of 1 identification record (record #0) and N' data records (record #1 - #N') - N' means the smallest integer greater than or equal to N/8.

Each record includes 80 bytes of EBCDIC representation. For a detailed description of identification and data records see forms attached.

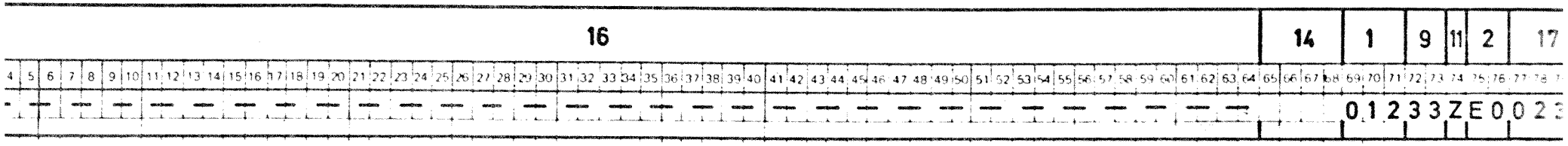
For any further information please contact

W. Baumjohann
Geophysical Institute
University of Muenster
Gievenbecker Weg 61
D-4400 Muenster, F.R.G.

identification record



data record



1 event number

2 'E0'

3 year
4 month
5 day
6 hour
7 min
8 sec

} of first amplitude value in UT

9 station number

10 station abbreviation

11 component

12 sampling interval in sec

13 number of amplitude values (=N) in this subdataset

14 blank

15 '0000'

16 8 amplitude values, each 8 byte EBCDIC in format ±99999.9

17 sequence number of data record in this subdataset

add (16) the last record of one subdataset contains ≤ 8 amplitude values

D-32273
GG-25A/GG-76A
12/02/77

```
$NOP  ***********  LIST OF X-409  ************
$EXEC LIST BS

INPUT PARAMETERS ARE:  ED FL=1=4

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   16000
022 ED 77 12 02 15 00 00 01 NAM X 010 02880                                  02201XE00000-00009.1-00008.5-00
008.8-00009.5-00010.2-00012.3-00015.3-00018.6     02201XE00001-00021.7-00024.2-00026.3-00028.2-00029
.8-00031.1-00032.0-00032.3     02201XE00002-00032.1-00031.8-00031.3-00030.5-00029.2-00028.0-00026.5-
00025.0     02201XE00003-00023.5-00022.1-00021.0-00020.0-00019.6-00019.5-00019.6-00020.0     02201XE0
0004-00020.5-00020.8-00021.5-00022.0-00022.6-00023.0-00023.1-00023.0     02201XE00005-00023.0-00022.
3-00020.5-00018.6-00016.5-00014.1-00011.7-00009.5     02201XE00006-00007.3-00005.2-00003.5-00002.2-0
0001.3-00000.6+00000.0+00000.5     02201XE00007+00000.6+00000.5+00000.1+00000.1+00000.6+00001.5+0000
3.0+00004.8     02201XE00008+00006.3+00007.5+00008.6+00009.6+00010.5+00011.5+00012.7+00014.2     0220
1XE00009+00016.0+00017.5+00018.5+00019.5+00020.7+00022.6+00024.5+00026.0     02201XE00010+00027.0+00
028.3+00029.7+00031.0+00032.1+00033.5+00035.0+00036.3     02201XE00011+00037.7+00039.1+00040.5+00042
.0+00044.0+00045.6+00047.5+00049.1     02201XE00012+00050.5+00051.6+00052.5+00053.1+00053.5+00053.2+
00053.0+00053.1     02201XE00013+00053.6+00054.7+00056.3+00058.1+00060.2+00062.8+00066.2+00068.5
02201XE00014+00070.0+00071.0+00071.0+00070.0+00069.0+00068.7+00068.6+00068.6     02201XE00015+00068.
5+00068.6+00069.0+00070.2+00071.8+00072.8+00073.0+00072.5     02201XE00016+00072.3+00072.6+00073.1+0
0073.0+00072.8+00072.8+00073.1+00073.5     02201XE00017+00074.0+00074.6+00075.2+00076.0+00076.5+0007
7.0+00077.5+00078.3     02201XE00018+00080.0+00081.6+00083.5+00084.8+00086.0+00086.8+00087.3+00087.5
     02201XE00019+00087.5+00087.5+00088.0+00089.6+00091.7+00093.2+00094.3+00095.0     02201XE00020+00
095.0+00094.5+00094.1+00094.5+00095.6+00097.2+00098.6+00099.2     02201XE00021+00099.2+00098.8+00098
.1+00097.6+00097.0+00096.2+00095.1+00094.0     02201XE00022+00092.7+00091.1+00089.1+00087.0+00085.2+
00084.5+00084.2+00083.8     02201XE00023+00083.3+00083.0+00082.5+00081.8+00081.1+00080.2+00079.3+000
78.3     02201XE00024+00076.8+00074.8+00072.5+00071.0+00069.5+00068.0+00066.8+00065.5     02201XE0002
5+00064.2+00062.8+00061.8+00061.0+00060.3+00059.8+00059.5+00059.0     02201XE00026+00058.6+00058.5+0
0058.2+00058.0+00057.5+00056.8+00055.7+00054.5     02201XE00027+00053.1+00052.0+00050.8+00050.0+0004
9.5+00048.7+00047.8+00047.0     02201XE00028+00046.1+00045.7+00045.7+00045.5+00045.0+00044.0+00042.5
+00041.1     02201XE00029+00040.0+00038.7+00037.5+00035.8+00034.0+00032.0+00030.1+00029.0     02201XE
00030+00028.5+00028.3+00028.2+00028.5+00028.6+00028.8+00029.0+00029.0     02201XE00031+00029.0+00028
.7+00028.2+00027.2+00025.6+00024.0+00022.2+00020.5     02201XE00032+00019.0+00017.5+00016.2+00015.5+
00015.0+00014.8+00014.7+00014.8     02201XE00033+00014.8+00014.8+00015.0+00015.0+00015.0+00014.8+000
14.5+00014.0     02201XE00034+00013.2+00012.3+00011.3+00010.2+00009.1+00008.1+00007.2+00006.5     022
01XE00035+00006.1+00006.0+00006.0+00006.0+00006.1+00006.1+00006.2+00006.2     02201XE00036+00006.2+0
0006.0+00005.3+00004.8+00004.2+00003.3+00002.6+00002.0     02201XE00037+00001.2+00000.5-00000.2-0000
1.0-00001.6-00002.0-00002.1-00002.1     02201XE00038-00002.1-00002.0-00002.3-00002.7-00003.5-00004.2
-00005.0-00005.3     02201XE00039-00005.3-00005.1-00005.0-00004.8-00004.2-00003.3-00002.5-00001.5
  02201XE00040-00000.6+00000.0+00000.0-00000.5-00001.0-00001.5-00002.6-00004.1     02201XE00041-00005
.7-00007.5-00009.0-00010.0-00010.5-00009.5-00007.7-00006.0     02201XE00042-00004.0-00002.0-00000.2+
00001.7+00002.6+00002.2+00001.2+00000.0     02201XE00043-00001.2-00002.8-00004.6-00006.3-00008.0-000
09.5-00010.3-00010.3     02201XE00044-00009.5-00007.8-00006.0-00004.5-00003.2-00002.7-00002.5-00002.
5     02201XE00045-00002.6-00002.8-00002.8-00002.7-00002.3-00002.0-00001.3-00000.5     02201XE00046+0
0000.5+00001.5+00002.7+00004.0+00005.2+00006.3+00007.3+00008.5     02201XE00047+00009.7+00010.8+0001
2.0+00012.6+00013.0+00013.0+00013.0+00012.6     02201XE00048+00012.1+00011.5+00010.3+00008.5+00007.0
+00005.1+00003.7+00002.7     02201XE00049+00002.2+00002.1+00002.1+00002.3+00002.8+00003.8+00005.0+00
006.5     02201XE00050+00007.0+00007.3+00007.3+00007.0+00006.5+00006.0+00004.5+00003.2     02201XE000
51+00002.2+00001.2+00000.2-00000.3-00000.8-00001.1-00001.2-00001.0     02201XE00052-00000.5+00000.3+
00002.2+00004.6+00006.5+00007.7+00008.3+00008.5     02201XE00053+00008.2+00007.8+00007.5+00007.5+000
07.3+00007.1+00007.1+00007.5     02201XE00054+00008.3+00009.2+00010.1+00011.0+00011.7+00012.2+00012.
5+00012.7     02201XE00055+00012.7+00012.7+00012.7+00012.7+00013.0+00013.2+00013.6+00014.1     02201X
E00056+00014.7+00015.6+00016.3+00016.8+00017.0+00016.8+00016.7+00017.1     02201XE00057+00017.8+0001
8.5+00018.5+00018.2+00018.1+00018.3+00019.0+00019.8     02201XE00058+00020.7+00021.5+00022.5+00024.0
+00025.3+00026.5+00027.7+00029.0     02201XE00059+00030.2+00032.1+00034.3+00036.5+00038.7+00040.0+00
040.2+00040.0     02201XE00060+00039.2+00038.7+00038.3+00037.0+00037.2+00039.0+00041.0+00042.6     02
201XE00061+00044.6+00046.6+00048.2+00049.7+00050.3+00049.5+00049.2     02201XE00062+00049.8+
00051.0+00052.3+00053.8+00055.3+00057.1+00059.6+00063.5     02201XE00063+00065.0+00065.2+00065.5+000
66.6+00068.8+00071.5+00073.8+00076.2     02201XE00064+00078.7+00080.6+00081.7+00082.2+00081.5+00081.
0+00080.6+00080.7     02201XE00065+00081.5+00083.0+00085.3+00088.0+00090.6+00093.2+00096.0+00099.0
  02201XE00066+00101.6+00103.7+00105.7+00107.5+00108.5+00109.0+00109.0+00108.6     02201XE00067+0010
8.0+00107.0+00106.0+00104.5+00103.0+00102.5+00104.1+00106.8     02201XE00068+00108.7+00109.7+00111.1
+00113.2+00115.7+00117.7+00118.6+00119.7     02201XE00069+00122.1+00124.6+00126.6+00129.0+00132.0+00
```

```
00017.0+00018.0    02854YE00388+00020.0+00020.0+00018.0+00017.0+00015.0+00014.0+00014.0+00017.0
02854YE00389+00017.0+00015.0+00015.0+00018.0+00017.0+00019.0+00019.0+00017.0    02854YE00390+00015.
0+00014.0+00015.0+00018.0+00019.0+00019.0+00018.0+00016.0    02854YE00391+00014.0+00014.0+00014.0+0
0014.0+00014.0+00014.0+00016.0+00017.0    02854YE00392+00015.0+00016.0+00017.0+00018.0+00017.0+00020
0.0+00022.0+00023.0    02854YE00393+00022.0+00022.0+00021.0+00021.0+00024.0+00022.0+00021.0+00021.0
    02854YE00394+00020.0+00017.0+00017.0+00015.0+00015.0+00015.0+00016.0+00018.0    02854YE00395+00
019.0+00020.0+00019.0+00018.0+00017.0+00018.0+00021.0+00021.0    02854YE00396+00021.0+00019.0+00017
.0+00018.0+00018.0+00018.0+00018.0+00018.0    02854YE00397+00019.0+00020.0+00019.0+00019.0+00020.0+
00019.0+00020.0+00020.0    02854YE00398+00018.0+00017.0+00016.0+00016.0+00016.0+00015.0+00015.0+000
16.0    02854YE00399+00018.0+00020.0+00021.0+00023.0+00024.0+00025.0+00025.0+00026.0    02854YE0040
0+00024.0+00022.0+00019.0+00016.0+00013.0+00012.0+00010.0+00010.0    02854YE00401+00011.0+00013.0+0
0014.0+00016.0+00017.0+00018.0+00018.0+00019.0    02854YE00402+00017.0+00016.0+00014.0+00012.0+00011
1.0+00009.0+00007.0+00006.0    02854YE00403+00006.0+00005.0+00004.0+00004.0+00004.0+00003.0
+00003.0    02854YE00404+00003.0+00003.0                                                    02854YE
00405

***** JOB DONE.
$NOTE EOJ   11:33:35
$WEO LPS
```

```
$$
$ASS IN MS3 OUT MS2
```

REQ. AGENT	RAND NO.	ACQ. AGENT
VJP	RD1109	HKH

NORTH AMERICAN

MAGNETIC CHAIN DATA

~~GG-75R~~
GG-27A

This data set catalog consists of 1 data tape. The tape is 7 track, 800 BPI, BCD and contains 34 files of data. The tape was created on an IBM 360 computer.

Time span is as follows:

D#	C#	TIME SPAN
D-32339	C-20267	12/01/[illegible] - 12/12/[illegible]

Barfield's Ground Magnetometer Data for CDAW

9-track, 800 BPI, BCD (even parity), [illegible] files, 80 characters per record

Each file contains data for 3 components at one station for one day.

In each file, Record 1 contains an identification consisting of a single letter code, year, month, day, station code, and trace code for each of the three traces (components).

Example: [illegible]

Record 2 contains three numbers (format 3I4), which tell how many data pairs there are for the three traces.

Record 3 - ... contain four pairs of data, (format [illegible]). Data for the first trace appears, first, followed by the others. Each data pair contains (1st) the time of day in minutes and (2nd) the deviation for the value of the first time in the day, in gamma.

The last record of a file may have fill characters of 0.00 or -9999.00.

There is data for 4 days, but the list of stations is different for different days.

```
IEF285I   SYS78346.T094220.SV000.YZRWPJB6.R0000034      SYSOUT           DDNAME=SYSTERM                  1 EXCPS
IEF285I   VOL SER NOS= K3SCR5.
IEF285I   SYS78346.T094220.RV000.YZRWPJB6.R0000035      DELETED          DDNAME=SYSUT1                  22 EXCPS
IEF285I   VOL SER NOS= K3SCR2.
IEF285I   SYS78346.T094220.RV000.YZRWPJB6.S0000036      SYSIN            DDNAME=SYSLIN  -1               4 EXCPS
IEF285I   VOL SER NOS= K3SCR2.
IEF285I   SYS78346.T094220.RV000.YZRWPJB6.S0000036      DELETED          DDNAME=SYSLIN  -1               4 EXCPS
IEF285I   VOL SER NOS= K3SCR2.
IEF373I STEP /LINK     / START 78346.1006
IEF374I STEP /LINK     / STOP  78346.1017 CPU    0MIN 01.24SEC MAIN 132K LCS    0K
- STEP 02 -      RETURN CODE = 0000                                  STEP TIME =      .21 MINS=(CPU=      .02,IO=      .19)
                                    IO IN SECS. DISK=    11.90,DRUM=      .04,TAPE=      .00,CELL=      .00,OTHR=      .15
- SURCHARGES=(DRIVES ALOC=000,TAPE MOUNTS=000,CORE=000,PAPER=000,PRIORITY=00000)SECS.    TOTAL STP TIME=      .21 MINS.  -
      XXGO       EXEC PGM=*.LINK.SYSLMOD,COND=(4,LT),REGION=70K                          00000250
      XXFT05F001 DD  DDNAME=DATA5                                                        00000260
      XXFT06F001 DD SYSOUT=&OUT,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=&BLKSIZE)               00000270
      IEF653I SUBSTITUTION JCL - SYSOUT=A,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=7265)
      XXFT07F001 DD SYSOUT=B,DCB=(RECFM=FB,BLKSIZE=7280,LRECL=80)                        00000280
      XXSYSPRINT DD SYSOUT=&OUT,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=&BLKSIZE),              00000290
      IEF653I SUBSTITUTION JCL - SYSOUT=A,DCB=(RECFM=VBA,LRECL=137,BLKSIZE=7265),
      XX               SPACE=(CYL,(0,1)),UNIT=(DISK,3)                                   00000300
      XXSYSUDUMP DD SYSOUT=A,SPACE=(CYL,(0,5))                                           00000310
      //GO.FT08F001 DD UNIT=7TRACK,DISP=(OLD,KEEP),LABEL=(01,NL,,IN),
      //        DCB=(BLKSIZE=32000,RECFM=U,DEN=2,TRTCH=E),
      //             VOL=SER=JJ0004
      //GO.DATA5 DD *
      //
IEF236I ALLOC. FOR YZRWPJB6 GO
IEF237I 333   ALLOCATED TO PGM=*.DD
IEF237I 232   ALLOCATED TO FT05F001
IEF237I 335   ALLOCATED TO FT06F001
IEF237I 335   ALLOCATED TO FT07F001
IEF237I 333   ALLOCATED TO SYSPRINT
IEF237I 232   ALLOCATED TO SYSPRINT
IEF237I 237   ALLOCATED TO SYSPRINT
IEF237I 335   ALLOCATED TO SYSUDUMP
IEF237I 0C0   ALLOCATED TO FT08F001
```

<

```
                                    RECORD      1  OF FILE   1
                                    LENGTH =      80  BYTES

1(    1)    710707010212  012261706471  070701021201  226170707107  070102120122  617031202020  202020202020  202020202020
9(   49)    202020202020  202020202020  202020202020  202020202020  202020202020  2020
```

<

```
                                    RECORD      2  OF FILE   1
                                    LENGTH =      80  BYTES

1(    1)    200112042001  041020010510  202020202020  202020202020  202020202020  202020202020  202020202020  202020202020
9(   49)    202020202020  202020202020  202020202020  202020202020  202020202020  2020
```

<

```
                                    RECORD    104  OF FILE   1
                                    LENGTH =      80  BYTES

1(    1)    200104121273  100620204006  027302052001  041210730505  202040060673  060220010401  047303012020  400606730511
9(   49)    200104021273  120720204005  037302112020  202020202020  202020202020  2020
```

<

```
                                    RECORD    105  OF FILE   1
```

LENGTH = 80 BYTES

```
1(    1)  200104020673  101220204004  107310032001  040304730411  202040050373  021220202020  127312124011  111111731212
9(   49)  401111111173  121240111111  117312122020  202020202020  202020202020  2020
```

105 RECORDS IN FILE 1 OF TAPE

<

RECORD 1 OF FILE 34
LENGTH = 80 BYTES

```
1(    1)  650707010201  024546516465  070701020102  454651706507  070102010245  465131202020  202020202020  202020202020
9(   49)  202020202020  202020202020  202020202020  202020202020  202020202020  2020
```

<

RECORD 2 OF FILE 34
LENGTH = 80 BYTES

```
1(    1)  200110122001  100520011106  202020202020  202020202020  202020202020  202020202020  202020202020  202020202020
9(   49)  202020202020  202020202020  202020202020  202020202020  202020202020  2020
```

<

RECORD 3 OF FILE 34
LENGTH = 80 BYTES

```
1(    1)  202020200673  111020202020  127312122020  200101730706  202020204073  011120202001  037306072020  202040730206
9(   49)  202020021273  030520204001  047312112020  202020202020  202020202020  2020
```

<

RECORD 141 OF FILE 34
LENGTH = 80 BYTES

```
1(    1)  200103070273  010620204001  107303062001  031002730711  202040011073  030320010311  047303102020  400110730211
9(   49)  200104120473  120320204001  107302062020  202020202020  202020202020  2020
```

<

RECORD 142 OF FILE 34
LENGTH = 80 BYTES

```
1(    1)  200104010673  051120204001  107302032001  040206730205  202040020273  070120010403  037311072020  400202730611
9(   49)  200104041273  070320204002  077301112020  202020202020  202020202020  2020
```

<

RECORD 143 OF FILE 34
LENGTH = 80 BYTES

```
1(    1)  200104041273  070320204002  077301112020  202012731212  401111111173  121240111111  117312124011  111111731212
9(   49)  401111111173  121240111111  117312122020  202020202020  202020202020  2020
```

REQ. AGENT	RAND NO.	ACQ. AGENT
VJP	RD2468	MJT

GG-~~27B~~ 26A

MAGNETOMETER DATA

This data set catalog consists of 1 data tape. The tape is 1600 BPI, EBCDIC, 9 track with 1 file of data. The tape was created on an CDC 6600 computer.

Time span is as follows:

D#	C#	TIME SPAN
D-33820	C-20593	7/28/77 - 7/29/77

GG-27B

Energy, Mines and Resources Canada
Science and Technology

Énergie, Mines et Ressources Canada
Science et Technologie

May 29th, 1979.

Your file Votre référence

Our file Notre référence

Dr. J.I. Vette
(CDAW 2 Workshop)
Code 601
NASA Goddard Space Flight Centre
Greenbelt, Maryland 20771
U.S.A.

Dear Sir:

The following Canadian observatories have already deposited their geomagnetic digital data for the July 29, 1977 substorm at WDC-A, Boulder, Colorado:

Station	Geographic Coordinates Lat. °N	Long. °E	Numeric Identifier
Ottawa	45.4	284.4	045284
St. John's	47.6	307.3	042307
Meanook	54.6	246.7	035247
Fort Churchill	58.8	265.9	031266
Cambridge Bay	69.1	255.0	021255
Great Whale River	55.3	282.2	035282
Yellowknife	62.5	245.5	028246
Whiteshell	49.8	264.8	040265

Enclosed is a tape (CDAW01) and a listing of its dump. The tape characteristics are 9-track 1600 BPI; a format description is also enclosed. Geomagnetic data for the requested interval from the following two observatories have been placed on this tape:

Resolute Bay	74.7	265.1	015265 ✓
Baker Lake	64.3	264.0	026264 ✓

Geomagnetic data from the following IMS variation stations for the substorm interval will be deposited in digital form in WDC-A within the next two weeks:

Rankin Inlet*	62.6	268.1	027268
Eskimo Point	61.1	265.9	029266
Fort Severn	56.0	272.4	034272
Island Lake	53.9	265.3	036265

*Z component data only.

....2

Earth Physics Branch
Division of Geomagnetism
1 Observatory Crescent
Ottawa Canada

Direction de la physique du globe
Division du géomagnétisme
1, place de l'Observatoire
Ottawa Canada

NASA
National Aeronautics and Space Administration

CDAW TAPE DOCUMENTATION FORM

SECTION I. DATA SET DESCRIPTION (please print)

1. Data Set Name: CDAW01

2. Scientific Contact: G. JANSEN VANBEEK

3. Telephone No. or Telex No.:

4. Address: EARTH PHYSICS BRANCH
DEPARTMENT OF ENERGY, MINES & RESOURCES

5. City: OTTAWA

6. State: CANADA

7. ZIP Code or Country: K1A 0Y3

8. Programmer Contact: SAME

SECTION II. TAPE DESCRIPTION

1. No. of Tapes Submitted: ONE

2. Tape Density: ☐ 800 bpi ☒ 1600 bpi

3. No. of Files (per tape): ONE

4. No. of End of File Marks: ONE

5. No. of Tracks: ☐ 7 ☒ 9

6. Recording Parity: ODD

7. Make and Model of Computer Used to Generate Tape: C.D.C. CYBER 74
NOS/BE 1.2

8. Are tapes written in binary, coded or both? (e.g. BCD): EBCDIC

9. What floating point representation is used? (e.g. CDC 64 bit)

10. What integer representation is used?
CAN BE READ UNDER FORMAT CONTROL I6

11. No. of Physical Records (per file)
NINETY-SIX

12. Are original tapes to be returned? ☐ Yes ☒ No

13. Start and Stop Time of Each File (If more space is needed, please attach.)
SEE ATTACHED DUMP

SECTION III. LOGICAL AND PHYSICAL RECORD FORMAT (please attach)

SECTION IV. TO BE FILLED IN BY IMS/SSC ONLY

CDAW No.:

Date Received:

Tape No.:

Programmer ID:

CON No.:

Date Loaded:

FINAL AMOS TAPE FORMAT

Record description - Each record is 1464 BCD (or EDCDIC for nine-track tapes) characters long and contains all the data for one hour.

Character Position	Description
1-6	- station identifier (co-latitude and longitude east in degrees)
7-12	- year
13-18	- sequential day of the year (nos. range from 1 to 366)
19-24	- hour of the day (nos. range from 0000 to 2300, time is U.T.)
25-30	- Y (East) component in gammas.
31-36	- X (North) component in gammas.
37-42	- Z (Vertical) component in gammas.
43-48	- F (Total Force) in tenths of gammas.
49-1464	- X,Y,Z and F values cycle until the 60th minute of the hour.

NOTE: missing values within the data have been replaced by 999999.

Limited resources unfortunately prevent us from supplying an event tape to the CDAW 2 workshop directly. I sincerely hope that WDC-A at Boulder will be able to supply you with the relevant Canadian geomagnetic digital data.

Yours sincerely,

G. Jansen van Beek

G. Jansen van Beek
Division of Geomagnetism

JGVB/ja
Enc.
CC: Dr. P.H. Serson
Dr. J.K. Walker

GG-2 6A
D-33820
7/28/77 - 7/29/77

DUMP OF TAPE X-398

INPUT TAPE X-398 ON MS1
DATA INPUT H9 FL 1 1 1

FILE 1 RECORD 1 LENGTH 1464BYTES

(0)	40F1E5E2	F6F54040	F1F9F7F7	40404OF2	F0F94040	4C4C4OF0	40404OF3	F7F64040	60F7F0F9	40F5E8E5
(40)	F3F0F5F8	F5F4F1F5	4040 0F3	F7F64 40	60F7F0F9	4CF5F8F5	F3F6F5F8	F5F4F1F5	4040 0F3	F7F74 40
(80)	60F7F1F0	40F5F8F5	F3F6F5F8	F5F4F1F6	404040F3	F7F94040	60F7F1F0	40F5F8F5	F3F7F5F8	F5F4F2F6
(120)	4040 0F3	F7F94040	60F7F0F9	40F5F8F5	F3F7F5F8	F5F4F2F6	40404OF3	F7F84040	60F7F1F0	40F5F8F5
(160)	F3F7F5F8	F5F4F2F6	404040F3	F7F94040	60F7F1F2	4CF5F8F5	F3F7F5F8	F5F4F2F6	404040F3	F7F84040
(200)	60F7F1F3	40F5F8F5	F3F6F5F8	F5F4F1F6	404040F3	F8F14040	60F7F1F1	40F5F8F5	F3F7F5F8	F5F4F2F6
(240)	404040F3	F8F24040	60F7F1F1	40F5F8F5	F3F7F5F8	F5F4F2F6	404040F3	F8F04040	60F7F1F1	40F5F8F5
(280)	F3F7F5F8	F5F4F2F9	4040 0F3	F8F24 40	60F7F1F3	4CF5F8F5	F3F7F5F8	F5F4F3F0	404040F3	F8F24040
(320)	60F7F1F2	40F5F8F5	F3F8F5F8	F5F4F4F0	404 40F3	F8F54 40	60F7F1F0	40F5F8F5	F3F9F5F8	F5F4F5F0
(360)	404040F3	F8F54040	60F7F0F9	40F5F8F5	F3F9F5F8	F5F4F4F9	404040F3	F8F64040	60F7F0F7	40F5F8F5
(400)	F3F9F5F8	F5F4F4F9	404040F3	F8F64040	60F7F0F6	4CF5F8F5	F4F0F5F8	F5F4F5F9	404040F3	F8F74040
(440)	60F7F0F6	40F5F8F5	F4F1F5F8	F5F4F6F9	404040F3	F8F94040	60F7F0F7	40F5F8F5	F4F2F5F8	F5F4F7F9
(480)	404040F3	F8F64040	60F7F0F7	40F5F8F5	F4F2F5F8	F5F4F7F9	404040F3	F8F54040	60F7F0F7	40F5F8F5
(520)	F4F2F5F8	F5F4F8F0	404040F3	F8F54040	60F7F0F8	4CF5F8F5	F4F3F5F8	F5F4F9F0	404040F3	F8F64040
(560)	60F7F0F7	40F5F8F5	F4F4F5F8	F5F5F0F0	4040 0F3	F8F54040	60F7F0F6	40F5F8F5	F4F4F5F8	F5F5F0F0
(600)	404 40F3	F8F64 40	60F7F0F7	40F5F8F5	F4F5F5F8	F5F5F1F0	40404OF3	F8F74040	60F7F0F5	4 F5F8F5
(640)	F4F5F5F8	F5F5F1F0	404040F3	F8F84040	60F7F0F7	4CF5F8F5	F4F6F5F8	F5F5F2F0	404040F3	F8F84040
(680)	60F7F0F5	40F5F8F5	F4F7F5F8	F5F5F3F0	404040F3	F8F94040	60F7F0F4	40F5F8F5	F4F8F5F8	F5F5F4F0
(720)	404040F3	F8F74040	60F7F0F5	40F5F8F5	F4F8F5F8	F5F5F4F0	404040F3	F9F24040	60F7F0F8	40F5F8F5
(760)	F5F1F5F8	F5F5F7F0	4040 0F3	F9F14 40	60F7F0F4	4CF5F8F5	F5F1F5F8	F5F5F6F9	404040F3	F9F 40 0
(800)	60F7F0F9	40F5F8F5	F5F1F5F8	F5F5F7F0	404040F3	F9F04040	60F7F0F6	40F5F8F5	F5F2F5F8	F5F5F7F9
(840)	4040 0F3	F8F74 40	60F7F0F9	40F5F8F5	F5F1F5F8	F5F5F6F9	404040F3	F8F64040	60F7F0F9	40F5F8F5
(880)	F5F2F5F8	F5F5F7F9	404040F3	F8F44040	60F7F0F8	4CF5F8F5	F5F2F5F8	F5F5F7F9	404040F3	F8F44040
(920)	60F7F0F8	40F5F8F5	F5F2F5F8	F5F5F7F9	404040F3	F8F54040	60F7F1F1	40F5F8F5	F5F4F5F8	F5F5F9F9
(960)	404040F3	F8F44040	60F7F1F2	40F5F8F5	F5F3F5F8	F5F5F8F9	404040F3	F8F04040	60F7F1F0	40F5F8F5
(1000)	F5F3F5F8	F5F5F9F	4040 0F3	F7F74 40	60F7F1F	4CF5F8F5	F5F3F5F8	F5F5F9F	404 40F3	F7F84040
(1040)	6 F7F1F	4 F5F8F5	F5F3F5F8	F5F5F9F	404 40F3	F7F94040	60F7F1F	40F5F8F5	F5F4F5F8	F5F6F F
(1080)	4 4040F3	F7F94 40	60F7F1F3	40F5F8F5	F5F5F5F8	F5F6F1F1	404040F3	F7F94040	60F7F1F4	40F5F8F5
(1120)	F5F4F5F8	F5F6F0F1	404040F3	F8F24040	60F7F1F6	4CF5F8F5	F5F5F5F8	F5F6F1F1	404040F3	F7F94040
(1160)	60F7F1F7	40F5F8F5	F5F5F5F8	F5F6F1F1	404040F3	F7F94040	60F7F1F8	40F5F8F5	F5F5F5F8	F5F6F1F1
(1200)	404040F3	F8F04040	60F7F1F7	40F5F8F5	F5F4F5F8	F5F6F0F1	404040F3	F7F74040	60F7F1F4	40F5F8F5
(1240)	F5F3F5F8	F5F5F9F0	404040F3	F7F74040	60F7F1F2	4CF5F8F5	F5F3F5F8	F5F5F9F0	404040F3	F7F54040
(1280)	6 F7F1F	4 F5F8F5	F5F4F5F8	F5F6F F	404 40F3	F7F64 40	60F7F F	40F5F8F5	F5F4F5F8	F5F6F0F0
(1320)	4 4 40F3	F7F64 40	60F7F0F7	40F5F8F5	F5F6F5F8	F5F6F2F	404040F3	F7F74040	60F7F0F6	4 F5F8F5
(1360)	F5F7F5F8	F5F6F3F0	404040F3	F7F84040	60F7F0F3	4CF5F8F5	F5F8F5F8	F5F6F3F9	404040F3	F7F84040
(1400)	60F7F0F2	40F5F8F5	F5F9F5F8	F5F6F4F9	404040F3	F7F84040	60F7F0F2	40F5F8F5	F5F9F5F8	F5F6F4F9
(1440)	404040F3	F8F24040	60F6F9F9	40F5F8F5	F6F2F5F8	F5F6F7F9				

FILE 1 RECORD 96 LENGTH 1464BYTES

(0)	40F2F6F2	F6F44040	F1F9F7F7	4C4040F2	F1F04 40	4C4CF2F3	404040F3	FCF04040	F4F5F5F1	40F6F0F6
(40)	F1F9F6F0	F8F5F0F5	404040F3	F0F54040	F4F5F5F4	4CF6F0F6	F2F4F6F0	F8F5F5F7	404040F3	F0F54040
(80)	F4F5F5F2	40F6F0F6	F2F8F6F0	F8F5F9F6	404040F3	FCF34040	F4F5F4F9	40F6F0F6	F2F3F6F0	F8F5F4F3
(120)	404040F3	F0F74040	F4F5F5F4	40F6F0F6	F2F9F6F0	F8F6F0F7	404040F3	F0F44040	F4F5F5F1	40F6F0F6
(160)	F3F0F6F0	F8F6F1F5	4040 0F3	F0F84040	F4F5F5F2	4CF6F0F6	F3F2F6F0	F8F6F3F6	404040F3	F0F44040
(200)	F4F5F5F4	4 F6F F6	F2F5F6F	F8F5F6F7	404 40F3	FCF74 40	F4F5F5F7	4 F6F F6	F2F5F6F	F8F5F7F
(240)	4040 0F3	F0F34040	F4F5F5F5	4 F6F F6	F3F1F6F	F8F6F2F8	4C4040F3	F0F4404	F4F5F5F6	4 F6F0F6
(280)	F3F5F6F0	F8F6F7F3	404040F2	F9F94040	F4F5F5F2	4CF6F0F6	F3F7F6F0	F8F6F9F0	404040F3	F0F04040
(320)	F4F5F5F3	40F6F0F6	F3F2F6F0	F8F6F4F1	404040F3	FCFC4040	F4F5F5F2	40F6F0F6	F3F9F6F0	F8F7F1F0
(360)	404040F2	F9F34040	F4F5F5F4	40F6F0F6	F3F7F6F0	F8F6F9F1	404040F2	F8F84040	F4F5F5F3	40F6F0F6
(400)	F2F4F6F0	F8F5F6F1	404040F2	F9F94040	F4F5F6F	4CF6F0F6	F2F5F6F0	F8F5F7F6	4C4C40F3	FCF14040
(440)	F4F5F6F0	40F6F0F6	F3F4F6F0	F8F6F6F6	404040F2	F9F84040	F4F5F6F2	40F6F0F6	F3F5F6F0	F8F6F7F8
(480)	4C4 40F2	F9F94 40	F4F5F6F4	4CF6F F6	F3F5F6F	F8F6F7F9	404040F2	F9F84040	F4F5F6F5	4CF6F0F6
(520)	F3F8F6F0	F8F7F0F5	404040F2	F9F64040	F4F5F6F1	4CF6F0F6	F3F7F6F0	F8F6F9F1	404040F2	F9F34040
(560)	F4F5F6F3	40F6F0F6	F3F6F6F0	F8F6F8F3	404040F2	F9F14040	F4F5F5F9	40F6F0F6	F3F8F6F0	F8F7F0F0
(600)	404040F2	F9F14040	F4F5F5F6	40F6F0F6	F3F9F6F0	F8F7F0F7	404040F2	F9F94040	F4F5F5F9	40F6F0F6
(640)	F4F2F6F0	F8F7F4F0	4C4 40F3	FCF34 40	F4F5F6F2	4CF6F F6	F3F8F6F0	F8F7FCF3	404C40F3	FCF84040
(680)	F4F5F6F3	40F6F0F6	F4F0F6F0	F8F7F2F3	404040F3	FCFC4040	F4F5F6F3	40F6FCF6	F4F3F6F0	F8F7F5F3

```
(  800)  F4F5F6F2  40F6F0F6  F3F8F6F0  F8F7F1F0  4040403F  F0F24040  F4F5F6F6  40F6F0F6  F4F3F6F0  F8F7F6F3
(  840)  404040F2  F9F94040  F4F5F6F6  40F6F0F6  F4F5F6F0  F8F7F8F2  40404 F3  F0F24040  F4F5F6F9  40F6F0F6
(  880)  F3F9F6F0  F8F7F2F5  40404 F3  F1F04040  F4F5F7F2  40F6F0F6  F3F8F6F0  F8F7F1F8  40404 F3  F1F14040
(  920)  F4F5F7F1  40F6F0F6  F4F2F6F0  F8F7F5F7  4040403F  F1F44040  F4F5F7F5  40F6F0F6  F4F4F6F0  F8F7F8F0
(  960)  40404 F3  F1F34040  F4F5F7F5  40F6F0F6  F5F3F6F0  F8F8F7F0  4040403F  F0F64040  F4F5F6F7  40F6F0F6
( 1000)  F5F5F6F0  F8F8F8F0  40404 F3  F0F84040  F4F5F6F3  40F6F0F6  F5F2F6F0  F8F8F4F8  40404 F3  F0F84040
( 1040)  F4F5F6F2  40F6F0F6  F5F2F6F0  F8F8F4F7  40404 F3  F0F84040  F4F5F6F0  40F6F0F6  F5F7F6F0  F8F8F9F5
( 1080)  40404 F3  F0F64040  F4F5F5F6  40F6F0F6  F6F2F6F0  F8F9F4F2  40404 F3  F0F14040  F4F5F4F9  40F6F0F6
( 1120)  F6F1F6F0  F8F9F2F6  40404 F3  F0F14040  F4F5F4F3  40F6F0F6  F6F5F6F0  F8F9F6F2  40404 F2  F8F74040
( 1160)  F4F5F1F7  40F6F0F6  F6F9F6F0  F8F9F8F2  40404 F2  F7F74040  F4F5F0F8  40F6F0F6  F5F9F6F0  F8F8F7F5
( 1200)  40404 F2  F9F54 40  F4F5F0F5  40F6F0F6  F5F1F6F0  F8F7F9F4  40404 F2  F9F64040  F4F5F0F4  40F6F0F6
( 1240)  F4F8F6F0  F8F7F5F8  40404 F2  F9F24040  F4F5F1F0  40F6F0F6  F4F8F6F0  F8F7F6F2  40404 F2  F8F34040
( 1280)  F4F5F2F0  40F6F0F6  F3F5F6F0  F8F6F4F0  40404 F2  F8F84040  F4F5F3F2  40F6F0F6  F3F1F6F0  F8F6F0F9
( 1320)  40404 F2  F7F74040  F4F5F3F5  40F6F0F6  F2F9F6F0  F8F5F9F1  40404 F2  F7F74040  F4F5F4F4  40F6F0F6
( 1360)  F2F9F6F0  F8F5F9F8  40404 F2  F8F44 40  F4F5F5F5  40F6F0F6  F2F8F6F0  F8F5F9F6  40404 F2  F9F24040
( 1400)  F4F5F6F6  40F6F0F6  F2F8F6F0  F8F6F0F5  40404 F2  F9F54040  F4F5F7F8  40F6F0F6  F3F2F6F0  F8F6F5F4
( 1440)  40404 F2  F9F44040  F4F5F8F8  40F6F0F6  F4F0F6F0  F8F7F4F1
```

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	96	97	1464	0	0	0	0	0	0

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

START TIME 06/15/79 08:03:15 STOP TIME 06/15/79 08:03:32

```
$$
$ASS IN MS3 OUT MS1
```

D-35100
G-G-26B
2128117-2129117

DUMP OF TAPE X-395

INPUT TAPE X-395 ON MS2
DATA INPUT H9 NF 1 FL 1 1 1

FILE 1 RECORD 1 LENGTH 480BYTES

(0)	F0F1F5F3	F0F0F2F6	F5F1F0F0	F7F7F0F7	F2F8C6F0	F1D9C240	C3404040	40404040	404040F5	F8F5F4F1
(40)	40F5F8F5	F4F140F5	F8F5F4F1	40F5F8F5	F4F240F5	F8F5F4F2	40F5F8F5	F4F240F5	F8F5F4F2	40F5F8F5
(80)	F4F140F5	F8F5F4F2	40F5F8F5	F4F240F5	F8F5F4F2	40F5F8F5	F4F340F5	F8F5F4F4	40F5F8F5	F4F540F5
(120)	F8F5F4F4	40F5F8F5	F4F440F5	F8F5F4F5	40F5F8F5	F4F640F5	F8F5F4F7	40F5F8F5	F4F740F5	F8F5F4F8
(160)	40F5F8F5	F4F940F5	F8F5F5F0	40F5F8F5	F5F040F5	F8F5F5F1	40F5F8F5	F5F140F5	F8F5F5F2	40F5F8F5
(200)	F5F340F5	F8F5F5F4	40F5F8F5	F5F440F5	F8F5F5F7	40F5F8F5	F5F640F5	F8F5F5F7	40F5F8F5	F5F740F5
(240)	F8F5F5F6	40F5F8F5	F5F740F5	F8F5F5F7	40F5F8F5	F5F740F5	F8F5F5F9	40F5F8F5	F5F840F5	F8F5F5F9
(280)	40F5F8F5	F5F940F5	F8F5F5F9	40F5F8F5	F6F040F5	F8F5F6F1	40F5F8F5	F6F040F5	F8F5F6F1	40F5F8F5
(320)	F6F140F5	F8F5F6F1	40F5F8F5	F6F040F5	F8F5F5F9	40F5F8F5	F5F940F5	F8F5F6F0	40F5F8F5	F6F140F5
(360)	F8F5F6F2	40F5F8F5	F6F340F5	F8F5F6F3	40F5F8F5	F6F440F5	F8F5F6F4	40F5F8F5	F6F740F5	F8F5F5F2
(400)	F0F1F5F3	F0F0F2F6	F5F1F0F0	F7F7F0F7	F2F8C6F0	F1D9C240	C3404040	40404040	404040F5	F8F5F6F5
(440)	40F5F8F5	F6F540F5	F8F5F6F6	40F5F8F5	F6F740F5	F8F5F6F6	40F5F8F5	F6F740F5	F8F5F6F7	40F5F8F5
(480)	F6F740F5	F8F5F6F8	40F5F8F5	F6F840F5	F8F5F7F0	4CF5F8F5	F7F140F5	F8F5F7F1	40F5F8F5	F7F140F5
(520)	F8F5F7F2	40F5F8F5	F7F240F5	F8F5F7F1	40F5F8F5	F7F140F5	F8F5F7F1	40F5F8F5	F7F140F5	F8F5F7F1
(560)	40F5F8F5	F7F140F5	F8F5F6F9	40F5F8F5	F6F840F5	F8F5F6F9	40F5F8F5	F6F840F5	F8F5F6F6	40F5F8F5
(600)	F6F540F5	F8F5F6F5	40F5F8F5	F6F540F5	F8F5F6F6	4CF5F8F5	F6F540F5	F8F5F6F5	40F5F8F5	F6F540F5
(640)	F8F5F6F5	40F5F8F5	F6F540F5	F8F5F6F5	40F5F8F5	F6F540F5	F8F5F6F7	40F5F8F5	F6F540F5	F8F5F6F4
(680)	40F5F8F5	F6F440F5	F8F5F6F4	40F5F8F5	F6F440F5	F8F5F6F4	40F5F8F5	F6F240F5	F8F5F6F1	40F5F8F5
(720)	F6F140F5	F8F5F6F0	40F5F8F5	F6F040F5	F8F5F5F9	4CF5F8F5	F5F940F5	F8F5F5F9	40F5F8F5	F5F840F5
(760)	F8F5F5F7	40F5F8F5	F5F640F5	F8F5F5F5	40F5F8F5	F5F540F5	F8F5F5F6	40F5F8F5	F5F940F5	F8F5F6F5
(800)	F0F1F5F3	F0F0F2F6	F5F1F0F0	F7F7F0F7	F2F8C6F0	F2D9C240	C3404040	40404040	404040F5	F8F5F5F5
(840)	40F5F8F5	F5F540F5	F8F5F5F6	40F5F8F5	F5F640F5	F8F5F5F7	40F5F8F5	F5F840F5	F8F5F5F8	40F5F8F5
(880)	F5F840F5	F8F5F5F9	40F5F8F5	F5F840F5	F8F5F5F9	4CF5F8F5	F6F040F5	F8F5F6F0	40F5F8F5	F6F140F5
(920)	F8F5F6F1	40F5F8F5	F6F340F5	F8F5F6F2	40F5F8F5	F6F240F5	F8F5F6F2	40F5F8F5	F6F240F5	F8F5F6F2
(960)	40F5F8F5	F6F140F5	F8F5F6F1	40F5F8F5	F6F140F5	F8F5F6F0	40F5F8F5	F6F040F5	F8F5F6F1	40F5F8F5
(1000)	F6F040F5	F8F5F6F1	40F5F8F5	F6F040F5	F8F5F6F1	4CF5F8F5	F6F240F5	F8F5F6F2	40F5F8F5	F6F240F5
(1040)	F8F5F6F3	40F5F8F5	F6F340F5	F8F5F6F2	40F5F8F5	F6F440F5	F8F5F6F4	40F5F8F5	F6F440F5	F8F5F6F4
(1080)	40F5F8F5	F6F340F5	F8F5F6F4	40F5F8F5	F6F440F5	F8F5F6F5	40F5F8F5	F6F740F5	F8F5F6F8	40F5F8F5
(1120)	F6F840F5	F8F5F6F9	40F5F8F5	F6F840F5	F8F5F6F5	4CF5F8F5	F6F440F5	F8F5F6F5	40F5F8F5	F6F440F5
(1160)	F8F5F6F4	40F5F8F5	F6F440F5	F8F5F6F4	40F5F8F5	F6F440F5	F8F5F6F4	40F5F8F5	F6F740F5	F8F5F6F2
(1200)	F0F1F5F3	F0F0F2F6	F5F1F0F0	F7F7F0F7	F2F8C6F0	F3D9C240	C3404040	40404040	404040F5	F8F5F6F7
(1240)	40F5F8F5	F6F740F5	F8F5F6F6	40F5F8F5	F6F740F5	F8F5F6F8	40F5F8F5	F6F740F5	F8F5F6F8	40F5F8F5
(1280)	F6F840F5	F8F5F6F6	40F5F8F5	F6F840F5	F8F5F6F9	4CF5F8F5	F7F040F5	F8F5F7F1	40F5F8F5	F7F140F5
(1320)	F8F5F7F1	40F5F8F5	F7F140F5	F8F5F7F2	40F5F8F5	F7F240F5	F8F5F7F2	40F5F8F5	F7F240F5	F8F5F7F1
(1360)	40F5F8F5	F7F140F5	F8F5F7F1	40F5F8F5	F7F140F5	F8F5F7F2	40F5F8F5	F7F240F5	F8F5F7F2	40F5F8F5
(1400)	F7F240F5	F8F5F7F1	40F5F8F5	F7F240F5	F8F5F7F3	4CF5F8F5	F7F340F5	F8F5F7F3	40F5F8F5	F7F240F5
(1440)	F8F5F7F1	40F5F8F5	F7F240F5	F8F5F7F2	40F5F8F5	F7F240F5	F8F5F7F2	40F5F8F5	F7F340F5	F8F5F7F3
(1480)	40F5F8F5	F7F340F5	F8F5F7F2	40F5F8F5	F7F240F5	F8F5F7F2	40F5F8F5	F7F240F5	F8F5F7F2	40F5F8F5
(1520)	F7F240F5	F8F5F7F2	40F5F8F5	F7F340F5	F8F5F7F3	4CF5F8F5	F7F340F5	F8F5F7F3	40F5F8F5	F7F340F5
(1560)	F8F5F7F2	40F5F8F5	F7F340F5	F8F5F7F3	40F5F8F5	F7F240F5	F8F5F7F2	40F5F8F5	F7F540F5	F8F5F7F1
(1600)	F0F1F5F3	F0F0F2F6	F5F1F0F0	F7F7F0F7	F2F8C6F0	F4D9C240	C3404040	40404040	404040F5	F8F5F7F2
(1640)	40F5F8F5	F7F240F5	F8F5F7F2	40F5F8F5	F7F240F5	F8F5F7F2	40F5F8F5	F7F240F5	F8F5F7F0	40F5F8F5
(1680)	F6F840F5	F8F5F6F9	40F5F8F5	F6F940F5	F8F5F6F8	4CF5F8F5	F6F740F5	F8F5F6F7	40F5F8F5	F6F540F5
(1720)	F8F5F6F6	40F5F8F5	F6F740F5	F8F5F6F7	40F5F8F5	F6F740F5	F8F5F6F6	40F5F8F5	F6F540F5	F8F5F6F6
(1760)	40F5F8F5	F6F640F5	F8F5F6F6	40F5F8F5	F6F540F5	F8F5F6F5	40F5F8F5	F6F440F5	F8F5F6F4	40F5F8F5
(1800)	F6F440F5	F8F5F6F4	40F5F8F5	F6F540F5	F8F5F6F4	4CF5F8F5	F6F440F5	F8F5F6F5	40F5F8F5	F6F540F5
(1840)	F8F5F6F4	40F5F8F5	F6F440F5	F8F5F6F5	40F5F8F5	F6F540F5	F8F5F6F5	40F5F8F5	F6F640F5	F8F5F6F4
(1880)	40F5F8F5	F6F640F5	F8F5F6F6	40F5F8F5	F6F540F5	F8F5F6F6	40F5F8F5	F6F540F5	F8F5F6F6	40F5F8F5
(1920)	F6F740F5	F8F5F6F7	40F5F8F5	F6F740F5	F8F5F6F9	4CF5F8F5	F6F840F5	F8F5F6F7	40F5F8F5	F6F840F5
(1960)	F8F5F6F8	40F5F8F5	F6F840F5	F8F5F6F9	40F5F8F5	F7FC40F5	F8F5F6F9	40F5F8F5	F7F440F5	F8F5F6F6
(2000)	F0F1F5F3	F0F0F2F6	F5F1F0F0	F7F7F0F7	F2F8C6F0	F5D9C240	C3404040	40404040	404040F5	F8F5F7F3
(2040)	40F5F8F5	F7F140F5	F8F5F7F3	40F5F8F5	F7F240F5	F8F5F7F3	40F5F8F5	F7F340F5	F8F5F7F3	40F5F8F5
(2080)	F7F340F5	F8F5F7F4	40F5F8F5	F7F540F5	F8F5F7F6	4CF5F8F5	F7F540F5	F8F5F7F4	4CF5F8F5	F7F540F5
(2120)	F8F5F7F5	40F5F8F5	F7F540F5	F8F5F7F5	40F5F8F5	F7F540F5	F8F5F7F6	40F5F8F5	F7F740F5	F8F5F7F5
(2160)	40F5F8F5	F7F540F5	F8F5F7F6	40F5F8F5	F7F640F5	F8F5F7F7	40F5F8F5	F7F640F5	F8F5F7F6	40F5F8F5
(2200)	F7F640F5	F8F5F7F7	40F5F8F5	F7F840F5	F8F5F7F9	4CF5F8F5	F8FC40F5	F8F5F8F0	40F5F8F5	F8FC40F5
(2240)	F8F5F8F1	40F5F8F5	F8FC40F5	F8F5F8F1	40F5F8F5	F8F240F5	F8F5F8F3	40F5F8F5	F8F240F5	F8F5F8F4

(800)	F7F6F8F6	40F5F2F9	F3F3F5F6	F2F4F5F8	4040F6F9	F8F640F1	F7F6F8F6	40F5F2F9	F3F3F5F6	F2F4F5F8
(840)	4040F6F9	F8F640F1	F7F6F8F8	40F5F2F9	F3F3F5F6	F2F4F7F5	4040F6F9	F8F640F1	F7F6F8F8	40F5F2F9
(880)	F3F3F5F6	F2F4F6F7	4040F6F9	F8F640F1	F7F6F8F9	40F5F2F9	F3F3F5F6	F2F4F7F6	4040F6F9	F8F540F1
(920)	F7F6F9F1	40F5F2F9	F3F4F5F6	F2F4F9F6	4040F6F9	F8F640F1	F7F6F9F0	40F5F2F9	F3F4F5F6	F2F4F8F3
(960)	4040F6F9	F8F640F1	F7F6F9F0	40F5F2F9	F3F4F5F6	F2F4F7F3	4040F6F9	F8F640F1	F7F6F9F2	40F5F2F9
(1000)	F3F5F5F6	F2F4F9F3	4040F6F9	F8F640F1	F7F6F9F3	40F5F2F9	F3F5F5F6	F2F4F9F8	4040F6F9	F8F640F1
(1040)	F7F6F9F3	40F5F2F9	F3F5F5F6	F2F4F9F9	4040F6F9	F8F640F1	F7F6F9F2	40F5F2F9	F3F5F5F6	F2F4F9F6
(1080)	4040F6F9	F8F640F1	F7F6F9F1	40F5F2F9	F3F5F5F6	F2F4F9F8	4040F6F9	F8F540F1	F7F6F9F1	40F5F2F9
(1120)	F3F5F5F6	F2F4F9F6	4040F6F9	F8F540F1	F7F6F9F3	40F5F2F9	F3F5F5F6	F2F5F0F5	4040F6F9	F8F540F1
(1160)	F7F6F9F5	40F5F2F9	F3F6F5F6	F2F5F2F2	4040F6F9	F8F540F1	F7F6F9F8	40F5F2F9	F3F7F5F6	F2F5F3F3
(1200)	4040F6F9	F8F440F1	F7F7F0F1	40F5F2F9	F3F8F5F6	F2F5F4F8	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9
(1240)	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9
(1280)	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9
(1320)	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9
(1360)	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9
(1400)	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9
(1440)	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9	F9F9F9F9				

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	1152	1153	1464	0	0	0	0	2	2

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

START TIME 07/30/00 18:23:58 STOP TIME 07/30/00 18:24:31

$$
$ASS IN MT4 OUT MT2

REQ. AGENT	RAND NO.	ACQ. AGENT
VJP	RD2816	MJT

MAGNETOMETER + RIOMETER

GG-28B/82A

This data set catalog consists of 2 data tape. The tape ~~is~~ are 9 track, 1600 BPI, Binary with 3 files of data. The tape ~~was~~ were created on a CDC 6000 computer.

Time span is as follows:

D#	C#	TIME SPAN
D-34562	C-20668	7/28/77 - 7/29/77
D-35099	C-20702	7/28/77 - 7/29/77

D-35099
GG-28B/82A
7/28/77 - 7/29/77

DUMP OF TAPE X-214

INPUT TAPE X-214 ON MS2
DATA INPUT 09 NF 3 FL 1 1 1 SR 3 1 1 SR 3 LAST 1

FILE	1 RECORD	1 LENGTH	3648BYTES					
(0)	442127452563	464425632551	202421632120	205146442062	632163314645	274546212120	202012022020	202024217062
(48)	202202042052	202142022020	211137172025	205205205205	236231474325	221321061120	202024217062	202212745202
(96)	010473011107	072020202020	202020202020	202020202020	202020202020	202020202020	202020202020	202020202020
(144)	202020202020	202020202020	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(192)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(240)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(288)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(336)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(384)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(432)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(480)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(528)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(576)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(624)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(672)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(720)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(768)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(816)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(864)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(912)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(960)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1008)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1056)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1104)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1152)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1200)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1248)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1296)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1344)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1392)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1440)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1488)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1536)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1584)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1632)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1680)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1728)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1776)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1824)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1872)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1920)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(1968)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2016)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2064)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2112)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2160)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2208)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2256)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2304)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2352)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2400)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2448)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2496)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2544)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2592)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2640)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(2688)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000

```
(  1040)  813C5E3F  0F7E8404  F179043D  FA1013C5  E41CF7E8  4C4F1790  C3DFB101  3C5E440F  7F0404F1  79143DFC
(  1080)  101445E4  50F7EC4C  51179183  DFC1013C  5E460F7F  04050179  143DFD10  1405E460  F7F4404F  179103DF
(  1120)  D1013C5E  450F7F84  04F17910  3DFE1014  05E450F7  F8405C17  9183DFC1  013C5E44  0F7FC404  F1791C3D
(  1160)  FB1013C5  E420F7EC  404E179C  C3DFC101  3C5E420F  7FC404F1  79043DFC  101385E4  1DF7E840  4E179083
(  1200)  DFA10134  5E430F7E  C404C179  0C3DFA10  12C5E44C  F7E8404A  179103DF  C1012B5F  440F7EC4  04A1791C
(  1240)  3DFD1012  45E483F8  00404717  9283E001  011C5E4C  0F80C404  6179343E  04101185  E4F0F818  40471794
(  1280)  43E38101  145E553F  81C40471  795C3EC7  10120BE5  9CF82040  46179643  E0810114  5E5BCF82  04045179
(  1320)  703E0810  1145E5B0  F81C4045  1796C3E0  41011B5F  5C0F8084  04617970  3E0C1011  05E5B0F7  F8404317
(  1360)  9CC3DFC1  01105E5B  0F7E4404  31796C3D  F61C1105  F5ACF7CC  40431796  43DF0101  085E580F  7B040411
(  1400)  7963DE9  101C05E5  70F79C40  3E1795C3  DE510CF8  5E580F79  4403E179  5C3DE410  0F85E560  F7844C3D
(  1440)  179543DE  0130EC5E  562F7804  03A17958  3DDE10DE  C5E570F7  7C403A17  95C3DDD1  00E45E59  0F772403
(  1480)  81796B3D  DC100E05  E580F770  40361797  03DDC100  E45E5C0F  76840381  79743DDA  100E05E5  F0F7C840
(  1520)  38179843  DDA100E4  5E620F76  C4038179  903DD910  0E45E650  F7644039  179983DD  810CE45E  670F75C4
(  1560)  038179A0  3DD9100E  85E670F7  60403B17  9A43DD81  0CE85E6B  0F758403  B179B03D  D51C0F05  E6C0F750
(  1600)  403B179E  43DD410C  EC5E6D0F  74C403A1  79B83DD2  1C2EC5E6  F0F74440  3B179BC3  DDD100EC  5E6F0F74
(  1640)  0403B179  BC3DD010  0F05E710  F740403D  179C43DD  0100F45E  710F7404  03E179C8  3DCF100F  85E720F7
(  1680)  3C403F17  9CC3DD01  D3FC5E73  0F744403  F179C03D  D1100FC5  E720F748  4040179C  83DD3100  FC5E730F
(  1720)  74C403F1  79D83DD4  100FC5E7  A0F75840  3F179F03  DD810100  5E7F0F76  4404017A  083DD810  0FC5E850
(  1760)  F7604040  17A283DD  A101045E  6D0F7704  04117A44  3DDE1010  C5E950F7  88404517  A5C3DE61  01185E9A
(  1800)  0F7A4404  617A783D  EE1011C5  EA20F7D0  404A17A9  C3DFA101  285EAA0F  80040481  7AB83E04  101385EA
(  1840)  D0F81440  4F17AB83  E0510148  5EAE0F81  0405317A  B03E0410  150C5EAB  F8144055  17AAC3E0  41015C5E
(  1880)  A80F8044  05717A94  3E001016  45E9F0F7  F8405B17  A5C3DFB1  016C5E8F  1F7D8405  B17A243D  F5101605
(  1920)  E830F7D0  405B179F  83DF3101  705E790F  7C0405C1  79DC3DFC  1016C5E7  00F7B840  5B179AC3  DED10168
(  1960)  5E650F7A  84058179  843DE710  15C5E5F0  F7984056  179743DE  7101585E  5C0F79C4  05517968  3DE71015
(  2000)  85E590F7  A4405617  9603DEB1  01545E56  0F7B0405  6179543D  EE101585  E520F7B8  40571793  83DEB101
(  2040)  605E4C0F  7A340591  79243DE8  101645E4  70F7944D  59CC0000  00000000  00000000  00000000  00000000
(  2080)  00000C00  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(  2120)  0E0C0700  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(  2160)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(  2200)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(  2240)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(  2280)  0E0C0700  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
(  2560)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(  2600)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(  2640)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(  2680)  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(  2720)  00000000  00000000  00000000  00000000

          FILE    INPUT     DATA RECORDS      MAX.          READ ERROR SUMMARY          INPUT RETRIES
                  RECS.       INPUT           SIZE       PERM  ZERO B    SHORT  UNDEF.  #RECS.  TOTAL#
              3    3468      3469            2736          0       0        0       0       8       8

    EOJ         DUMP STOPPED AFTER FILE   3          # OF PERMANENT READ ERRORS  0

  START TIME 09/10/79  13:00:33          STOP TIME 09/10/79  13:04:13


$$
$REW LO
```

983352.00	0.0	0.0	1	0	0	0	89.71	983351	0.0	6	1	0	0
983352.00	0.0	0.0	1	0	0	0	88.89	983364	0.0	6	1	0	0
983352.00	0.0	0.0	1	0	0	0	90.20	983367	0.0	6	1	0	0
983368.00	0.0	0.0	1	0	0	0	89.06	983371	0.0	6	1	0	0
983368.00	0.0	0.0	1	0	0	0	89.59	983374	0.0	6	1	0	0
983368.00	0.0	0.0	1	0	0	0	89.16	983377	0.0	6	1	0	0
983368.00	0.0	0.0	1	0	0	0	90.00	983380	0.0	6	1	0	0
983384.00	0.0	0.0	1	0	0	0	90.04	983384	0.0	6	1	0	0
983384.00	0.0	0.0	1	0	0	0	89.28	983387	0.0	6	1	0	0
983384.00	0.0	0.0	1	0	0	0	89.18	983390	0.0	6	1	0	0
983384.00	0.0	0.0	1	0	0	0	88.55	983394	0.0	6	1	0	0
983384.00	0.0	0.0	1	0	0	0	90.02	983397	0.0	6	1	0	0
983400.00	0.0	0.0	1	0	0	0	89.88	983400	0.0	6	1	0	0
983400.00	0.0	0.0	1	0	0	0	89.45	983403	0.0	6	1	0	0
983400.00	0.0	0.0	1	0	0	0	89.32	983407	0.0	6	1	0	0
983400.00	0.0	0.0	1	0	0	0	88.98	983410	0.0	6	1	0	0
983400.00	0.0	0.0	1	0	0	0	89.22	983413	0.0	6	1	0	0
983416.00	0.0	0.0	1	0	0	0	89.77	983416	0.0	6	1	0	0
983416.00	0.0	0.0	1	0	0	0	89.36	983420	0.0	6	1	0	0
983416.00	0.0	0.0	1	0	0	0	89.75	983423	0.0	6	1	0	0
983416.00	0.0	0.0	1	0	0	0	89.69	983426	0.0	6	1	0	0
983416.00	0.0	0.0	1	0	0	0	88.96	983430	0.0	6	1	0	0
983432.00	0.0	0.0	1	0	0	0	89.26	983433	0.0	6	1	0	0
983432.00	0.0	0.0	1	0	0	0	89.14	983436	0.0	6	1	0	0
983432.00	0.0	0.0	1	0	0	0	89.37	983439	0.0	6	1	0	0
983432.00	0.0	0.0	1	0	0	0	89.49	983443	0.0	6	1	0	0
983432.00	0.0	0.0	1	0	0	0	88.71	983446	0.0	6	1	0	0
983448.00	0.0	0.0	1	0	0	0	88.73	983449	0.0	6	1	0	0
983448.00	0.0	0.0	1	0	0	0	88.85	983453	0.0	6	1	0	0
983448.00	0.0	0.0	1	0	0	0	88.96	983456	0.0	6	1	0	0
983448.00	0.0	0.0	1	0	0	0	89.57	983459	0.0	6	1	0	0
983448.00	0.0	0.0	1	0	0	0	89.51	983462	0.0	6	1	0	0
983464.00	0.0	0.0	1	0	0	0	89.30	983466	0.0	6	1	0	0
983464.00	0.0	0.0	1	0	0	0	89.51	983469	0.0	6	1	0	0
983464.00	0.0	0.0	1	0	0	0	90.68	983472	0.0	6	1	0	0
983464.00	0.0	0.0	1	0	0	0	89.59	983475	0.0	6	1	0	0
983464.00	0.0	0.0	1	0	0	0	89.65	983479	0.0	6	1	0	0
983480.00	0.0	0.0	1	0	0	0	89.67	983482	0.0	6	1	0	0
983480.00	0.0	0.0	1	0	0	0	90.16	983485	0.0	6	1	0	0
983480.00	0.0	0.0	1	0	0	0	89.73	983489	0.0	6	1	0	0
983480.00	0.0	0.0	1	0	0	0	89.61	983492	0.0	6	1	0	0
983480.00	0.0	0.0	1	0	0	0	89.43	983495	0.0	6	1	0	0
983496.00	0.0	0.0	1	0	0	0	89.28	983498	0.0	6	1	0	0
983496.00	0.0	0.0	1	0	0	0	89.65	983502	0.0	6	1	0	0
983496.00	0.0	0.0	1	0	0	0	88.79	983505	0.0	6	1	0	0
983496.00	0.0	0.0	1	0	0	0	88.85	983508	0.0	6	1	0	0
983496.00	0.0	0.0	1	0	0	0	88.20	983511	0.0	6	1	0	0
983512.00	0.0	0.0	1	0	0	0	89.26	983515	0.0	6	1	0	0
983512.00	0.0	0.0	1	0	0	0	89.08	983518	0.0	6	1	0	0
983512.00	0.0	0.0	1	0	0	0	89.37	983521	0.0	6	1	0	0
983512.00	0.0	0.0	1	0	0	0	90.37	983525	0.0	6	1	0	0
983528.00	0.0	0.0	1	0	0	0	89.57	983528	0.0	6	1	0	0
983528.00	0.0	0.0	1	0	0	0	89.65	983531	0.0	6	1	0	0
983528.00	0.0	0.0	1	0	0	0	89.47	983534	0.0	6	1	0	0
983528.00	0.0	0.0	1	0	0	0	89.71	983538	0.0	6	1	0	0
983528.00	0.0	0.0	1	0	0	0	88.71	983541	0.0	6	1	0	0
983544.00	0.0	0.0	1	0	0	0	89.53	983544	0.0	6	1	0	0
983544.00	0.0	0.0	1	0	0	0	88.09	983548	0.0	6	1	0	0
983544.00	0.0	0.0	1	0	0	0	89.78	983551	0.0	6	1	0	0
983544.00	0.0	0.0	1	0	0	0	90.27	983554	0.0	6	1	0	0
983544.00	0.0	0.0	1	0	0	0	90.39	983557	0.0	6	1	0	0
983560.00	0.0	0.0	1	0	0	0	90.31	983561	0.0	6	1	0	0
983560.00	0.0	0.0	1	0	0	0	88.79	983564	0.0	6	1	0	0
983560.00	0.0	0.0	1	0	0	0	90.35	983567	0.0	6	1	0	0
983560.00	0.0	0.0	1	0	0	0	89.32	983570	0.0	6	1	0	0

```
(  2400)   F5F6F5F5  F6F5F5F5  7A7A4040  40404040  F440F5F5  F5F5F5F5  F5F5F5F5  F5F4F5F5  F4F5F5F4  F5F5F4F5
(  2480)   F5F5F5F5  F5F5F5F6  F5F5F6F5  F5F6F5F5  F6F5F5F5  F5F5F5F5  F5F6F5F5  F6F5F5F7  F5F5F7F5  F5F87A7A
(  2520)   40404040  4040F440  F5F5F9F5  F6F0F5F6  F0F5F6F0  F5F6F0F5  F5F9F5F5  F9F5F5F9  F5F5F9F5  F5F8F5F5
(  2560)   F8F5F5F7  F5F5F7F5  F5F6F5F5  F6F5F5F6  F5F5F6F5  F5F5F5F5  F4F5F5F4  7A7A4040  40404040  F440F5F5
(  2600)   F3F5F5F4  F5F5F3F5  F5F3F5F5  F4F5F5F3  F5F5F3F5  F5F3F5F5  F2F5F5F1  F5F5F1F5  F5F0F5F5  F0F5F5F0
(  2640)   F5F4F9F5  F4F9F5F4  F9F5F4F9  F5F4F9F5  F4F97A7A  4040404040  4040F440  F5F4F9F5  F4F9F5F4  F9F5F4F9
(  2680)   F5F4F9F5  F4F9F5F4  F9F5F5F0  F5F5F0F5  F5F0F5F5  F0F5F5F0  F5F5F0F5  F5F1F5F5  F1F5F5F1  F5F5F1F5
(  2720)   F5F1F5F5  F1F5F5F2  7A7A4040  40404040  F440F5F5  F2F5F5F4  F5F5F5F5  F5F5F5F5  F6F5F5F6  F5F5F6F5
(  2760)   F5F6F5F5  F7F5F5F7  F5F5F7F5  F5F7F5F5  F7F5F5F8  F5F5F8F5  F5F8F5F5  F8F5F5F7  F5F5F7F5  F5F67A7A
(  2800)   40404040  4040F440  F5F5F6F5  F5F5F5F5  F6F5F5F6  F5F5F7F5  F5F7F5F5  F7F5F5F8  F5F5F8F5  F5F8F5F5
(  2840)   F8F5F5F7  F5F5F7F5  F5F7F5F5  F7F5F5F7  F5F5F6F5  F5F6F5F5  F6F5F5F6  7A7A4040  40404040  F440F5F5
(  2880)   F6F5F5F6  F5F5F6F5  F5F6F5F5  F5F5F5F5  F5F5F5F5  F5F5F5F5  F5F5F5F5  F5F5F5F5  F5F5F5F5  F5F5F5F4
(  2920)   F5F5F4F5  F5F5F5F5  F4F5F5F4  F5F5F4F5  F5F37A7A  4040404040  4040F440  F5F5F3F5  F5F3F5F5  F3F5F5F3
(  2960)   F5F5F3F5  F5F3F5F5  F3F5F5F3  F5F5F3F5  F5F3F5F5  F3F5F5F4  F5F5F4F5  F5F4F5F5  F4F5F5F4  F5F5F4F5
(  3000)   F5F4F5F5  F4F5F5F4  7A7A4040  40404040  F440F5F5  F4F5F5F4  F5F5F4F5  F5F3F5F5  F2F5F5F3  F5F5F3F5
(  3040)   F5F3F5F5  F3F5F5F3  F5F5F3F5  F5F3F5F5  F4F5F5F4  F5F5F4F5  F5F4F5F5  F4F5F5F4  F5F5F4F5  F5F47A7A
(  3080)   40404040  4040F440  F5F5F4F5  F5F3F5F5  F3F5F5F3  F5F5F2F5  F5F2F5F5  F2F5F5F2  F5F5F2F5  F5F2F5F5
(  3120)   F2F5F5F2  F5F5F2F5  F5F3F5F5  F3F5F5F3  F5F5F3F5  F5F3F5F5  F4F5F5F4  7A7A4040  40404040  F440F5F5
(  3160)   F5F5F5F5  F5F5F6F5  F5F7F5F5  F8F5F5F8  F5F5F7F5  F5F6F5F5  F6F5F5F6  F5F5F7F5  F5F7F5F5  F7F5F5F8
(  3200)   F5F5F8F5  F5F8F5F5  F8F5F5F8  F5F5F7F5  F5F77A7A  4040404040  4040F440  F5F5F6F5  F5F5F5F5  F5F5F5F5
(  3240)   F5F5F5F5  F5F6F5F5  F6F5F5F6  F5F5F6F5  F5F6F5F5  F6F5F5F6  F5F5F6F5  F5F6F5F5  F6F5F5F6  F5F5F6F5
(  3280)   F5F6F5F5  F7F5F5F8  7A7A4040  40404040  F440F5F5  F9F5F6F1  F5F6F3F5  F6F4F5F6  F3F5F6F2  F5F6F1F5
(  3320)   F6F1F5F6  F0F5F6F0  F5F6F0F5  F5F9F5F5  F9F5F5F9  F5F5F9F5  F5F9F5F6  F0F5F6F1  F5F6F2F5  F6F37A7A
(  3360)   40404040  4040F440  F5F6F4F5  F6F4F5F6  F4F5F6F3  F5F6F3F5  F6F2F5F6  F2F5F6F3  F5F6F4F5  F6F5F5F6
(  3400)   F6F5F6F6  F5F6F7F5  F6F7F5F6  F7F5F6F7  F5F6F7F5  F6F6F5F6  F6F5F6F5  7A7A4040  40404040  F440F5F6
(  3440)   F4F5F6F3  F5F6F2F5  F6F1F5F6  F0F5F5F9  F5F5F8F5  F5F7F5F5  F7F5F5F6  F5F5F6F5  F5F6F5F5  F6F5F5F5
(  3480)   F5F5F6F5  F5F6F5F5  F6F5F5F7  F5F5F7F5  F5F87A7A  4040404040  4040F440  F5F5F8F5  F5F8F5F5  F9F5F5F9
(  3520)   F5F5F9F5  F5F9F5F5  F8F5F5F7  F5F5F5F5  F5F4F5F5  F3F5F5F3  F5F5F3F5  F5F3F5F5  F4F5F5F5  F5F5F5F5
(  3560)   F5F5F5F5  F5F5F5F5  7A7A4040  40404040  F440F5F5  F6F5F5F6  F5F5F7F5  F5F8F5F5  F9F5F6F0  F5F6F1F5
(  3600)   F6F2F5F6  F3F5F6F2  F5F6F2F5  F6F1F5F6  F0F5F5F8  F5F5F6F5  F5F9F5F6  F1F5F6F3  F5F6F5F5  F6F77A7A
(  3640)   40404040  4040F440  F5F6F7F5  F6F7F5F6  F6F5F6F4  F5F6F3F5  F6F2F5F6  F0F5F5F8  F5F5F6F5  F5F4F5F5
(  3680)   F3F5F5F0  F5F4F8F5  F4F7F5F4  F6F5F4F4  F5F4F3F5  F4F2F5F4  F2F5F4F2  7A7A4040  40404040  F440F5F4
(  3720)   F3F5F4F3  F5F4F3F5  F4F3F5F4  F3F5F4F3  F5F4F5F5  F4F6F5F4  F8F5F4F9  F5F4F8F5  F4F8F5F4  F7F5F4F8
(  3760)   F5F4F8F5  F4F8F5F4  F7F5F4F7  F5F4F7F5  F4F77A7A  4040404040  4040F440  F5F4F7F5  F4F7F5F4  F7F5F4F8
(  3800)   F5F5F0F5  F5F1F5F5  F1F5F5F1  F5F5F4F5  F5F6F5F5  F9F5F6F0  F5F6F2F5  F6F3F5F6  F4F5F6F6  F5F6F6F5
(  3840)   F6F8F5F6  F9F5F7F0  7A7A4040  40404040  F440F5F7  F0F5F7F1  F5F7F2F5  F7F3F5F7  F3F5F7F1  F5F7F1F5
(  3880)   F7F1F5F7  F0F5F7F0  F5F6F9F5  F6F9F5F6  F9F5F7F0  F5F7F1F5  F7F2F5F7  F3F5F7F5  F5F7F5F5  F7F57A7A
(  3920)   40404040  4040F440  F5F7F4F5  F7F3F5F7  F1F5F7F0  F5F6F9F5  F6F8F5F6  F8F5F6F7  F5F6F8F5  F6F8F5F6
(  3960)   F6F5F6F3  F5F6F1F5  F5F8F5F5  F4F5F5F2  F5F5F1F5  F5F0F5F4  F9F5F4F8  7A7A4040  40404040  F440F5F4
(  4000)   F8F5F4F9  F5F5F0F5  F5F1F5F5  F2F5F5F2  F5F5F3F5  F5F3F5F5  F3F5F5F2  F5F5F2F5  F5F2F5F5  F1F5F5F1
(  4040)   F5F5F1F5  F5F2F5F5  F2F5F5F2  F5F5F2F5  F5F27A7A  4040404040  4040F440  F5F4F9F5  F4F7F5F4  F5F5F4F3
(  4080)   F5F4F2F5  F4F2F5F4  F2F5F3F8  F5F3F6F5  F3F3F5F3  F1F5F2F9  F5F2F6F5  F2F3F5F2  F3F5F2F3  F5F2F4F5
(  4120)   F2F4F5F2  F1F5F1F8  7A7A4040  40404040  F440F5F1  F5F5F1F1  F5F0F8F5  F0F5F5F0  F3F5F0F0  F4F9F6F4
(  4160)   F9F2F4F8  F8F4F8F8  F4F8F9F4  F9F5F4F9  F9F5F0F5  F5F1F0F5  F1F1F5F0  F9F5F0F7  F5F0F6F5  F0F87A7A
(  4200)   40404040  4040F440  F5F1F0F5  F1F4F5F1  F7F5F1F9  F5F2F1F5  F2F5F5F2  F8F5F2F8  F5F3F0F5  F3F1F5F2
(  4240)   F8F5F2F1  F5F0F5F5  F0F3F5F0  F1F5F0F1  F5F0F2F5  F0F4F5F0  F6F5F1F0  7A7A4040  40404040  F440F5F1
(  4280)   F5F5F2F1  F5F3F0F5  F3F3F5F3  F2F5F3F0  F5F2F7F5  F2F4F5F2  F8F5F2F6  F5F2F2F5  F2F2F5F2  F3F5F2F3
(  4320)   F5F2F3F5  F2F4F5F2  F4F5F2F2  F5F2F0F5  F1F77A7A  4040404040  4040F440  F5F1F4F5  F1F0F5F0  F6F5F0F3
(  4360)   F5F0F2F5  F0F2F5F0  F3F5F0F8  F5F1F1F5  F1F4F5F1  F5F5F1F6  F5F1F7F5  F1F9F5F1  F9F5F1F7  F5F1F6F5
(  4400)   F1F6F5F1  F6F5F1F7  7A7A4040  40404040  F440F5F1  F6F5F1F5  F5F1F4F5  F1F3F5F1  F6F5F1F9  F5F2F4F5
(  4440)   F2F5F5F2  F5F5F2F5  F5F2F5F5  F2F5F5F2  F4F5F2F4  F5F2F4F5  F2F5F5F2  F5F5F2F5  F5F2F6F5  F2F77A7A

          FILE    INPUT     DATA RECORDS      MAX.          READ ERROR SUMMARY          INPUT RETRIES
                  RECS.       INPUT           SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
             1      16         17             5120         0       0       0       0       0       0

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

START TIME 05/01/79  15:44:54         STOP TIME 05/01/79  15:45:09


$$
$ASS IN MS3 OUT MS1
```

ACQ. AGENT	MAP NO.	ACQ. AGENT
VJP	RD2468	MJT

MAGNETOMETER DATA

6 STATION

GG-28C

This data set catalog consists of 1 data tape. The tape is 1600 BPI, EBCDIC, 9 track, with 1 file of data. The tape was created on a CDC 6600 computer.

Time spans are as follows:

D#	C#	TIME SPAN
D-33810	C-20616	07/28/77 - 07/29/77

UNITED STATES GOVERNMENT

2-Way Memo

INSTRUCTIONS

Use routing symbols whenever possible.

SENDER:
- Use brief, informal language.
- Conserve space.
- Forward original and one copy.

RECEIVER:
- Reply below the message, keep one copy, return one copy.

Subject : DATA TAPE FOR IMS INTERVAL, July 1977

DATE OF MESSAGE	Routing Symbol
79/04/18	D-64

To : DR. M. TEAGUE

SIGNATURE OF ORIGINATOR

Joe H. Allen

TITLE OF ORIGINATOR

GG-32D

FOLD

INITIAL MESSAGE

Mike,
This is the tape for the AE, AO, AU and AL indices and auroral zone magnetic observatory variations (H or X component) for the two-day (48-hr) interval from July 28 @ 2100 UT through July 30 @ 2100 UT, 1977. The stations written here are Leirvogur (LR), Great Whale River (GW), College (CO), Tixie Bay (TI), and Dixon Island (DI). The values should be in gammas (i.e. nanoTeslas).

The tape should be written in the same fashion as that provided about six months ago for the December IMS intervals. I believe that is was output using a formatted write statement and was copied in CDC display code. If you have any problems reading this tape, we are modifying our output program (originally intended only for printed and microfilm output) to produce and EBCDIC tape.

GG-27A

We will send the variations data for the auroral zone, polar cap and mid-latitude stations on another tape which will necessarily be in a different format. These values, ~~xax~~ other than the auroral zone ones, are not used in deriving any indices, only in preparing the microfilm stacked-plots of magnetic variations. They are copied directly from disc files as card-images onto an EBCDIC tape.

Call me if any problems.

GG-27 Mid-latitude and auroral stations
GG-27A Magnetometer Data (6 sta.)

From : Joe H. Allen

DATE OF REPLY	Routing Symbol

SIGNATURE OF REPLIER

TITLE OF REPLIER

D-34018
LG-28A
12/06/79

DUMP OF TAPE X412

INPUT TAPE X412 ON MS1
DATA INPUT H9 FL 1 1 1

FILE 1 RECORD 1 LENGTH 768BYTES

(0)	40404040	F1F2F0F9	F4F3F1F3	F8F2F8F1	F2F7F3F2	F2F1F9F5	F2F0F1F4	404060F1	404040F1	404040F1
(40)	404040F4	404040F5	40404040	F2F2F0F9	F4F3F1F4	F9F2F8F9	F2F7F3F6	F2F1F9F3	F2F0F1F3	404060F4
(80)	40404F2	40404F2	40404F6	40404F4	40404040	F3F2F0F9	F4F3F1F6	F0F2F9F7	F2F7F3F2	F2F1F9F5
(120)	F2F F1F4	40404F1	404060F1	40404F1	404040F3	40404F6	40404040	F4F2F0F9	F4F3F1F7	F1F3F0F5
(160)	F2F7F3F2	F2F1F9F5	F2F0F1F6	4040 40F2	404060F2	404060F1	404040F2	404040F4	40404040	F5F2F0F9
(200)	F4F3F1F8	F2F3F1F3	F2F7F3F6	F2F1F9F4	F2F0F1F4	404060F1	404060F1	404040F1	404040F2	404040F3
(240)	40404040	F6F2F0F9	F4F3F1F9	F3F3F2F1	F2F7F3F6	F2F1F9F3	F2F0F2F0	404040F0	404060F2	404060F5
(280)	4 4040F5	404040F5	404C4040	F7F2F0F9	F4F3F2F0	F4F3F2F9	F2F7F3F6	F2F1F9F1	F2F0F1F6	404040F1
(320)	4040 40F0	4040 60F1	404040F4	40403 0F3	40404040	F8F2F0F9	F4F3F2F1	F5F3F3F7	F2F7F3F7	F2F1F9F1
(360)	F2F0F1F7	404040F1	404060F1	404060F2	404040F5	4C4C40F4	40404040	F9F2F0F9	F4F3F2F2	F6F3F4F5
(400)	F2F7F3F8	F2F1F9F1	F2F0F1F4	404040F1	404060F1	4C4C40F2	404040F9	404040F3	404040F1	F0F2F0F9
(440)	F4F3F2F3	F7F3F5F3	F2F7F4F2	F2F1F9F0	F2F0F1F8	4C4060F2	404060F1	404060F2	404040F4	404040F4
(480)	404040F1	F1F2F0F9	F4F3F2F4	F8F3F6F1	F2F7F4F4	F2F1F8F3	F2F0F0F9	404060F3	404040F5	404040F7
(520)	4040F1F0	404040F3	404C40F1	F2F2F0F9	F4F3F2F5	F9F3F6F9	F2F7F5F0	F2F1F9F0	F2F0F1F7	4C4060F9
(560)	404060F2	4040 4F0	4040 40F9	404040F5	40404F1	F3F2F0F9	F4F3F2F7	F0F3F7F7	F2F7F4F2	F2F1F8F8
(600)	F2F0F1F7	404040F0	404060F1	404040F0	404040F4	4C4C40F6	404040F1	F4F2F0F9	F4F3F2F8	F1F3F8F5
(640)	F2F7F3F9	F2F1F7F5	F2F0F1F7	404040F4	4040F1F1	4C4C40F0	404040F6	404040F7	404040F1	F5F2F0F9
(680)	F4F3F2F9	F2F3F9F3	F2F7F4F3	F2F1F8F7	F2F0F1F5	4C4C40F0	404060F1	404040F2	404040F2	404040F8
(720)	404040F1	F6F2F0F9	F4F3F3F0	F3F4F0F1	F2F7F4F3	F2F1F8F7	F2F0F1F9	404040F1	404060F2	404060F2
(760)	404040F3	4040 40F6								

FILE 1 RECORD 738 LENGTH 768BYTES

(0)	F1F1F7F9	F3F2F1F1	F0F0F1F4	F4F6F0F0	F2F7F7F4	F2F1F6F6	F2F0F5F1	404060F3	404040F0	404060F4
(40)	404040F4	404040F3	F1F1F7F9	F4F2F1F1	F0F0F1F5	F5F6F0F8	F2F7F6F9	F2F1F7F2	F2F0F4F7	404040F0
(80)	404060F5	404060F1	404040F3	404040F2	F1F1F7F9	F5F2F1F1	F0F0F1F6	F6F6F1F6	F2F7F6F4	F2F1F7F1
(120)	F2F0F4F6	404040F2	4040 60F4	404040F0	404040F4	4C4C40F2	F1F1F7F9	F6F2F1F1	F0F0F1F7	F7F6F2F4
(160)	F2F7F5F9	F2F1F6F9	F2F0F4F4	404 40F5	404060F1	4C4C40F1	404040F5	404040F3	F1F1F7F9	F7F2F1F1
(200)	F0F0F1F8	F8F6F3F2	F2F7F6F4	F2F1F7F1	F2F0F4F3	4C4C60F3	404060F2	404040F2	404040F2	404040F1
(240)	F1F1F7F9	F8F2F1F1	F0F0F1F9	F9F6F4F0	F2F7F5F8	F2F1F6F9	F2F0F4F5	404040F0	404040F1	404040F0
(280)	404040F2	404040F4	F1F1F7F9	F9F2F1F1	F0F0F2F1	F0F6F4F8	F2F7F5F2	F2F1F7F1	F2F0F4F7	404040F3
(320)	404040F0	404060F3	404040F3	404040F4	F1F1F8F0	F0F2F1F1	F0F0F2F2	F1F6F5F6	F2F7F4F9	F2F1F7F5
(360)	F2F0F3F9	404040F4	404060F4	404040F5	404040F1	4C4C40F5	F1F1F8F0	F1F2F1F1	F0F0F2F3	F2F6F6F4
(400)	F2F7F4F9	F2F1F7F3	F2F0F4F4	404040F2	404060F1	4C4C40F0	404040F2	404040F3	F1F1F8F0	F2F2F1F1
(440)	F0F0F2F4	F3F6F7F2	F2F7F4F5	F2F1F7F2	F2F0F4F1	4C4C40F3	404040F0	404040F3	404040F2	404040F2
(480)	F1F1F8F0	F3F2F1F1	F0F0F2F5	F4F6F8F0	F2F7F4F6	F2F1F7F6	F2F0F4F1	404040F0	404060F4	404040F2
(520)	404040F2	404040F2	F1F1F8F0	F4F2F1F1	F0F0F2F6	F5F6F8F8	F2F7F5F0	F2F1F7F3	F2F0F4F3	404060F6
(560)	404060F1	404040F1	404040F3	404040F1	F1F1F8F0	F5F2F1F1	F0F0F2F7	F6F6F9F6	F2F7F3F9	F2F1F7F6
(600)	F2F0F4F5	404040F3	404060F4	404060F1	404040F2	4C4C40F1	F1F1F8F0	F6F2F1F1	F0F0F2F8	F7F7F0F4
(640)	F2F7F4F0	F2F1F7F2	F2F0F4F5	404040F0	404040F0	4C4C60F1	404040F3	404040F1	F1F1F8F0	F7F2F1F1
(680)	F0F0F2F9	F8F7F1F2	F2F7F3F2	F2F1F7F2	F2F0F4F0	4C4C40F6	404040F1	404040F4	404040F2	404040F2
(720)	F1F1F8F0	F8F2F1F1	F0F0F3F0	F9F7F2F0	F2F7F3F5	F2F1F7F0	F2F0F3F9	404040F2	404040F3	404040F4
(760)	404040F2	404040F3								

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	738	739	768	0	0	0	0	0	0

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

START TIME 07/11/79 11:05:18 STOP TIME 07/11/79 11:05:46

$$
$ASS IN MS1

D-34018
LG-28A
12/06/79

DUMP OF TAPE X412

INPUT TAPE X412 ON MS1
DATA INPUT H9 FL 1 1 1

FILE 1 RECORD 1 LENGTH 768BYTES

(0)	40404040	F1F2F0F9	F4F3F1F3	F8F2F8F1	F2F7F3F2	F2F1F9F5	F2F0F1F4	404060F1	404040F1	404040F1
(40)	404040F4	404040F5	40404040	F2F2F0F9	F4F3F1F4	F9F2F8F9	F2F7F3F6	F2F1F9F3	F2F0F1F3	404060F4
(80)	40404F2	40404F2	40404F6	40404F4	40404040	F3F2F0F9	F4F3F1F6	F0F2F9F7	F2F7F3F2	F2F1F9F5
(120)	F2F F1F4	40404F1	404060F1	40404F1	404040F3	40404F6	40404040	F4F2F0F9	F4F3F1F7	F1F3F0F5
(160)	F2F7F3F2	F2F1F9F5	F2F0F1F6	4040 40F2	404060F2	404060F1	404040F2	404040F4	40404040	F5F2F0F9
(200)	F4F3F1F8	F2F3F1F3	F2F7F3F6	F2F1F9F4	F2F0F1F4	404060F1	404060F1	404040F1	404040F2	404040F3
(240)	40404040	F6F2F0F9	F4F3F1F9	F3F3F2F1	F2F7F3F6	F2F1F9F3	F2F0F2F0	404040F0	404060F2	404060F5
(280)	4 4040F5	404040F5	404C4040	F7F2F0F9	F4F3F2F0	F4F3F2F9	F2F7F3F6	F2F1F9F1	F2F0F1F6	404040F1
(320)	4040 40F0	4040 60F1	404040F4	40403 0F3	40404040	F8F2F0F9	F4F3F2F1	F5F3F3F7	F2F7F3F7	F2F1F9F1
(360)	F2F0F1F7	404040F1	404060F1	404060F2	404040F5	4C4C40F4	40404040	F9F2F0F9	F4F3F2F2	F6F3F4F5
(400)	F2F7F3F8	F2F1F9F1	F2F0F1F4	404040F1	404060F1	4C4C40F2	404040F9	404040F3	404040F1	F0F2F0F9
(440)	F4F3F2F3	F7F3F5F3	F2F7F4F2	F2F1F9F0	F2F0F1F8	4C4060F2	404060F1	404060F2	404040F4	404040F4
(480)	404040F1	F1F2F0F9	F4F3F2F4	F8F3F6F1	F2F7F4F4	F2F1F8F3	F2F0F0F9	404060F3	404040F5	404040F7
(520)	4040F1F0	404040F3	404C40F1	F2F2F0F9	F4F3F2F5	F9F3F6F9	F2F7F5F0	F2F1F9F0	F2F0F1F7	4C4060F9
(560)	404060F2	4040 4F0	4040 40F9	404040F5	40404F1	F3F2F0F9	F4F3F2F7	F0F3F7F7	F2F7F4F2	F2F1F8F8
(600)	F2F0F1F7	404040F0	404060F1	404040F0	404040F4	4C4C40F6	404040F1	F4F2F0F9	F4F3F2F8	F1F3F8F5
(640)	F2F7F3F9	F2F1F7F5	F2F0F1F7	404040F4	4040F1F1	4C4C40F0	404040F6	404040F7	404040F1	F5F2F0F9
(680)	F4F3F2F9	F2F3F9F3	F2F7F4F3	F2F1F8F7	F2F0F1F5	4C4C40F0	404060F1	404040F2	404040F2	404040F8
(720)	404040F1	F6F2F0F9	F4F3F3F0	F3F4F0F1	F2F7F4F3	F2F1F8F7	F2F0F1F9	404040F1	404060F2	404060F2
(760)	404040F3	4040 40F6								

FILE 1 RECORD 738 LENGTH 768BYTES

(0)	F1F1F7F9	F3F2F1F1	F0F0F1F4	F4F6F0F0	F2F7F7F4	F2F1F6F6	F2F0F5F1	404060F3	404040F0	404060F4
(40)	404040F4	404040F3	F1F1F7F9	F4F2F1F1	F0F0F1F5	F5F6F0F8	F2F7F6F9	F2F1F7F2	F2F0F4F7	404040F0
(80)	404060F5	404060F1	404040F3	404040F2	F1F1F7F9	F5F2F1F1	F0F0F1F6	F6F6F1F6	F2F7F6F4	F2F1F7F1
(120)	F2F0F4F6	404040F2	4040 60F4	404040F0	404040F4	4C4C40F2	F1F1F7F9	F6F2F1F1	F0F0F1F7	F7F6F2F4
(160)	F2F7F5F9	F2F1F6F9	F2F0F4F4	404 40F5	404060F1	4C4C40F1	404040F5	404040F3	F1F1F7F9	F7F2F1F1
(200)	F0F0F1F8	F8F6F3F2	F2F7F6F4	F2F1F7F1	F2F0F4F3	4C4C60F3	404060F2	404040F2	404040F2	404040F1
(240)	F1F1F7F9	F8F2F1F1	F0F0F1F9	F9F6F4F0	F2F7F5F8	F2F1F6F9	F2F0F4F5	404040F0	404040F1	404040F0
(280)	404040F2	404040F4	F1F1F7F9	F9F2F1F1	F0F0F2F1	F0F6F4F8	F2F7F5F2	F2F1F7F1	F2F0F4F7	404040F3
(320)	404040F0	404060F3	404040F3	404040F4	F1F1F8F0	F0F2F1F1	F0F0F2F2	F1F6F5F6	F2F7F4F9	F2F1F7F5
(360)	F2F0F3F9	404040F4	404060F4	404040F5	404040F1	4C4C40F5	F1F1F8F0	F1F2F1F1	F0F0F2F3	F2F6F6F4
(400)	F2F7F4F9	F2F1F7F3	F2F0F4F4	404040F2	404060F1	4C4C40F0	404040F2	404040F3	F1F1F8F0	F2F2F1F1
(440)	F0F0F2F4	F3F6F7F2	F2F7F4F5	F2F1F7F2	F2F0F4F1	4C4C40F3	404040F0	404040F3	404040F2	404040F2
(480)	F1F1F8F0	F3F2F1F1	F0F0F2F5	F4F6F8F0	F2F7F4F6	F2F1F7F6	F2F0F4F1	404040F0	404060F4	404040F2
(520)	404040F2	404040F2	F1F1F8F0	F4F2F1F1	F0F0F2F6	F5F6F8F8	F2F7F5F0	F2F1F7F3	F2F0F4F3	404060F6
(560)	404060F1	404040F1	404040F3	404040F1	F1F1F8F0	F5F2F1F1	F0F0F2F7	F6F6F9F6	F2F7F3F9	F2F1F7F6
(600)	F2F0F4F5	404040F3	404060F4	404060F1	404040F2	4C4C40F1	F1F1F8F0	F6F2F1F1	F0F0F2F8	F7F7F0F4
(640)	F2F7F4F0	F2F1F7F2	F2F0F4F5	404040F0	404040F0	4C4C60F1	404040F3	404040F1	F1F1F8F0	F7F2F1F1
(680)	F0F0F2F9	F8F7F1F2	F2F7F3F2	F2F1F7F2	F2F0F4F0	4C4C40F6	404040F1	404040F4	404040F2	404040F2
(720)	F1F1F8F0	F8F2F1F1	F0F0F3F0	F9F7F2F0	F2F7F3F5	F2F1F7F0	F2F0F3F9	404040F2	404040F3	404040F4
(760)	404040F2	404040F3								

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	738	739	768	0	0	0	0	0	0

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

START TIME 07/11/79 11:05:18 STOP TIME 07/11/79 11:05:46

$$
$ASS IN MS1

INSTITUTE OF GEOLOGICAL SCIENCES
Geomagnetism Unit *Incorporating* WDDC C1
Murchison House,
West Mains Road,
Edinburgh EH9 3LA.

Telephone: 031-667 1000
Telex: 727343

Dr James I Vette
NSSDC, Code 601
NASA Goddard Space Flight Center
Greenbelt
Md 20771
USA

29 February 1980

Your Ref..

Our Ref..

Dear Dr Vette

Dr Robert Manka, US Coordinator for the International Magnetospheric Study, asked if we could send you copies of our digital magnetic data for the period 12.00 UT, 28 July to 20.00 UT, 29 July 1977.

We had ten stations running at this time covering all or some part of the above period, and such data as we have available is on the enclosed tape.

The locations of the stations and their identifying codes are among those listed on enclosed sheet 1.

The format of the data type is as specified on sheet 2. On sheet 3 is a log of the order of the Station files on the tape. The time is continuous throughout each file and data gaps due to cassette changes on the recording sites (between 'data stops' and 'data starts' on the log sheet) are filled with zeros, which is otherwise a forbidden state for the data values. The 'baseline' is arbitrary ? and is discontinuous over one of these gaps. I am also enclosing an analysis of the tape structure and a dump of the beginning of the first file.

One thing to note with our data is that they are reconstructed from a digital logger with a limited dynamic range. This, coupled with the fact that the magnetometer is of fairly high sensitivity designed for pulsation recording, means that at some stations at times of very rapid field variation, the reconstruction is not 100% reliable.

I have not had time to check all the data personally and there will undoubtedly be some errors. For example the data from EG is unreliable at times, particularly on Z.

I apologise for the long delay in answering the request. If I can be of any further assistance please contact me.

Yours sincerely

Christopher A Green.

C A GREEN

IGS DIGITAL MAGNETOMETER STATIONS

Station	Identifier	Geographic Coords Lat	Long	Operating Period From	To
Tromso	TR	69.66	18.95	Sep 76	Jul 79
Kiruna	KI	67.80	20.40	Sep 76	Jul 79
Oulu	OL	65.11	25.49	Jun 77	Jul 79
Nurmijarvi	NU	60.51	24.66	Jul 76	Sep 79
Kvistaberg	KV	59.50	17.63	Sep 76	Jun 77
Arendal	AR	58.47	8.63	Sep 76	Jun 77
Reyjavik	RY	64.18	-21.70	Jul 77	Jun 78
Eidar	EG	65.37	-18.95	Jul 77	Jun 78
Faroes	FA	62.03	- 6.78	Aug 77	present
Lerwick	LE	60.13	- 1.18	May 75	present
Durness	DU	58.58	- 4.76	Dec 77	Oct 79
Loch Laggan	LL	56.97	- 4.38	Jul 77	present
Earlyburn	EB	55.73	- 3,23	May 75	Jun 77
Eskdalemuir	ES	55.32	- 3.20	Jan 76	present
York	YO	53.95	- 1.05	Oct 75	present
Cambridge	CA	52.23	0.05	Jan 78	Dec 78
Hartland	HA	51.00	- 4.48	Jun 75	present
Valentia	VA	53.80	-10.25	May 75	Jun 77
St Anthony	SA	51.35	-55.60	Jul 76	Aug 79
South Georgia	SG	-54.28	-36.48	Jul 76	present
Halley Bay	HY	-75.52	-26.60	Jul 76	present

IGS Geomagnetism Unit
January 1980

(2)

Data Tapes for Special Intervals

9 track
~~800~~ or 1600 BPI
Odd parity
ASC11

Block length	3960	(10 mins data)
Lines per block	30	(3 lines/minute)
Bytes per line	132	(24 values at $2\frac{1}{2}$ sec intervals)

Line Structure
Byte position

1-2	Station identifier
3-4	Year (last 2 digits)
5-7	Day (000-365)
8-9	Hour (00-23)
10-11	Minute (00-59)
12	Component (H, D or Z)
13-17 ... 128-132	24 component field values in $^1/_{10}$ nT units (50000 added)

as nT

Each line can be read under fortran using a decode statement
Format A2, I2, I3, 2I2, A1, 24 F.5.1
or A2, I2, I3, 2I2, A1, 24 I5 as 1/10 nT units

The format used is a quasi-one minute format with 24 component values to a line. These field values were recorded at $2\frac{1}{2}$ second intervals during the course of the minute given in byte position 10-11.

(7)

FILE NUMBER : 1
STATION : TR TROMSO

FILE STARTS : 12. 0 DAY 209 1977
DATA STARTS : 12. 0 DAY 209 1977
DATA STOPS : 12.21 DAY 210 1977
DATA STARTS : 12.43 DAY 210 1977
DATA STOPS : 20. 0 DAY 210 1977
FILE STOPS : 20. 0 DAY 210 1977

FILE NUMBER : 1
STATION : KI KIRUNA

FILE STARTS : 12. 0 DAY 209 1977
DATA STARTS : 12. 0 DAY 209 1977
DATA STOPS : 8. 0 DAY 210 1977
DATA STARTS : 8. 6 DAY 210 1977
DATA STOPS : 11.10 DAY 210 1977
FILE STOPS : 11.10 DAY 210 1977

FILE NUMBER : 3
STATION : NU NURMIJARVI

FILE STARTS : 12. 0 DAY 209 1977
DATA STARTS : 12. 0 DAY 209 1977
DATA STOPS : 20. 0 DAY 210 1977
FILE STOPS : 20. 0 DAY 210 1977

FILE NUMBER : 4
STATION : LE LERWICK

FILE STARTS : 12. 0 DAY 209 1977
DATA STARTS : 12. 0 DAY 209 1977
DATA STOPS : 15.10 DAY 210 1977
DATA STARTS : 15.14 DAY 210 1977
DATA STOPS : 20. 0 DAY 210 1977
FILE STOPS : 20. 0 DAY 210 1977

FILE NUMBER : 5
STATION : ES ESKDALEMUIR

FILE STARTS : 12. 0 DAY 209 1977
DATA STARTS : 12. 0 DAY 209 1977
DATA STOPS : 14.41 DAY 210 1977
DATA STARTS : 14.47 DAY 210 1977
DATA STOPS : 20. 0 DAY 210 1977
FILE STOPS : 20. 0 DAY 210 1977

FILE NUMBER : 6
STATION : HY HALLEY BAY

FILE STARTS : 12. 0 DAY 209 1977
DATA STARTS : 12. 0 DAY 209 1977
DATA STOPS : 20. 0 DAY 210 1977
FILE STOPS : 20. 0 DAY 210 1977

FILE NUMBER : 7
STATION : SA St. ANTHONY

FILE STARTS : 10. 0 DAY 209 1977
DATA STARTS : 10. 8 DAY 209 1977
DATA STOPS : 20. 0 DAY 210 1977
FILE STOPS : 20. 0 DAY 210 1977

FILE NUMBER : 8
STATION : EG EIDAR

FILE STARTS : 12.50 DAY 209 1977
DATA STARTS : 12.55 DAY 209 1977
DATA STOPS : 20. 0 DAY 210 1977
FILE STOPS : 20. 0 DAY 210 1977

FILE NUMBER : 9
STATION : OL OULU

FILE STARTS : 12. 0 DAY 209 1977
DATA STARTS : 12. 0 DAY 209 1977
DATA STOPS : 19.09 DAY 210 1977
FILE STOPS : 20. 0 DAY 210 1977

FILE NUMBER : 10
STATION : SG SOUTH GEORGIA

FILE STARTS : 12. 0 DAY 209 1977
DATA STARTS : 12. 0 DAY 209 1977
DATA STOPS : 20. 0 DAY 210 1977
FILE STOPS : 20. 0 DAY 210 1977

THERE ARE 192 BLOCKS OF 3960 BYTES

**** TAPE MARK ****

FILE 2

THERE ARE 139 BLOCKS OF 3960 BYTES

**** TAPE MARK ****

FILE 3

THERE ARE 192 BLOCKS OF 3960 BYTES

**** TAPE MARK ****

FILE 4

THERE ARE 192 BLOCKS OF 3960 BYTES

**** TAPE MARK ****

FILE 5

THERE ARE 192 BLOCKS OF 3960 BYTES

**** TAPE MARK ****

FILE 6

THERE ARE 192 BLOCKS OF 3960 BYTES

**** TAPE MARK ****

FILE 7

THERE ARE 168 BLOCKS OF 3960 BYTES

**** TAPE MARK ****

FILE 8

THERE ARE 107 BLOCKS OF 3960 BYTES

FILE 9

THERE ARE 191 BLOCKS OF 3780 BYTES

**** TAPE MARK ****

FILE 10

THERE ARE 192 BLOCKS OF 3780 BYTES

**** TAPE MARK ****

**** TAPE MARK ****

```
TR7720912 1H4988149881498824988149882498814988249885498774987649875498744987
TR7720912 1D5000250002500005000250004500025000350003500035000650006500065000
TR7720912 1Z4998349990499049990499049990499914999049999049999249993499934999
TR7720912 3H4986349853498564985549853498334985149851498504985049849485049850
TR7720912 3D5000350005500083000930011300135001530001750018500135001950019500
TR7720912 3Z5000250002500025000450006500055000850008500098001050011500115001
TR7720912 4H4984249841498394983649834498334982749827498254982349822498194982
TR7720912 4D5001350017500185001950021500233002350023450024500275002350023500
TR7720912 4Z5001850020500205002150022500245002550027500275002750030500315003
TR7720912 5H4932649826498244982349820498194981749818498164981549815498174981
TR7720912 5D5002950031500315003150031500305003150031500315003150032500325003
TR7720912 5Z5003850039500405004030004250043500445004450044550046500465004850
TR7720912 6H4981349814498144981e49817498154981649817498174981849821498214982
TR7720912 6D5002850027500305003050032500335003650038500385003850039500385003
TR7720912 6Z5005350054500555005550055500565005850056500585005950060500605006
TR7720912 7H4982049821498224982349823498234982349823498264982249822498224981849811
TR7720912 7D5002350020500225002050018500185001850018500165001450012500125001150001
TR7720912 7Z5006250061500605006050060500615006050061500605006150060500615006050061
TR7720912 8H4981949820498234982449826498294982949827498284982649825498234982
TR7720912 8D5001350013500125001050007500045000250000499984999849999649997499991
TR7720912 8Z5006350063500645006350062500625006250060500605006050059500595005850059
TR7720912 9H4982349828498274982949829498304983149831498314983149830498264982849824
TR7720912 9D5000950010500095000950009500085000650007500045000550004500015000150001
TR7720912 9Z5006350063500635006250062500625006130061500605006050060500605006050061
```

REQ. AGENT	NO.	ACQ. AGENT
VPL	V0013	DNS

GG-28E

INDUCTION MAGNETOMETER

(10 STATION)

This data set catalog consists of 1 data tape. The tape is 9trk, ASCII, and contains 10 files of data. The 'D' tape is 6250 BPI and the 'C' tape is 1600. The tape was created on an IBM 360 computer.

The time span is as follows:

D#	C#	FILES	TIME SPAN
D-37988	C-20897	10	7/28/77 - 7/29/77

G-G-28E
7/28/77 - 7/29/77
D37988

DUMP OF TAPE X-2 /

INPUT TAPE X-207 ON MT2
DATA INPUT HX NF 10 FL 1 1 1 SR 10 1 1 SR 10 LAST 1

FILE 1 RECORD 1 LENGTH 3960 BYTES

(0)	54523737	323.3931	322 3146	34393639	39343938	39393439	38393934	393e3959	34393937	31343959
(40)	30303439	39303034	393e3939	34393e39	3e343958	39363439	3e393e34	39383936	54393839	36343936
(80)	39363439	39393934	39383937	34393e39	39343939	30303439	3e393934	39393e30	34393e39	39343939
(120)	3[illegible]3439	393 3134	393e3939	54523737	323 3931	322 3144	34393934	35343939	39353439	39393434
(160)	39393933	34393939	33343939	39313439	393e3934	39393930	34343939	32343939	395e3439	39393334
(200)	39393935	34393939	36343939	393e3530	30303235	30303031	35303030	32353030	30343530	30303435
(240)	3[illegible]3134	3931[illegible]30	34353030	30353531	3031[illegible]435	3031[illegible]134	54523737	323 3931	322 3[illegible]0A	34393937
(280)	35343939	37353439	39373534	39393736	34393937	3e343939	37373439	39373734	39393737	34393937
(320)	37343939	37383439	39373734	39393738	34393937	3e343939	37383439	39373934	39393739	34393936
(360)	3[illegible]343939	3e313439	393e3134	39393631	34393938	32343939	3e323439	39383234	39393433	54523737
(400)	323 3931	322 3146	34393639	36343930	3031[illegible]439	32393e34	34393e38	34393839	39343939	30313439
(440)	30393734	39383936	34393639	36343938	39363439	38393e34	39383937	34393e39	35346932	39323439
(480)	3[illegible]393234	39383931	34393836	39343938	3e3e3439	3e383634	34383835	34393e36	34343936	39333439
(520)	3e3e3334	39383132	54523737	32313931	3221[illegible]144	35313030	32353030	30313530	30303235	30303032
(560)	353 3131	31353[illegible]30	3[illegible]313530	3031[illegible]135	3[illegible]3[illegible]33	353[illegible]3130	3435303[illegible]	3[illegible]3435[illegible]	3[illegible]3535	3[illegible]3[illegible]5e
(600)	35303030	36353030	33373530	30303e35	30303035	35303030	35353030	30343530	30303335	31303033
(640)	3535e3030	33353030	30313550	30303135	30303031	54523737	32303931	3220[illegible]15A	34393936	33343939
(680)	38333439	393e3434	39393633	34393938	33343939	38333439	393e3434	39393833	34393938	33343939
(720)	3e333439	39303534	39393635	34393938	35343939	3e353437	39383734	39393837	34393938	37343939
(760)	3e333439	39393934	39393839	34393936	39343939	39303439	393e3934	39393e39	54523737	32303931
(800)	322 3146	34393e36	31343938	38313439	3e3e3234	39333831	34393e30	32343938	38313439	32353234
(840)	393e3833	3439[illegible]837	37343938	373e3439	3e373534	39383734	34393837	32343938	37323439	36373134
(880)	39303639	34393936	3e343936	36373439	3e3e3634	39393637	34393e36	35343938	36343439	32303434
(920)	39383e33	54523737	32303931	32203244	35303030	32353030	30323530	30303035	30303032	35303030
(960)	34353[illegible]3	3[illegible]3253[illegible]	3[illegible]3335	3[illegible]3[illegible]33	353[illegible]3[illegible]	33353030	3[illegible]3635[illegible]	3030[illegible]35	3[illegible]3[illegible]38	353 3[illegible]3
(1000)	37353030	30303530	33303735	30303037	35303030	37353[illegible]3[illegible]	3[illegible]3e353[illegible]	3[illegible]3e35	3[illegible]3535	352 3[illegible]3
(1040)	34353030	30333530	30303235	30303033	54523737	32303931	3220325A	34393936	39343939	34303439
(1080)	39393[illegible]34	39393933	34303939	3[illegible]343939	39313439	39393[illegible]34	39393930	34393939	32343939	39383434
(1120)	39383334	39393933	34393939	34343939	39353439	39393e34	39393936	34393939	37343939	39383439
(1160)	39393e34	39393939	34393939	39353030	30303530	30303135	30303032	54523737	32303931	322[illegible]3342
(1200)	34393936	33343935	35393439	38353634	393e3535	34393835	33343938	35333439	39353134	39383531
(1240)	34393e35	3[illegible]343938	353[illegible]2439	3e343934	39383530	34393e35	30343938	34393439	38353[illegible]34	39383439
(1280)	34393834	3e343935	34373439	38343734	39383436	34393e34	3e343938	34333439	3e343534	39383432
(1320)	54523737	32303931	32203344	35303030	33353030	30353530	30303e35	30303039	35303031	31353030
(1360)	31353530	3[illegible]313535	3[illegible]3137	353[illegible]3131	3e353e30	3131[illegible]530	30313935	3[illegible]303139	35303032	33353030
(1400)	3131e353[illegible]	3[illegible]313e35	3[illegible]3303136	353[illegible]3131	3e353e30	3[illegible]353[illegible]30	30313e35	3[illegible]3303135	35[illegible]3[illegible]31	3[illegible]353[illegible]30
(1440)	3131e3535	30313435	30303134	54523737	32303931	3220335A	353[illegible]3030	32353030	30523530	30303235
(1480)	30303034	35303030	3e353e30	30353530	30303e35	30303e30	35303030	3e353e30	31303530	30313135
(1520)	3[illegible]3[illegible]3131	353[illegible]3[illegible]31	3[illegible]3335303[illegible]	31333530	3[illegible]3131e35	303[illegible]3135	353[illegible]3031	3e353[illegible]30	31303535	3[illegible]313235
(1560)	3030e313e	35303031	37353030	31373530	3[illegible]313e35	303[illegible]313e	54523737	323[illegible]3931	322[illegible]344A	34393e34
(1600)	32343933	34313439	3[illegible]333934	39303336	34393e33	34343938	33333439	3e323934	393e3237	34393e32
(1640)	35343[illegible]3e	32333439	3e3235234	393e3139	34393e32	3[illegible]343938	32323439	3e323434	393e3233	34393e32
(1680)	35343e38	32303439	3e3[illegible]3e34	393e323e	34393e33	30343938	32373439	3e323734	39303237	54523737
(1720)	32303931	32203444	35303031	33353030	31373530	30313e35	30303139	35303032	31353030	32333530
(1760)	3[illegible]323335	30303234	35[illegible]3032	3635[illegible]30	32373530	30323535	30303235	35303032	35353030	22333535
(1800)	3[illegible]323435	313[illegible]3233	353[illegible]32	35353[illegible]30	3[illegible]3[illegible]3530	3[illegible]323535	303[illegible]3236	353[illegible]3032	3e353[illegible]3e	32303531
(1840)	30323e35	30303239	54523737	32303931	3220345A	353[illegible]31	3e353[illegible]31	323[illegible]3530	3[illegible]323e35	3[illegible]3[illegible]3231
(1880)	35303032	32393030	32343530	30303235	30303237	35303032	37353030	32393530	30333035	30303331
(1920)	353[illegible]3[illegible]33	3235[illegible]3[illegible]	3[illegible]333535	3[illegible]3[illegible]333	353[illegible]3[illegible]33	3[illegible]353[illegible]30	33333530	3[illegible]3535[illegible]	3[illegible]3435	30303335
(1960)	353[illegible]3[illegible]33	35353[illegible]3[illegible]	3[illegible]3363535	3[illegible]3[illegible]3635	3[illegible]3[illegible]3337	54523737	323[illegible]3931	322[illegible]3548	34393e32	3e343932
(2000)	32393439	3[illegible]323434	393e3233	34393e32	3034393e	31393439	3e313734	3936313[illegible]	34393e31	3e343938
(2040)	31353439	3[illegible]313534	393e3137	34393e31	3e343938	313e3434	3[illegible]313734	3936313[illegible]	34393e32	30343932
(2080)	31373439	3[illegible]313734	39383136	34393e31	37343938	31353439	3e313334	30303133	54523737	32303931
(2120)	32203544	35303032	39353030	33313535	3[illegible]333135	3031[illegible]31	353[illegible]35	30353[illegible]30	33312535	3[illegible]333135
(2160)	30303331	35303033	32353030	33323535	30353435	30303336	35303033	3e353e30	33373530	31333e35
(2200)	2[illegible]3[illegible]3336	353[illegible]3[illegible]33	3e353[illegible]3	3330353[illegible]	3[illegible]333535	3031[illegible]3333	35303033	32353[illegible]30	34313530	32323935
(2240)	3[illegible]3[illegible]3239	54523737	323[illegible]3931	322[illegible]355A	353[illegible]3[illegible]33	3[illegible]3535[illegible]3[illegible]	3[illegible]3393535[illegible]	3[illegible]343[illegible]35	3[illegible]3[illegible]343[illegible]	353[illegible]3[illegible]54

(320)	343[illegible]	[illegible]343[illegible]31	34323439	31343234	34313433	33473737	32313331	39353944	34393531	35343535	
(332)	31373439	35313754	37353137	34393531	36343635	31373439	35313754	37353137	34393531	32323735	
(336)	313[illegible]343[illegible]	35313[illegible]34	37353137	34393531	36343635	313[illegible]3439	35313634	39353136	34393531	35343535	
(34[illegible])	31363439	35313634	39353135	34393531	36343635	31353439	35313534	37353137	33473737	32313031	
(344)	39353635A	355[illegible]37	31353[illegible]3[illegible]	37313533	3[illegible]373139	39313731	35313037	31353[illegible]3[illegible]	373[illegible]353[illegible]	3[illegible]373135	
(3480)	30303731	35303037	31353030	37313530	30373135	30303731	35303037	37353[illegible]3[illegible]	37313535	3[illegible]373135	
(3520)	30303731	35303037	31353030	37313530	30373135	30303731	35303037	32353[illegible]37	37313530	30373235	
(356[illegible])	3[illegible]3[illegible]3731	34473737	32313[illegible]31	39353[illegible]48	34393134	31343931	34313439	31343134	39313431	34393134	
(36[illegible])	31343931	34313439	31343134	3931343[illegible]	34393134	3[illegible]343931	343[illegible]3439	31343[illegible]34	39313[illegible]39	34393133	
(3640)	39343931	34303439	31333934	39313430	34393134	30343931	34303439	31343134	39313431	34393134	
(368[illegible])	32343931	34323439	31343334	39313433	33473737	32313331	39353944	34393531	35343535	31353439	
(372)	35313534	39353135	34393531	35343935	31343439	35313534	39353134	34393531	35343535	31343437	
(3760)	35313434	39353135	34393531	35343935	31353439	35313534	39353135	34393531	35343535	31353439	
(3800)	35313534	39353135	34393531	35343435	31353439	35313534	39353135	53473737	32313031	3[illegible]353[illegible]5A	
(384)	353[illegible]37	31353[illegible]30	3732353[illegible]	3[illegible]373235	303[illegible]3731	353[illegible]037	31353[illegible]31	3731353[illegible]	3[illegible]373135	3[illegible]373731	
(392)	353[illegible]37	31353[illegible]34	3732353[illegible]	3[illegible]373235	3[illegible]3[illegible]3732	353[illegible]037	32353[illegible]30	3732353[illegible]	3[illegible]373235	3[illegible]3[illegible]3733	
(3920)	35303037	32353030	37323530	30373235	303[illegible]3733	35303037	31353030	37313530	30373235	30303731	

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
10	192	193	3960	0					

EOJ DUMP STOPPED AFTER FILE 10 # OF PERMANENT READ ERRORS 0

START TIME 03/18/8[illegible] 14:5[illegible]:13 STOP TIME 03/18/8[illegible] 14:51:35

REQ. AGENT	REQ NUMBER	ACQ. AGENT
LSM	V0144	DMS

GG-28E

U.K. MAGNETOMETER STATIONS 2.5 SEC.

This data set consists of 1 tape(s). The tape(s) is 9 track, 1600 bpi,
ASCII with 22 file(s) of data. The time span and D and C numbers are as follows:
created on a PDP 11/50 computer.

D#	C#	TIME SPAN
D-45303	C-21742	3/22/79, 3/31/79, 4/1/79

INFORMATION SHEET FOR INCOMING DATA

NSSDC ID: 79-095E

DATE DATA RECEIVED: 12/79

DATE NSDF COORDINATOR CONSULTED: _____

DATE SCIENTIST NOTIFIED: _____

SOURCE:	MATERIAL RECEIVED: (NUMBER OF SHEETS OF HARDCOPY, NUMBER 100' REELS MICROFILM, NUMBER OF MAGNETIC TAPES, ETC.)
PI AND AFFILIATION:	1 mag-tape

SATELLITE NAME/NSDF NAME: MTS. Magnetometer

EXPERIMENT NAME: _____

DATA SET FULL NAME: UK magnetometer data

CONTACT: _____ ACQUISITION SCIENTIST: DMS

FORM THAT WILL BE ANNOUNCED IN AIM/NSDF: DD

THESE ARE: ☐ A NEW DATA SET ☑ ADDITIONS ☐ REPLACEMENTS ☐ OTHER (EXPLAIN BELOW)

ACCESSION UNIT NUMBERS: DD 7-206 C-21742

REMARKS:

1600 ascii odd atrk 22 files

3/22
3/31 } 1979
4/1

DATA RECEIPT NOTIFICATION SENT? ☐

Sheila Ingram
DATA TECHNICIAN

601-32 (6/76)

ADP SERVICES (MACHINE SENSIBLE ONLY)

Type Not Readable.

Ralph, Please try 6250 bpi Thanks

Date 7/1/81

NSSDC ID GG-28(E) (GON26)

CDAW DATA SET ENTRY

Date Rcvd: 7/1/81 CDB: 06

Data Sent By: Dr. W. F. Stuart

Material Rcvd: 1 Tape 1600 Bpi, 9 Trk. ASCII (PDP11/45 or 360

Documentation, a Tape Dump; Verification plots.

Satellite/NSRF Name: Misc. Magnetometer Data

Data Set Name: U.K. Magnetometer Stations (2.5 sec.)

☐ New Data Set ☒ Additions ☐ Replacements

Comments But 11 stations, in 22 files. File structure is same as GG-28E. Possibly new name for 28E?

Time Coverage: ~~Days~~ 22 March, 31 March, 1 April

~~Tapes To be Returned to:~~ Dr. W. F. Stuart

Geomagnetism Unit, IGS

West Mains Road

Edinburgh, Scotland

EH9 3LA

Please Return Dumps, Thanks Dan

Completed By: Dan Sanger

INSTITUTE OF GEOLOGICAL SCIENCES
Geomagnetism Unit *Incorporating* WDDC C1
Murchison House,
West Mains Road,
Edinburgh EH9 3LA.
Telephone: 031-667 1000
Telex: 727343

10/6/81
CDB6
GG-28(E)?

Dr James I Vette
World Data Center A
Goddard Space Flight Center - Code 601
Greenbelt
Maryland 20771
U S A

Your Ref..

Our Ref..

Dear Dr Vette

U.K. I.M.S. Magnetometer Data Tape

I have checked the data tape which you returned to us and it is indeed unreadable at the beginning. The first 3 files and the start of file 4 were undecipherable. Either it was damaged in transit,or,I hesitate to suggest,overwritten in some way. The other 18 files were perfectly alright and I was able to read them.

I have regenerated the tape and checked it. It seems to be readable and free from errors as far I can tell. All the information that accompanied the tape originally still applies with the exception of a small change for files 21 and 22. The data gaps in these files caused by cassette changes at the sites are now extended by two minutes because of a recent change in the computer program that retrieves the data.

I hope you have better luck with the new tape. Please contact me if you still have problems. The tape is 1600 bpi,unlabelled and written in ASCII. I could produce an 800 bpi tape if you require it. 22 files

Yours sincerely

Christopher Green.

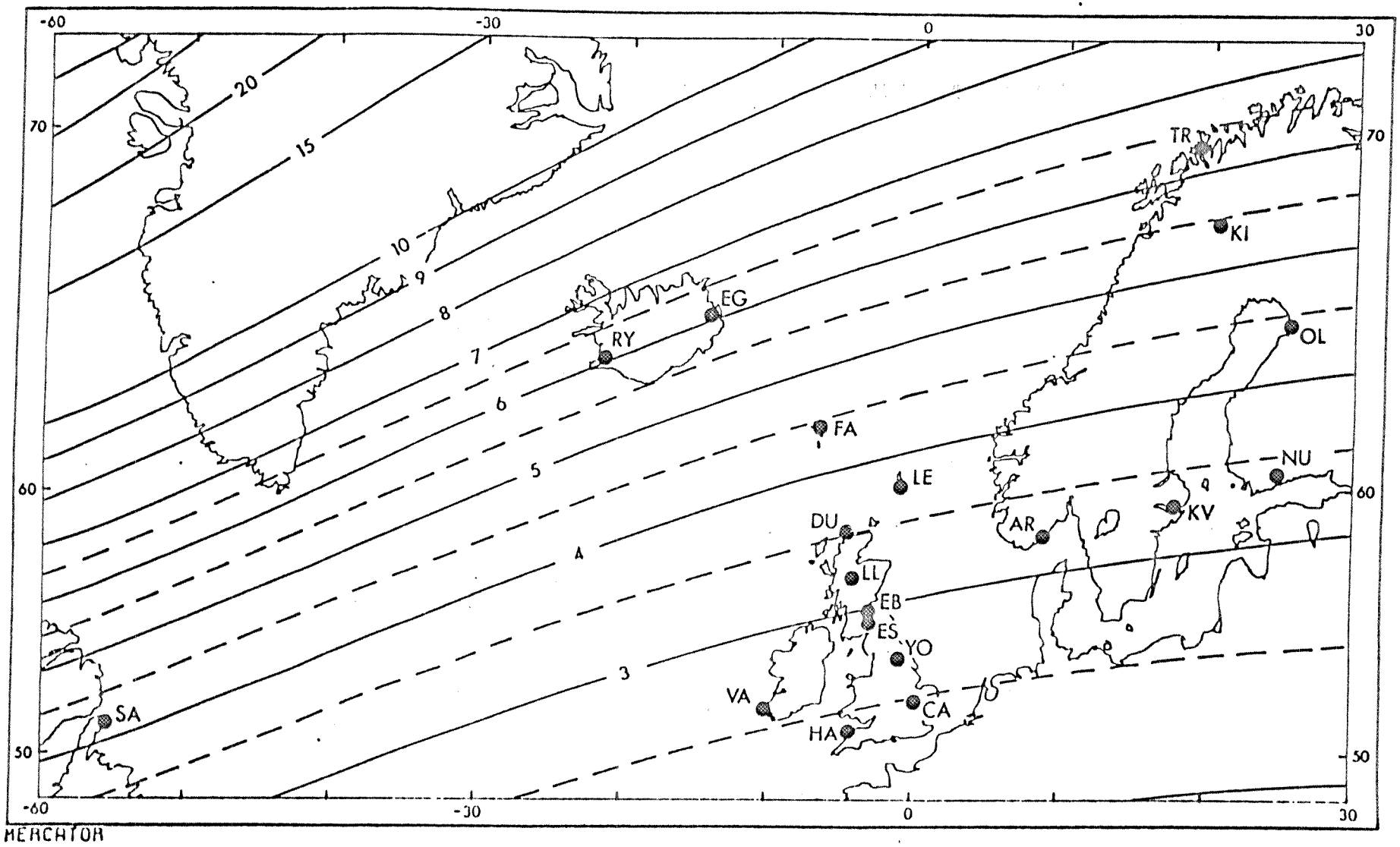
C A Green

Enc: 1 tape
1 dump

CDB 6
7/1/81
66-282

IGS DIGITAL MAGNETOMETER STATIONS

STATION	IDENTIFIER	GEOGRAPHIC COORDS		DIPOLE COORDS	
		Lat	Lon	Lat	Lon
TROMSO	Tr	69.66	18.95	66.91	117.58
KIRUNA	Ki	67.80	20.40	65.03	116.51
OULU	Ol	65.11	25.49	61.72	117.96
NURMIJARVI	Nu	60.51	24.66	57.63	113.73
KVISTABERG	Kv	59,50	17.63	57.98	106.90
ARENDAL	Ar	58.47	8.63	58.74	97.96
REYKJAVIK	Ry	64.18	-21.70	69.84	72.45
EIDAR	Eg	65.37	-14.42	69.51	81.97
FAROES	Fa	62.03	-6.78	65.03	86.02
LERWICK	Le	60.13	-1.18	62.19	89.86
DURNESS	Du	58.58	-4.76	61.46	85.03
LOCH LAGGAN	Ll	56.97	-4.38	59.89	84.21
EARLYBURN	Eb	55.73	-3.23	58.51	84.53
ESKDALEMUIR	Es	55.32	-3.20	58.11	84.29
YORK	Yo	53.95	-1.05	56.40	85.60
CAMBRIDGE	Ca	52.23	0.05	54.56	85.71
HARTLAND	Ha	51.00	-4.48	54.28	80.46
VALENTIA	Va	51.93	-10.25	56.27	74.96
St. ANTHONY	SA	51.35	-55.60	62.13	20.34
SOUTH GEORGIA	SG	-54.28	-36.48	-44.55	27.42
HALLEY BAY	Hy	-75.52	-26.60	-66.10	25.43



Location of IGS digital magnetometer stations in the Northern hemisphere during the TMS. Contours of L-values are calculated at height 120 km for epoch 1978.0 from the main field model of Barraclough et al(1975). (Geophys. J. R. Astro. Soc. 43,645-659)

Tape analysis COBC 7/1/81 66-28B

```
MAG TAPE ANALYSIS PROGRAM
TAPE UNIT NO.    5
TAPE DENSITY IS 1600bpi
FILE     1
THERE ARE      86 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE     2
THERE ARE     110 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE     3
THERE ARE      86 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE     4
THERE ARE     110 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE     5
THERE ARE      86 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE     6
THERE ARE      50 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE     7
THERE ARE      86 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE     8
THERE ARE     110 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE     9
THERE ARE      86 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE    10
THERE ARE     110 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE    11
THERE ARE      86 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE    12
THERE ARE     110 BLOCKS OF    3960 BYTES
```

```
FILE   13
THERE ARE      86 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE   14
THERE ARE     110 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE   15
THERE ARE      86 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE   16
THERE ARE     110 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE   17
THERE ARE      86 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE   18
THERE ARE     110 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE   19
THERE ARE      86 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE   20
THERE ARE     110 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE   21
THERE ARE      86 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****

FILE   22
THERE ARE     110 BLOCKS OF    3960 BYTES

****  TAPE MARK  ****
```

```
****  TAPE MARK  ****
```

Tape log CPB 6 2/1/81 GG-28E

FILE NUMBER : 1
STATION : TR

FILE STARTS : 5.50 DAY 81 1979
DATA STARTS : 5.50 DAY 81 1979
DATA STOPS : 20.10 DAY 81 1979
FILE STOPS : 20.10 DAY 81 1979

FILE NUMBER : 2
STATION : TR

FILE STARTS : 11.50 DAY 90 1979
DATA STARTS : 11.50 DAY 90 1979
DATA STOPS : 6.10 DAY 91 1979
FILE STOPS : 6.10 DAY 91 1979

FILE NUMBER : 3
STATION : KI

FILE STARTS : 5.50 DAY 81 1979
DATA STARTS : 5.50 DAY 81 1979
DATA STOPS : 20.10 DAY 81 1979
FILE STOPS : 20.10 DAY 81 1979

FILE NUMBER : 4
STATION : KI

FILE STARTS : 11.50 DAY 90 1979
DATA STARTS : 11.50 DAY 90 1979
DATA STOPS : 6.10 DAY 91 1979
FILE STOPS : 6.10 DAY 91 1979

FILE NUMBER : 5
STATION : OL

FILE STARTS : 5.50 DAY 81 1979
DATA STARTS : 5.50 DAY 81 1979
DATA STOPS : 14.18 DAY 81 1979
DATA STARTS : 14.34 DAY 81 1979
DATA STOPS : 20.10 DAY 81 1979
FILE STOPS : 20.10 DAY 81 1979

FILE NUMBER : 6
STATION : OL

FILE STARTS : 11.50 DAY 90 1979
DATA STARTS : 11.50 DAY 90 1979
DATA STOPS : 14.19 DAY 90 1979
DATA STARTS : 14.35 DAY 90 1979 } — error?
DATA STOPS : 20.10 DAY 90 1979 }
FILE STOPS : 20.10 DAY 90 1979

FILE NUMBER : 7
STATION : NU

DATA STARTS : 5.50 DAY 81 1979
DATA STOPS : 11.42 DAY 81 1979
DATA STARTS : 11.48 DAY 81 1979 11.46
DATA STOPS : 20.10 DAY 81 1979
FILE STOPS : 20.10 DAY 81 1979

FILE NUMBER : 8
STATION : NU

FILE STARTS : 11.50 DAY 90 1979
DATA STARTS : 11.55 DAY 90 1979
DATA STOPS : 6.10 DAY 91 1979
FILE STOPS : 6.10 DAY 91 1979

FILE NUMBER : 9
STATION : FA

FILE STARTS : 5.50 DAY 81 1979
DATA STARTS : 5.50 DAY 81 1979
DATA STOPS : 13.49 DAY 81 1979
DATA STARTS : 15.49 DAY 81 1979
DATA STOPS : 20.10 DAY 81 1979
FILE STOPS : 20.10 DAY 81 1979

FILE NUMBER : 10
STATION : FA

FILE STARTS : 11.50 DAY 90 1979
DATA STARTS : 11.50 DAY 90 1979
DATA STOPS : 6.10 DAY 91 1979
FILE STOPS : 6.10 DAY 91 1979

FILE NUMBER : 11
STATION : LE

FILE STARTS : 5.50 DAY 81 1979
DATA STARTS : 5.50 DAY 81 1979
DATA STOPS : 20.10 DAY 81 1979
FILE STOPS : 20.10 DAY 81 1979

FILE NUMBER : 12
STATION : LE

FILE STARTS : 11.50 DAY 90 1979
DATA STARTS : 11.50 DAY 90 1979
DATA STOPS : 6.10 DAY 91 1979
FILE STOPS : 6.10 DAY 91 1979

FILE NUMBER : 13
STATION : DU

FILE STARTS : 5.50 DAY 81 1979
DATA STARTS : 5.50 DAY 81 1979
DATA STOPS : 20.10 DAY 81 1979
FILE STOPS : 20.10 DAY 81 1979

FILE NUMBER : 14
STATION : DU

FILE STARTS : 11.50 DAY 90 1979
DATA STARTS : 11.50 DAY 90 1979
DATA STOPS : 6.10 DAY 91 1979
FILE STOPS : 6.10 DAY 91 1979

FILE NUMBER : 15
STATION : FS

FILE STARTS : 5.50 DAY 81 1979
DATA STARTS : 5.50 DAY 81 1979
DATA STOPS : 14.44 DAY 81 1979
DATA STARTS : 14.50 DAY 81 1979
DATA STOPS : 20.10 DAY 81 1979
FILE STOPS : 20.10 DAY 81 1979

FILE NUMBER : 16
STATION : FS

FILE STARTS : 11.50 DAY 90 1979
DATA STARTS : 11.50 DAY 90 1979
DATA STOPS : 6.10 DAY 91 1979
FILE STOPS : 6.10 DAY 91 1979

FILE NUMBER : 17
STATION : YO

FILE STARTS : 5.50 DAY 81 1979
DATA STARTS : 5.50 DAY 81 1979
DATA STOPS : 20.10 DAY 81 1979
FILE STOPS : 20.10 DAY 81 1979

FILE NUMBER : 18
STATION : YO

FILE STARTS : 11.50 DAY 90 1979
DATA STARTS : 11.50 DAY 90 1979
DATA STOPS : 6.10 DAY 91 1979
FILE STOPS : 6.10 DAY 91 1979

FILE NUMBER : 19
STATION : SG

FILE STARTS : 5.50 DAY 81 1979
DATA STARTS : 5.50 DAY 81 1979
DATA STOPS : 20.10 DAY 81 1979
FILE STOPS : 20.10 DAY 81 1979

FILE NUMBER : 20
STATION : SG

FILE STARTS : 11.50 DAY 90 1979
DATA STARTS : 11.50 DAY 90 1979
DATA STOPS : 6.10 DAY 91 1979
FILE STOPS : 6.10 DAY 91 1979

FILE NUMBER : 21
STATION : UV

FILE STARTS : 5.50 DAY 81 1979
DATA STARTS : 5.50 DAY 81 1979
DATA STOPS : 18.44 DAY 81 1979
DATA STARTS : 18.59 DAY 81 1979
DATA STOPS : 20.10 DAY 81 1979
FILE STOPS : 20.10 DAY 81 1979

FILE NUMBER : 22
STATION : HY

FILE STARTS : 11.50 DAY 90 1979
DATA STARTS : 11.50 DAY 90 1979
DATA STOPS : 16.55 DAY 90 1979
DATA STARTS : 17. 6 DAY 90 1979
DATA STOPS : 6.10 DAY 91 1979
FILE STOPS : 6.10 DAY 91 1979

NASA
National Aeronautics and Space Administration

DATA ANALYSIS WORKSHOP CENTER

CDB 6
2/1/8
GG-28B

CDB TAPE DOCUMENTATION FORM

SECTION I. DATA SET DESCRIPTION (please print)

1. Data Set Name: U.K. MAGNETOMETER ARRAY		
2. Scientific Contact: DR. W. F. STUART	3. Telephone No. or Telex No.: 031-667-1000	
4. Address: GEOMAGNETISM UNIT, IGS, WEST MAINS ROAD		
5. City: EDINBURGH	6. State: SCOTLAND	7. ZIP Code or Country: EH9 3LA
8. Programmer Contact: DR C. A. GREEN		

SECTION II. TAPE DESCRIPTION

1. No. of Tapes Submitted: 1	2. Tape Density: ☐ 800 bpi ☑ 1600 bpi
3. No. of Files (per tape): 22	
4. No. of End of File Marks: 1 between files, 2 at end	5. No. of Tracks: ☐ 7 ☑ 9
6. Recording Parity: Odd.	7. Make and Model of Computer Used to Generate Tape: PDP 11/50
8. Are tapes written in binary, coded or both? (e.g. BCD): ASCII	
9. What floating point representation is used? (e.g. CDC 64 bit)	
10. What integer representation is used?	
11. No. of Physical Records (per file): 3960 bytes/block. 1 block = 30 × 132 character records.	
12. Are original tapes to be returned? ☑ Yes ☐ No	
13. Start and Stop Time of Each File (If more space is needed, please attach.): See attached Sheets	

SECTION III. LOGICAL AND PHYSICAL RECORD FORMAT (please attach)

SECTION IV. TO BE FILLED IN BY DAWOC ONLY

	CDB No.
Date Received	Tape No.
Programmer ID	CON Name
Data Base	Date Loaded

TAPE IDENTIFICATION

GM/ED/IMS/81A

CPB 6
7/1/81
GG-28E

Tape Name U.K. I.M.S. Magnetometer Array Data for CDAW-6.

Contents $2\frac{1}{2}$ sec magnetic data from the U.K. I.M.S. magnetometer array for the two chosen intervals for CDAW-6. Data is from 11 stations in 22 files.

Tracks: 9

Packing Density: 1600 BPI

Parity: Odd

Code: ASCII

Block Length: 3960 bytes (10 minutes data)

Lines per block: 30 3 lines/minute

Bytes per line: 132 24 values at $2\frac{1}{2}$ second intervals

Line Structure:-

Byte position	Data
1 - 2	Station indentifier e.g. TR
3 - 4	Year (last 2 digits)
5 - 7	Day number (001 - 365)
8 - 9	Hour number (00 - 23)
10 - 11	Minute number (00 - 59)
12	Component (H,D or Z)
13 - 17	24 component field value
128 - 132	In 1/10 nT units (50000 added)

Each line can be read under FORTRAN using a decode statement with

Format: A2, I2, I3, 2I2, A1, (24F 5.1) → for data in units of nT.

Tape Structure

File 1 blocks
2
3
4
5
6
7
8
9
10

See attached sheet.

COB-6
7/1/81
66-28E

Single file marks separate files.

A double file mark terminates the tape.

Notes

1. Each line of data contains 24 field values which were recorded at $2\frac{1}{2}$ second intervals during the course of the minute given in byte position 10 - 11. Minute mean values can be obtained by meaning the 24 values in each line and subtracting 5000 nT.

2. Small discontinuities can occur in the data when the field is very active, or during periods of missing data. These discontinuities arise from limitations imposed by using an 8 bit word in the magnetometer data logger. All recorded data values necessarily lie in the range 000 - 191. A "scale jump" circuit returns count 192 to 064, and a downscale excursion through 000 back to 128. When the field is very active it is not possible to guarantee that every scale jump is decoded. When the data is missing the number of scale jumps is of course not known.
   Missing data periods are padded with zeroes, but the time is continuous.

3. At some high latitude stations the magnetometer sensitivity was decreased at night to accommodate the expected increase in level of magnetic activity. A small discontinuity equivalent to a scale jump may occur at the time of changing sensitivity.

4. The array magnetometers are essentially variation stations with no absolute baseline control. The quality of the data is largely dependent on the stability of level of the bias coils systems, which are used to annul unwanted field components at the sensors. The larmor frequencies from the sensors are logged at the start of each new cassette. These values are used to calculate the sensitivities. The first data sample serves as a datum for all subsequent values during the period of the cassette. Cassette changes are regarded as missing data. The first data sample of the new cassette then becomes the datum level for the duration of the new cassette.

The following documentation is enclosed

a) List of all U.K. I.M.S. magnetometer array sites. Those underlined those for which data are available on this tape. Map showing statio

b) Quick-look plots of the data on the tape .

c) Analysis of the tape. Log showing on-off times of files and locatio

d) Dump of the first and last blocks of files 1 and 2.

e) Dump of blocks 51 and 52 of file 5 to show a data gap resulting from cassette change at the site.

6. Comments

a) The clock at SG was in error (1 hour fast). This obvious if one looks f the sudden commencement on day 81,which should have been at 08.36.

b) The Z-component data from OL on day 81 are useless until after 11.00.

c) The horizontal data from YO have an error (a discontinuity due to a misse 'scale-jump') at about the time of the sudden commencement on day 81.

d) The Z-component data from SG are useless after about 18.40 (tape time) on day 90.

D-45303
3/22/79, 3/31/79, 4/1/79

RECORD 1 OF FILE 1
LENGTH = 3960 BYTES

79 81

36373033	34393730	31343937	30312343	37303033	33333730	35353120	35353744	34393936
31343939	36333439	39363334	39393939	34393936	32333730	39393434	39393633	34393936
32343939	36353439	39363834	39393737	34393937	33333730	39373434	39393738	34393937
36343939	38323439	39383434	39393838	34393938	33333730	39383234	39393830	54523739
20383120	35353754	34393933	32324339	33313439	33333730	33333333	34393933	33343939
36333434	39393333	34393933	34343939	33333934	33333730	33333333	34393933	36343939
36333734	39393338	34393933	39343939	33333934	33333730	33333333	34393934	31343939
39343234	39393432	38452739	20283120	38383848	34393730	30343936	39393435	36393934
34393639	34343936	39353439	36393934	39363937	34393639	34343936	39383435	36393734
34393639	33343936	39393439	36383834	39383836	34393638	38343936	39383439	36383434
34393638	39343936	38393439	36373734	39383733	38482739	20383120	39383844	34393938
36333439	39383534	39393835	34393935	37343935	39323439	39383934	39393933	34393939
36343439	39393134	39393930	34393935	30343935	38393439	39393234	39393931	54523739
36353854	34393934	33343939	34333435	39343335	39393435	34393934	39383836	34393938
39393437	34393934	38343939	34393435	39393435	39393430	34393935	39383834	34393939
39393532	34393935	33343939	38393435	39383434	39393438	34393938	39383933	35313439
39393537	54523739	20383120	38383948	34393837	33343935	39373436	39383934	35353439
30343936	37303439	36363434	39393635	34393635	39343935	39373434	39393831	34393635
39343936	34393439	36383134	39393635	34393635	34343935	39383234	39393830	34393635
36343936	34343439	36343334	39383435	38482739	20383120	38383944	34393938	37343939
39383434	39393739	34393937	39373435	39373834	39393934	39393937	38343939	38323439
39383434	39393833	34393938	39343935	39373534	39393934	39393937	32343939	36393439
39363934	39393635	34393936	38343935	39383434	39393934	39393639	38452739	20383120
34393935	37343939	35383439	39383835	39393835	34393935	39393439	39393435	39393539
34393936	30343939	36313439	39393234	39393634	34393936	38343939	39393634	39393636
34393936	36343939	36363439	39383234	39393634	34393936	37343939	39373435	39393834

79 81

54523739	20383132	30203048	34393238	36343932	38383439	32393134	39323838	34393238
38383439	32383834	39323838	34393239	36343932	39333439	32393934	39323933	34393238
38383439	32383034	39323738	34393237	38343932	37322439	32273034	39323835	34393236
38373439	32353734	39323539	38452739	20383132	30203044	34393637	39343936	38313439
39363736	34393637	36343936	37373434	39393134	39393636	34393636	38343936	36363439
39363636	34393636	38343936	36363434	36373134	39393634	34393636	38343936	36363439
39363638	34393636	35343936	36383439	36363034	39393633	38452739	20383132	3020305A
31353134	39313531	34393135	31343931	35313439	31353134	39313531	34393235	31343931
39353134	38383531	34383735	31343837	35313438	36353134	38373531	34383535	31343836
39363134	38353531	34383536	31343836	35313438	36353134	38363531	34383635	31343836
20383132	30203148	34393235	34343932	38343439	32383734	39323531	34393235	37343932
32353634	39323534	34393235	36343932	34343439	32343934	39323531	34393234	36343932
32343634	39323433	34393234	31343932	38343439	32333634	39323333	34393233	31343932
32333134	39323331	54523739	20383132	30202144	34393636	38343936	38373439	36353534
34393635	35343936	34393439	36343434	39343437	34393634	34343936	36373435	36353434
34393634	39343936	35373439	36353534	39363637	34393636	30343936	38383439	36373034
34353637	35343936	37363439	38373534	39363735	38482739	20383132	3020315A	35313438
38373531	34383835	31343839	36313438	38353134	38393531	34383835	31343838	35313438
38383531	34383935	31343839	38313439	30353134	39393531	34393136	31343932	35313439
39343531	34393635	31343937	38383139	38383135	30323831	38393236	31353034	54523739
38303248	34393233	31343932	38383439	38323834	39393231	38303236	31343932	33333439
39323333	34393233	31343932	38383439	38323834	39393233	34393233	31343932	33313439
30323231	34393231	35343932	31313439	38313134	39393133	34393230	38343932	30323439
38313937	54523739	20383132	30203244	36343836	31343936	38383435	36383134	39363831
33343936	38333439	36393134	39363839	34393639	31343936	39343439	36393934	39373034
32343937	30373439	37313234	39393731	34393731	37343937	31363439	37313534	39373235
32343937	32353439	37323834	39393730	36482739	20383132	30203258	39313530	35353135
35303835	31353039	35313531	31313835	31383531	35313435	31353135	38383134	37353135
35323035	31353231	35313632	32323831	32333831	38323438	31363236	36313532	36353135
35333035	31353332	36313533	33333135	33343931	38383635	31363338	36482739	20383132
34393138	37343931	38373439	31313634	39313731	34393136	36343931	36323439	31363234
34393135	35343931	35323439	31313534	39313633	34393135	37343931	36323439	31363234
34393136	30343931	35353439	31323034	39313834	34393134	39343931	34363439	31343634
54523739	20383132	30203344	34393733	30343927	33333034	39373334	39373335	34393733
31393439	37313734	39373039	34393720	33343936	39383439	36393334	39363930	34393639
39303439	36383034	39363735	34393637	37373439	38373234	39393732	39363732	34393637
36343439	36353934	39363631	54523739	20383132	30203348	38313635	39313135	34303531
31353434	35313534	37353135	34383631	36343935	31313830	38313635	39313135	35303531
31353439	35313534	39353135	34393835	36343935	31313436	38313635	39313135	35303531
31353434	35313534	32383135	34323831	36343135	31313436	38313635	39313135	34353631
36343931	33383439	31333634	39313333	34393133	33343931	33333834	39313634	39313336
33343931	33383439	31333634	39313333	34393133	33343931	33333834	39313634	39313336
36343931	33363439	31333334	39313333	34393133	33343931	33333834	39313334	39313333
20383132	30203444	34393635	36313439	36343834	33343931	33333834	39313336	39313336
36373234	39363338	34393633	33353439	36343834	33343934	33333234	39313634	39313333
36343934	39363435	34383439	36343439	36343834	33343934	33333234	39313634	39313333

36343938	34383439	38353934	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39383932	34393839
35343939	30313439	39303034	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39393034	35323739
20303120	36203735A	35323732	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38313237	33333532
37333635	32373338	35323734	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36353237	36303532
37363435	32373636	35323736	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38353237	37393532
37383135	32373832	35323739	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38373435	30343733
35303437	35353034	37373530	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38323530	34383335
35303439	36353034	39303530	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38323530	34393835
35303538	31353035	30333530	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	34393930	36343939
30353439	39303334	39393036	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39383939	34393839
35303439	38393934	39383933	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39383838	34393838
38343430	38383334	39383837	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39383836	54523739
3620385A	35323738	34353237	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38383532	39303532
32373839	35323738	39353237	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38303532	38393532
32373830	35323739	30363237	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38303532	38383532
32373837	54523739	20393120	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38303335	30353033
36353035	39373530	35313235	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38323335	30353235
36353035	32383530	35333135	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38333235	30353332
32353035	32373530	35323635	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38303335	30353332
38383134	39383835	34393838	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38393832	34393838
38393234	39383834	38383938	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38383930	34393838
39303434	39393038	34393931	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	39393237	54523739
35323738	37353237	38373532	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38383237	38373532
35323738	37353237	38383532	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38383237	39303532
35323730	32353237	39343532	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	38383238	20303532

39383932	34393839	36343938	34383439
39393034	54523739	35343939	30313439
38313237	33333532	20303120	36203735A
36353237	36303532	32373338	35323734
38353237	37393532	32373636	35323736
38373435	30343733	32373832	35323739
38323530	34383335	35353034	37373530
38323530	34393835	36353034	39303530
34393930	36343939	31353035	30333530
39383939	34393839	39303334	39393036
39383838	34393838	38393934	39383933
39383836	54523739	38383334	39383837
38383532	39303532	35323738	34353237
38383532	38393532	35323739	39353237
38303532	38383532	35323739	30363237
38303335	30353033	54523739	20393120
38323335	30353235	39373530	35313235
38333235	30353332	32383530	35333135
38303335	30353332	32373530	35323635
38393832	34393838	38383834	39383835
38383930	34393838	38383938	39383834
39393237	54523739	39393038	34393931
38383237	38373532	37353237	38373532
38383237	39303532	37353237	38383532
38383238	20303532	32353237	39343532

116 RECORDS IN FILE 2 OF TAPE

VJP

RD1066

KWC

1-MIN AE MAGNETIC INDICES

ON TAPE

GG-32D

This data set catalog consists of 2 data tapes. The tapes are 9 track, 1600 BPI, ASCII with 1 file of data each. The tapes were created on a CDC 6600 computer.

Time span is as follows:

D#	C#	TIME SPAN
D-32362	C-20207	12/01/77 - 12/11/77
D-33811	C-20617	07/28/77 - 07/29/77

GG-32D

FORMAT

DATA are written in ASCII code on 1600 BPI, 9 track, without labels. This data set has 36 blocks. (EOF can be detected by tape marks.) 1 physical record (block) has 9680 characters. It can be treated as if one block has 121 logical records (1 RECORD = 80 characters). The first record of a block is for data-station date identification. 2nd to 121st records contain 1 min values.

G6-320
D-32362
12/01/77-12/12/77

DUMP OF TAPE X-213

INPUT TAPE X-213 ON MS1
DATA INPUT H9 FL 1 1 1

FILE 1 RECORD 2101 LENGTH 9680 BYTES

(0)	4C454831	322F3031	2F373720	20313830	30202020	20332E38	35202036	36302020	31343430	20202020	
(40)	20202020	20202020	20202020	20202020	20202020	20202020	20202020	20202020	20202020	20202020	
(80)	20202020	20202020	20202020	33342020	20203334	20202020	33342020	20203334	20202020	33382020	
(120)	20203338	20202020	33382020	20203338	20202020	33382020	20203338	20202020	33342020	20203334	
(160)	20202020	20202020	20202020	33382020	20203338	20202020	33382020	20203338	20202020	33382020	
(200)	20203338	20202020	34322020	20203432	20202020	33382020	20203338	20202020	33382020	20203338	
(240)	20202020	20202020	20202020	33382020	20203338	20202020	34322020	20203432	20202020	34322020	
(280)	20203432	20202020	34322020	20203436	20202020	34362020	20203436	20202020	34362020	20203530	
(320)	20202020	20202020	20202020	35332020	20203537	20202020	35372020	20203631	20202020	36352020	
(360)	20203639	20202020	37332020	20203830	20202020	38342020	20203932	20202020	39322020	20203932	
(400)	20202020	20202020	20202020	39322020	20203932	20202020	39322020	20203932	20202020	39362020	
(440)	20203936	20202031	30302020	20313033	20202031	30372020	20313037	20202031	31312020	20313131	
(480)	20202020	20202020	20202031	31352020	20313135	20202031	31352020	20313135	20202031	31312020	
(520)	20313131	20202031	31352020	20313135	20202031	31392020	20313139	20202031	32332020	20313334	
(560)	20202020	20202020	20202031	34362020	20313533	20202031	35302020	20313334	20202031	32372020	
(600)	20313131	20202031	30372020	20313131	20202031	31392020	20313237	20202031	33342020	20313338	
(640)	20202020	20202020	20202031	34362020	20313436	20202031	34362020	20313436	20202031	34322020	
(680)	20313432	20202031	34362020	20313537	20202031	35372020	20313537	20202031	36352020	20313733	
(720)	20202020	20202020	20202031	38302020	20313830	20202031	38302020	20313737	20202031	37372020	
(760)	20313737	20202031	37372020	20313830	20202031	38382020	20313932	20202031	39322020	20313936	
(800)	20202020	20202020	20202031	39362020	20323034	20202032	31352020	20323233	20202032	33302020	
(840)	20323432	20202032	35342020	20323631	20202032	36352020	20323639	20202032	38312020	20323838	
(880)	20202020	20202020	20202032	39362020	20323831	20202032	36312020	20323432	20202032	32332020	
(920)	20323135	20202032	32332020	20323139	20202032	31392020	20323233	20202032	32372020	20323330	
(960)	20202020	20202020	20202032	33302020	20323330	20202032	33342020	20323338	20202032	33342020	
(1000)	20323233	20202032	31312020	20323037	20202031	39362020	20313936	20202031	39322020	20313932	
(1040)	20202020	20202020	20202031	39362020	20313936	20202031	39362020	20313936	20202031	39362020	
(1080)	20313936	20202031	39362020	20313838	20202031	38342020	20313631	20202031	34322020	20313233	
(1120)	20202020	20202020	20202031	31392020	20313030	20202020	39322020	20203838	20202020	38342020	
(1160)	20203830	20202020	37362020	20203830	20202020	38302020	20203834	20202020	38342020	20203733	
(1200)	20202020	20202020	20202020	36312020	20203530	20202020	33382020	20203338	20202020	33382020	
(1240)	20203236	20202020	31392020	20203135	20202020	20332020	20202D33	2020202D	31312020	202D3139	
(1280)	20202020	20202020	20202D2D	32362020	202D3338	20202D2D	34362020	202D3530	20202D2D	35332020	
(1320)	202D3537	20202D2D	35372020	202D3631	20202D2D	35372020	202D3338	20202D2D	31312020	20203131	
(1360)	20202020	20202020	20202020	33342020	20203533	20202020	36392020	20203537	20202020	35302020	
(1400)	20203432	20202020	33342020	20203330	20202020	32362020	20203334	20202020	34322020	20203533	
(1440)	20202020	20202020	20202020	34362020	20203334	20202020	31392020	20203131	20202020	20372020	
(1480)	20202037	20202020	31312020	20203233	20202020	32332020	20203236	20202020	32362020	20203236	
(1520)	20202020	20202020	20202020	33302020	20203139	20202020	20332020	202D3139	20202D2D	33382020	
(1560)	202D3736	20202D31	30372020	2D313432	20202D31	37372020	2D323030	20202D32	33382020	2D323737	
(1600)	20202020	20202020	20202D33	30302020	2D333139	20202D32	35372020	2D323037	20202D31	30372020	
(1640)	202D3838	20202D2D	31392020	20203131	20202020	34322020	20203436	20202020	31352020	20202037	
(1680)	20202020	20202020	20202020	20302020	20203330	20202020	35332020	20203631	20202020	36312020	
(1720)	20203533	20202020	34362020	20203330	20202D2D	31352020	202D3537	20202D2D	38302020	202D3932	
(1760)	20202020	20202020	20202D2D	39362020	2D313030	20202D31	30302020	202D3936	20202D2D	38382020	
(1800)	202D3830	20202D2D	36352020	202D3537	20202D2D	33382020	202D3236	20202D2D	31312020	20202D37	
(1840)	20202020	20202020	20202020	20372020	20203334	20202020	34362020	20203830	20202020	38302020	
(1880)	20203733	20202020	37362020	20203830	20202020	35372020	20203338	20202020	32362020	20203330	
(1920)	20202020	20202020	20202020	33382020	20203233	20202020	31392020	20203131	20202020	2D332020	
(1960)	202D3139	20202D2D	33302020	202D3334	20202D2D	33342020	202D3233	20202D2D	31312020	20202D33	
(2000)	20202020	20202020	20202020	20332020	20203131	20202020	20372020	20202030	20202020	20302020	
(2040)	20203135	20202020	33302020	20203530	20202020	35332020	20203436	20202020	33342020	20203139	
(2080)	20202020	20202020	20202020	31312020	202D3135	20202D2D	33382020	202D3236	20202D2D	32332020	
(2120)	202D3131	20202D2D	31312020	202D3432	20202D2D	34362020	202D3537	20202D2D	35332020	202D3530	
(2160)	20202020	20202020	20202D2D	34322020	202D3334	20202D2D	32362020	202D3131	20202020	2D372020	
(2200)	20202D33	20202020	20332020	20202033	20202020	2D332020	202D3139	20202D2D	32332020	202D3334	
(2240)	20202020	20202020	20202D2D	33342020	202D3338	20202D2D	33342020	202D3330	20202D2D	32332020	

(8440)	202D3339	20202020	34362020	202D3533	20202020	34372020	202D3731	20202020	36332020	202D3633
(8480)	20202020	20202020	20202D31	32302020	2D333532	20202D32	39342020	2D323336	20202D32	33362020
(8520)	2D323431	20202D32	33362020	2D323233	20202D32	30322020	2D313931	20202D31	36382020	2D315233
(8560)	20202020	20202020	20202D31	32302020	2D313236	20202D31	32332020	2D313035	20202020	37312020
(8600)	202D3339	20202020	32382020	202D3130	20202020	20302030	20202020	2D372020	202D3132	
(8640)	20202020	20202020	20202020	31392020	202D3231	20202020	32342020	202D3231	20202020	31392020
(8680)	202D3137	20202020	31372020	202D3137	20202020	31322020	20202D39	20202020	2D392020	20202D39
(8720)	20202020	20202020	20202020	31392020	202D3331	20202020	33312020	202D3336	20202020	35372020
(8760)	202D3339	20202020	34312020	202D3431	20202020	33392020	202D3336	20202020	34312020	202D3436
(8800)	20202020	20202020	20202020	34362020	202D3336	20202020	33312020	202D3331	20202020	32362020
(8840)	202D3231	20202020	32342020	202D3234	20202020	32312020	202D3231	20202020	31382020	202D3230
(8880)	20202020	20202020	20202020	32352020	202D3330	20202020	33312020	202D3336	20202020	32362020
(8920)	202D3237	20202020	33362020	202D3332	20202020	32352020	202D3234	20202020	32362020	202D3139
(8960)	20202020	20202020	20202020	32312020	202D3137	20202020	2D392020	202D3330	20202020	34382020
(9000)	202D3632	20202020	35302020	202D3139	20202020	32372020	202D3332	20202020	32372020	202D3236
(9040)	20202020	20202020	20202020	32362020	202D3237	20202020	33362020	202D3535	20202020	34332020
(9080)	202D3138	20202020	31372020	202D3233	20202020	33322020	202D3233	20202020	31342020	202D3138
(9120)	20202020	20202020	20202020	32312020	202D3235	20202020	32302020	20202037	20202020	2D372020
(9160)	202D3235	20202020	32352020	202D3133	20202020	31332020	202D3133	20202020	31322020	202D3231
(9200)	20202020	20202020	20202020	34372020	202D3638	20202020	38342020	202D3537	20202020	33312020
(9240)	202D3233	20202020	31382020	202D3137	20202020	31372020	202D3236	20202020	32382020	202D3433
(9280)	20202020	20202020	20202020	36302020	202D3736	20202020	39392020	202D3934	20202020	39322020
(9320)	2D313135	20202D31	32332020	2D313339	20202D31	34392020	2D313439	20202D31	34372020	2D313432
(9360)	20202020	20202020	20202D31	34372020	2D313532	20202D31	35372020	2D313630	20202D31	36332020
(9400)	2D313532	20202D31	33392020	2D313336	20202D31	33312020	2D313138	20202D31	30322020	202D3932
(9440)	20202020	20202020	20202020	37382020	202D3633	20202020	35352020	202D3630	20202020	36382020
(9480)	202D3638	20202020	34392020	202D3436	20202020	34332020	202D3336	20202020	33312020	202D3331
(9520)	20202020	20202020	20202020	33342020	202D3334	20202020	33312020	202D3331	20202020	33312020
(9560)	202D3331	20202020	34362020	202D3334	20202020	33312020	202D3336	20202020	33392020	202D3431
(9600)	20202020	20202020	20202020	34362020	202D3531	20202020	34362020	202D3431	20202020	33362020
(9640)	202D3334	20202020	33342020	202D3336	20202020	33362020	202D3432	20202020	34322020	202D3339

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	36	37	9680	0	0	0	0	0	0

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

START TIME 10/24/78 15:06:42 STOP TIME 10/24/78 15:07:03

$$
$REW LO

REQ. AGENT	RAND NO.	ACQ. AGENT
VLP	RD2979	MJT

GG-32E

DST AND AE INDICES

This data set catalog consists of 1 data tape. The tape is 9 track, 1600 BPI, EBCDIC with 2 files of data. The tape was created on an IBM 360 computer.

Time span is as follows:

D#	C#	TIME SPAN
D-35101	C-20704	7/29/77

D-35101
GG-32E
7/29/77

DUMP OF TAPE X-398

INPUT TAPE X-398 ON MS2
DATA INPUT H9 NF 2 FL 2 1 1
DATA INPUT $4

FILE 1 RECORD 1 LENGTH 492BYTES

(0)	4040F7F7	4040F2F9	4040404F1	4040404F1	F44BF3F3	4C4C40F1	F84BF9F1	4C4040F1	F64BF9F5	4C4 40F1
(40)	F24BF7F2	4040404F1	F04BF8F2	4040404F1	F34BF8F6	4C4C40F1	F74BF0F1	4C4040F3	F04BF8F5	4C4 40F4
(80)	F44BF4F6	4040404F5	F84BF4F3	4040404F7	F04BF3F5	4C4C40F8	F54BF2F5	4040F1F0	F84BF9F6	4040F1F2
(120)	F74BF8F6	4040F1F7	F74BF8F1	4040F1F9	F94BF7F3	4C4CF2F0	F64BF6F6	4040F2F4	F74BF7F1	4040F2F8
(160)	F44BF8F3	4040F2F6	F44BF2F5	4040F3F2	F64BF0F9	4C4CF3F4	F14BF2F6	4040F3F8	F34BF8F9	4C4 F3F9
(200)	F64BF5F4	4040F4F0	F44BF6F5	4040F4F1	F04BF2F8	4C4CF4F0	F74BF7F3	4040F3F5	F14BF8F5	4C4 F3F3
(240)	F44BF9F8	4040F3F0	F34BF5F4	4040F3F8	F54BF8F1	4C4CF5F4	F64BF8F3	4040F6F0	F34BF2F3	4040F6F0
(280)	F84BF3F0	4040F6F3	F24BF7F6	4040F7F0	F64BF2F5	4C4CF8F0	F34BF5F0	4C40F7F4	F54BF1F4	4C4 F6F7
(320)	F44BF1F4	4040F6F3	F14BF5F0	4040F6F4	F34BF6F6	4C4CF6F5	F54BF4F0	4C40F6F6	F84BF8F8	4C4 F6F7
(360)	F54BF7F1	4040F6F7	F54BF9F0	4040F6F9	F44BF8F6	4C4CF7F1	F14BF6F0	4040F7F2	F34BF9F3	4040F6F8
(400)	F24BF4F9	4040F6F4	F34BF9F6	4C4 F6F5	F34BF7F8	4C4CF6F7	F04BF2F3	4040F6F8	F34BF1F1	4040F6F9
(440)	F04BF9F6	4040F6F9	F74BF3F8	4C4 F7F1	F14BF6F2	4C4CF7F2	F64BF6F4	4C40F7F3	F54BF5F9	4C4 F7F4
(480)	F64BF8F1	4040F7F3	F04BF1F2							

FILE 1 RECORD 24 LENGTH 492BYTES

(0)	4040F7F7	4040F2F9	4040F2F4	4040F1F3	F84BF6F7	4C4CF1F3	F84BF8F6	4040F1F3	F94BF4F2	4040F1F4
(40)	F04BF6F1	4040F1F4	F04BF1F6	4C4 F1F4	F04BF2F0	4C4CF1F4	F04BF2F9	4C40F1F4	F04BF1F2	4C4 F1F3
(80)	F94BF7F7	4040F1F3	F94BF1F9	4040F1F3	F84BF5F7	4C4CF1F3	F94BF2F2	4040F1F3	F94BF5F3	4040F1F3
(120)	F94BF6F7	4040F1F3	F94BF5F4	4040F1F3	F94BF6F7	4C4CF1F3	F94BF6F5	4040F1F3	F94BF8F3	4040F1F3
(160)	F94BF4F8	4040F1F3	F94BF8F0	4040F1F3	F94BF9F1	4C4CF1F4	F04BF0F2	4C40F1F4	F04BF5F4	4C4 F1F4
(200)	F04BF8F7	4040F1F4	F04BF0F9	4040F1F3	F94BF9F7	4C4CF1F4	F04BF7F7	4C40F1F4	F04BF7F6	4C4 F1F4
(240)	F24BF4F9	4040F1F4	F24BF5F3	4040F1F4	F04BF9F9	4C4CF1F4	F04BF6F5	4040F1F3	F94BF9F4	4040F1F4
(280)	F14BF1F8	4040F1F4	F14BF3F2	4040F1F4	F14BF8F8	4C4CF1F4	F34BF7F7	4C40F1F4	F44BF3F4	4040F1F4
(320)	F44BF3F4	4040F1F4	F54BF3F3	4040F1F4	F64BF9F9	4C4CF1F4	F94BF0F0	4040F1F5	F14BF7F9	4C4 F1F5
(360)	F54BF8F6	4040F1F6	F04BF8F7	4040F1F6	F54BF8F8	4C4CF1F7	F34BF7F0	4040F1F8	F64BF2F7	4040F1F9
(400)	F74BF5F0	4040F2F0	F34BF6F8	4040F2F0	F54BF8F1	4C4CF1F9	F94BF3F6	4C40F1F9	F54BF2F8	4040F1F6
(440)	F54BF8F5	4040F1F3	F64BF3F9	4040F1F2	F54BF5F4	4C4CF1F1	F64BF7F0	4040F1F0	F94BF1F7	4C4 40F9
(480)	F64BF7F5	4040404F5	F74BF3F3							

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	24	25	492	0	0	0	0	0	0

FILE 2 RECORD 1 LENGTH 492BYTES

(0)	4040F7F7	4040F2F9	4040404F1	4040404F0	F04BF0F8	4C4C4060	F04BF6F0	4040404F0	F14BF4F4	4C4C4060
(40)	F14BF7F2	4040404F0	F24BF0F1	4040404F0	F14BF9F6	4C4C4060	F24BF0F8	4C4C4060	F24BF1F2	4C4 C4060
(80)	F24BF1F0	4040404F0	F24BF0F5	4040404F0	F24BF3F7	4C4C4060	F14BF6F8	4C4C4060	F14BF2F8	4C4 C4060
(120)	F04BF8F8	4040404F0	F04BF7F0	4040404F0	F04BF8F9	4C4C4060	F04BF9F3	4040404F0	F04BF7F5	4C4C4060
(160)	F04BF6F8	4040404F0	F04BF7F4	4040404F0	F04BF5F9	4C4C4060	F04BF7F0	4040404F0	F04BF6F8	4C4C4060
(200)	F04BF7F5	4040404F0	F04BF0F2	4040404F0	F44BF7F8	4C4C40F1	F34BF4F6	4C4C40F1	F84BF6F4	4C4 C40F2
(240)	F94BF8F1	4040404F3	F24BF2F8	4040404F3	F24BF8F0	4C4C40F3	F14BF9F5	4040404F3	F84BF6F0	4C4 C40F4
(280)	F04BF7F2	4040404F4	F14BF0F4	4040404F3	F94BF6F8	4C4C40F3	F84BF3F6	4040404F3	F74BF3F2	4040404F3
(320)	F64BF6F7	4040404F3	F64BF0F3	4040404F3	F54BF6F2	4C4C40F3	F44BF9F4	4C4C40F3	F34BF4F9	4C4 C40F3
(360)	F14BF9F2	4040404F3	F04BF2F1	4C4C40F2	F84BF9F5	4C4C40F2	F84BF5F0	4040404F2	F74BF2F9	4040404F2
(400)	F64BF3F6	4040404F2	F64BF1F0	4040404F2	F54BF9F2	4C4C40F2	F64BF2F2	4040404F2	F64BF2F9	4040404F2
(440)	F64BF4F9	4040404F2	F64BF4F7	4040404F2	F64BF8F5	4C4C40F2	F64BF7F4	4040404F2	F54BF5F7	4040404F2
(480)	F44BF5F7	4040404F2	F34BF8F4							

FILE 2 RECORD 24 LENGTH 492BYTES

(0)	4040F7F7	4040F2F9	4040F2F4	4040604F4	F24BF2F7	4C4C60F4	F24BF2F9	4040604F4	F24BF2F5	4040604F4
(40)	F24BF2F6	4040604F4	F24BF2F2	4040604F4	F24BF1F6	4C4C60F4	F24BF0F5	4040604F4	F24BF0F0	4040604F4
(80)	F24BF1F5	4040604F4	F24BF2F8	4040604F4	F24BF3F0	4C4C60F4	F24BF3F9	4040604F4	F24BF4F4	4040604F4
(120)	F24BF5F0	4040604F4	F24BF4F7	4040604F4	F24BF3F5	4C4C60F4	F24BF3F8	4040604F4	F24BF4F1	4040604F4
(160)	F24BF4F5	4040604F4	F24BF5F5	4040604F4	F24BF8F4	4C4C60F4	F34BF0F4	4040604F4	F34BF0F2	4040604F4
(200)	F24BF9F5	4040604F4	F24BF8F6	4040604F4	F24BF8F8	4C4C60F4	F24BF9F	4C4C60F4	F24BF9F7	4C4C60F4

```
(    280)  F44BF4F0  404060F4  F44BF5F9  404060F4  F44BF8F1  4C4C6CF4  F44BF8F6  4C4D6CF4  F44BF9F0  4C4C60F4
(    320)  F44BF9F9  404C6CF4  F54BF1F1  4C4C6CF4  F44BF9F8  4C4C6CF4  F44BF9F1  4C4C6CF4  F44BF7F5  4C4C6CF4
(    360)  F44BF3F5  404C6CF4  F34BF7F9  404C6CF4  F34BF0F4  4C4C6CF4  F14BF6F7  4C4D6CF4  F04BF2F8  4C4C6CF3
(    400)  F94BF1F2  404060F3  F74BF6F3  404060F3  F64BF3F3  4C4C60F3  F54BF6F1  4C4D60F3  F44BF8F4  4C4C60F3
(    440)  F44BF5F3  404060F3  F44BF2F8  404060F3  F44BF7F8  4C4C60F3  F04BF2F1  404D60F3  F04BF9F1  4C4C60F2
(    480)  F74BF8F3  404C6CF1  F44BF7F5

          FILE   INPUT     DATA RECORDS     MAX.          READ ERROR SUMMARY          INPUT RETRIES
                 RECS.       INPUT         SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
             2      24         25           492         0       2       3       0       0       0

 EOJ        DUMP STOPPED AFTER FILE    2          # OF PERMANENT READ ERRORS    0

 START TIME 10/05/79  16:19:21          STOP TIME 10/05/79  16:19:35
```

```
$$
$ASS IN MS3 OUT MS2
```

REQ. AGENT	NO.	ACQ. AGENT
VPL	V0018	DWS

GG-32F

AE,AO,AU,AL + H(OR X)

COMP OF 12 MAG STA

This data set catalog consists of 1 data tape. The tape is 1600 BPI,EBCDIC, 9 track with 2 files of data. The tape was created on a IBM 360 computer.

Time span is as follows:

D#	C#	TIME SPAN
D-38006	C-20916	7/28/77 - 7/29/77

INSTRUCTIONS FOR READING AURORAL ZONE DATA FROM MAGNETIC TAPE

This tape(s) AE77 contain the data for 12 observatories.

For the date(s) 07/28/77 - 07/29/77 starting at 2100 U.T..

Observatories used are: LEH, GWX, COH, TIH, DIH, WAH, FCX, YKX CCH, CWH, ABH, KIX

The data are organized in the following manner. The first day (24 hours) is listed first, then the second, and so on. Each block of one days' data contains data for each individual observatory, then for the day, AE, AO, AU, and AL ; respectively. Each block of data for an observatory consists of first a label, then 120 lines of numbers. The format of the label is:

COLUMN	INFORMATION	EXAMPLE
1-3	Code for obs. and component.	LEH
4-11	Date, Month/Day/YEAR	02/31/79
12-13	Blank.	
14-17	Time in U.T. for first data value	2100
18-19	Blank.	
20-25	Scale factor in xxx.xx format.	011.26
26-27	Blank.	
28-30	Quiet level reference from digitizer	750
31-32	Blank.	
33-36	Number of points (usually 1440) in block	1440

Following the label are 120 lines of integers with twelve values to a line. The format for the numerical data is:

COLUMN	INFORMATION	EXAMPLE
1-8	Blank.	
9-14	First integer-right justified.	-28
15-20	Second integer -right justified.	280
21-26	Third integer-right justified.	-3875
ECT.		
75-80	12th integer	

Immediately following the last line of integers for the last observatory on

a given day, the AE,AO, AU, and AL . data will appear. Except for the lable these data blocks are in the same format as the individual observatories. The format of the lable for AE, AO,AU, and AL is:

COLUMN	INFORMATION	EXAMPLE
1-2	(AE,AO,AU,AL)	AE
3-6	Blank.	
7-8	Number of observatories.	12
9-12	Blank.	
13-20	Date. MO/DAY/YR	01/30/79
21-26	Blank.	
27-30	Starting time (UT)	2100

The last line of integers from AL is the end of data for this day. The next day may aither follow this day on the same tape or appear on another tape. See comments below to determine which days are on each tape. For more information call:

Jim Phillips
DSD-Boulder, Colorado
P.N. (303) 499-1000 ext. 6501
FTS No. 323-6501

Comments:

1 Tape: AE77 File 1: 28th day
File 2: 29th day

2 80 character record

3. No blank lines in block

Tape information:

DENSITY: 1600 BPI

TRACK: 9

CODE: EBCDIC

STRUCTURE FOR ONE DAYS DATA

FIRST OBSERVATORY, DATE, STARTING TIME(UT),SCALE FACTOR, QUIET LEVEL,# OF POINTS(1440)

120 lines of integers.
12 integers per line.
Each integer right justified in a field length of 6 spaces.
Each line of intgers starts in column 9[illegible].
Lable is started in first column.

SECOND OBSERVATORY, DATE, STARTING TIME(UT), SCALE FACTOR, QUIET LEVEL, # OF POINTS(1440)

SAME AS ABOVE.

.
.
.

LAST OBSERVATORY, DATE, STARTING TIME(UT), SCALE FACTOR, QUIET LEVEL, # OF POINTS(1440)

SAME AS ABOVE.

AE, # OF OBSERVATORIES, DATE, STARTING TIME(UT).

SAME AS ABOVE.

AO, # OF OBS., DATE, STARTING TIME(UT).

SAME AS ABOVE.

AU, # OF OBS., DATE, STARTING TIME(UT).

SAME AS ABOVE.

AL, #OF OBS., DATE, STARTING TIME(UT).

SAME AS ABOVE.

END OF DAY 1

D-38006
GG-32F
2/28/77 - 2/29/77

DUMP OF TAPE X-257

INPUT TAPE X-257 ON MT1
DATA INPUT HX NF 2 FL 2 1 1

FILE 1 RECORD / 1 LENGTH 80BYTES

( )	D3C5C8E2F1F2F7	61F2F9	61F2F7	40F2F1F0	F4404040	4CF34BF8	F54040F6	F7F04040
	F1F4F4F0	40404040						
(4)	40404040	40404040	40404040	40404040	40404040	40404040	40404040	40404040
	40404040	40404040						

FILE 1 RECORD 1936 LENGTH 80BYTES

( )	40404040	40404040	40404060	F2F04040	406F2F6	40404060	F3F94040	4060F5F3
	40404060	F7F24040						
(4)	4060F5F5	40404060	F3F84040	4060F4F1	40404060	F3F84040	4060F3F6	40404060
	F3F64040	4060F3F4						

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	1936	1937	80	0	0	3	2	0	0

FILE 2 RECORD / 1 LENGTH 80BYTES

( )	D3C5C8E2F1F2F9	61F2F7	61F2F4	40F2F1F0	F4404040	4CF34BF8	F54040F6	F7F04040
	F1F4F4F0	40404040						
(4)	40404040	40404040	40404040	40404040	40404040	40404040	40404040	40404040
	40404040	40404040						

FILE 2 RECORD 1936 LENGTH 80BYTES

( )	40404040	40404040	40404060	F5F54040	4060F5F5	4C4C4060	F5F54040	4060F5F5
	40404060	F5F54040						
(4)	4060F4E4	40404060	F4F44040	4060F4F6	40404060	F4F64040	40404060	F4F64040
	4060F4F6	40404060						

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
2	1936	1937	80	0	0	0	0	0	0

EOJ DUMP STOPPED AFTER FILE 2 # OF PERMANENT READ ERRORS

START TIME 4/02/80 08:06:09 STOP TIME 4/02/80 08:06:57

$$
$ASS IN MT3 OUT MT1

REQ. AGENT	RAND NO.	ACO AGENT
VJP	RD1266	WHW

STARE RADAR DATA

GN-11A

This data set catalog consists of 1 data tape. The tape is 800 BPI, Binary, 9track and contains 1 file of data. The tape was created on a NOVA computer. Because of the type of computer used a assembly program was created by Wayne Warren to reverse bits and bytes to make the tape readable.

The time span is as follows:

D#	C#	TIME SPAN
D-52334	C-20294	12/01/77 - 12/12/77

LISTING OF FILE OUTPUT

DIRECTORY: TAPE GREENWALD CDAW DATA

YEAR	DAY	TIME	INTT	LAT	LONG	NLAT	NLON	NVAL
1977	335	15: 0: 0	20	67.2	18.0	30	-5	930
1977	336	6:30: 0	20	67.2	18.0	30	-5	2160
1977	336	18:53: 0	20	67.2	18.0	30	-5	920
1977	345	21: 0: 0	20	67.2	18.0	30	-5	1090
1977	346	5:30: 0	20	67.2	18.0	30	-5	360

9 TRACK TAPE - 800 BYTES PER INCH
2-BYTE TWOS COMPLEMENT ODD PARITY BINARY
1 BYTE = 8 BITS
BIT ZERO IS SIGN BIT. BIT 15 IS LEAST SIGNIFICANT BIT
E.G. 0 000 000 001 011 001 = +89
1 000 000 001 011 001 = -32679

TRACK:	P	1	2	3	4	5	6	7	8
BYTE1: BIT		0	1	2	3	4	5	6	7
BYTE2: BIT		8	9	10	11	12	13	14	15

DATA ORGANIZED IN RECORDS SEPARATED BY EOR GAPS GT 0.6IN

RECORD:
1 -1 10*LAT 10*LONG NLAT NLON NVAL
2 YEAR DAY HOUR MIN SEC INTT
ARRAY OF NLAT*NLON EASTWARD COMPONENTS OF VELOCITY
ARRAY OF NLAT*NLON NORTHWARD COMPONENTS OF VELOCITY
N.B. IF NLON IS NEGATIVE THERE ARE ONLY NLAT
VALUES OF THE VELOCITY WHICH HAVE BEEN
AVERAGED OVER ABS(NLON) LONGITUDE POINTS
3 TO NVAL+1: FURTHER RECORDS OF DATA IN SAME FORMAT
AS RECORD 2 WITH TIMES RUNNING CONSECUTIVELY IN INCREMENTS
OF INTT
THESE ARE FOLLOWED BY OTHER RECORDS OF DATA IN SAME FORMAT
AS RECORDS 1 TO NVAL+1 CORRESPONDING TO OTHER EVENTS
THE LAST RECORD ON THE TAPE CONSISTS ONLY OF -1,-1,-1...

TIME GIVEN IS U.T. OF BEGINNING OF RECORD OF LENGTH
INTT SECONDS. LAT AND LON ARE GEOGRAPHIC COORDS OF BOTTOM
LEFT HAND CORNER OF GRID NLAT BY NLON POINTS IN SIZE.
LAT GRID POINTS ARE SEPARATED BY 0.2 DEGREES
LON GRID POINTS ARE SEPARATED BY 0.5 DEGREES.
VELOCITIES ARE IN METERS PER SECOND.
A VALUE -1 FOR A VELOCITY COMPONENT IMPLIES BACKSCATTER
INTENSITY BELOW THRESHOLD OR MISSING DATA

C DAW GREENWALD STARE RADAR DESCRIPTION - WAYNE H. WARREN JR - 1

NOTES

1. Each 200-byte record is an I*2 array of 100 x 16-bit words; however, the machine that wrote the tape transposed the 2 bytes in each word. Subroutine CONK therefore calls an assembly language function subprogram, written by L. BAGE, to transpose bytes before processing. (assembly language function subprogram QPOS)

2. The last record on the tape (record 5515) contains -1 in all elements of the array. This record was not written to the data base.

3. If NLON is negative, there are only NLAT eastward and NLAT northward components of velocity averaged over NLON longitude points. NLON is always negative for the data on this particular tape (NLON = -5 for every record group), and there are always 30 eastward and 30 northward velocity components.

4. Although the fourth data group has NVAL = 1870 in the documentation, the actual number of data points is 1440. This was confirmed by R. GREENWALD by [illegible]

5. The tic time is 1 millisecond.

D-32334-1
12/01/77 - 12/12/77

DUMP OF TAPE X-212 NOVA

```
INPUT TAPE  X-212   ON  MS4
DATA INPUT    H9 FL 1 3 3

FILE      1  RECORD       1  LENGTH     200BYTES
(     0)   FFFFA002  840C1E00  FBFFA203  057B8724  BA1E2101  11240300  A5240000  00000000  C0000000  00000000
(    40)   30242D01  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(    80)   0E30C0FF  30C30C0E  30630000  0C0C0300  30C00000  C0C00000  03000000  000C0CF0  C00FC000  0C000000
(   120)   00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(   160)   0C000C03  30000300  00030000  00000000  00000000  00C00C00  00000000  00000000  00000000  00000000

FILE      1  RECORD       2  LENGTH     200BYTES
(     0)   B9074F01  0F000000  00001400  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(    40)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(    80)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(   120)   FFFFFFFF  FFFFFFFF  FFFFFFFF  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(   160)   00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000

FILE      1  RECORD       3  LENGTH     200BYTES
(     0)   B9074F01  0F000000  14001400  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(    40)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(    80)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(   120)   FFFFFFFF  FFFFFFFF  FFFFFFFF  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(   160)   00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000

FILE      1  RECORD    5813  LENGTH     200BYTES
(     0)   B9075A01  07001D00  14001400  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(    40)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(    80)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(   120)   FFFFFFFF  FFFFFFFF  FFFFFFFF  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(   160)   00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000

FILE      1  RECORD    5814  LENGTH     200BYTES
(     0)   B9075A01  07001D00  28001400  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(    40)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(    80)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(   120)   FFFFFFFF  FFFFFFFF  FFFFFFFF  00000000  00000000  00000000  00000000  00000000  00000000  00000000
(   160)   00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000  00000000

FILE      1  RECORD    5815  LENGTH     200BYTES
(     0)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(    40)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(    80)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(   120)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF
(   160)   FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF  FFFFFFFF

          FILE   INPUT     DATA RECORDS     MAX.          READ ERROR SUMMARY          INPUT RETRIES
                 RECS.       INPUT         SIZE      PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
              1   5815     5818             200         0      0       0      0       3       3

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

START TIME 01/08/79  10:19:33        STOP TIME 01/08/79  10:20:59


$$
```