#550

CDAW DATA SETS FROM 6.0
1979-053A-01A
1976-059A-01C
1977-007A-01C
77-048A-04B
78-096A-04A
79-017A-05A
80-014A-06A — SMM
78-062A-04A

550	76-059A-01C	SPMS-00541	1976-059A
550	77-007A-01C	SPMS-00541	1977-007A
550	77-048A-04B	SPMS-00348	GOES 2
550	78-062A-04A	SPMS-00178	GOES 3
550	78-096A-04A	SPIO-00097	TIROS N
550	79-017A-05A	SPMS-00574	STP P78-1
550	79-053A-01A	SPMS-00541	1979-053A
550	80-014A-06A	ASXR-00010	SMM

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1. INTRODUCTION:

The documentation for this data set was originally on paper, kept in NSSDC's Data Set Catalogs (DSCs). The paper documentation in the Data Set Catalogs have been made into digital images, and then collected into a single PDF file for each Data Set Catalog. The inventory information in these DSCs is current as of July 1, 2004. This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system. The information existing in the DSCs is now not needed for locating the data files, but we did not remove that inventory information.

The offline tape datasets have now been migrated from the original magnetic tape to Archival Information Packages (AIP's).

A prior restoration may have been done on data sets, if a requestor of this data set has questions; they should send an inquiry to the request office to see if additional information exists.

2. ERRATA/CHANGE LOG:

NOTE: Changes are made in a text box, and will show up that way when displayed on screen with a PDF reader.

When printing, special settings may be required to make the text box appear on the printed output.

Version	Date	Person	Page	Description of Change
01				
02				

3 LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM:

http://nssdc.gsfc.nasa.gov/nmc/

[NOTE: This link will take you to the main page of the NSSDC Master Catalog. There you will be able to perform searches to find additional information]

4. CATALOG MATERIALS:

a. Associated Documents To find associated documents you will need to know the document ID number and then click here.
http://nssdcftp.gsfc.nasa.gov/miscellaneous/documents/

b. Core Catalog Materials

STP P78-1

HIGH LATITUDE PARTICLE SPECTROMTR

79-017A-05A SPMS-00574

This data set has been restored. There was originally one 9-track, 1600 BPI tape written in Binary. There is one restored tape. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tape was created on a 6600 computer and the restored tape was created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D number are as follows:

DR#	DS#	D#	FILES	TIME SPAN
DR005856	DS005856	D047133	1 - 3	03/22/79 - 03/22/79

REQ. AGENT	REQ NUMBER	ACQ. AGENT
LSM	V0144	DMS

79-017A-05A

STP P78-1

HIGH LATITUDE PARTICLE SPECTROMETER

This data set consists of 1 tape(s). The tape(s) is 9 track, 1600 bpi, bin with 3 file(s) of data. The time span and D and C numbers are as follows:

D#	C#	TIME SPAN
D-47133	C-22006	3/22/79

INFORMATION SHEET FOR INCOMING DATA

NSSDC ID: 79-019A-05A

DATE DATA RECEIVED: 1/5/82

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: STP P78-1

EXPERIMENT NAME:

DATA SET FULL NAME: High Intensity Particle Spectrometer

CONTACT: ACQUISITION SCIENTIST: DMS

FORM THAT WILL BE ANNOUNCED IN AIM/NSDF: DD

THESE ARE: [X] A NEW DATA SET [ ] ADDITIONS [ ] REPLACEMENTS [ ] OTHER (EXPLAIN BELOW)

ACCESSION UNIT NUMBERS: DD 49133 C-22006

REMARKS:

1600 Bpi 9trk 3 files
3/22/79

CDAW

DATA RECEIPT NOTIFICATION SENT? [ ]

Moran
DATA TECHNICIAN

601-32 (6/76)

ADP SERVICES (MACHINE SENSIBLE ONLY)

Date Jan 4 82

NSSDC ID 79-017A-05

CDAW DATA SET ENTRY

Date Rcvd : Jan 2 82 CDB : ϕb

Data Sent By : David Hardy

Material Rcvd : Letter, documentation, tape list and 1 tape

Satellite/NSRF Name : STP P78-1

Data Set Name : High Latitude Particle spectrometer

☒ New Data Set ☐ Additions ☐ Replacements

Comments

Time Coverage : 1979 Mar 22

Tapes To be Returned to :

Completed By : M. Tecsgue

DEPARTMENT OF THE AIR FORCE
AIR FORCE GEOPHYSICS LABORATORY (AFSC)
HANSCOM AIR FORCE BASE, MASSACHUSETTS 01731

REPLY TO ATTN OF: AFGL/PHG/D.A. Hardy/3102 28 DEC 81

SUBJECT: P78-1 Data for CDAW-6

TO: Dr. James I. Vette
National Space Science Data Center
Code 601
NASA Goddard Space Flight Center
Greenbelt, MD 20771

Dear Jim,

Enclosed is a tape of the electron data from the P78-1 satellite for the March 22 period to be studied at the CDAW-6. A description of the tape format is attached along with a printout of the data. If you have any questions please contact me.

David A. Hardy

DAVID A. HARDY Atch as/
Plasmas, Particles & Fields Branch
Space Physics Division

P78-1 Tape format for NASA

Files will be created for Ø387, Ø390 and Ø395

Tape will be 9 Track, 1600 bpi
Tape created on CDC6600 (odd parity)
All words are binary, 60 bits per word.
Tapes need not be returned

Tape Name: P78102
File 1 = Orbit 387
File 2 = Orbit 390
File 3 = Orbit 395

STRANGER TAPE | RT = S, BT = C

Each file will have a header record followed by a series of data records. Information for each orbit will terminate with an EOF.

Header Record (All words floating point)

Word Number	Description	
1	Orbit Number	
2	Year of orbit (79.)	
3	Month " "	
4	Day of month	
5	E_1	The 15 energy values associated with the differential flux vals in the data records. Energies are in kev
6	E_2	
7	E_3	
⋮	⋮	
19	E_{15}	
20	ZERO	

Data Records (All words floating point)

Word Number	Description	
1	UT (seconds)	
2	Altitude (km)	
3	Longitude (+E) (deg)	
4	Geocentric latitude (deg)	
5	Geomagnetic latitude (deg)	
6	Invariant latitude (deg)	
7	Local time (seconds)	
8	Magnetic local time (seconds)	
9	Corrected geomagnetic latitude (deg)	
10	Detector number (1. or 2.)	
11	Differential flux measured at E_1	units of number/cm²-sec-sr
12	" " " " " " " E_2	
13	" " " " " " " E_3	
⋮	⋮	
25	Differential flux measured at E_{15}	
26	ZERO	

SMM

PULSE HEIGHT SPECTROMETER DATA

80-014A-06A ASXR-00010

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

DR#	DS#	D#	FILES	TIME SPAN
DR004828	DS004828	D045286	1	06/29/80 - 06/29/80
		D045287	2	06/29/80 - 06/29/80
DR004829	DS004829	D045288	1	06/29/80 - 06/29/80

REQ. AGENT	REQ NUMBER	ACQ. AGENT
LSM	V0144	DMS

80-014A-06A

SMM

PULSE HEIGHT SPECTROMTER DATA

This data set consists of 3 tape(s). The tape(s) is 9 track, 800 bpi, ASCII with 1 file(s) of data. The time span and D and C numbers are as follows:

D#	C#	TIME SPAN
D-45286	C-21492	6/29/80
D-45287	C-21493	6/29/80
D045288	C-21494	6/29/80

INFORMATION SHEET FOR INCOMING DATA

NSSDC ID: [illegible]

DATE DATA RECEIVED: 6/23/81

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:	3 Mag-[illegible]

SATELLITE NAME/NSDF NAME: SMM

EXPERIMENT NAME:

DATA SET FULL NAME: [illegible]

CONTACT: ACQUISITION SCIENTIST: [illegible]

FORM THAT WILL BE ANNOUNCED IN AIM/NSDF:

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

ACCESSION UNIT NUMBERS: [illegible]

REMARKS:

87-
45288-800 ASCII Card 1 file 6/29/80

DATA RECEIPT NOTIFICATION SENT? ☐

[illegible]
DATA TECHNICIAN

601-32 (6/76)

ADP SERVICES (MACHINE SENSIBLE ONLY)

HXRBS

To: Ralph/Linda

New Data Set

3 Tapes - SMM Spacecraft.

80-014A-06

PI= Ken Frost / Brian Dennis

Tapes are ~~1600~~ 800 bpi?, ASCII, 120 char/record.

Files? probably 1.

It is ~~with~~ important to get tapes back within the next week, so we can put it onto the SMM data base.

High Priority

Thanks.

Don / K. Hadley.
6/29/80

D-45286	C-21492	02:30 - 02:50
D-45287	C-21493	10:30 - 11:00
D-45288	C-21494	18:00 - 18:40

NAME?

PHS?

80-014A-06
SMM

3 Tapes

```
C     SUBROUTINE WRTAPE IS USED IN PROGRAM PHSPLT TO WRITE
C     AN OUTPUT TAPE TO BE USED BY THE OTHER EXPERIMENTS.
C     EACH FILE ON THE TAPE CONTAINS A HEADER RECORD FOLLOWED
C     BY ANY NUMBER OF DATA RECORDS.
C     THE HEADER RECORD HAS THE FOLLOWING FORMAT:        120 char
C        I1 - 0 : CODE IDENTIFYING HEADER RECORD
C        I4 - START DAY OF INTERVAL (1 = 00:00:00 1/1/79)
C        I9 - START MSEC OF INTERVAL
C        I5 - TIME BETWEEN DATA INTERVALS IN MSEC
C        A4 - 'XRBS' (SOURCE ID)
C        1X
C        16F6.1 - 16 CHANNEL EDGES IN KEV
C     THE DATA RECORDS HAVE THE FOLLOWING FORMAT:
C        REC 1. I1 - 1 : RECORD NUMBER IN DATA INTERVAL        120 char
C               I6 - DATA INTERVAL NUMBER
C               13X- SPARE
C               10E10.3 - PHS CHANNELS 1 - 10
C        REC 2. I1 - 2 : RECORD NUMBER IN DATA INTERVAL        120 char.
C               I6 - DATA INTERVAL NUMBER
C               13X- SPARE
C               10E10.3 - PHS CHANELS 11-15 AND LIVE TIME IN SECONDS
C     PAIRS OF DATA RECORDS CONTINUE UNTIL THE SELECTED END TIME
C     IS REACHED.
C     THE PHS DATA IS IN UNITS OF COUNTS OR COUNTS/SECOND
C     DEPENDING ON WHETHER THE LVTIM OPTION WAS SET.
C
C*****************************************************************
C
      SUBROUTINE WRTAPE
      IMPLICIT REAL*8(D),INTEGER*4(H),LOGICAL*2(Q)
      COMMON /DMSRVS/ HSMS,HSME,HSMT,HSMI,HSMH,HSMB,HSMAVE,
     *      HSMHAF,HSMMID,HDUM1(6),HPHSC(15),HLT,HCAL,HFLARE,
     *      HSLLRE,HSLLRO,HSLLRA,HDUM2(4),JAVERF,JCRSM,
     *      JNRSM,JENDFS,MASKPH,JDMSRF,JBINSM,JDUM(9)
C
      COMMON/DMSRV/ HMFS,HMFT,HMFE,HMFI,HMFH,HDUM(9),
     1 IDUMA(2),IADBLU,LADBLU,ISITE,ISEQCD,IHSFC,IBADMF,NBADMF,
     2 IDWEL,MDMP,JSC1,JSARS,MSTAT,ITS,MFTYP,
     3 IUNIT,IRMODE,ITSFC,LUN,IASCLU,ISW,ITDECM,
     4 ITSF,ITDWEL,ITMDMP,ITSLLR,ITFLAG,IWAIT,
     5 ITOGLE,IENDF,IDMSRF,IBINMF,IEOT,IDUMB(10),
     6 IFCB(10)
C
      COMMON /OPVARX/ ICMND,LIST,IERR,IOP(20),ROP(20)
C
      DIMENSION IUT(3),Y(15),IT(2),RCHAN(16),ISUT(3),INUT(3)
C
      EQUIVALENCE (ITAPE,IOP(4)), (HMSEC,INUT(2))
      EQUIVALENCE (LVTIM,IOP(2))
C
      DATA HXRBS/'XRBS'/
      DATA IT/'T0','T1'/
      DATA ISUT/0,0,64/
C
      CALL FINLUN(IT(ITAPE+1),LOUT)
C
C     WRITE HEADER RECORD
      IHEAD=0
```

```
      CALL SUBUT(IUT,ISUT,INUT,IDEL)
      HDEL=HSMAVE * 128
      CALL CH2KEV(JSC1,JSARS,RCHAN)
      WRITE(LOUT,1000,ERR=800) IHEAD,INUT(1),HMSEC,HDEL,HXRBS,RCHAN
 1000 FORMAT(I1,I4,I9,I5,A4,1X,16F6.1)
C     WRITE(22,1001) IHEAD,INUT(1),HMSEC,HDEL,HXRBS,RCHAN
C1001 FORMAT(' HEADER:',I1,I4,I9,I5,A4,1X,16F6.1)
C
C     INT WILL COUNT THE DATA INTERVALS
      INT=0
C
C     INITIALIZE DMSRVS PACKAGE FOR THIS ACCUMULATION
      CALL BINSM
C
C     NXTSM WILL ADD HSMAVE SAMPLES TOGETHER AND STORE EACH
C     CHANNEL SEPARATELY IN COMMON /DMSRVS/ ARRAY HPHSC
   50 CONTINUE
      CALL NXTSM
C
C     WHEN JENDFS=1, WE HAVE HIT END OF REQUESTED TIME.
      IF(JENDFS.EQ.1) GO TO 900
      INT=INT + 1
C
C     WRITE PHS DATA IN 2 RECORDS (CHANNELS 1-10, THEN CHANNELS
C     11-15).
      IREC=1
      SEC=HLT * .128E-3
      DO 60 I=1,15
      Y(I)=HPHSC(I)
      IF(LVTIM.EQ.1) Y(I)=Y(I) / SEC
   60 CONTINUE
      WRITE(LOUT,2000,ERR=800) IREC,INT,(Y(I),I=1,10)
 2000 FORMAT(I1,I6,13X,10E10.4)
      IREC=2
      WRITE(LOUT,2000,ERR=800) IREC,INT,(Y(I),I=11,15),SEC
C     WRITE(22,2005) IREC,INT,Y,SEC
C2005 FORMAT(1X,I1,I6,10E10.3/8X,5E10.3)
      GO TO 50
C
  800 CONTINUE
      WRITE(LUN,4000)
 4000 FORMAT(' ERROR WRITING TAPE.')
      GO TO 999
C
  900 CONTINUE
      WRITE(LUN,9000) INT,IT(ITAPE+1)
 9000 FORMAT(1X,I10,' INTERVALS OF DATA WRITTEN ON TAPE ',A2)
      ENDFILE LOUT
      ENDFILE LOUT
      BACKSPACE LOUT
C
  999 CONTINUE
      RETURN
      END
```

1976-059A-01C SPMS-00541

1977-007A-01C

1979-053A-01A

ELECTRON AND PROTON RAW COUNT RATE

THESE DATA SETS HAVE BEEN RESTORED. ORIGINALLY THEY CONTAINED TWO 9-TRACK, 1600 BPI TAPES, WRITTEN IN BINARY. THERE IS ONE RESTORED TAPE. THE DR TAPE IS A 3480 CARTRIDGE AND THE DS TAPE IS 9-TRACK, 6250 BPI. THE ORIGINAL TAPES WERE CREATED ON A CDC 7600 COMPUTER AND WERE RESTORED ON THE MRS SYSTEM. THE DR AND DS NUMBER ALONG WITH THE CORRESPONDING D NUMBERS AND TIME SPANS ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR005287	DS005287	D045914	1	03/31/79
			2	04/01/79
			3	03/31/79
			4	04/01/79
			5	04/01/79
			6	03/22/79
		D063544	7	04/24/79
			8	05/11/80

REQ. AGENT	RAND NO.	ACQ. AGENT
LSM	V0144	DMS

1979-053A-01A

1976-059A-01C

1977-007A-01C

ELECTRON AND PROTON RAW COUNT RATE

This data set consists of 2 magnetic tapes. The tapes are 9 track, 1600 BPI, binary with multi-filed data. They were created on a CDC 7600 computer. The time span and D and C numbers are as follows:

D#	C#	TIME SPAN
D-45914	C-21625	FILES 1 3/31/79
		2 4/1/79
		3 3/31/79
		4 4/1/79
		5 4/1/79
		6 3/22/79
D-63544	C-24067	FILES 1 4/24/79
		2 5/11/80

INFORMATION SHEET FOR INCOMING DATA

1979-053A-01A

NSSDC ID: 1979-053A-01C

DATE DATA RECEIVED: 03/24/81

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:

EXPERIMENT NAME:

DATA SET FULL NAME: ELECTRON AND PROTON RAW COUNT RATE

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 45914 C21625

REMARKS:

1600 BIN 9trk 6files

3/31	F1	4/1	5
4/1	2	3/22	6
3/31	3		
4/1	4		

CDAW

DATA RECEIPT NOTIFICATION SENT? ☐

J. Hogan

DATA TECHNICIAN

601-32 (6/76)

ADP SERVICES (MACHINE SENSIBLE ONLY

Questions for Baker
1. Defn of your V, D, H system

Date August 14, 198
NSSDC ID 1976-059A-01
1977-007A-01

CDAW DATA SET ENTRY

Date Rcvd: August 14, 1981 CDB: 06

Data Sent By: Dan Baker

Material Rcvd: 1 tape 9-track 1600 bpi
documentation, verification plots
dump

satellite/NSDF Name: 1976-059A / 1977-007A

Data Set Name: Electron and Proton Raw Count Rate

☒ New Data Set ☐ Additions ☐ Replacements
Comments Format differs from 01A, 01B

Time Coverage: March 22, March 31, + April 1

Tapes ~~To be Returned to~~: Not To Be Returned

Please return DUMP to us
thanks

Completed By: Kathy Headley

Dan Baker
CDB 6
1976-059A-01C
1977-007A-01C

Los Alamos
Los Alamos National Laboratory
Los Alamos, New Mexico 87545

SSO-81-750
MS-436

July 15, 1981

Dr. J. I. Vette
(CDB-6 Workshop)
Code 601
NASA Goddard Space Flight Center
Greenbelt, MD 20771

Dear Jim,

Under this cover please find a magnetic tape which contains our geostationary orbit energetic particle data for the Coordinated Data Analysis Workshop-6. We have also enclosed the Coordinated Data Base (CDB) tape documentation form. In a brief attached write-up, I describe how the raw data on the tape should be converted to differential fluxes and averaged for 1-minute intervals. As per your request, we also include an octal dump of the first and last records of each file, exemplary plots of raw count rates (counts/8ms sample) and converted fluxes, and a list of significant time gaps.

We hope that the enclosed information is adequate to get the CPA data into the CDB with no major difficulty. Please call me if you have questions.

Sincerely,

Dan

Daniel N. Baker

DNB:ek
Enc. a/s
cy: SSO File
CRMO (2)

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Notes for the Los Alamos Synchronous Orbit Data Submission to the CDAW-6 Coordinated Data Base

by

D. N. Baker

The Charged-particle Analyzer (CPA) makes measurements of the electron (LoE/HiE) and ion (LoP/HiP) environment at 6.6 R_e. The LoE, HiE, and LoP make pseudo-integral measurements, i.e., from a variety of threshold values (E_i, i = 1,n) up to a fixed upper energy level for each sensor. The HiP measurements are inherently differential. It seems most useful and relevant to form average differential particle intensities (cm^{-2}-s^{-1}-sr^{-1}-keV^{-1}) for the CPA data and include these (as opposed to raw count rates) in the CDB. For magnetospheric studies, it seems irrelevant to include HiP values above $\sim$ 2 MeV. The point of this note is to describe the method of count-rate-to-flux conversion for the CPA data tape.

The basic idea of the flux conversion is to take a channel count rate and subtract from it the next higher energy channel count rate to get a differential "count rate". For example, the first differential low-energy electron count rate (DLOE1) is formed by the procedure

$$\text{DLOE1} = \text{RALOE1} - \text{RALOE2} = Z(5) - Z(6)$$

To complete the process, a multiplication by a flux conversion factor should be performed (to take account of geometric factor, sample time, efficiency, etc.). Thus

$$j(30\text{-}45\ \text{keV}) = \text{DLOE1} * \text{PHLE}(1) = (Z(5)-Z(6)) * 2480.2$$

and j is now the number of 30-45 keV electrons per (cm^2-s-sr-keV). Similar procedures apply for other LoE channels:

j(45-65) = DLOE2 * PHLE(2)
j(65-95) = DLOE3 * PHLE(3)
j(95-140) = DLOE4 * PHLE(4)
j(140-200) = DLOE5 * PHLE(5)

Note that RALOE6 is differential (200-300 keV) and

j(200-300 keV) = Z(10) * PHLE(6)

Table 2 shows the various sensor energy ranges. The flux conversion for HiE and LoP is similar to that shown above:

$$j(E_i \leqslant E_e \leqslant E_{i+1}) = \text{DHIEi} * \text{PHHE(i)}$$

and

$$j(E_i \leqslant E_p \leqslant E_{i+1}) = \text{DLOPi} * \text{PHLP(i)}$$

The last channels of HiE and LoP are again differential:

$$j(1.4 \leqslant E_e \leqslant 2.0 \text{ MeV}) = Z(16) * \text{PHHE}(6)$$

$$j(480 \leqslant E_p \leqslant 560 \text{ kev}) = Z(26) * \text{PHLP}(10)$$

The conversion of HiP count rates to flux is more simple:

$$j_i = \text{RAH1Pi} * \text{PHHP(i)}$$

that is,

$$j_1 = Z(27) * \text{PHHP}(1)$$

$$\vdots$$

We suggest that HiP fluxes only up to channel HiP7 (1.7-2.1 MeV) be included in the CDB.

The suggested procedure for handling the CPA data would be to produce all the differential fluxes described above and then to average all quantities for 1-minute periods. Parameters Z(2) through Z(4), all differential fluxes (29 channels), and parameters Z(43) through Z(49) should be averaged over each minute UT.

The following annotated sections of a simple flux conversion program illustrate applicable flux conversion values for each sensor system (LoE, LoP, etc.) and how these are applied to differenced count rates.

Flux Conversion Factors

```
      DIMENSION PHLE(6,3),PHHE(6,3),PHLP(10,3),PHHP(16,3)
      DATA (PHLE=2480.2,1593.8,1157.4,771.6,534.2,365.5,
     A            3968.3,1973.6,1157.4,771.6,534.2,365.5,
      DATA (PHHE=73.88,50.69,34.55,23.46,16.08,10.85,
     1            73.88,50.69,34.55,23.46,16.08,10.85,
      DATA (PHLP=1750.0,1602.6,1602.6,1282.1,915.7,
     1            801.3,493.1,457.9,377.1,337.4,
     2            2136.7,9772.2,823.5,1282.1,915.7,
     3            801.3,493.1,457.9,377.1,337.4,
      DATA (PHHP=29.9,21.04,16.71,12.35,9.16,7.28,7.28,1.42,
     A            .661,.661,.312,.245,.0979,.0555,.0521,.0372,
     B            30.9,20.3,18.9,12.4,9.47,7.28,6.61,1.41,
     C            0.672,0.618,0.355,0.229,0.0977,0.0558,0.0521,0.0372,
      NBD=1
      IF(NBIRD.EQ.4H3151)NBD=2
      IF(NBIRD.EQ.4H7484)NBD=3
C                    LOAD TIME
      T(M)=Z(1)/1000.
C                    LOAD LO-E, HI-E, AND DIFFERENCES
      DO 30 J=1,6
      ELO(M,J)=Z(J+4)
      EHI(M,J)=Z(J+10)
      IF(J.GE.6)GO TO 10
      DELO(M,J)=Z(J+4)-Z(J+5)
      DEHI(M,J)=Z(J+10)-Z(J+11)
      GO TO 20
   10 DELO(M,J)=Z(J+4)
      DEHI(M,J)=Z(J+10)
C                    TAKE LOG BASE 10 OF THE VALUES
   20 IF(ELO(M,J).LE.0.0)ELO(M,J)=0.01
      IF(EHI(M,J).LE.0.0)EHI(M,J)=0.01
      IF(DELO(M,J).LE.0.0)DELO(M,J)=0.001
      IF(DEHI(M,J).LE.0.0)DEHI(M,J)=0.001
      ELO(M,J)=ALOG10(ELO(M,J))
      EHI(M,J)=ALOG10(EHI(M,J))
      DELO(M,J)=ALOG10(DELO(M,J)*PHLE(J,NBD))
      DEHI(M,J)=ALOG10(DEHI(M,J)*PHHE(J,NBD))
   30 CONTINUE
C                    LOAD LO-P-A,LO-P-B, AND DIFFERENCES FOR EACH
      K=0
      DO 60 J=1,10,2
      K=K+1
      ALOP(M,K)=Z(J+16)
      BLOP(M,K)=Z(J+17)
      DALOP(M,K)=Z(J+16)-Z(J+17)
      IF(J.EQ.9)GO TO 40
      DBLOP(M,K)=Z(J+17)-Z(J+18)
      GO TO 50
   40 DBLOP(M,K)=Z(J+17)
C                    TAKE LOG BASE 10 FO THE VALUES
   50 IF(ALOP(M,K).LE.0.0)ALOP(M,K)=0.01
      IF(BLOP(M,K).LE.0.0)BLOP(M,K)=0.01
      IF(DALOP(M,K).LE.0.0)DALOP(M,K)=0.0001
      IF(DBLOP(M,K).LE.0.0)DBLOP(M,K)=0.0001
      ALOP(M,K)=ALOG10(ALOP(M,K))
      BLOP(M,K)=ALOG10(BLOP(M,K))
      DALOP(M,K)=ALOG10(DALOP(M,K)*PHLP(J,NBD))
      DBLOP(M,K)=ALOG10(DBLOP(M,K)*PHLP(J+1,NBD))
   60 CONTINUE
C                    LOAD HI-P-A, AND HI-P-B
      DO 70 J=1,5
      HIPA(M,J)=Z(J+26)
      HIPB(M,J)=Z(J+32)
      IF(HIPA(M,J).LE.0.0)HIPA(M,J)=0.001
      IF(HIPB(M,J).LE.0.0)HIPB(M,J)=0.001
      HIPA(M,J)=ALOG10(HIPA(M,J)*PHHP(J,NBD))
      HIPB(M,J)=ALOG10(HIPB(M,J)*PHHP(J+6,NBD))
   70 CONTINUE
```

FLUX conversion FACTORS, LoE, 76-05
" " " " , 77-0
HiE, 76-059
HiE, 77-007
LoP, 76-059
LoP, 77-007
HiP, 76-059
HiP, 77-007

differenced count rates for electrons

for plotting

flux conversion factors applied

differenced count rates for protons

for plotting

flux conversion factors applied

HiP flux conversion

Table 1. CDAW-6 DATA SUBMISSION TO THE COORDINATED DATA BASE: TAPE FORMAT

Each record consists of 59 floating point (or integer, as noted) words. They are:

Word	mnemonic	Meaning
Z(1)	TIMFF	Time of first frame; ∿10-s sample start in msec UT
(2)	HH	Normalized local magnetic field H-comp
(3)	VV	Normalized local magnetic field V-comp
(4)	DD	Normalized local magnetic field D-comp
(5-10)	RALOE1-6	LoE (30-300 keV) electron spin-av. count/8ms
(11-16)	RAHIE1-6	HiE (200-2000 keV) electron spin-av. counts/8ms
(17-26)	RALOP1-10	LoP (145-560 keV) proton spin-av. counts/8ms
(27-42)	RAHIP1-16	HiP (400 keV-150 MeV) proton spin-av. counts/8ms
(43)	THETAC	Θ_B; meridional tilt of local mag. field line
(44)	PHIC	ϕ_B; azimuthal tilt of local mag. field line
(45)	C2	2nd. order (>30 keV) electron anisotropy amplit.
(46)	C4	4th order (>30 keV) electron anisotropy amplitude
(47)	PAEW	East-west proton (>145 keV) gradient anisotropy
(48)	PANS	North-south proton (>145 keV) gradient anisotropy
Z(49)	TLOCAL	S/C geographic local time
IZ(50)	KDATE	Date (YY/MM/DD): character data
IZ(51)	NBIRD	S/C I.D. (1976-059 = 2112; 1977-007 = 3151): char. Data
IZ(52)	IPSFILE	DATA FILE (Irrelevant to CDB)
Z(53)	ERAD	Radial distance (geocentric) of S/C
(54)	GLONG	Geographic Longitude of S/C
(55)	GLAT	Geographic Latitude of S/C
(56)	EPMODE	Instrument mode (Irrelevant to CSB)
(57)	EPA	Instrument mode (Irrelevant to CDB)
Z(58)	EPB	Instrument mode (Irrelevant to CDB)
IZ(59)	LEMODE	Instrument mode (Irrelevant to CDB)

Table 2. CPA Differential Energy Channels for Spacecraft 1976-059 and for Spacecraft 1977-007

Channel Designation	Energy Range, keV
LoE	
1	$30 \leqslant E_e < 45$
2	$45 \leqslant E_e < 65$
3	$65 \leqslant E_e < 95$
4	$95 \leqslant E_e < 140$
5	$140 \leqslant E_e < 200$
6	$200 \leqslant E_e < 300$
HiE	
1	$200 \leqslant E_e < 300$
2	$300 \leqslant E_e < 430$
3	$430 \leqslant E_e < 630$
4	$630 \leqslant E_e < 930$
5	$930 \leqslant E_e < 1360$
6	$1360 \leqslant E_e < 2000$
LoP	
1	$145 \leqslant E_p < 160$
2	$160 \leqslant E_p < 175$
3	$175 \leqslant E_p < 190$
4	$190 \leqslant E_p < 215$
5	$215 \leqslant E_p < 245$
6	$245 \leqslant E_p < 290$
7	$290 \leqslant E_p < 340$
8	$340 \leqslant E_p < 400$
9	$400 \leqslant E_p < 480$
10	$480 \leqslant E_p < 560$

Table 2 CPA Differential Energy Channels for Spacecraft 1976-059 and for Spacecraft 1977-007

(con't)

Channel Designation	Proton Energy Range, MeV
HiP	
1	0.4-0.5
2	0.5-0.6
3	0.6-0.8
4	0.8-1.0
5	1.0-1.3
6	1.3-1.7
7	1.7-2.1
8	2.7-4.7
9	4.7-9.0
10	9.0-13
11	13-22
12	22-34
13	34-50
14	50-78
15	78-108
16	108-150

LOS ALAMOS COORDINATED DATA BASE SUBMISSION

MAJOR DATA	GAPS	CDAW 6
S/C	UT (Seconds)	DATE
1976 - 059	64400 - 66700	790331
	69300 - 71500 spotty	790331
	1900 - 2250	790401
	25100 - 25400	790322
	36600 - 36900	790322
	51200 - 60100	790322
1977 - 059	64400 - 66700	790331
	1900 - 2250	790401
	25100 - 25400	790322
	36700 - 37750	790322
	51200 - 60100	790322
	61200 - 62000 spotty	790322

FILE	RECORDS	SPACECRAFT	DATA DATE
1	2578	1976-059	79/03/31
2	1389	1976-059	79/04/01
3	3391	1977-007	79/03/31
4	1723	1977-007	79/04/01
5	2642	1976-059	79/03/22
6	3199	1977-007	79/03/22

NASA
National Aeronautics and Space Administration

DATA ANALYSIS WORKSHOP CENTER

CDB TAPE DOCUMENTATION FORM

SECTION I. DATA SET DESCRIPTION (please print)

1. Data Set Name CHARGED-PARTICLE ANALYZER (CPA)		
2. Scientific Contact DANIEL N. BAKER	3. Telephone No. or Telex No. 505-667-3101 (FTS 843-3101)	
4. Address SPACE SCIENCES OFFICE/MS 436/ LOS ALAMOS NAT. LAB.		
5. City LOS ALAMOS	6. State N M	7. ZIP Code or Country 87545
8. Programmer Contact MARILYN F. HALBIG (505-667-2508)		

SECTION II. TAPE DESCRIPTION

1. No. of Tapes Submitted ONE (1)	2. Tape Density ☐ 800 bpi ☒ 1600 bpi
3. No. of Files (per tape) 6	
4. No. of End of File Marks 5 single ; 1 double	5. No. of Tracks ☐ 7 ☒ 9
6. Recording Parity ODD	7. Make and Model of Computer Used to Generate Tape CDC 7600
8. Are tapes written in binary, coded or both? (e.g. BCD) Binary	
9. What floating point representation is used? (e.g. CDC 64 bit) CDC 60 BIT	
10. What integer representation is used? CDC Integer (and character data as noted) ↑ 6-bit ASCII	
11. No. of Physical Records (per file) As Listed in Attachment	
12. Are original tapes to be returned? ☐ Yes ☒ No	
13. Start and Stop Time of Each File (If more space is needed, please attach.) As Listed in Attachment	

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

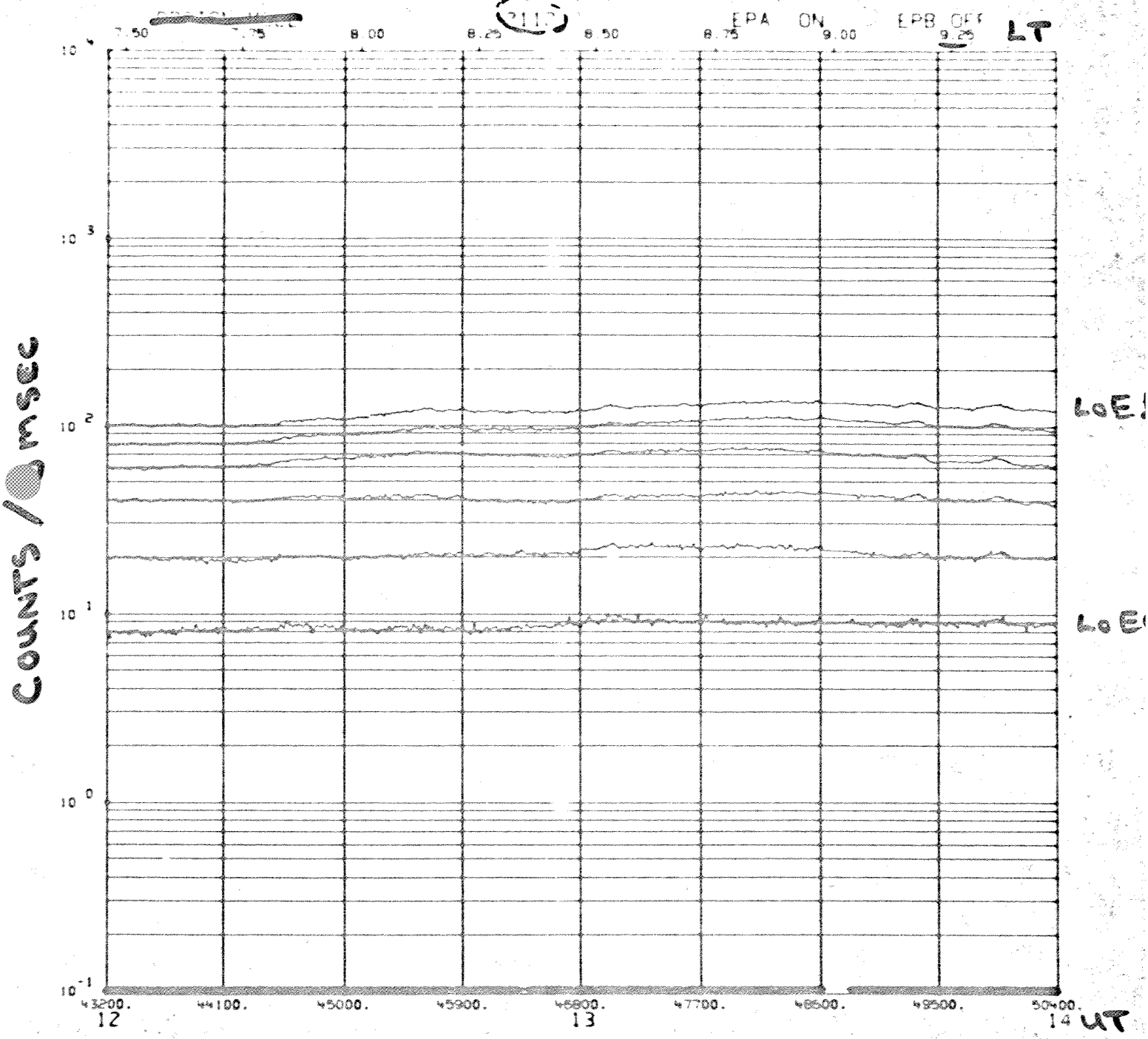
SECTION IV. TO BE FILLED IN BY DAWOC ONLY

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

601-79 (10/80)

Raw Data

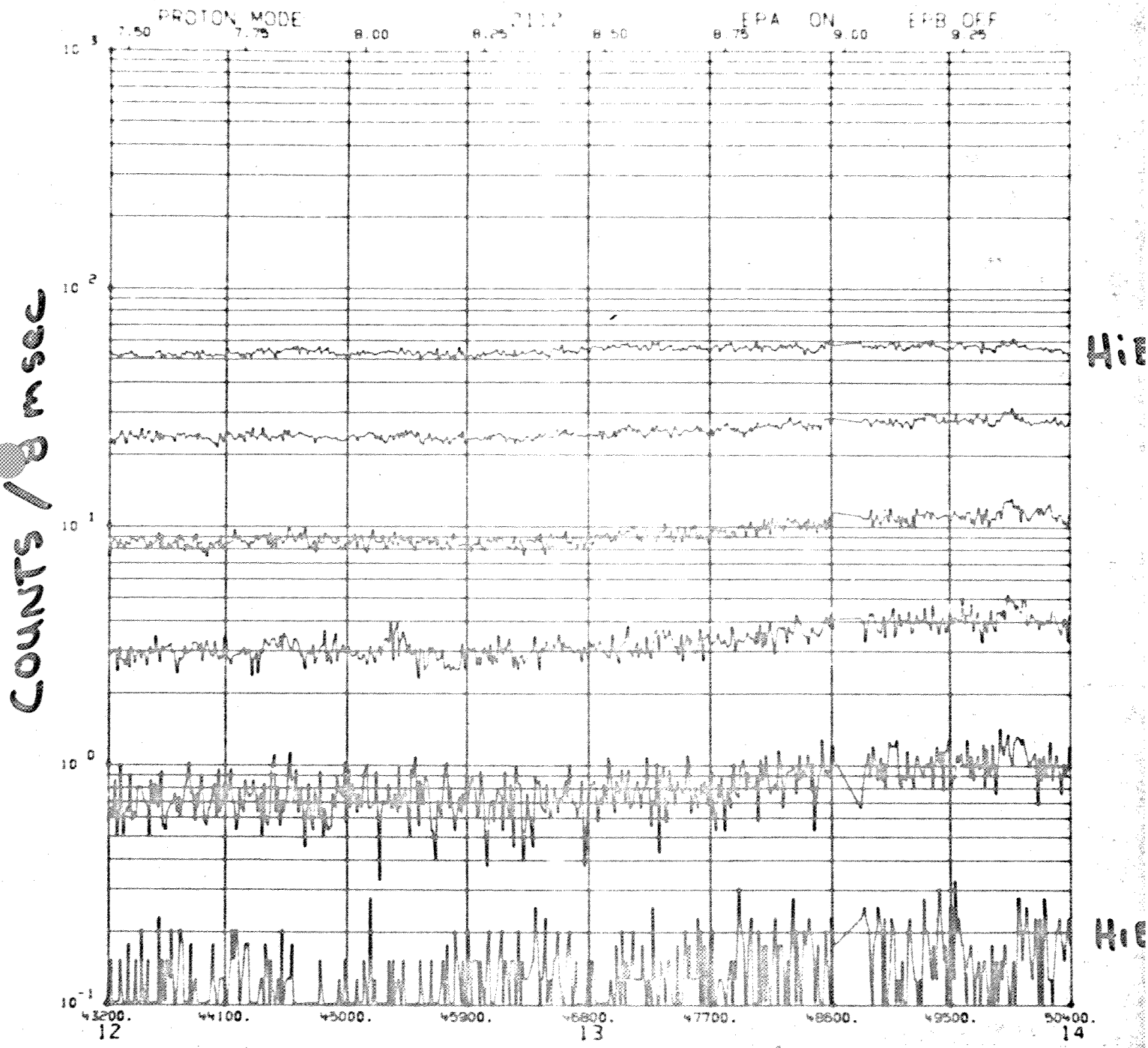
File 1
S/C 1976-059
1200-1400 UT
79/03/31



R703525

79/03/31

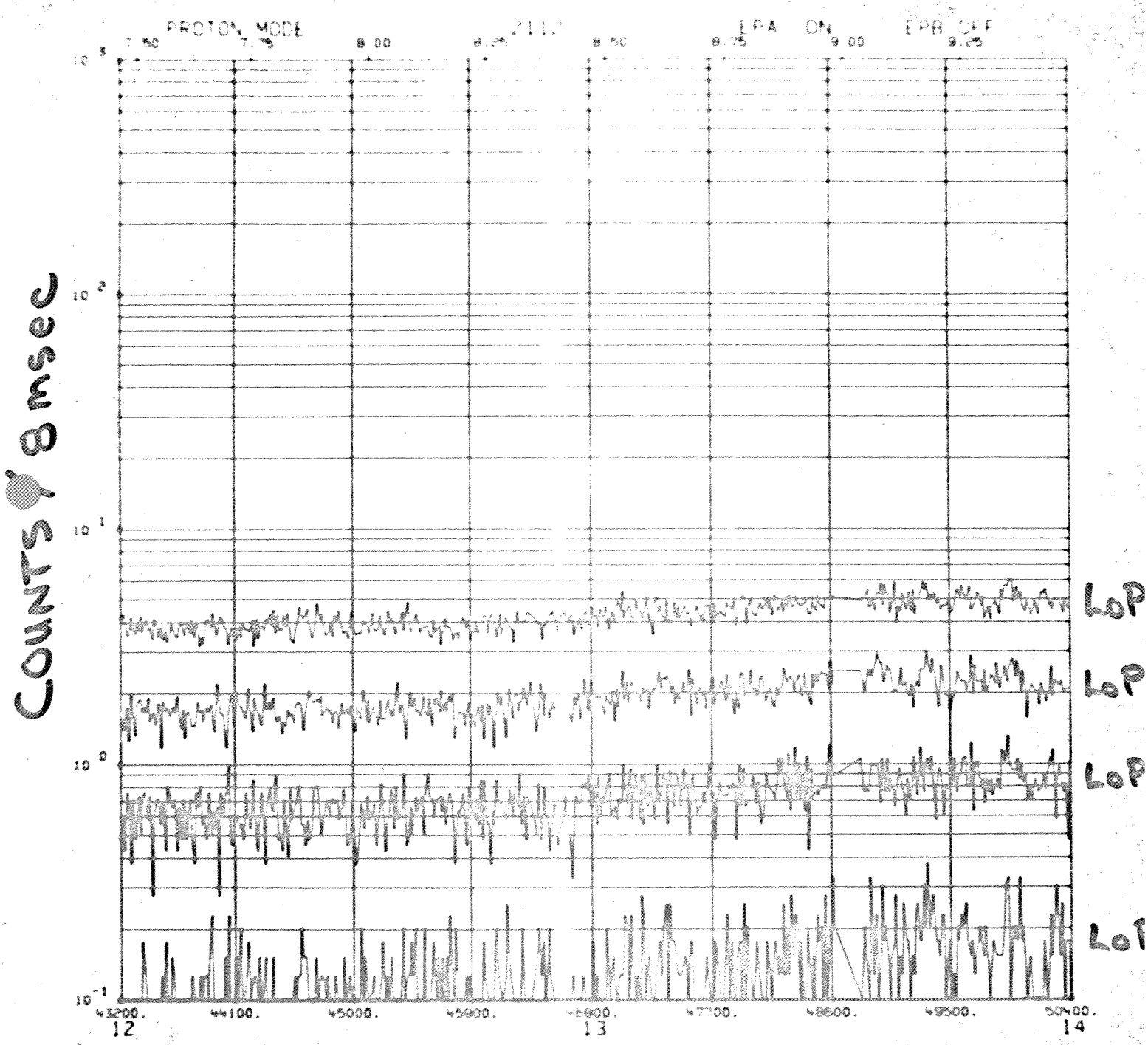
LO-E
R= 6.6 LAT= -1.9 LONG= -68.1



R703525

79/03/31

PROTON MODE 2112 EPA ON EPB OFF



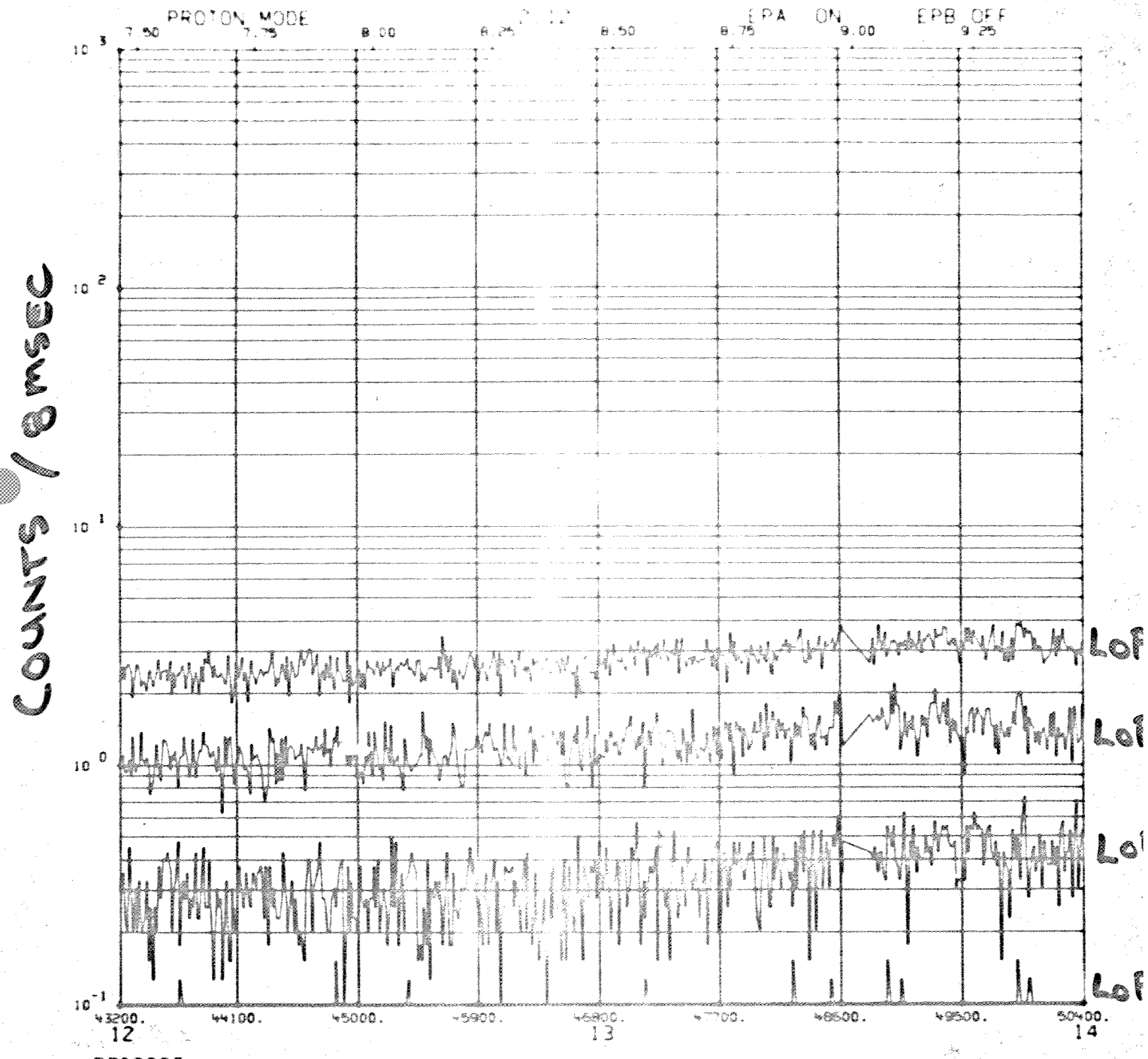
R703525

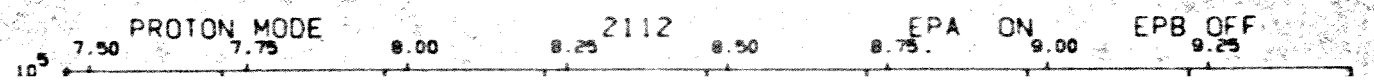
79/03/31

LO-P-A

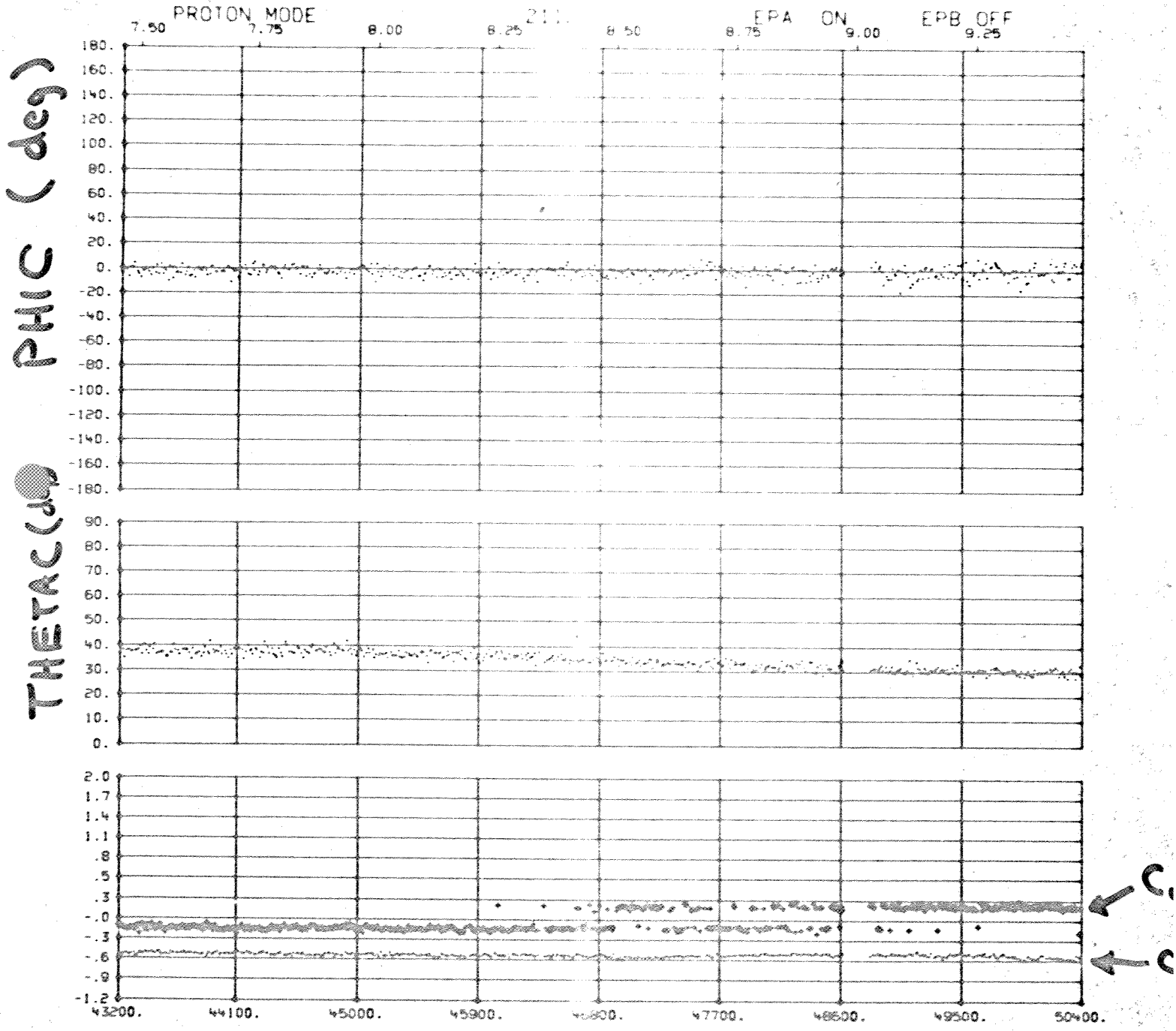
R= 6.6 LAT= -1.9 LONG= -68.1

PROTON MODE 2112 EPA ON EPB OFF
7.50 7.75 8.00 8.25 8.50 8.75 9.00 9.25
10^3


PROTON MODE
EPA ON
EPB OFF
7.50
7.75
8.00
8.25
8.50
8.75
9.00
9.25
COUNTS / 8MSEC
43200.
44100.
45000.
45900.
46800.
47700.
48600.
49500.
50400.
12
13
14
R703525
79/03/31
LO-P-B
R= 6.6 LAT= -1.9 LONG= -68.1


PROTON MODE
2112
EPA ON
EPB OFF
7.50
7.75
8.00
8.25
8.50
8.75
9.00
9.25

79/03/31

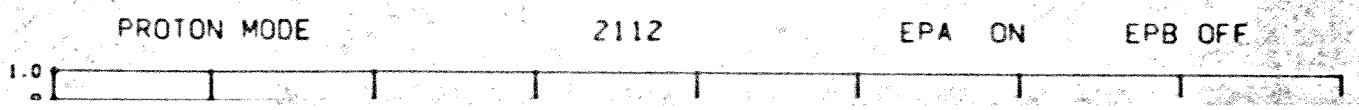


R703525

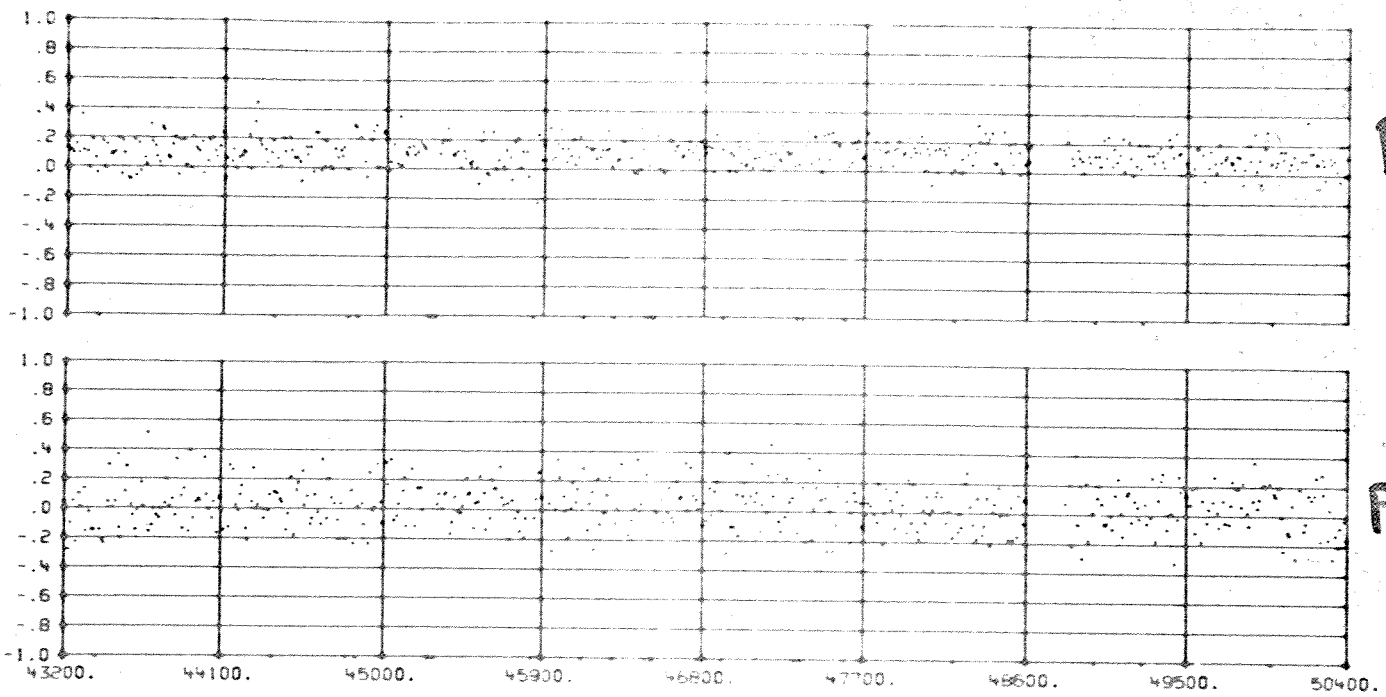
79/03/31

PHI, THETAC, C2, C4

R= 6.6 LAT= -1.9 LONG= -68.1



PROTON MODE 2112 EPA ON EPB OFF



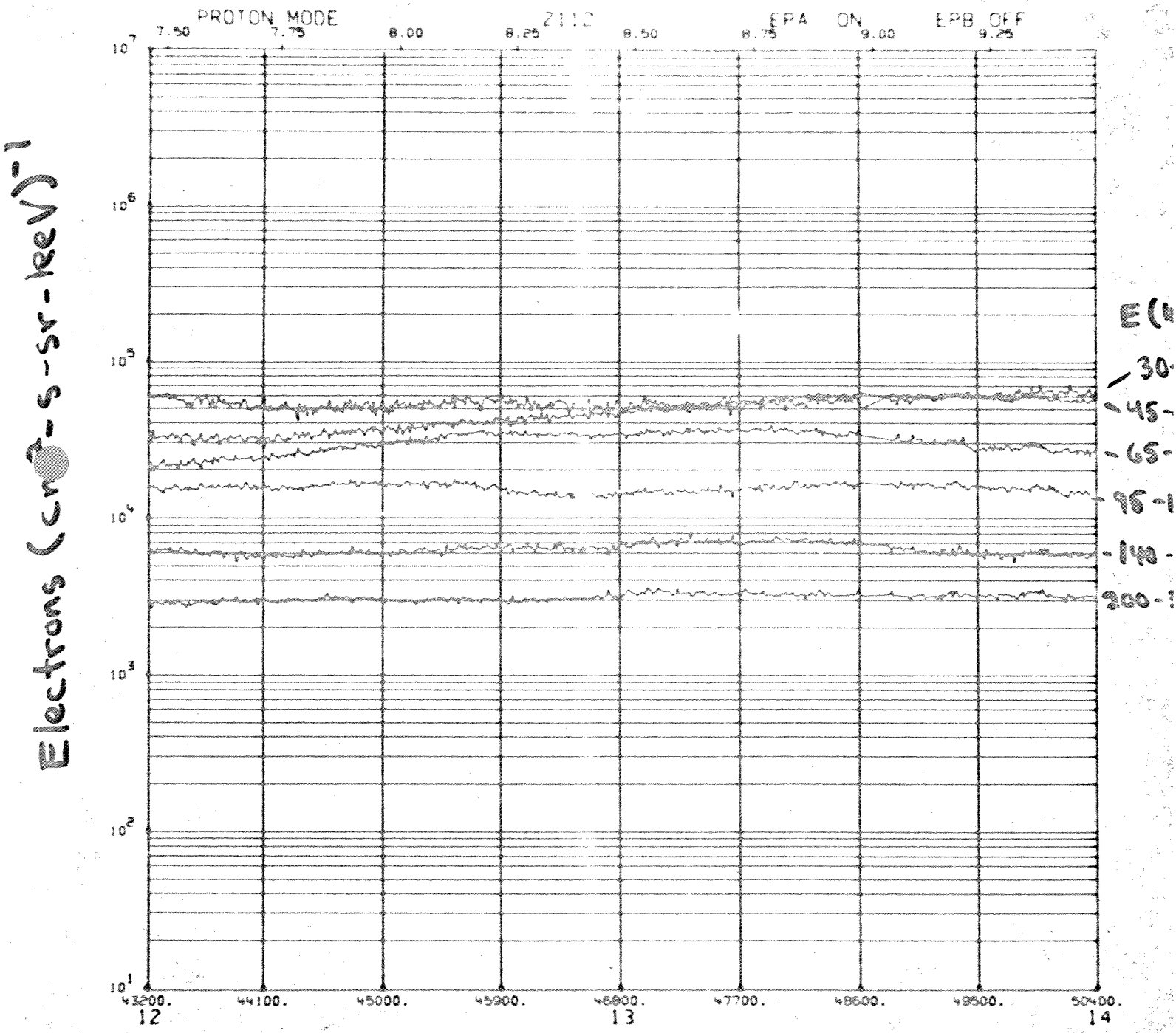
R703525

79/03/31

E-W N S ANISOTROPY
R= 8.6 LAT= -1.9 LONG= -68.1

Converted FLUXES

File 1
S/C 1976-059
1200-1400 UT
79/03/31

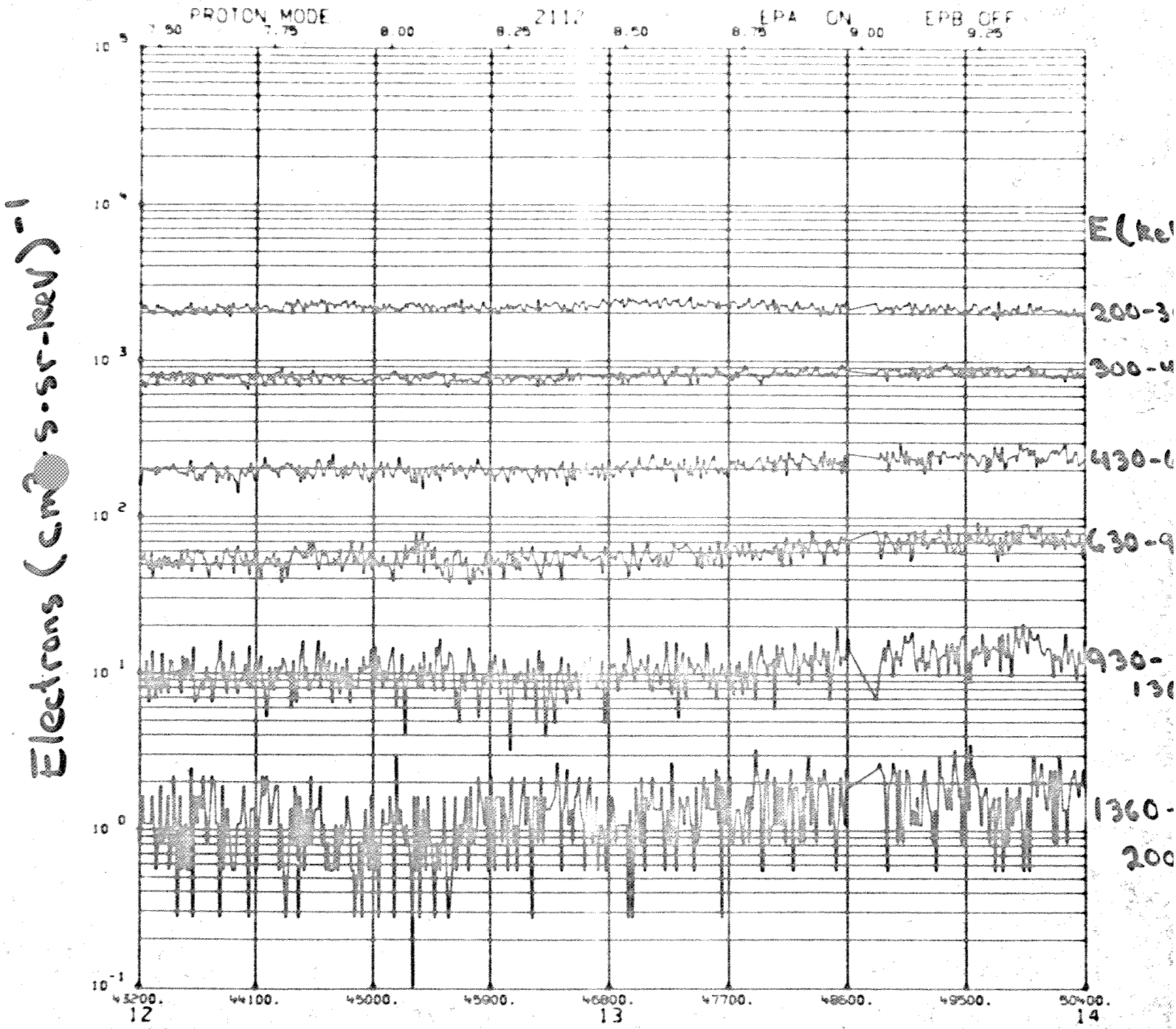


R703525

79/03/31

LO-E DIFF
R= 6.6 LAT= -1.9 LONG= -68.1

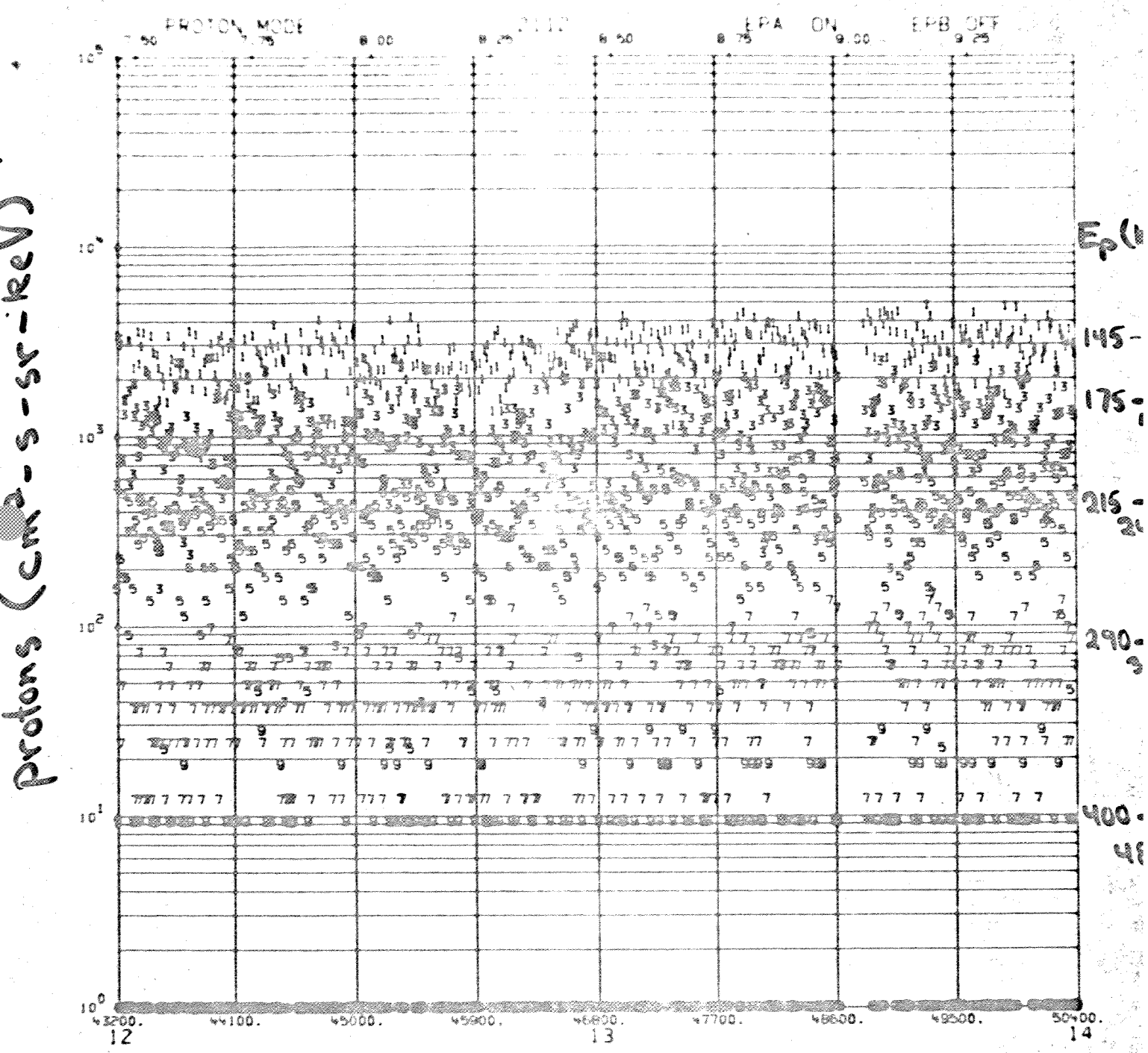
PROTON MODE 2112 EPA ON EPB OFF
7.50 7.75 8.00 8.25 8.50 8.75 9.00 9.25



R703525

79/03/31

PROTON MODE 2112 EPA ON EPB OFF
7.50 7.75 8.00 8.25 8.50 8.75 9.00 9.25

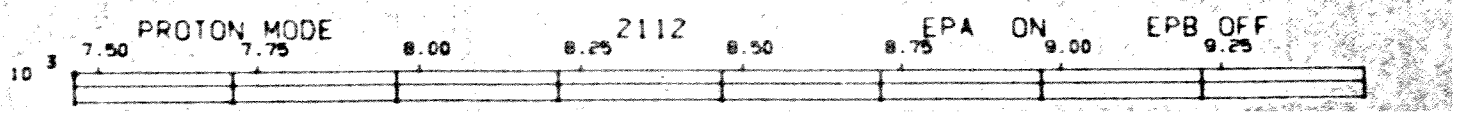


R703525

79/03/31

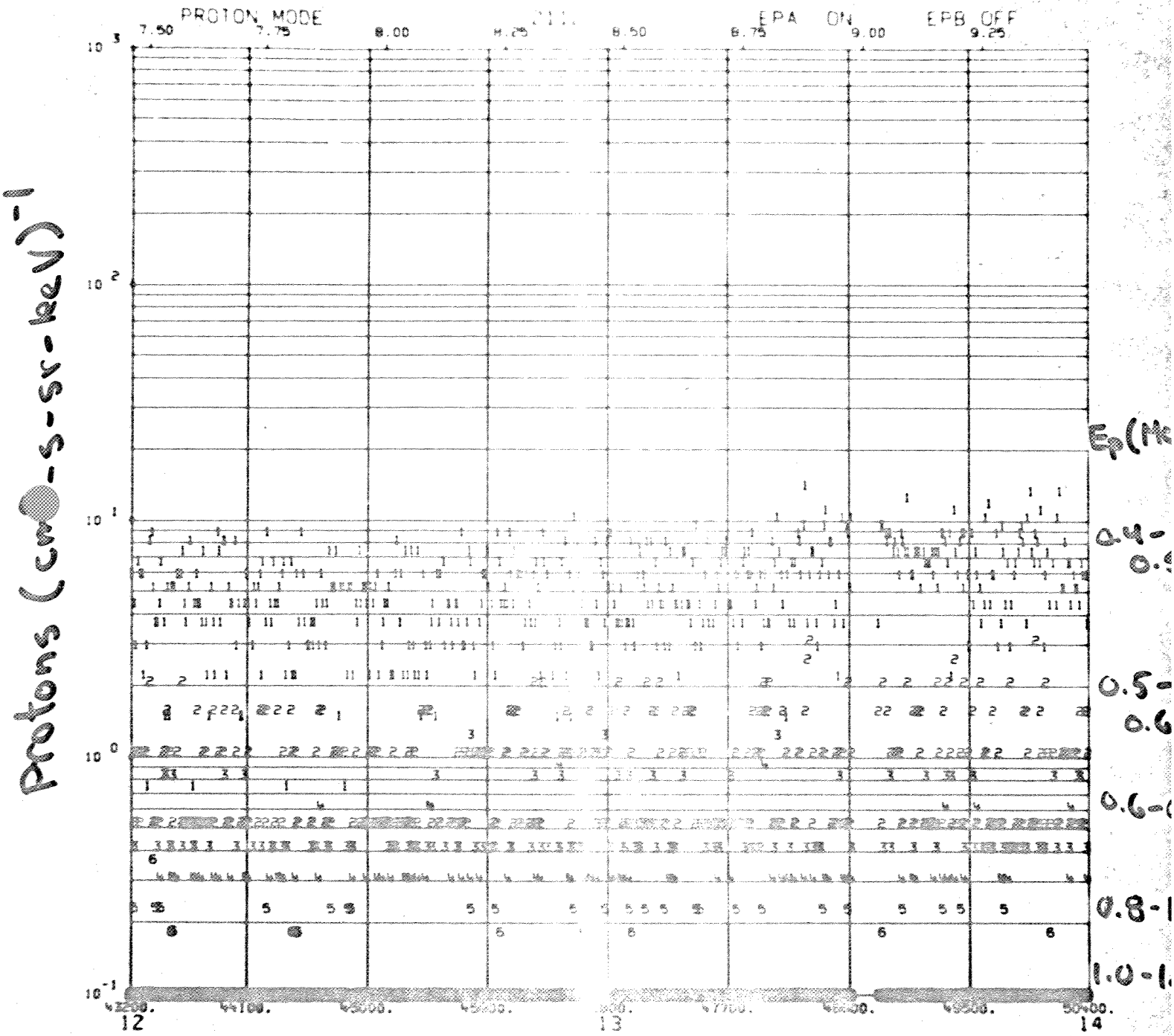
LO-P-A DIFF

-1.9 LONG= -68.1



R703525

79/03/31

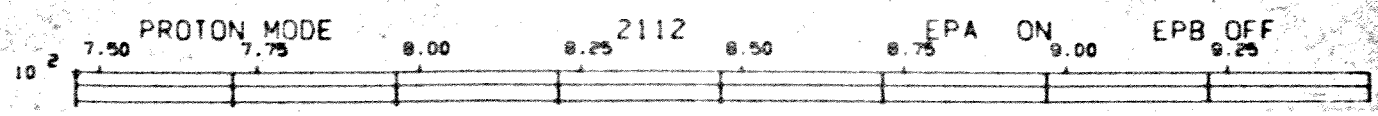


R703525

79/03/31

HI-P-A

R= 6.6 LAT= -1.9 LONG= -68.1



R703525

79/03/31

LO-P-B

R= 6.6 LAT= 1.9 LONG= 68.1

PROTON MODE 2111 EPA ON EPB OFF

7.50 7.75 8.00 8.25 8.50 8.75 9.00 9.25

Protons (cm² s-sr-keV)⁻¹

10^5 10^4 10^3 10^2 10^1 10^0

Ep(ke

160-17

190-2

245-29

340-40

480-560

43200. 44100. 45000. 45900. 46800. 47700. 48600. 49500. 50400.

12 13 14

R703525

79/03/31

LO-P-B DIFF

R= 6.6 LAT= -1.9 LONG= -68.1

PROTON MODE 2112 EPA ON EPB OFF

7.50 7.75 8.00 8.25 8.50 8.75 9.00 9.25

10^3

INFORMATION SHEET FOR INCOMING DATA

79-053A-01A

NSSDC ID: 77-007A-01C

DATE DATA RECEIVED: 07/09/84

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: 1976-059A, 1977-007A

EXPERIMENT NAME:

DATA SET FULL NAME: ELECTRON + PROTON RAW COUNT RATE

CONTACT: ACQUISITION SCIENTIST: EJS

FORM THAT WILL BE ANNOUNCED IN AIM/NSDF: DD

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

ACCESSION UNIT NUMBERS: D 63544 C 24067

REMARKS:

CDAW

DATA RECEIPT NOTIFICATION SENT? ☐

Paul Schneider

DATA TECHNICIAN

601-32 (6/76)

UNIT RECORD FILE

CDAW DATA SET ENTRY

Date 7/2/84

Date Received 6/22/84 CDB 7 Sent By Sharon Trujillo (Programmer for D. Baker)

Material Received 1 mag tape; 1-p. cover letter; 5-pp printout

* NSSDC ID 1977-007 1976-059 ___ New X Additional ___ Replacement

NSSDC Data Set Name

CDAW ID S07B & S59B X New ___ Additional ___ Replacement

CDAW Data Set Name Energetic Particle Detector

Time Coverage

Comments: CDAW 6 documentation attached for 1976-059A-01C & 1977-007A-01C

Tapes to be Returned to:

DD Number X Number

Initiated by Ellen Stenner

Additional Information Supplied by HKH

* I held a conversation for S. Trujillo to try to determine the content of the data. HKH followed up with R. Zwickl in D. Baker's absence on 6/28. What is contained here is the best guess.

Los Alamos
Los Alamos National Laboratory
Los Alamos, New Mexico 87545

DATE: 15 June 1984
IN REPLY REFER TO: ESS-8:84-805
MAIL STOP: D438
TELEPHONE: 505/667-3101

Dr. James I. Vette
Code 601
National Space Science Data Center
NASA/Goddard Space Flight Center
Greenbelt, MD 20771

SUBJECT: CDAW-7

Dear Dr. Vette:

Enclosed are the data requested on a 9-track, 1600 BPI, 60-Bit word binary tape written on a CDC 7600 machine.

We have included a copy of a read routine and sample output.

Sincerely,

Sharon Trujillo

Sharon Trujillo

/st

Enc. a/s

Cy: CRM-4 (2)

An Equal Opportunity Employer/Operated by University of California

```
79/04/24   3151 R703639   36059839.   1.13
 ERAD-GLONG-GLAT    6.63-133.37    .89 EPMODE-A-B-LEMODE PROTON  ON OFF NORMAL
 RALOE  179.4 153.0  99.0  56.5  24.2   9.8
 RAHIE  144.8  84.4  45.1  20.4   6.7   1.3
 RALOP    9.2   5.2   5.3   2.4   1.5    .7
           .2    .1   0.0    .1
 RAHIP    1.1    .5    .3    .1    .1    .0
           .0    .1   0.0   0.0   0.0   0.0
          0.0   0.0   0.0
 THETAC- PHIC -CC2-CC4-PAEW-PANS
   40.2   -5.2  -.2  -.2 -2.0 -2.0
79/04/24   3151 R703639   36070079.   1.13
 ERAD-GLONG-GLAT    6.63-133.37    .88 EPMODE-A-B-LEMODE PROTON  ON OFF NORMAL
 RALOE  178.4 153.4  98.7  57.1  23.9   9.5
 RAHIE  141.0  85.4  44.2  19.7   6.6   1.2
 RALOP    8.5   6.0   5.3   3.0   1.7    .4
           .5    .2    .1   0.0
 RAHIP    1.2    .5    .3    .2    .2    .1
          0.0   0.0   0.0   0.0    .0   0.0
          0.0    .0   0.0
 THETAC- PHIC -CC2-CC4-PAEW-PANS
   42.4   -1.9  -.2  -.2    .0    .1
79/04/24   3151 R703639   36080319.   1.13
 ERAD-GLONG-GLAT    6.63-133.37    .88 EPMODE-A-B-LEMODE PROTON  ON OFF NORMAL
 RALOE  175.3 154.0  97.6  56.4  25.0   9.9
 RAHIE  142.1  83.8  45.6  19.4   7.1   1.3
 RALOP    9.2   6.3   5.4   2.8   1.6    .7
           .5    .1    .0    .0
 RAHIP     .8    .3    .5    .1    .1   0.0
          0.0    .1   0.0   0.0   0.0   0.0
          0.0   0.0   0.0
 THETAC- PHIC -CC2-CC4-PAEW-PANS
   38.6    -.7  -.2  -.2    .1   -.1
79/04/24   3151 R703639   36090559.   1.13
 ERAD-GLONG-GLAT    6.63-133.37    .88 EPMODE-A-B-LEMODE PROTON  ON OFF NORMAL
 RALOE  179.6 151.1  98.4  57.2  24.5   9.7
 RAHIE  139.7  83.7  43.3  20.1   7.3   1.4
 RALOP    9.0   4.8   4.8   3.0   1.6    .7
           .2    .1    .0   0.0
 RAHIP    1.1    .3    .4    .1    .1    .1
           .1   0.0   0.0   0.0   0.0   0.0
          0.0   0.0   0.0
 THETAC- PHIC -CC2-CC4-PAEW-PANS
   35.4    8.8  -.2  -.2   .1    .0
79/04/24   3151 R703639   36100798.   1.14
 ERAD-GLONG-GLAT    6.63-133.37    .88 EPMODE-A-B-LEMODE PROTON  ON OFF NORMAL
 RALOE  179.7 151.5  98.1  57.6  24.0   9.9
 RAHIE  139.1  82.7  43.6  19.8   6.6   1.4
 RALOP    9.4   5.5   4.8   2.4   1.7    .7
           .3    .1    .1   0.0
 RAHIP     .9    .6    .3    .1    .1    .1
          0.0    .1   0.0   0.0   0.0   0.0
          0.0   0.0    .0
 THETAC- PHIC -CC2-CC4-PAEW-PANS
   39.5   -4.2  -.2  -.2    .1   -.1
79/04/24   3151 R703639   36111038.   1.14
 ERAD-GLONG-GLAT    6.63-133.37    .86 EPMODE-A-B-LEMODE PROTON  ON OFF NORMAL
 RALOE  177.2 150.2  97.1  56.7  24.5   9.7
 RAHIE  140.6  81.4  44.3  20.1   6.6   1.3
 RALOP    8.6   5.4   4.9   2.6   1.8    .9
           .3    .1    .1   0.0
 RAHIP     .8    .6    .4    .1    .1    .1
           .1    .1    .0   0.0   0.0   0.0
          0.0   0.0   0.0
```

```
80/05/11   2112  P03787   15667584.  23.70
 ERAD-GLONG-GLAT     6.63 -69.78   1.52 EPMODE-A-B-LEMODE PROTON  ON OFF NORMAL
 RALOE   46.4  37.4  28.0  18.8   9.6   3.9
 RAHIE   26.4  11.6   4.3   1.1    .2    .1
 RALOP    1.6    .9    .5    .4    .0    .0
           .1   0.0   0.0   0.0
 RAHIP    0.0   0.0   0.0    .0   0.0   0.0
          0.0   0.0   0.0   0.0   0.0   0.0
          0.0   0.0   0.0
 THETAC- PHIC -CC2-CC4-PAEW-PANS
   53.0   -1.6    .8  -.7 -2.0 -2.0
80/05/11   7484  P03787   15675580.  19.41
 ERAD-GLONG-GLAT     6.60-134.18  -1.07 EPMODE-A-B-LEMODE PROTON  ON OFF   FAST
 RALOE   48.3   0.0   0.0   0.0   0.0   0.0
 RAHIE   63.2  28.9  11.3   3.6   1.0    .2
 RALOP   21.2  12.7   8.8   3.2   1.8    .8
           .4    .1    .1   0.0
 RAHIP     .1    .1   0.0   0.0   0.0   0.0
          0.0   0.0   0.0   0.0   0.0   0.0
          0.0   0.0   0.0
 THETAC- PHIC -CC2-CC4-PAEW-PANS
   21.3    7.1    .4  -.6 -2.0 -2.0
80/05/11   2112  P03787   15677824.  23.70
 ERAD-GLONG-GLAT     6.63 -69.78   1.52 EPMODE-A-B-LEMODE PROTON  ON OFF NORMAL
 RALOE   47.3  37.9  27.3  18.4   9.8   3.7
 RAHIE   26.4  10.5   3.7   1.2    .5    .0
 RALOP    1.5    .9    .6    .4    .2    .1
           .1    .1   0.0   0.0
 RAHIP     .1   0.0   0.0   0.0   0.0   0.0
          0.0   0.0   0.0   0.0   0.0   0.0
          0.0   0.0   0.0
 THETAC- PHIC -CC2-CC4-PAEW-PANS
   57.9    -.3    .8  -.8    .3    .2
80/05/11   7484  P03787   15685820.  19.41
 ERAD-GLONG-GLAT     6.60-134.18  -1.07 EPMODE-A-B-LEMODE PROTON  ON OFF   FAST
 RALOE   48.6   0.0   0.0   0.0   0.0   0.0
 RAHIE   64.1  28.1  11.8   4.3   1.2    .1
 RALOP   19.9  11.4   9.7   3.8   1.7    .8
           .3    .1    .0   0.0
 RAHIP     .1   0.0   0.0   0.0   0.0    .0
           .0   0.0   0.0   0.0   0.0   0.0
          0.0   0.0   0.0
 THETAC- PHIC -CC2-CC4-PAEW-PANS
   17.0    4.2    .4  -.6    .1    .0
80/05/11   7484  P03787   15716540.  19.42
 ERAD-GLONG-GLAT     6.60-134.18  -1.07 EPMODE-A-B-LEMODE PROTON  ON OFF   FAST
 RALOE   48.2   0.0   0.0   0.0   0.0   0.0
 RAHIE   63.2  28.7  11.5   3.3   1.2    .2
 RALOP   19.2  11.6   8.4   3.6   1.8    .9
           .3    .1   0.0   0.0
 RAHIP     .2    .1   0.0   0.0   0.0   0.0
          0.0   0.0   0.0   0.0   0.0   0.0
          0.0   0.0   0.0
 THETAC- PHIC -CC2-CC4-PAEW-PANS
   18.2  -13.1    .4  -.6 -2.0 -2.0
80/05/11   2112  P03787   15718783.  23.71
 ERAD-GLONG-GLAT     6.63 -69.78   1.52 EPMODE-A-B-LEMODE PROTON  ON OFF NORMAL
 RALOE   46.3  37.0  27.0  18.4   9.6   3.9
 RAHIE   27.3  12.1   3.8   1.6    .4   0.0
 RALOP    1.8    .9    .7    .3    .2    .1
          0.0   0.0   0.0   0.0
 RAHIP    0.0   0.0    .0   0.0   0.0   0.0
          0.0   0.0   0.0   0.0   0.0   0.0
          0.0   0.0   0.0
```

```
      PROGRAM T4READ(INPUT,OUTPUT,TAPE4)
      DIMENSION Z(59),IZ(59)
      EQUIVALENCE (Z,IZ)
      IPRINT=0
   10 READ(4)(Z(I),I=1,59)
      IF(EOF(4))20,30
   20 IEOF=IEOF+1
      IF(IEOF.LT.2)GO TO 10
      GO TO 999
   30 IEOF=0
      IPRINT=IPRINT+1
      PRINT 900,(IZ(I),I=50,52),Z(1),Z(49),(Z(I),I=53,58),IZ(59)
  900 FORMAT(A10,1X,A4,1X,A8,1X,F10.0,F7.2,/,
     +       * ERAD-GLONG-GLAT *3F7.2,* EPMODE-A-B-LEMODE *,
     +       A6,2(1X,A3),1X,A6)
      PRINT 901,(Z(I),I=5,10)
  901 FORMAT(* RALOE *6(1X,F5.1))
      PRINT 902,(Z(I),I=11,16)
  902 FORMAT(* RAHIE *6(1X,F5.1))
      PRINT 903,(Z(I),I=17,26)
  903 FORMAT(* RALOP *,6(1X,F5.1),/,7X,4(1X,F5.1))
      PRINT 904,(Z(I),I=27,41)
  904 FORMAT(* RAHIP *,6(1X,F5.1),/,7X,6(1X,F5.1),/,7X,4(1X,F5.1))
      PRINT 905,(Z(I),I=43,48)
  905 FORMAT(* THETAC- PHIC -CC2-CC4-PAEW-PANS *,
     +       /,2(1X,F6.1),4(1X,F4.1))
      IF(IPRINT.LT.10)GO TO 10
  999 STOP
      END
```

6/20/84

6/21 12:47 no answer

Ron Zwickl
(505) 667-3897
FTS 843-3897

Will be back from travel on Monday.

D. Baker's data

Could be like CDAW 6 ISEE 3 Solar Wind Plasmas (I3Ø1) Zwickl

or

1977-007 } Energetic Particle Detector SØ7B , D. Baker
1977-059 } S59B

CDAW 7

6/28/84
HKH

Zwickl says that this is supposed to be from the "Energetic Particle Exp. on synchronous S/C 3151", but he (Zwickl) doesn't recognize the number.

It should be "count rates" and is presumed to be identical in format to what Baker sent to CDAW 6, and that previous documentation should apply. Thus it should be compared with doc. for 1977-007 } S07B
1977-059 } S59B
6

Please obtain that doc. + send me a copy, together with a copy of the 3 data sheets sent with this tape.

Ken

CDAW DATA SET ENTRY

Date 7/2/84

Date Received 6/22/84 CDB 7 Sent By Sharon Trujillo (Programmer for D. Baker)

Material Received 1 mag tape; 1-p. cover letter; 5-pp printout
unknown 3rd s/c also present

* NSSDC ID 1977-007 1976-059 ___ New X Additional ___ Replacement

79-053
From Marilyn Itai
7/20/84

NSSDC Data Set Name ? only for 3rd s/c

CDAW ID S07B & S59B X New ___ Additional ___ Replacement

CDAW Data Set Name Energetic Particle Detector

Time Coverage

Comments: CDAW 6 documentation attached
for 1976-059A-01C & 1977-007A-01C
1979-053A-01A — new s/c; assumed -01A

Tapes to be Returned to:

DD Number X Number

Initiated by Ellen Stenner

Additional Information Supplied by HKH

Dan Baker: FTS 843-3101

* I held a conversation for S. Trujillo to try to determine the content of the data. HKH followed up with R. Zwickl in D. Baker's absence on 6/28. What is contained here is the best guess.

```
      DIMENSION PHLE(6,3),PHHE(6,3),PHLP(10,3),PHHP(16,3)
      DATA (PHLE=2480.2,1593.8,1157.4,771.6,534.2,365.5,
     A        3969.3,1973.6,1157.4,771.6,534.2,365.5,

      DATA (PHHE=73.88,50.69,34.55,23.46,16.08,10.85,
     1        73.88,50.69,34.55,23.46,16.08,10.85,

      DATA (PHLP=1750.0,1602.6,1602.6,1282.1,915.7,
     1        801.3,493.1,457.9,377.1,337.4,
     2        2136.7,9772.2,823.5,1282.1,915.7,
     3        801.3,493.1,457.9,377.1,337.4,
      DATA (PHHP=29.9,21.04,16.71,12.35,9.16,7.28,7.28,1.42,
     A        .661,.661,.312,.245,.0979,.0555,.0521,.0372,
     B        30.9,20.3,18.9,12.4,9.47,7.28,6.61,1.41,
     C        0.672,0.618,0.355,0.229,0.0977,0.0558,0.0521,0.0372,
      NBD=1
      IF(NBIRD.EQ.4H3151)NBD=2
      IF(NBIRD.EQ.4H7484)NBD=3
                    LOAD TIME
      T(M)=Z(1)/1000.
                    LOAD LO-E, HI-E, AND DIFFERENCES

      DO 30 J=1,6
      ELO(M,J)=Z(J+4)
      EHI(M,J)=Z(J+10)
      IF(J.GE.6)GO TO 10
      DELO(M,J)=Z(J+4)-Z(J+5)
      DEHI(M,J)=Z(J+10)-Z(J+11)
      GO TO 20
   10 DELO(M,J)=Z(J+4)
      DEHI(M,J)=Z(J+10)
                    TAKE LOG BASE 10 OF THE VALUES
   20 IF(ELO(M,J).LE.0.0)ELO(M,J)=0.01
      IF(EHI(M,J).LE.0.0)EHI(M,J)=0.01
      IF(DELO(M,J).LE.0.0)DELO(M,J)=0.001
      IF(DEHI(M,J).LE.0.0)DEHI(M,J)=0.001
      ELO(M,J)=ALOG10(ELO(M,J))
      EHI(M,J)=ALOG10(EHI(M,J))
      DELO(M,J)=ALOG10(DELO(M,J)*PHLE(J,NBD))
      DEHI(M,J)=ALOG10(DEHI(M,J)*PHHE(J,NBD))
   30 CONTINUE
                    LOAD LO-P-A,LO-P-B, AND DIFFERENCES FOR EACH

      K=0
      DO 60 J=1,10,2
      K=K+1
      ALOP(M,K)=Z(J+16)
      BLOP(M,K)=Z(J+17)
      DALOP(M,K)=Z(J+16)-Z(J+17)
      IF(J.EQ.9)GO TO 40
      DBLOP(M,K)=Z(J+17)-Z(J+18)
      GO TO 50
   40 DBLOP(M,K)=Z(J+17)
                    TAKE LOG BASE 10 FO THE VALUES
   50 IF(ALOP(M,K).LE.0.0)ALOP(M,K)=0.01
      IF(BLOP(M,K).LE.0.0)BLOP(M,K)=0.01
      IF(DALOP(M,K).LE.0.0)DALOP(M,K)=0.0001
      IF(DBLOP(M,K).LE.0.0)DBLOP(M,K)=0.0001
      ALOP(M,K)=ALOG10(ALOP(M,K))
      BLOP(M,K)=ALOG10(BLOP(M,K))
      DALOP(M,K)=ALOG10(DALOP(M,K)*PHLP(J,NBD))
      DBLOP(M,K)=ALOG10(DBLOP(M,K)*PHLP(J+1,NBD))
   60 CONTINUE
                    LOAD HI-P-A, AND HI-P-B

      DO 70 J=1,6
      HIPA(M,J)=Z(J+26)
      HIPB(M,J)=Z(J+32)
      IF(HIPA(M,J).LE.0.0)HIPA(M,J)=0.001
      IF(HIPB(M,J).LE.0.0)HIPB(M,J)=0.001
      HIPA(M,J)=ALOG10(HIPA(M,J)*PHHP(J,NBD))
      HIPB(M,J)=ALOG10(HIPB(M,J)*PHHP(J+6,NBD))
   70 CONTINUE
```

FLUX conversion FACTORS, LoE, 76-05
" " " " 77-0
new one 79-053

HiE, 76-059
HiE, 77-007
HiE same for 79-053

LoP, 76-059
LoP: 1140, 1390, 1030, 84
800, 580, 460, 46
340, 280
LoP, 77-007

HiP, 76-059
HiP, 77-007
30.6, 18.4, 17.2,
13.1, 9.2, 6.
6.9, ~~1.5, 0.~~
0.63, 0.21, 0.
0.13, 0.089, 0.
0.050
HiP 79-053

differenced count rates for electrons

for plotting

flux conversion factors applied

differenced count rates for protons

for plotting

flux conversion factors applied

HiP flux conversion

Table 1. CDAW-6 DATA SUBMISSION TO THE COORDINATED DATA BASE: TAPE FORMAT

Each record consists of 59 floating point (or integer, as noted) words. They are:

Word	mnemonic	Meaning
Z(1)	TIMFF	Time of first frame; ∿10-s sample start in msec UT
(2)	HH	Normalized local magnetic field H-comp
(3)	VV	Normalized local magnetic field V-comp
(4)	DD	Normalized local magnetic field D-comp
(5-10)	RALOE1-6	LoE (30-300 keV) electron spin-av. count/8ms
(11-16)	RAHIE1-6	HiE (200-2000 keV) electron spin-av. counts/8ms
(17-26)	RALOP1-10	LoP (145-560 keV) proton spin-av. counts/8ms
(27-42)	RAHIP1-16	HiP (400 keV-150 MeV) proton spin-av. counts/8ms
(43)	THETAC	Θ_B; meridional tilt of local mag. field line
(44)	PHIC	ϕ_B; azimuthal tilt of local mag. field line
(45)	C2	2nd. order (>30 keV) electron anisotropy amplit.
(46)	C4	4th order (>30 keV) electron anisotropy amplitude
(47)	PAEW	East-west proton (>145 keV) gradient anisotropy
(48)	PANS	North-south proton (>145 keV) gradient anisotropy
Z(49)	TLOCAL	S/C geographic local time
IZ(50)	KDATE	Date (YY/MM/DD): character data
IZ(51)	NBIRD	S/C I.D. (1976-059 = 2112; 1977-007 = 3151): char. Data 1979-053 = 7484
IZ(52)	IPSFILE	~~DATA FILE~~ (Irrelevant to CDB)
Z(53)	ERAD	Radial distance (geocentric) of S/C
(54)	GLONG	Geographic Longitude of S/C
(55)	GLAT	Geographic Latitude of S/C
(56)	EPMODE	Instrument mode (Irrelevant to CSB)
(57)	EPA	Instrument mode (Irrelevant to CDB)
Z(58)	EPB	Instrument mode (Irrelevant to CDB)
IZ(59)	LEMODE	Instrument mode (Irrelevant to CDB)

GOES 2 & 3

MAGNETOMETER DATA

77-048A-04B SPMS-00348

78-062A-04A SPMS-00178

These data sets have been restored. There was originally one 9-track, 1600 BPI tape written in ASCII. There is one restored tape. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tape was created on a 1000 computer and the restored tape was created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D number are as follows:

DR#	DS#	D#	FILES	TIME SPAN
DR005700	DS005700	D046905	1 - 6	03/22/79 - 04/01/79

REQ. AGENT	REQ NUMBER	ACQ. AGENT
LSM	V0144	DMS

77-048A-04B

78-062A-04A

MAGNETOMETER DATA

This data set consists of 1 tape(s). The tape(s) is 9 track, 1600 bpi, ascii with 6 file(s) of data. The time span and D and C numbers are as follows:

D#	C#	TIME SPAN	
D-46905	C-21960	Files 1 + 2	3/22/79
		3 + 4	3/31/79
		5 + 6	4/1/79

INFORMATION SHEET FOR INCOMING DATA

NSSDC ID: 78-094A-04A

DATE DATA RECEIVED: 12/10/81

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: GOES 2, GOES 3

EXPERIMENT NAME:

DATA SET FULL NAME: Magnetometer Data

CONTACT: ACQUISITION SCIENTIST: DMS

FORM THAT WILL BE ANNOUNCED IN AIM/NSDF: DD

THESE ARE: [X] A NEW DATA SET [ ] ADDITIONS [ ] REPLACEMENTS [ ] OTHER (EXPLAIN BELOW)

ACCESSION UNIT NUMBERS: DD 76105 C-21960

REMARKS: 1600 Ascii 9trk 6 files

Files 1+2 3/22/79
3+4 3/31
5 6 4/1

CDAW

DATA RECEIPT NOTIFICATION SENT? [ ]

DATA TECHNICIAN

601-32 (6/76)

ADP SERVICES (MACHINE SENSIBLE ONLY)

Date Dec. 8, 1981

NSSDC ID 77-048A-04
78-062A-04

CDAW DATA SET ENTRY

Date Rcvd : Dec 1 1981 CDB : 06

Data Sent By : J.N. Barfield

Material Rcvd : 1 9-track 1600-bpi ascii magnetic tape (6 f
+ 8 pp. documentation, verification data

Satellite/NSRF Name : GOES 2 & GOES 3

Data Set Name : Magnetometer Data

☒ New Data Set ☐ Additions ☐ Replacements

Comments

Time Coverage : 79/081/00/00/00 - 79/081/24/00/00 (for each s
79/090/00/00/00 - 79/091/24/00/00

Tapes To be Returned to :

Completed By : Ellen Teague

SOUTHWEST RESEARCH INSTITUTE

POST OFFICE DRAWER 28510 · 6220 CULEBRA ROAD · SAN ANTONIO, TEXAS 78284 · (512) 684-5111

25 November 1981

Dr. James I. Vette, Code 601
(CDB-6 Workshop)
NASA Goddard Space Flight Center
Greenbelt, MD 20771

Dear Jim:

Enclosed is a mag tape containing the GOES 2 and 3 magnetometer data for CDAW 6. The tape is 9-track, 1600 bpi, H-P ASCII. There are 6 files on the tape, each file containing 24 hours of 1-minute data. The first record of each hour contains: month, day, hour. This is followed by 20 records each containing 3 triplets of H, -V, -D. This sequence is repeated for the remainder of the day. The data should be stored in your system as H, D, V. I have enclosed a sample listing for one hour of data, and sample data plots. The files are as follows:

1.	GOES 2	March 22, 1979
2.	GOES 3	" " "
3.	GOES 2	March 31, 1979
4.	GOES 3	" " "
5.	GOES 2	April 1, 1979
6.	GOES 3	" " "

Unfortunately, I will not be able to attend the workshop. Have a good one!

Sincerely yours,

J. N. Barfield

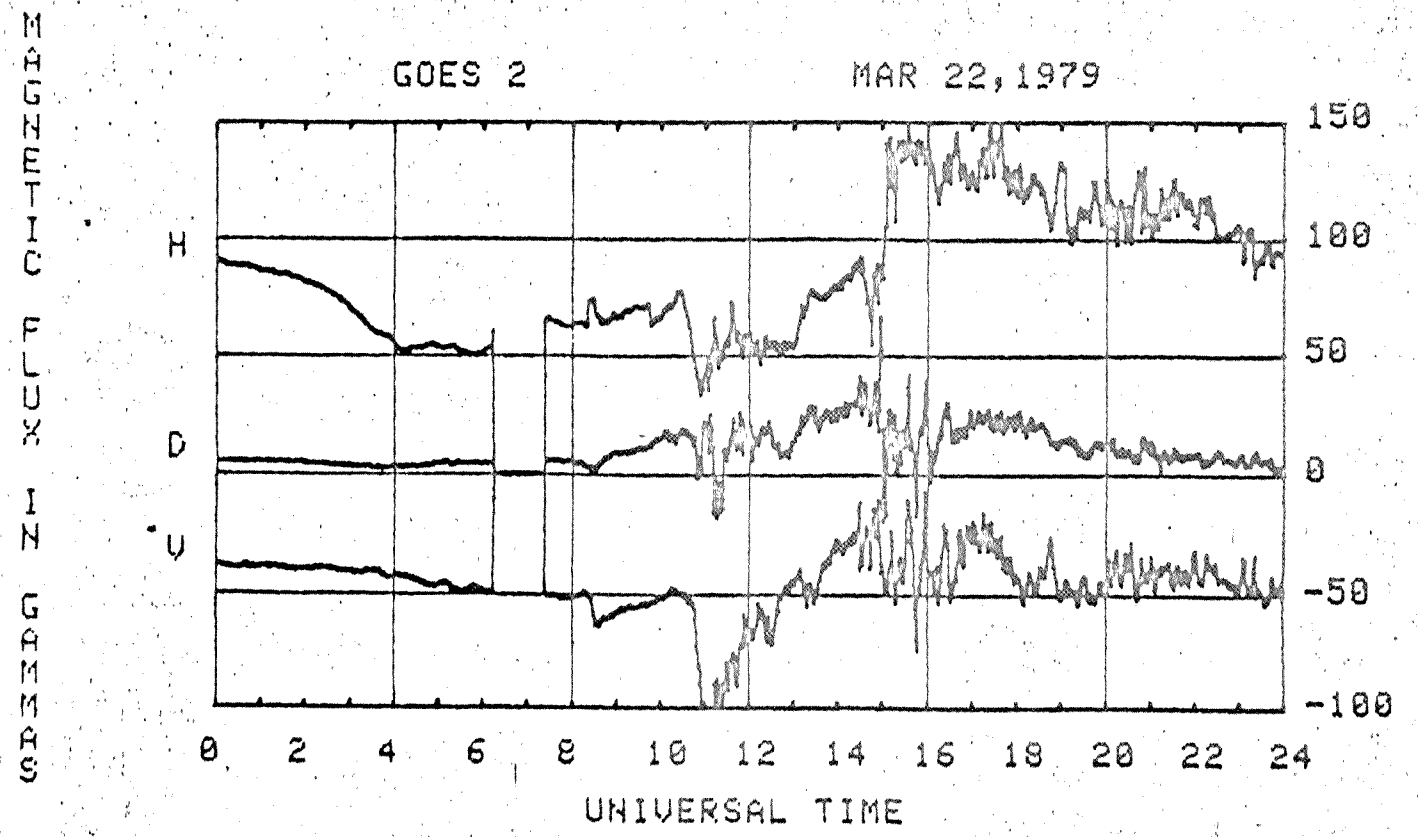
JNB:r
Encs.

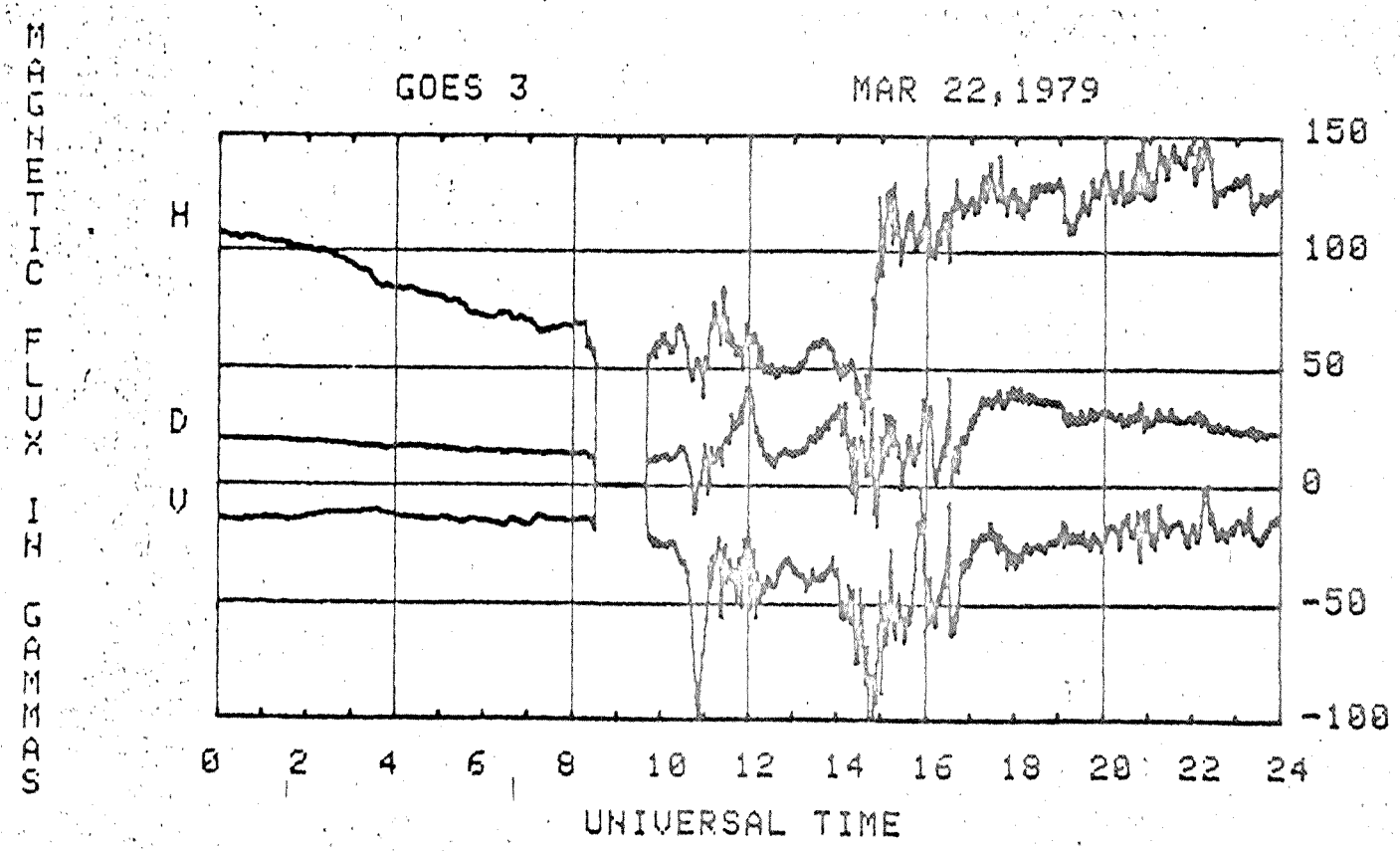
GOES 3 MARCH 31, 1977

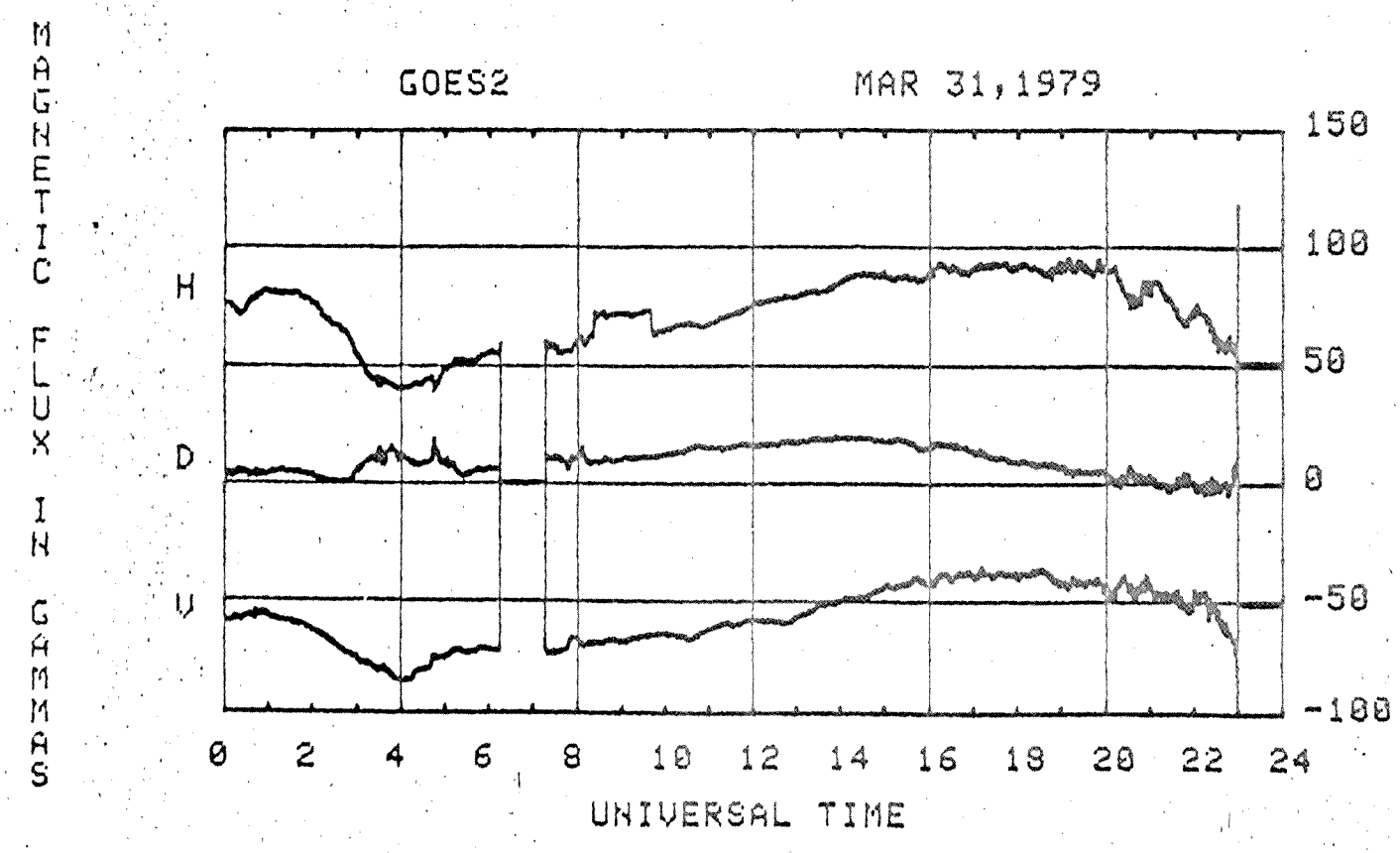
-V -D

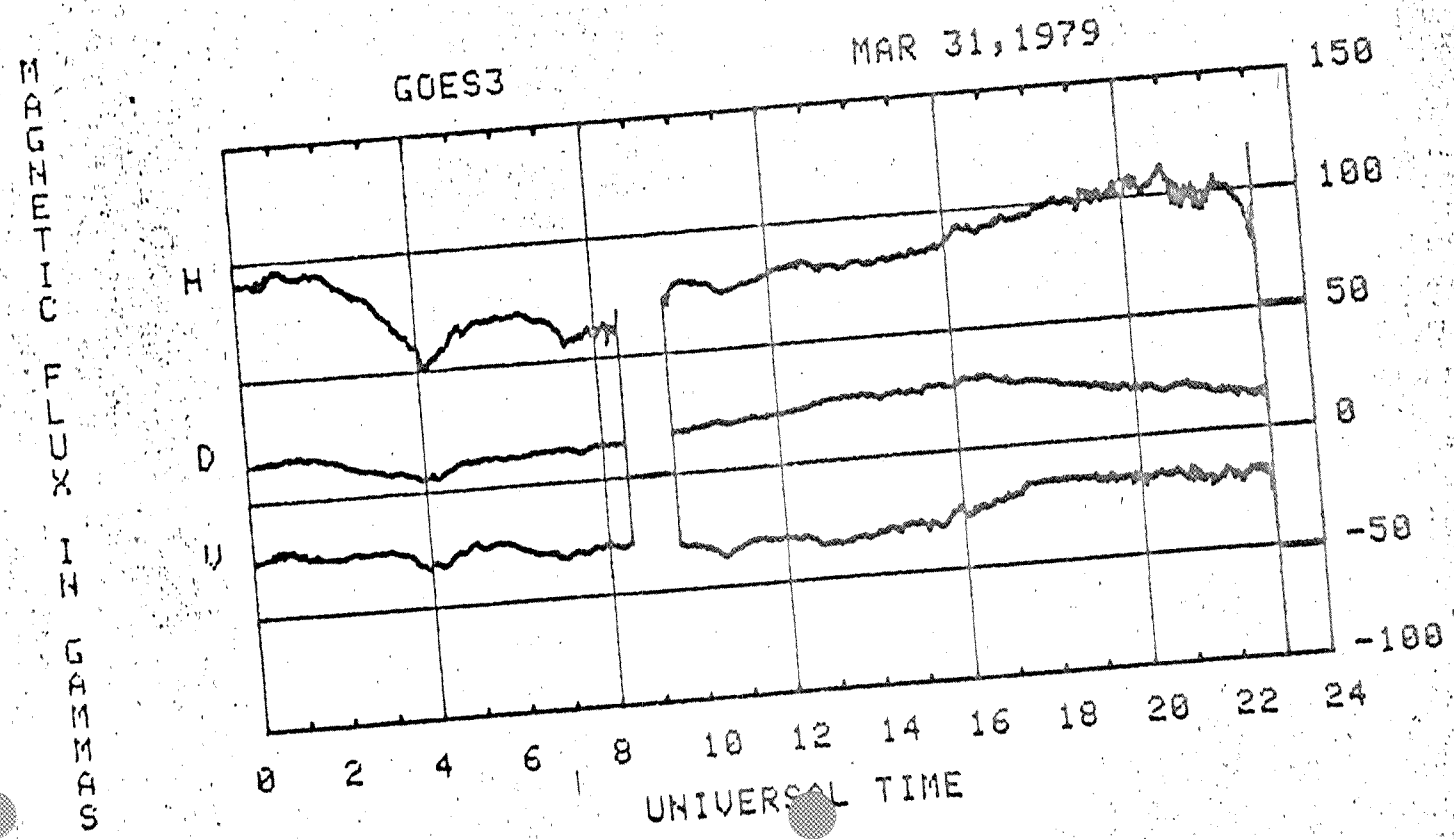
MO	DAY	HOUR						
3.	31.	0.						
89.6	26.9	-15.1	90.0	26.5	-14.9	90.5	26.3	-15.0
90.9	26.1	-15.0	91.4	25.9	-14.9	91.7	25.9	-14.8
91.4	25.7	-15.0	90.7	25.6	-15.0	90.5	25.4	-15.0
90.3	25.4	-15.0	90.4	25.8	-14.9	90.5	25.5	-15.0
90.9	25.4	-15.4	91.1	25.3	-15.3	91.0	25.0	-15.1
91.1	25.0	-15.3	91.8	25.2	-15.6	92.0	25.1	-15.5
91.4	24.8	-15.2	91.2	25.0	-15.2	91.3	25.1	-15.4
90.8	25.2	-15.3	90.3	25.0	-15.0	90.2	24.9	-15.4
89.9	24.1	-16.1	89.2	23.6	-15.5	89.2	23.4	-15.3
89.5	23.0	-16.3	92.0	23.6	-15.9	93.1	24.7	-15.7
90.3	22.8	-15.5	90.7	22.7	-16.1	89.9	21.9	-15.9
88.7	21.5	-15.4	90.8	22.9	-15.2	92.5	24.3	-15.9
90.3	23.1	-15.6	90.4	22.9	-15.3	91.9	23.5	-15.8
89.3	21.4	-15.3	94.9	24.8	-16.1	91.5	22.4	-15.7
91.3	21.7	-15.4	94.4	23.7	-16.3	92.1	21.7	-15.8
93.1	22.7	-16.0	94.3	22.7	-16.0	94.1	22.4	-16.1
94.3	21.9	-16.2	95.1	22.6	-16.3	95.6	22.7	-16.5
95.5	22.0	-16.9	96.1	22.0	-16.9	96.1	23.8	-16.9
95.0	21.1	-16.5	96.1	23.6	-16.2	95.2	22.8	-16.6
95.5	22.6	-16.5	96.0	24.7	-16.7	95.6	23.9	-16.3

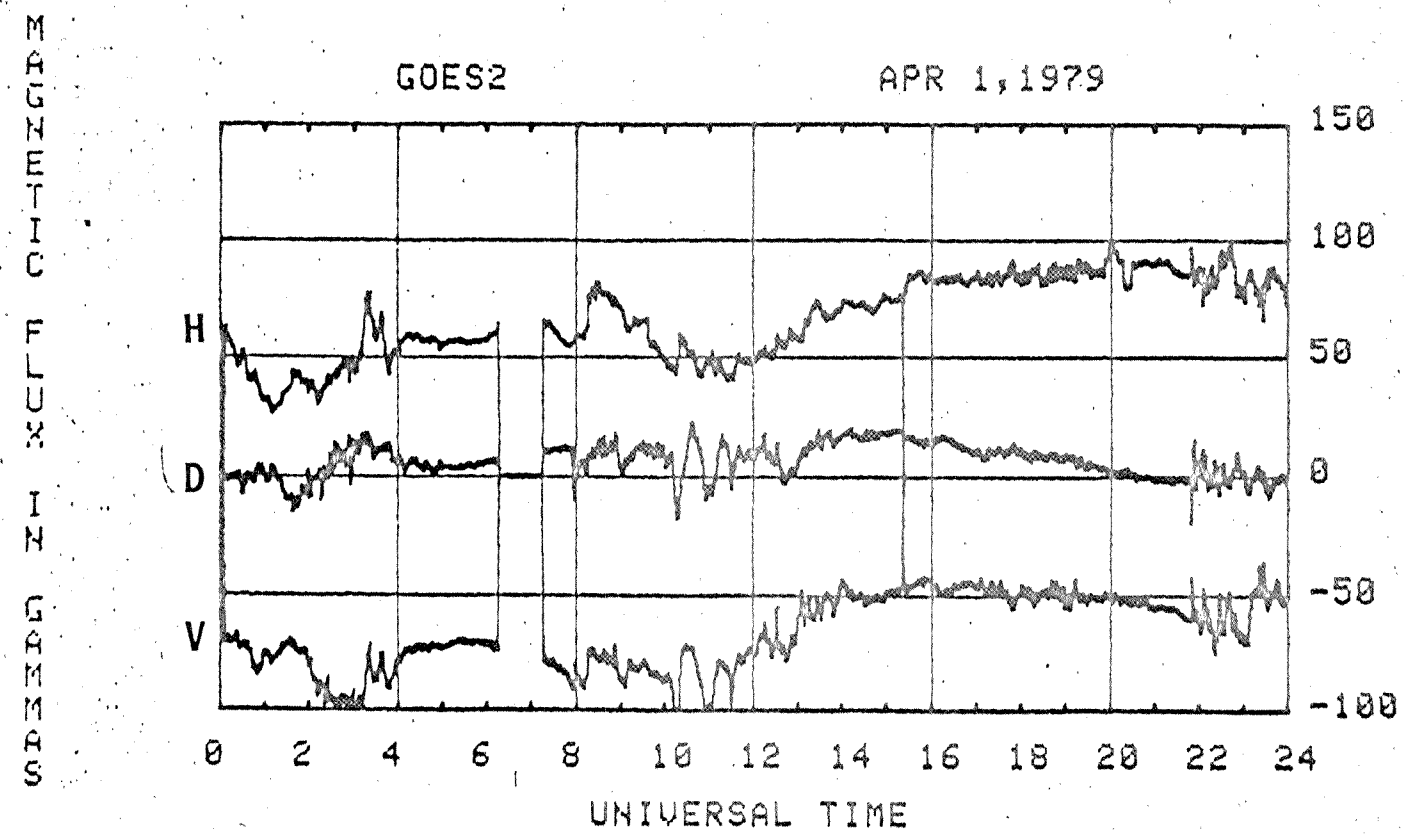
H

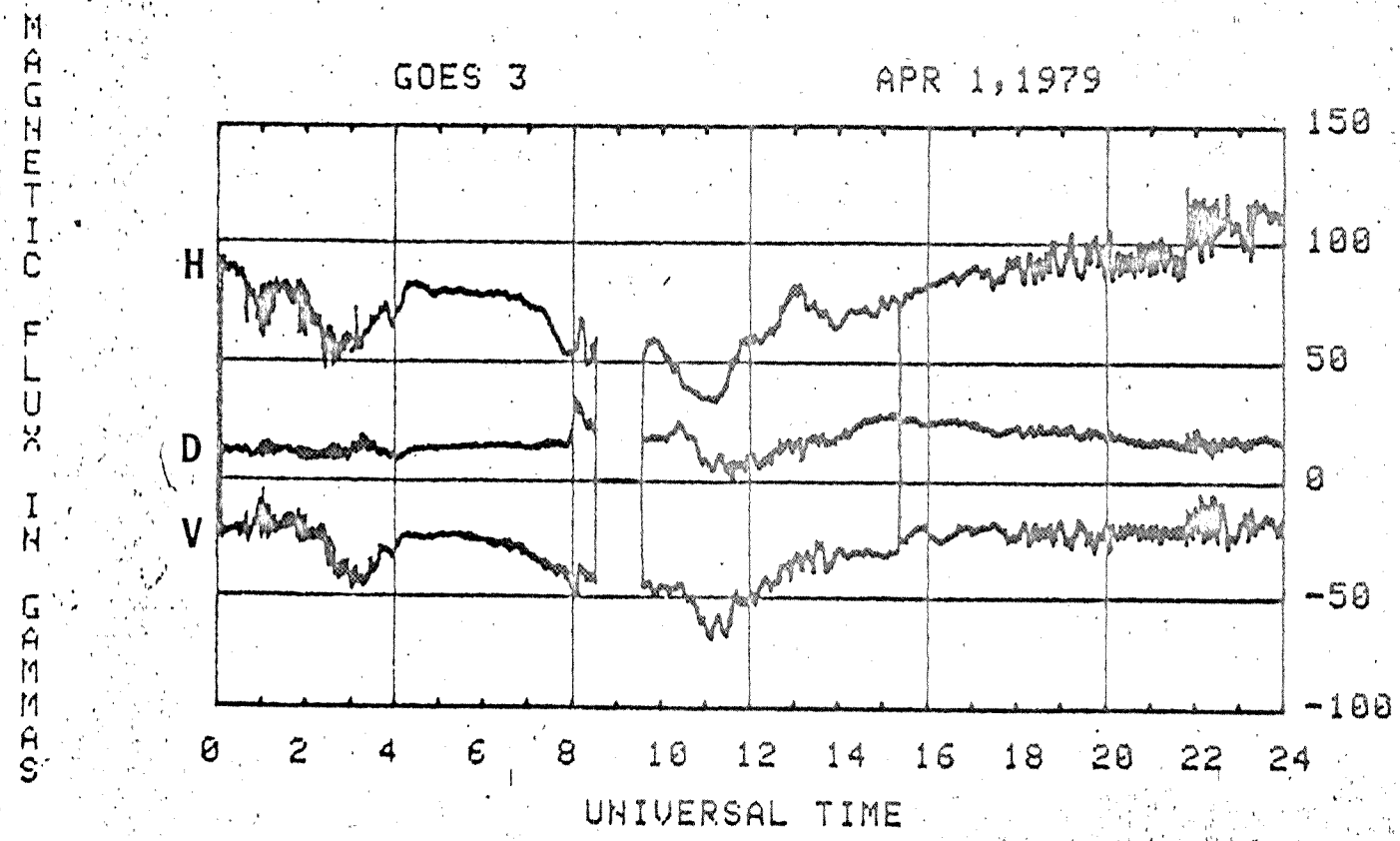

GOES 2
MAR 22,1979
MAGNETIC FLUX IN GAMMAS
H
D
V
150
100
50
0
-50
-100
0
2
4
6
8
10
12
14
16
18
20
22
24
UNIVERSAL TIME


GOES 3
MAR 22,1979
MAGNETIC FLUX IN GAMMAS
H
D
V
150
100
50
0
-50
-100
0
2
4
6
8
10
12
14
16
18
20
22
24
UNIVERSAL TIME


GOES2
MAR 31,1979
MAGNETIC FLUX IN GAMMAS
H
D
U
150
100
50
0
-50
-100
0
2
4
6
8
10
12
14
16
18
20
22
24
UNIVERSAL TIME


GOES3
MAR 31,1979
MAGNETIC FLUX IN GAMMAS
H
D
U
150
100
50
0
-50
-100
0
2
4
6
8
10
12
14
16
18
20
22
24
UNIVERSAL TIME


GOES2
APR 1,1979
MAGNETIC FLUX IN GAMMAS
H
D
V
150
100
50
0
-50
-100
0
2
4
6
8
10
12
14
16
18
20
22
24
UNIVERSAL TIME


GOES 3
APR 1,1979
MAGNETIC FLUX IN GAMMAS
H
D
V
150
100
50
0
-50
-100
0
2
4
6
8
10
12
14
16
18
20
22
24
UNIVERSAL TIME

TIROS-N

SPACE ENV. MONITOR

78-096A-04A SPIO-00097

This data set has been restored. There was originally one 9-track, 1600 BPI tape written in ASCII. There is one restored tape. The DR tape is a 3480 cartridge and the DS tape is 9-track, 6250 BPI. The original tape was created on an IBM 360 computer and the restored tape was created on an IBM 9021 computer. The DR and DS numbers along with the corresponding D number are as follows:

DR#	DS#	D#	FILES	TIME SPAN
DR005845	DS005845	D047010	1 - 2	03/22/79 - 04/01/79

REQ. AGENT	REQ NUMBER	ACQ. AGENT
LSM	V0144	DMS

78-096A-04A

TIROS N

SPACE ENV. MONITOR

This data set consists of 1 tape(s). The tape(s) is 9 track, 1600 bpi, ASCII with 2 file(s) of data. The time span and D and C numbers are as follows:

D#	C#	TIME SPAN
D-47010	C-21974	3/22/79, 3/31/79, 4/1/79

INFORMATION SHEET FOR INCOMING DATA

NSSDC ID: 78-064A-04A

DATE DATA RECEIVED: 12/15/81

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: TIROS N

EXPERIMENT NAME:

DATA SET FULL NAME: Space Env. Monitor

CONTACT: ACQUISITION SCIENTIST: DMS

FORM THAT WILL BE ANNOUNCED IN AIM/NSDF: DD

THESE ARE: [X] A NEW DATA SET [ ] ADDITIONS [ ] REPLACEMENTS [ ] OTHER (EXPLAIN BELOW)

ACCESSION UNIT NUMBERS: DD 47010 C-27114

REMARKS:

1600 ascii 9trk 2 files
3/22
3/31
4/1

CDAW

DATA RECEIPT NOTIFICATION SENT? [ ]

Linda Moran
DATA TECHNICIAN

601-32 (6/76)

ADP SERVICES (MACHINE SENSIBLE ONLY)

Date Dec 10

NSSDC ID 78-096A-04A

CDAW DATA SET ENTRY

Date Rcvd: Dec 9 1981 CDB: 06

Data Sent By: Herb Kroehl
1600, ascii 9 track 2 files

Material Rcvd: letter, documentation and sample listing.

Satellite/NSDF Name: TIROS-N

Data Set Name: Space Environment Monitor

☐ New Data Set ☐ Additions ☐ Replacements

Comments

Time Coverage: Mar 22 06-20h Mar 31 12h - April 1 6h

Tapes To be Returned to:

Completed By: M. Teague

WORLD DATA CENTER A
for
SOLAR-TERRESTRIAL PHYSICS

Environmental Data and Information Service
NOAA, D63, 325 Broadway
Boulder, Colorado 80303 U.S.A.

SOLAR AND INTERPLANETARY PHENOMENA;
IONOSPHERIC PHENOMENA;
FLARE-ASSOCIATED EVENTS;
GEOMAGNETIC VARIATIONS;
MAGNETOSPHERIC AND INTERPLANETARY MAGNETIC PHENOMENA;
AURORA; COSMIC RAYS; AIRGLOW

TELEPHONE: (303) 497-6324
CABLE ADDRESS: SOLTERWARN
IN REPLY REFER TO:

Dr. D. Sawyer
National Space Science Data Center
NASA/Goddard Code 601
Greenbelt, MD 20771

HK/D63
November 25, 1981

Dear Don:

I'm sending under a separate cover the TIROS-N data for CDAW-6.

As I mentioned, the Space Environment Monitor on TIRON-N, NOAA-6 and NOAA-7 consists of three instruments; the Total Energy Detector, the Medium Energy Proton and Electron Dectector and the High Energy Proton and Alpha Detector. The TED is a sweeping electrostatic analyzer recording low energy electrons and protons from 0.3 to 20 keV. Data from the 4 instruments at local zenith and 30° off zenith for protons and electrons are integrated to determine the precipitated power flux in ergs/cm^2·sec. every two seconds. We are sending you the ephemeris data, the power flux when it exceeds 0.1 ergs/cm^2·sec. and the characteristic energy channel. See the enclosed sheets for a format description.

The MEPED consists of two telescopes measuring protons and electrons at the local zenith and 90° off zenith in the energy ranges of >30 keV, >100 keV and >300 keV. We are sending you the electron data along with ephemeris data. See the enclosed sheets for a detailed format description.

If you have additional questions, please feel free to contact me or Ms. Bonnie Hausman (FTS 320-6323).

Sincerely,

Herbert W. Kroehl
Physicist

WORLD DATA CENTERS CONDUCT INTERNATIONAL EXCHANGES OF GEOPHYSICAL OBSERVATIONS IN ACCORDANCE WITH THE PRINCIPLES SET FORTH BY THE INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS THROUGH THE ICSU PANEL ON WDC'S. INITIATED FOR THE INTERNATIONAL GEOPHYSICAL YEAR 1957-58, THE DATA EXCHANGE CONTINUES ACCORDING TO RECOMMENDATIONS OF VARIOUS ICSU SCIENTIFIC ORGANIZATIONS. WDC-A IS ESTABLISHED IN THE UNITED STATES UNDER THE AUSPICES OF THE NATIONAL ACADEMY OF SCIENCES.

Tirosn Data

3/22/79 06-20 UT
3/31/79 12-24 UT
4/1/79 00-06 UT

Tape is 1600 bpi, 9 track, ascii
140 Characters / record
36 Records / block

File #1 = Meped Data

1x Format (2X, I2, 1X, I4, 3(1X, I3), 2(2X, F5.1), 3X, F5.1, 2X, F6.1, 5X, F5.2, 5X, F5.2, 2X, F6.2, 1X, F6.2, 7X, 6(I6, 1X), I5)
→ dummy variable to fill out record

3x Format (93X, 6(I6, 1X), I5)
→ Dummy variable

# of lines = 60532
# of blocks = 1682

File #2 Ted Data

Format (2X, I2, 1X, I4, 3(1X, I3), 17X, F5.1, 13X, F5.2, 4X, 3(F6.2, 2X), F6.2, 4(2X, F5.1), I1

# of lines - 2892
# of blocks = 81

YR	MODA	HR	MIN	SEC	GEOG LAT	GEOG LONG	GEOMAG LAT	GEOMAG LONG	MAGNETIC LOC TIME	TOT 0 FLUX	TOT 30 FLUX	TOT 0 FLUX	TOT 30 FLUX	DEM		
81	227	1	56	37	-52.1	77.6	-61.8	126.8	5.47	.12	.19	.24	.18	1.0	1.0	1.0
81	227	1	56	45	-52.6	77.4	-62.2	126.2	5.43	.26	.24	.19	.78	1.0	2.0	1.0
81	227	1	56	53	-53.0	77.2	-62.5	125.5	5.39	.32	.23	.37	.45	1.0	1.0	1.0
81	227	1	57	1	-53.5	77.0	-62.8	124.9	5.35	.27	.70	.60	.50	1.0	1.0	1.0
81	227	1	57	9	-53.9	76.9	-63.2	124.3	5.31	.31	.47	.45	.44	1.0	3.0	4.0
81	227	1	57	17	-54.3	76.7	-63.5	123.6	5.27	.32	.45	.51	1.33	4.0	4.0	4.0
81	227	1	57	25	-54.8	76.5	-63.9	122.9	5.22	1.75	3.21	4.56	8.11	4.0	9.0	11.0
81	227	1	57	33	-55.2	76.3	-64.2	122.2	5.18	7.35	0.00	8.99	8.57	10.0	9.0	9.0
81	227	1	57	41	-55.6	76.1	-64.5	121.5	5.14	8.16	8.54	7.86	2.85	10.0	10.0	10.0
81	227	1	57	49	-56.1	75.9	-64.8	120.8	5.09	4.94	5.41	2.11	1.72	8.0	9.0	8.0
81	227	1	57	57	-56.5	75.7	-65.2	120.0	5.04	5.00	6.21	7.72	8.22	10.0	10.0	10.0
81	227	1	58	5	-57.0	75.5	-65.5	119.3	4.99	7.37	5.44	2.96	3.51	9.0	9.0	1.0
81	227	1	58	13	-57.4	75.3	-65.8	118.5	4.94	3.37	3.41	1.30	1.40	6.0	6.0	7.0
81	227	1	58	21	-57.8	75.1	-66.1	117.7	4.89	1.27	.92	1.56	2.18	6.0	4.0	6.0
81	227	1	58	29	-58.3	74.9	-66.4	116.9	4.84	2.32	2.15	2.15	2.02	6.0	1.0	1.0
81	227	1	58	37	-58.7	74.6	-66.7	116.0	4.79	1.33	1.53	.82	.74	1.0	1.0	5.0
81	227	1	58	45	-59.2	74.4	-66.9	115.2	4.73	.66	1.00	1.07	.98	5.0	5.0	4.0
81	227	1	58	53	-59.6	74.2	-67.2	114.3	4.68	.89	.85	.88	.94	2.0	3.0	3.0
81	227	1	59	1	-60.1	73.9	-67.5	113.5	4.62	.86	.87	1.02	1.24	3.0	2.0	3.0
81	227	1	59	9	-60.5	73.7	-67.8	112.6	4.56	.94	1.07	1.12	1.19	2.0	3.0	3.0
81	227	1	59	17	-60.9	73.4	-68.1	111.6	4.50	.98	.65	.78	.81	4.0	1.0	2.0
81	227	1	59	25	-61.4	73.2	-68.4	110.7	4.45	.97	.71	.58	.81	4.0	3.0	2.0
81	227	1	59	33	-61.8	72.9	-68.7	109.8	4.38	.85	.84	.81	.79	3.0	3.0	1.0
81	227	1	59	41	-62.3	72.6	-68.9	108.8	4.32	.63	.56	.50	.51	1.0	2.0	3.0
81	227	1	59	49	-62.7	72.4	-69.2	107.8	4.26	.46	.57	.62	.55	3.0	2.0	3.0
81	227	1	59	57	-63.1	72.1	-69.4	106.7	4.19	.48	.55	.53	.44	3.0	3.0	2.0
81	227	2	0	5	-63.6	71.8	-69.7	105.7	4.12	.81	.68	.54	.55	5.0	4.0	1.0
81	227	2	0	13	-64.0	71.5	-69.9	104.6	4.06	.49	.34	.29	.24	1.0	1.0	1.0
81	227	2	0	21	-64.4	71.2	-70.1	103.5	3.98	.23	.31	.36	.34	2.0	2.0	2.0
81	227	2	0	29	-64.9	70.9	-70.4	102.3	3.91	.38	.34	.31	.37	2.0	2.0	2.0
81	227	2	0	37	-65.3	70.5	-70.6	101.2	3.83	.46	.47	.48	.46	1.0	2.0	1.0
81	227	2	0	45	-65.7	70.2	-70.8	100.0	3.76	.51	.29	.30	.27	2.0	1.0	1.0
81	227	2	0	53	-66.2	69.9	-71.0	98.8	3.68	.24	.22	.26	.25	1.0	1.0	2.0
81	227	2	1	1	-66.6	69.5	-71.2	97.6	3.60	.42	.34	.30	.27	2.0	1.0	3.0
81	227	2	1	9	-67.0	69.1	-71.4	96.4	3.52	.36	.41	.61	.62	3.0	1.0	1.0
81	227	2	1	17	-67.5	68.7	-71.6	95.2	3.44	.89	1.40	.06	.07	1.0	1.0	1.0
81	227	2	1	25	-67.9	68.3	-71.8	93.9	3.36	.06	.15	.28	.33	1.0	1.0	1.0
81	227	2	1	33	-68.3	67.9	-71.9	92.6	3.28	.44	.54	.50	.44	1.0	1.0	1.0
81	227	2	1	41	-68.8	67.5	-72.1	91.3	3.19	.29	.21	.28	.18	1.0	2.0	1.0
81	227	2	1	49	-69.2	67.1	-72.3	89.9	3.10	.18	.16	.18	.19	2.0	1.0	1.0
81	227	2	1	57	-69.6	66.6	-72.4	88.6	3.02	.15	.16	.15	.17	1.0	1.0	2.0
81	227	2	2	5	-70.0	66.2	-72.6	87.3	2.93	.21	.20	.16	.11	1.0	1.0	1.0
81	227	2	2	13	-70.5	65.7	-72.7	85.8	2.83	.09	.15	.13	.11	1.0	1.0	1.0
81	227	2	2	21	-70.9	65.2	-72.8	84.3	2.74	.14	.11	.10	.12	1.0	1.0	2.0
81	227	2	2	29	-71.3	64.6	-72.9	82.9	2.64	.18	.18	.32	.29	2.0	1.0	3.0
81	227	2	2	37	-71.7	64.1	-73.0	81.4	2.55	.85	.23	.64	.85	2.0	1.0	1.0
81	227	2	2	45	-72.2	63.5	-73.0	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

E1 > 30 KeV E2 > 100 KeV E3 > 300 KeV

R	MODA	HR	MIN	SEC	GEOG LAT	GEOG LONG	FOFL LAT	FOFL LONG	GEOMAG LAT	MLT	PITCH ANGLES 81°	PITCH ANGLES 0°	0E1	0E2	0E3	90E1
0	308	0	3	44	-15.7	48.4	-20.5	49.5	-31.5	2.92	84.34	43.00	0.0	0.0	0.0	0.0
													10.5	0.0	0.0	0.0
													0.0	0.0	0.0	0.0
													10.5	0.0	0.0	21.1
0	308	0	3	52	-16.1	48.3	-20.9	49.4	-31.9	2.91	84.44	42.39	21.1	21.1	10.5	0.0
													0.0	0.0	0.0	31.6
													21.1	10.5	0.0	10.5
													0.0	0.0	0.0	0.0
0	308	0	4	0	-16.6	48.2	-21.3	49.3	-32.2	2.90	84.55	41.79	21.1	21.1	10.5	0.0
													0.0	0.0	0.0	10.5
													0.0	0.0	0.0	0.0
													0.0	0.0	0.0	0.0
0	308	0	4	8	-17.1	48.1	-21.6	49.2	-32.6	2.89	84.65	41.22	0.0	0.0	0.0	0.0
													0.0	0.0	0.0	0.0
													10.5	10.5	10.5	21.1
													0.0	0.0	0.0	0.0
0	308	0	4	16	-17.5	47.9	-22.0	49.1	-33.0	2.88	84.75	40.65	0.0	0.0	0.0	0.0
													0.0	0.0	0.0	31.6
													0.0	0.0	0.0	21.1
													10.5	10.5	10.5	42.1
0	308	0	4	24	-18.0	47.8	-22.4	49.0	-33.3	2.86	84.86	40.09	0.0	0.0	0.0	10.5
													0.0	0.0	0.0	0.0
													10.5	0.0	0.0	10.5
													0.0	0.0	0.0	0.0
0	308	0	4	32	-18.5	47.7	-22.8	48.9	-33.7	2.85	84.97	39.56	0.0	0.0	0.0	0.0
													0.0	0.0	0.0	0.0
													10.5	10.5	10.5	0.0
													10.5	10.5	10.5	0.0
0	308	0	4	40	-18.9	47.6	-23.2	48.8	-34.0	2.84	85.08	39.03	0.0	0.0	0.0	0.0
													0.0	0.0	0.0	10.5
													21.1	21.1	10.5	10.5
													0.0	0.0	0.0	10.5
0	308	0	4	48	-19.4	47.5	-23.6	48.7	-34.4	2.82	85.19	38.51	0.0	0.0	0.0	0.0
													0.0	0.0	0.0	0.0
													0.0	0.0	0.0	10.5
													0.0	0.0	0.0	21.1
0	308	0	4	56	-19.9	47.4	-24.0	48.6	-34.7	2.81	85.31	38.01	0.0	0.0	0.0	0.0
													0.0	0.0	0.0	0.0
													21.1	21.1	21.1	31.6
													10.5	10.5	0.0	10.5
0	308	0	5	4	-20.3	47.3	-24.4	48.5	-35.1	2.79	85.42	37.53	0.0	0.0	0.0	0.0
													0.0	0.0	0.0	10.5
													10.5	10.5	10.5	21.1

D-45914

1979-0534 014

DUMP OF TAPE X393

INPUT TAPE X393 ON MT3
DATA INPUT 09 NF 6 SR 1 1 1 SR 2 1 1 SR 3 1 1 SR 4 1 1 SR 5 1 1 SR 6 1 1

FILE 1 RECORD 1 LENGTH 590BYTES

(0)	175150303105	400000001717	620013343257	675660603006	101314374276	171270276011	630115421726	661120345026
(48)	024117264750	053060210364	172567434533	225073411725	462336461073	346317244725	665663020266	172277353353
(96)	255335251725	641146314631	463217246034	631463146315	172340314631	463146321721	543146314631	463217176000
(144)	000000000000	171446314631	463146321721	634631463146	314717214263	146314631463	172064631463	146314641720
(192)	471463146314	631517175631	463146314632	171563146314	631463150000	000000000000	000017126314	631463146315
(240)	000000000000	000000000000	000000000000	000017144631	463146314632	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	172546475671	556512656056
(432)	274347454755	166460603476	472041161637	606213146506	173541456056	377777777777	777760563777	777777777777
(480)	172271611456	212136202731	172023172321	000022212122	000000000000	622720232522	250000001722	650102527775
(528)	761460513574	335737763503	605730536444	405605456062	576457560000	000000575600	000000000000	574646000000
(576)	000000005657	625541540000	0000					

79103131 2112-1976-059

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	2578	2578	443	0	2	0	0	2	2

FILE 2 RECORD 1 LENGTH 590BYTES

(0)	173665605000	000000001716	417011065244	551360600224	422562700450	606500140464	104375471725	737313571140
(48)	416117254101	775114727715	172463403730	701405101723	755406503356	107317224462	256364555503	172052225676
(96)	776442451723	410000000000	000017216514	631463146315	171774631463	146314641717	414631463146	314617154000
(144)	000000000000	171263146314	631463151722	566314631463	146317215746	314631463146	172070000000	000000001717
(192)	731463146314	631517166000	000000000000	171563146314	631463151715	400000000000	000017144631	463146314632
(240)	000000000000	000000000000	000000000000	000017136314	631463146315	171263146314	631463150000	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	172645247111	363372331720
(432)	732027653026	500160613602	477411303076	606121512152	772070366056	377777777777	777760563777	777777777777
(480)	172446733747	451410002731	172024172021	000022212122	000000000000	622720232522	300000001722	647246315502
(528)	524460513573	335406765013	172053315535	420660176062	576457560000	000000575600	000000000000	574646000000
(576)	000000005657	625541540000	0000					

79104101 2112=1976·059

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
2	1389	1389	443	0	1	0	0	1	1

FILE 3 RECORD 1 LENGTH 590BYTES

(0)	175150314552	000000001717	661246151336	722560603574	244531103371	606521550426	000654771726	666511611426
(48)	341417265512	100350064047	172576661131	331136521725	436210263563	204517237651	510656736210	172252654562
(96)	624777461726	412746314631	463217247663	146314631464	172362314631	463146321721	731463146314	631517176463
(144)	146314631464	171363146314	631463151722	473146314631	463217216463	146314631464	172172314631	463146321720
(192)	714631463146	314717177631	463146314632	171750000000	000000001714	631463146314	631500000000	000000000000
(240)	171263146314	631463150000	000000000000	000017157146	314631463147	171263146314	631463150000	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	172540136361	441004631721
(432)	467263741363	746160611265	410541222754	606215734701	322126606056	377777777777	777760563777	777777777777
(480)	172155053256	255572202731	172023172321	000023212521	000000000000	622720232522	250000001722	651425754661
(528)	561760503634	074221147330	171764512132	303407576062	576457560000	000000575600	000000000000	574646000000
(576)	000000005657	625541540000	0000					

79103131 3151=1977-007

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
3	3391	3391	443	0	4	0	0	4	4

FILE 4 RECORD 1 LENGTH 590BYTES

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(    96)  650303501726  677431463146  314717255426  314631463146  172441200000  000000001722  733146314631  463217214546
(   144)  314631463146  171744631463  146314631723  614631463146  314617234606  314631463146  172342714631  463146321722
(   192)  433146314631  463217214546  314631463146  171763146314  631463151717  446314631463  146317154000  000000000000
(   240)  171540000000  000000000000  000000000000  000017174000  000000000000  171446314631  463146321712  631463146314
(   288)  631500000000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000
(   336)  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000
(   384)  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000  172442622032  645113406053
(   432)  106302434377  206360621317  574402121147  606224111605  554000166056  377777777777  777760563777  777777777777
(   480)  172374226001  333531002731  172024172021  000023212521  000000000000  622720232522  300000001722  651436043352
(   528)  463160503634  146632542400  606021174471  777702576062  576457560000  000000575600  000000000000  574646000000
(   576)  000000005657  625541540000  0000
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79/04/01 3151 = 1977-007

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
4	1723	1723	443	0	3	0	0	3	4

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FILE      5  RECORD        1  LENGTH      590BYTES
(     0)  175051161007  400000001717  437034247637  620460601317  137222034453  606331073020  537565531725  405725276302
(    48)  406417245302  156365602467  172365325344  003435221722  774724725143  567017217773  027654204300  172063455663
(    96)  606613341723  631463146314  631517226114  631463146315  172144631463  146314631717  663146314631  463217164000
(   144)  000000000000  000000000000  000000001717  631463146314  631517166000  000000000000  171646314631  463146321715
(   192)  546314631463  146317146314  631463146315  171263146314  631463151712  631463146314  631517126314  631463146315
(   240)  000000000000  000000000000  000000000000  000017136314  631463146315  000000000000  000000000000  000000000000
(   288)  000017136314  631463146315  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000
(   336)  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000
(   384)  000000000000  000000000000  000000000000  000000000000  000000000000  000000000000  172567714170  333136061722
(   432)  520664515101  655017164024  245221510704  606106563024  662005466056  377777777777  777760563777  777777777777
(   480)  172056415724  421543202731  172023172222  000022212122  000000000000  622720232430  270000001722  647262444331
(   528)  130760513570  275212427575  172067360366  527573356062  576457560000  000000575600  000000000000  574646000000
(   576)  000000005657  625541540000  0000
```

79/03/22 2112 = 1976-059

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
5	2642	2642	443	0	2	0	0	2	2

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FILE      6  RECORD        1  LENGTH      590BYTES
(     0)  175051247030  000000001717  625070611703  233360603156  370744720345  606237270405  352052741725  556050605517
(    48)  102117254143  271074767527  172452620753  406121531723  552036037256  411417225342  527070476263  172146042127
(    96)  544226021725  407146314631  463217244551  463146314632  172341063146  314631461721  414631463146  314617174000
(   144)  000000000000  171263146314  631463151722  410000000000  000017215431  463146314632  172144000000  000000001720
(   192)  506314631463  146317177314  631463146315  171660000000  000000001715  631463146314  631517146314  631463146315
(   240)  171263146314  631463150000  000000000000  000017154000  000000000000  171263146314  631463150000  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  172545545770  263336721723
(   432)  601100773075  146617154141  445024554753  606125100366  320111176056  377777777777  777760563777  777777777777
(   480)  172452055350  017577512731  172023172222  000023212521  000000000000  622720232430  270000001722  646220700505
(   528)  314060503626  144056461452  172047074121  255442436062  576457560000  000000575600  000000000000  574646000000
(   576)  000000005657  625541540000  0000
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79/03/22 3151 = 1977-007

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
6	3199	3199	443	0	1	0	0	1	1

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

START TIME 09/04/81  12:20:47          STOP TIME 09/04/81  12:24:43

$$
```

DUMP OF TAPE DN1

D-63544

INPUT TAPE DN1 ON TB1
DATA INPUT 09 NF 2 FL 2 3 1

FILE 1 RECORD 1 LENGTH 590BYTES

(0)	175142307257	600000001717	606735550743	370460602666	111063041147	171374320042	421332041727	546543744477
(48)	514017274620	111534265126	172661411356	126467611725	703760033072	274517246034	352212525320	172347223157
(96)	002352241727	441463146314	631517265214	631463146315	172555106314	631463151724	506631463146	314617226563
(144)	146314631454	172052314631	463146321723	445463146314	631517225131	463146314632	172252314631	463146321721
(192)	454631463146	314617206000	000000000000	171751463146	314631461715	631463146314	631517144531	463146314532
(240)	000000000000	000000001713	631463146314	631517204400	000000000000	171740000000	000000001716	514631463146
(288)	314617154000	000000000000	171446314631	463146321712	631463146314	631517126314	631463146315	171446314631
(336)	463146320000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(384)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	172550161770	576445506055
(432)	260425035206	153260621104	755107342431	606211174034	014124636056	377777777777	777760563777	777777777771
(480)	172044004655	127333011731	172024172224	000023212521	000000000000	622720232623	310000001722	650064370357
(528)	722150503652	050667753244	171770525071	314170421062	576457560000	000000575600	000000000000	574546000000
(576)	000000005657	625541540000	0000					

FILE 1 RECORD 2 LENGTH 590BYTES

(0)	175142314257	600000001717	572061424012	527360602467	643173472435	171256532702	227047201727	544637312772
(48)	664017274625	754156263261	172661250241	672253161725	710767612654	726217245755	372571743115	172346063237
(96)	047215321727	432000000000	000017265255	146314631463	172554146314	631463151724	473146314631	463217226446
(144)	314631463147	172044631463	146314631723	416314631463	146317225746	314631463146	172252314631	463146321721
(192)	574631463146	314617206631	463146314632	171660000000	000000001716	714631463146	314717155463	146314631463
(240)	171363146314	631463150000	000000000000	000017204546	314631463146	171671463146	314631471716	431463146314
(288)	631517156314	631463146315	171554631463	146314631714	463146314631	463200000000	000000000000	000000000000
(336)	000000000000	000000000000	000000000000	000000000000	171263146314	631463150000	000000000000	000000000000
(384)	000000000000	171253146314	631463150000	000000000000	000000000000	000000000000	172552314115	007612146057
(432)	020061361542	572660620501	525527312475	606211574060	004230511710	646640151550	033217146647	201551640324
(480)	172044063270	656614602731	172024172224	000023212521	000000000000	622720232623	310000001722	650063462506
(528)	143560503652	051133011343	171770227564	706770046062	576457560000	000000575600	000000000000	574546000000
(576)	000000005657	625541540000	0000					

FILE 1 RECORD 3 LENGTH 590BYTES

(0)	175142321257	600000001717	620046237003	453260603004	162403347374	171072005637	602364401727	536414205604
(48)	114617274637	506716271467	172660635511	343045121725	702667652343	431417246200	745567521146	172347455412
(96)	610167101727	434063146314	631517265170	314631463146	172555440000	000000001724	466314631463	146317227046
(144)	314631463147	172051463146	314631461723	447146314631	463217226214	631463146315	172253000000	000000001721
(192)	546314631463	146317206314	631463146315	171756314631	463146321716	746314631463	146417146314	631463146315
(240)	171263146314	631463151712	631463146314	631517176314	631463146315	171651463146	314631461716	746314631463
(288)	146417154000	000000000000	171446314631	463146320000	000000000000	000000000000	000000000000	171446314631
(336)	463146320000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(384)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	172546471027	160554535060
(432)	263053170302	255560622151	356020416223	606207036545	301103331715	426475313160	573460641130	576226137453
(480)	172044141755	612507202731	172024172224	000023212521	000000000000	622720232623	310000001722	650063462506
(528)	143560503652	051133011343	171770227564	706770046062	576457560000	000000575600	000000000000	574546000000
(576)	000000005657	625541540000	0000					

FILE 1 RECORD 1257 LENGTH 590BYTES

(0)	175160034371	600000001717	730536205564	012760611747	735532635760	171443466312	431352601727	507261434654
(48)	121217274353	357212016754	172657561330	526321371725	652354206633	445217247216	533134000562	172363064152
(96)	265004161727	507631463146	314617266324	000000000000	172567346314	631463151724	615463146314	631517235063
(144)	146314631463	172072314631	463146321723	564000000000	000017227763	146314631464	172263631463	146314641721
(192)	766314631463	146417214346	314631463146	171760000000	000000001715	631463146314	631517164000	000000000000
(240)	171263146314	631463150000	000000000000	000017204314	631463146315	171741463146	314631461715	714631463146
(288)	314717154631	463146314632	171546314631	463146320000	000000000000	000000000000	000000000000	171263146314
(336)	631463150000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(384)	000000000000	171263146314	631463150000	000000000000	000000000000	000000000000	172455146204	027370336054
(432)	262270516263	324460611146	265560132541	171357624307	622265501712	724072407240	723117145075	341217270241
(480)	172230672164	533745202731	172024172224	000023212521	000000000000	622720232623	310000001722	650006130605
(528)	251660503652	427000373747	606023126513	575267016062	576457560000	000000575600	000000000000	574546000000

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	1257	1256	443	0	0	0	0	0	0

FILE 2 RECORD 1 LENGTH 590BYTES

(0)	174773610600	000000001717	464241173661	476060601473	433637152436	171254436557	714030551725	563443661175
(48)	151517254533	162362577404	172467750572	664117411724	454455423245	144717234622	364163313136	172175622622
(96)	433644341724	646631463146	314717235540	000000000000	172242000000	000000001720	440000000000	000017156314
(144)	631463146315	171540000000	000000001720	614631463146	314617177314	631463146315	171671463146	314631471716
(192)	631463146314	631517126314	631463146315	171263146314	631463151713	631463146314	631500000000	000000000000
(240)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(288)	000017126314	631463146315	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(336)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(384)	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	172564762534	111241755057
(432)	160120531201	636517176613	565153532721	606020170717	277171606056	377777777777	777760563777	777777777777
(480)	172457314543	330374033020	172025172121	000022212122	000000000000	006020232730	270000001722	650342425146
(528)	555460513506	740675357461	172060621336	774677276062	576457560000	000000575600	000000000000	574646000000
(576)	000000005657	625541540000	0000					

FILE 2 RECORD 2 LENGTH 590BYTES

(0)	174773630274	000000001717	735021530512	171660612167	532251220227	606421750743	252175231725	602257111441
(48)	247300000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000	000000000000
(96)	000000001725	771231463146	314717247163	146314631464	172355146314	631463151721	714631463146	314717177631
(144)	463146314632	171554631463	146314631724	523463146314	631517236254	631463146315	172343146314	631463151721
(192)	631463146314	631517207000	000000000000	171761463146	314631461716	546314631463	146317154000	000000000000
(240)	171363146314	631463150000	000000000000	000017154000	000000000000	171446314631	463146320000	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	172452460367	614063051722
(432)	707126476155	431217166053	316214322045	606027011457	112501316056	377777777777	777760563777	777777777777
(480)	172446642370	012666523020	172025172121	000027243024	000000000000	006020232730	270000001722	646146475625
(528)	017460503635	025252236521	605735475115	322511156062	576457560000	000000575600	000000000000	574646000000
(576)	000000000000	464163640000	0000					

FILE 2 RECORD 3 LENGTH 590BYTES

(0)	174773634600	000000001717	417773263437	065560601162	215041273561	171047550561	053061041725	572121367566
(48)	652617254574	133763445510	172466535206	527040111724	446034212366	620217234721	460272577357	172173075064
(96)	056732031724	646000000000	000017235206	314631463146	172172631463	146314641720	471463146314	631517174000
(144)	000000000000	171263146314	631463151720	600000000000	000017177000	000000000000	171746314631	463146321716
(192)	631463146314	631517156314	631463146315	171446314631	463145321714	463146314631	463217136314	631463146315
(240)	000000000000	000000000000	000000000000	000017154000	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	172571722436	171723746061
(432)	260240700512	772717176513	123060475243	606017657731	444777771716	405750137202	764017155637	063043266007
(480)	172457317466	566167553020	172025172121	000022212122	000000000000	006020232730	270000001722	650342425146
(528)	555460513506	740675357461	172060621336	774677276062	576457560000	000000575600	000000000000	574646000000
(576)	000000005657	625541540000	0000					

FILE 2 RECORD 2548 LENGTH 590BYTES

(0)	175066732773	400000001717	504506340725	767560601733	270045034435	606232077545	013551341731	625024630073
(48)	314517307012	332032776414	172751630342	645772521725	554023141271	337717234532	714471315262	172145134726
(96)	506745701724	561146314631	463217234371	463146314632	172243314631	463146321720	623146314631	463217164631
(144)	463146314632	171540000000	000000001721	471463146314	631517205231	463146314632	171776314631	463146321717
(192)	563146314631	463217157146	314631463147	171540000000	000000001714	463146314631	463200000000	000000000000
(240)	000000000000	000000000000	000000000000	000017154631	463146314632	171363146314	631463150000	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	172562514565	000244261723
(432)	540775342732	076760623[illegible]	405[illegible]1467	606134000237	572102756056	377777777777	777760563777	777777777777
(480)	172165356157	542225200020	172025172121	000022212122	000000000000	006020232727	310000001722	647473235106
(528)	266760513504	166760075466	605734217240	214531266062	576457560000	000000575600	000000000000	574646000000
(576)	000000005657	625541540000	0000					

D-46905

DUMP OF TAPE X-408

```
INPUT TAPE  X-408   ON  MT1
DATA INPUT    H9 NF 6 SR 1 2 1 SR 2 2 1 SR 3 2 1 SR 4 2 1 SR 5 2 1 SR 6 2 1

 FILE      1  RECORD   3 22 2  LENGTH      80BYTES
 (     0)   20332C20  32322C20  30202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020
 (    40)   20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020

        FILE   INPUT    DATA RECORDS    MAX.          READ ERROR SUMMARY          INPUT RETRIES
               RECS.       INPUT        SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
           1     505      505             80         0       0       0       0       0       0

 FILE      2  RECORD   3 22 2  LENGTH      80BYTES
 (     0)   20332C20  32322C20  30202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020
 (    40)   20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020

        FILE   INPUT    DATA RECORDS    MAX.          READ ERROR SUMMARY          INPUT RETRIES
               RECS.       INPUT        SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
           2     505      505             80         0       0       0       0       0       0

 FILE      3  RECORD   3 31 2  LENGTH      80BYTES
 (     0)   20332C20  33312C20  30202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020
 (    40)   20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020

        FILE   INPUT    DATA RECORDS    MAX.          READ ERROR SUMMARY          INPUT RETRIES
               RECS.       INPUT        SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
           3     505      505             80         0       0       0       0       0       0

 FILE      4  RECORD       2  LENGTH      80BYTES
 (     0)   20202020  332E2020  33312E20  2020302E  20202020  20202020  20202020  20202020  20202020  20202020
 (    40)   20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020

        FILE   INPUT    DATA RECORDS    MAX.          READ ERROR SUMMARY          INPUT RETRIES
               RECS.       INPUT        SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
           4     483      483             80         0       0       0       0       0       0

 FILE      5  RECORD   4 1  2  LENGTH      80BYTES
 (     0)   20342C20  312C2030  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020
 (    40)   20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020

        FILE   INPUT    DATA RECORDS    MAX.          READ ERROR SUMMARY          INPUT RETRIES
               RECS.       INPUT        SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
           5     505      505             80         0       0       0       0       0       0

 FILE      6  RECORD   4 1  2  LENGTH      80BYTES
 (     0)   20342C20  312C2030  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020
 (    40)   20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020  20202020

        FILE   INPUT    DATA RECORDS    MAX.          READ ERROR SUMMARY          INPUT RETRIES
               RECS.       INPUT        SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
           6     505      504             80         1       0       0       0       2      11
       READ ERROR #    FILE #    RECORD #
             1          6         289

 EOJ        DUMP STOPPED AFTER FILE   6        # OF PERMANENT READ ERRORS  1

START TIME 12/15/81  12:53:59        STOP TIME 12/15/81  12:56:23


$$
$REW LO
```

D-46905

```
$NOP ************ LIST OF X399 ****************
$EXE TPLIST BS

INPUT PARAMETERS ARE:  AS SR=2=1 6

 TAPE NO.   1            FILE NO.   1
 RECORD   2              LENGTH   80
 3, 22, 0

 TAPE NO.   1            FILE NO.   2
 RECORD   2              LENGTH   80
 3, 22, 0

 TAPE NO.   1            FILE NO.   3
 RECORD   2              LENGTH   80
 3, 31, 0

 TAPE NO.   1            FILE NO.   4
 RECORD   2              LENGTH   80
    3.  31.   0.

 TAPE NO.   1            FILE NO.   5
 RECORD   2              LENGTH   80
 4, 1, 0

 TAPE NO.   1            FILE NO.   6
 RECORD   2              LENGTH   80
 4, 1, 0

***** JOB DONE.
```

$$

D-47010

```
INPUT PARAMETERS ARE:  AS FL=6=6 2

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   5040
  79  322   6   0   7   23.7  316.9    31.4    34.9      3.57      1.39  101.55 129.01            0
      0      0      0      0      0      0
                                        0      0      0      1      1      0      0
                                                                                0      0      0
   0      0      0      0
                        0      0      0      0      0      0      0  79  322   6   0  15   23.3  316.
8    31.1    34.7      3.56      1.38  101.52 128.45            0      0      0      0      0
0      0
      0      0      0      0      0      0      0
                                                1      1      1      0      0      0      0
                                                                                        0      0
   0      1      1      1      0  79  322   6   0  23   23.0  316.7    30.8    34.4      3.55      1
.38  101.50 127.89            0      0      0      0      0      0      0
                                                                        1      0      0      1
1      1      0
             0      0      0      1      1      0      0
                                                        0      0      0      0      0      0      0  7
9  322   6   0  31   22.6  316.5    30.5    34.2      3.53      1.37  101.47 127.31            0
   0      0      1      0      0      0
                                        0      0      0      0      0      0      0
                                                                                0      0      0
0      0      0      0
                      0      0      0      0      0      0      0  79  322   6   0  39   22.2  316.4
  30.2    34.0      3.52      1.36  101.44 126.74            0      0      0      0      0      0
   0
   1      0      0      0      0      0      0
                                                0      0      0      1      1      0      0
                                                                                        0      0
0      0      0      0      0  79  322   6   0  47   21.9  316.2    29.9    33.7      3.51      1.36
  101.40 126.16            0      0      0      0      0      0      0
                                                                        0      0      0      1      1
    0      0
           0      0      0      0      0      0      0
                                                        0      0      0      1      1      0      0  79
322   6   0  55   21.5  316.1    29.6    33.5      3.49      1.35  101.37 125.57            0
0      0      0      0      0      0
                                        0      0      0      0      0      0      0
                                                                                0      0      0      0
    0      0      0
                      0      0      0      0      0      0      0  79  322   6   1   3   21.2  316.0    2
9.3    33.3      3.48      1.34  101.33 125.00            0      0      0      1      1      0
0
0      0      0      0      0      0      0
                                                1      0      0      1      1      0      0
                                                                                        0      0      0
    0      0      0      0  79  322   6   1  11   20.8  315.8    29.0    33.1      3.47      1.34  1
01.29 124.38            0      0      0      0      0      0      0
                                                                        0      0      0      0      0
 0      0
       1      1      1      0      0      0      0
                                                        0      0      0      2      2      0      0

 TAPE NO.   1              FILE NO.   1
 RECORD   2                LENGTH   5040
  79  322   6   1  19   20.4  315.7    28.7    32.8      3.46      1.33  101.24 123.77            1
      1      0      3      3      0      0
                                        0      0      0      1      1      0      0
                                                                                0      0      0
   1      1      0      0
                        0      0      0      3      3      0      0  79  322   6   1  27   20.1  315.
```

```
      0      0      0      2      2      0      0
                                                1      0      0      2      2      0      0
                                                                                                0      0
   0      0      0      0      0  79  322   6   1  35   19.8  315.4    28.1    32.4      3.43      1
.32  101.15 122.56             0      0      0      1      1      0      0
                                                                                1      1      0      3
3      3      0
              0      0      0      2      2      0      0
                                                          0      0      0      4      4      0      0  7
9  322   6   1  43   19.4  315.3    27.8    32.1      3.42      1.31  101.10 121.96             2
   0      0      5      5      1      0
                                     2      1      0      2      2      1      0
                                                                                0      0      0
1      1      1      0
                     3      2      1      1      1      0      0  79  322   6   1  51   19.1  315.1
  27.5    31.9      3.40      1.31  101.04 121.34             1      1      0      5      3      2
   0
   2      2      1      0      0      0      0
                                                0      0      0      3      3      2      0
                                                                                                0      0
0      3      3      1      0  79  322   6   1  59   18.8  315.0    27.3    31.7      3.39      1.30
  100.98 120.72             1      1      1      4      4      4      0
                                                                      2      1      0      3      3
    1      0
           0      0      0      8      8      1      0
                                                          0      0      0      1      1      1      0  79
322   6   2   7   18.4  314.8    27.0    31.4      3.37      1.30  100.92 120.10             1
1      1      7      6      4      0
                                     0      0      0      3      3      3      0
                                                                                0      0      0      6
    6      3      0
                  3      3      1      4      4      1      0  79  322   6   2  15   18.1  314.7    2
6.7    31.2      3.36      1.29  100.86 119.47             1      1      1      8      8      2
0
3      2      1      5      5      4      0
                                           2      1      0      3      3      1      0
                                                                                      2      2      2
    4      4      1      0  79  322   6   2  23   17.8  314.6    26.4    30.9      3.35      1.29  1
00.79 118.82             5      4      1      4      4      3      0
                                                                      1      1      0      2      2
 0      0
        2      2      2      8      8      3      0
                                                0      0      0      5      5      3      0

 TAPE NO.   1            FILE NO.   1
 RECORD   3              LENGTH   5040
  79  322   6   2  31   17.4  314.4    26.2    30.7      3.33      1.28  100.72 118.18             4
      3      3      5      4      2      0
                                           2      1      1      6      6      6      0
                                                                                      7      6      6
   3      3      2      0
                         3      2      1     12     12      7      0  79  322   6   2  39   17.1  314.
3    25.9    30.5      3.32      1.28  100.65 117.55             2      1      1     13     11
3      0
       4      3      2     11     11      4      0
                                                8      8      6     10     10      5      0
                                                                                                6      5
   4     11     11      6      0  79  322   6   2  47   16.8  314.1    25.6    30.2      3.30      1
.27  100.57 116.90             8      7      4     16     14      6      0
                                                                                7      7      5     15      1
5      9      0
              5      2      2     16     16      7      0
                                                          7      6      2     15     15      7      0  7
9  322   6   2  55   16.5  314.0    25.4    30.0      3.29      1.27  100.49 116.25             5
```

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```

TAPE NO. 1 FILE NO. 1
RECORD 4 LENGTH 5040

```
79  322   6   3  43   14.7  313.1    24.0    28.5      3.21      1.25   99.92 112.22          25
      18      9     38      34      9     0
                                          34     24     13     58     58     38     0
                                                                                  32     30     20
  75     75     50     0
                          36     31     19     60     60     36     0  79  322   6   3  51   14.4  313.
0    23.8    28.3      3.20      1.25   99.81 111.53            44     38     25     64     50
6     0
      48     40     24     60     60     40     0
                                          46     38     25     58     58     38     0
                                                                                  42     38
  23     64     64     40     0  79  322   6   3  59   14.2  312.8    23.5    28.1      3.18      1
.24   99.70 110.85           40     36     22     83     75      4     0
                                                                   50     44     27     99     9
9     67     0
             54     50     34     67     67     46     0
                                          56     46     27     99     99     62     0  7
9  322   6   4   7   13.9  312.6    23.3    27.8      3.17      1.24   99.59 110.15          75
  60     29    107     95      2     0
                                  71     60     36     91     91     60     0
                                                                   67     60     42     8
3     83     54     0
                    54     48     26     91     91     64     0  79  322   6   4  15   13.6  312.5
  23.1    27.6      3.16      1.24   99.47 109.45            58     52     34    107     91      4
  0
  79     75     44    123    123     83     0
                                  71     62     40     87     87     60     0
                                                                                  67     56     4
4    107    107     75     0  79  322   6   4  23   13.4  312.3    22.9    27.4      3.14      1.24
   99.34 108.75           83     71     46    141     19      1     0
```

```
        87     79     52     99     99     64     0
                                                  83     71     44    115    115     79     0  79
322   6   4  31   13.1  312.2    22.7    27.1      3.13      1.23   99.22 108.05          111     8
7     52    133     15      3      0
                                  95     83     60    123    123     83     0
                                                                        91     75     52    119
  119     83     0
                95     83     58    133    133     83     0  79  322   6   4  39   12.9  312.0    2
2.5    26.9      3.12      1.23   99.09 107.34          107     91     58    181     49      7
0                                                                                                10
7     91     64    141    141     91     0
                                      103     95     64    165    165    119     0
                                                                            111     95     58
  149    149    107     0  79  322   6   4  47   12.6  311.9    22.4    26.7      3.10      1.23
98.95 106.64          103     87     56    165     49      1     0
                                                                  111     95     54    157    157    1
19     0
     133    119     71    157    157    103     0
                                              133    119     79    149    149    103     0

 TAPE NO.   1            FILE NO.   1
 RECORD   5              LENGTH   5040
  79  322   6   4  55   12.4  311.7    22.2    26.5      3.09      1.23   98.81 105.92          115
    103     75    221     81      3      0
                                      123    103     75    165    165    115     0
                                                                            133    123     83
 181    181    123     0
                    141    123     75    189    189    133     0  79  322   6   5   3   12.2  311.
6    22.0    26.2      3.08      1.23   98.67 105.20          141    119     75    237     21
1     0
    133    123     79    189    189    127     0
                                              157    141     87    205    205    133     0
                                                                                  157    141
  95    205    205    149     0  79  322   6   5  11   12.0  311.4    21.8    26.0      3.06      1
.22   98.52 104.49          181    157    107    229     89      3     0
                                                                      181    157    107    197    19
7    141     0
            157    141     99    245    245    165     0
                                                    189    165    103    237    237    157     0  7
9  322   6   5  19   11.7  311.3    21.7    25.8      3.05      1.22   98.37 103.76          181
 165    103    253     21      9      0
                                    189    173    119    229    229    149     0
                                                                        197    165    111    22
1    221    157     0
                  205    173    123    221    221    157     0  79  322   6   5  27   11.5  311.1
  21.5    25.5      3.04      1.22   98.21 103.02          213    189    133    253      5      1
   0
 213    189    123    245    245    157     0
                                          229    205    141    253    253    165     0
                                                                                229    197    12
3    265    265    173     0  79  322   6   5  35   11.3  310.9    21.4    25.3      3.02      1.22
   98.05 102.29          221    205    133    281     45      5     0
                                                                  253    229    157    281    281
  197     0
        253    221    149    253    253    173     0
                                                  245    213    149    245    245    165     0  79
322   6   5  43   11.2  310.8    21.3    25.1      3.01      1.22   97.89 101.56          265    22
9    157    281     65      1      0
                                  281    245    157    313    313    213     0
                                                                        265    237    165    281
  281    197     0
                281    265    157    281    281    197     0  79  322   6   5  51   11.0  310.6    2
1.2    24.8      3.00      1.22   97.72 100.82          281    245    165    313     65      1
0                                                                                                31
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TAPE NO. 1 FILE NO. 1
RECORD 6 LENGTH 5040

```
  79  322    6    6    7   10.7  310.3    21.0    24.4     2.97     1.21   97.37  99.34          313
     281    173    377     29      7      0
                                          313    265    181    313    313    197      0
                                                                                 345    297    189
 329    329    229      0
                          313    265    157    345    345    237      0  79  322    6    6  15   10.5  310.
1    20.9    24.1     2.96     1.21   97.19  98.59          345    297    205    409     45
1      0
    345    313    205    329    329    221      0
                                        345    297    205    345    345    245      0
                                                                                 329    281
 181    345    345    221      0  79  322    6    6  23   10.3  309.9    20.8    23.9     2.95      1
.21   97.01  97.84          377    329    213    441     77      5      0
                                                                          393    345    229    345    34
5    229      0
           393    345    237    329    329    237      0
                                                 361    297    181    345    345    237      0  7
9  322    6    6  31   10.2  309.8    20.7    23.7     2.93     1.21   96.82  97.10          393
 345    237    457     93      1      0
                                 409    345    237    361    361    253      0
                                                                          393    345    229    40
9    409    281      0
                    345    297    205    393    393    281      0  79  322    6    6  39   10.0  309.6
   20.6    23.4     2.92     1.21   96.63  96.34          425    377    253    441     77      3
    0
 425    377    253    377    377    265      0
                                        409    345    213    377    377    253      0
                                                                                 393    345    22
1    377    377    265      0  79  322    6    6  47    9.8  309.4    20.5    23.2     2.91     1.21
   96.43  95.61          425    361    229    505     41      7      0
                                                                 425    361    245    441    441
 297      0
         441    377    253    425    425    297      0
                                                 457    409    281    425    425    297      0  79
322    6    6  55    9.7  309.3    20.4    23.0     2.89     1.21   96.23  94.85          425    37
7    253    489      9      5      0
                                 473    425    297    393    393    265      0
                                                                          489    425    297    457
 457    297      0
                489    441    281    425    425    281      0  79  322    6    7    3    9.5  309.1     2
0.3    22.8     2.88     1.21   96.03  94.10          473    409    281    489     25      3
0
                                                                                                    45
7    393    253    473    473    313      0
                                        489    441    297    457    457    297      0
                                                                                 473    409    265
 457    457    329      0  79  322    6    7  11    9.3  309.0    20.1    22.6     2.87     1.21
95.82  93.34          529    441    297    529     41      7      0
                                                                 505    441    297    473    473    3
13     0
    529    457    297    473    473    329      0
                                        505    441    297    473    473    313      0
```

TAPE NO. 1 FILE NO. 1
RECORD 1677 LENGTH 5040

```
                                                                                  1       1       0       0       0       0       0
                                                                                                                          0       0       0
    0       0       0       0
                                                  2       1       0       2       2       0       0  79  401    6  53  43   -9.9  121.
9   -18.7   191.8      14.97       1.07   78.03  78.82               3       3       1       2       1
1       0       \
        1       1       0       0       0       0       0
                                                                          0       0       0       3       3       2       0
                                                                                                                          0       0
    0       2       2       1       0  79  401    6  53  51   -9.8  121.8   -18.5   191.7      14.97       1
.07   78.20  79.83                1       0       0       2       1       0       0
                                                                                                  2       2       0       0
0       0       0
                3       2       1       1       1       0       0
                                                                          0       0       0       1       1       1       0  7
9  401    6  53  59   -9.7  121.7   -18.4   191.6      14.96       1.07   78.37  80.85                   3
   1       0       0       0       0       0
                                                                          0       0       0       1       1       0       0
                                                                                                          1       0       0
1       1       0       0
                                  2       2       1       1       1       1       0  79  401    6  54    7   -9.6  121.6
 -18.3   191.5      14.96       1.07   78.55  81.88               2       1       0       2       2       0
   0
   1       1       1       1       1       1       0
                                                                          0       0       0       1       1       1       0
                                                                                                                          0       0
0       1       1       0       0  79  401    6  54  15   -9.5  121.5   -18.2   191.4      14.95       1.07
   78.73  82.90                1       1       0       0       0       0       0
                                                                                  2       2       1       0       0
    0       0
            2       1       0       2       2       1       0
                                                                          0       0       0       2       2       2       0  79
401    6  54  23   -9.4  121.4   -18.1   191.3      14.94       1.07   78.92  83.94                   1
0       0       3       3       1       0
                                                                          2       2       0       2       2       1       0
                                                                                                          0       0       0       0
    0       0       0
                1       1       0       2       2       1       0  79  401    6  54  31   -9.3  121.3   -1
8.1   191.2      14.94       1.06   79.10  84.90                   0       0       0       3       3       1
0
2       2       0       1       1       1       0
                                                                          1       1       0       0       0       0       0
                                                                                                                          2       0       0
    0       0       0       0  79  401    6  54  39   -9.2  121.2   -17.9   191.0      14.93       1.06
79.29  85.94                0       0       0       2       1       1       0
                                                                                                  1       1       1       0       0
 0      0
        4       1       0       2       2       1       0
                                                                          1       1       1       3       3       1       0

 TAPE NO.   1              FILE NO.   1
 RECORD   1678             LENGTH   5040
  79  401    6  54  47   -9.1  121.0   -17.8   190.9      14.93       1.06   79.49  86.97                   1
      1       0       0       0       0       0
                                                                          3       2       0       1       1       1       0
                                                                                                                          2       1       0
    0       0       0       0
                                  0       0       0       0       0       0       0  79  401    6  54  55   -9.0  120.
9   -17.7   190.8      14.92       1.06   79.69  88.01               1       1       1       0       0
0       0
        1       1       0       1       1       0       0
                                                                          1       1       1       2       2       1       0
                                                                                                                          0       0
    0       0       0       0       0  79  401    6  55   3   -8.9  120.8   -17.6   190.7      14.92       1
```

```
0       0       0                                                                                                                  2       1       1       0
                4       4       1       0       0       0       0
                                                                                                                                  1       1       1       0       0       0       0. 7
9  401    6  55  11    25.6  121.1     20.2   190.7      14.92       1.06   80.11  90.09                                       3
   3       0       2       2       1       0
                                                                                                                                  0       0       0       0       0       0       0
                                                                                                                                  1       1       0
0       0       0       0
                        4       2       1       0       0       0       0  79  401    6  55  19    25.7  121.0
   20.3   190.6      14.92       1.06   80.32  91.14                       0       0       0       0       0       0
   0
   1       1       1       1       1       0       0
                                                                                                                                  2       2       1       1       1       0       0
                                                                                                                                                                                  3       1
0       1       1       0       0  79  401    6  55  27    25.8  120.9     20.4   190.5      14.91       1.06
   80.54  92.16                2       2       2       1       0       0       0
                                                                                                                                  2       1       0       0       0
   0       0
           2       2       0       0       0       0       0
                                                                                                                                  1       0       0       2       2       2       0  79
401    6  55  35    25.9  120.8     20.5   190.4      14.90       1.06   80.76  93.21                                       2
2       1       2       2       1       0
                                                                                                                                  0       0       0       1       1       0       0
                                                                                                                                                                                  0       0       0       2
   2       1       0
           2       2       0       1       1       1       0  79  401    6  55  43    26.0  120.7      2
0.6    190.3      14.90       1.06   80.98  94.25                       3       2       1       2       0       0
0
0       0       0       0       0       0       0
                                                                                                                                  2       1       0       1       1       0       0
                                                                                                                                                                                  3       2       1
   0       0       0       0  79  401    6  55  51    26.1  120.6     20.7   190.2      14.89       1.06
81.21  95.29                1       1       0       6       4       3       0
                                                                                                                                  0       0       0       2       2
1       0
           2       1       0       0       0       0       0
                                                                                                                                  4       4       1       2       2       2       0

TAPE NO.    1                FILE NO.    1
RECORD    1679               LENGTH    5040
 79  401    6  55  59    26.2  120.4     20.8   190.0      14.89       1.06   81.43  96.32                                       2
       2       0       1       1       1       0
                                                                                                                                  0       0       2       2       0       0
                                                                                                                                                                                  1       0       0
   0       0       0       0
                                1       1       1       0       0       0       0  79  401    6  56   7    26.3  120.
3     20.9   189.9      14.88       1.06   81.66  97.36                       1       0       0       3       2
0       0
        0       0       0       0       0       0       0
                                                                                                                                  1       0       0       0       0       0       0
                                                                                                                                                                                  0       0
   0       0       0       0       0  79  401    6  56  15    26.4  120.2     21.0   189.8      14.88       1
.07    81.89  98.39                2       1       0       0       0       0       0
                                                                                                                                  1       0       0       1
1       0       0
                1       1       1       0       0       0       0
                                                                                                                                  1       1       0       0       0       0       0  7
9  401    6  56  23    26.4  120.1     21.1   189.7      14.87       1.07   82.13  99.42                                       0
   0       0       0       0       0       0
                                                                                                                                  1       1       1       0       0       0       0
                                                                                                                                                                                  0       0       0
0       0       0       0
                        6       4       0       0       0       0       0  79  401    6  56  31    26.5  120.0
   21.2   189.6      14.87       1.07   82.36 100.45                       1       0       0       2       0       0
```

```
                                                  1      0      0      1      1      0      0
                                                                                          0      0
0      0      0      0      0  79  401   6  56  39   26.6  119.9    21.2   189.5     14.86      1.07
   82.59 101.40              0      0      0      0      0      0      0
                                                                          0      0      0      1      1
    0      0
           0      0      0      2      2      1      0
                                                      2      1      0      0      0      0      0  79
401   6  56  47   26.7  119.7    21.3   189.4     14.86      1.07   82.83 102.42              1
0      0      2      1      0      0
                                   1      0      0      2      2      1      0
                                                                          0      0      0      1
    1      0      0
                 1      0      0      1      1      0      0  79  401   6  56  55   26.9  119.6    2
1.5   189.3     14.85      1.07   83.06 103.43              1      1      1      0      0      0
0
1      0      0      0      0      0      0
                                          0      0      0      1      1      0      0
                                                                                  0      0      0
    2      2      1      0  79  401   6  57   3   27.0  119.5    21.7   189.2     14.85      1.08
83.30 104.44              1      1      0      2      1      1      0
                                                                  1      1      0      0      0
 0      0
        0      0      0      1      1      0      0
                                                0      0      0      0      0      0      0

 TAPE NO.   1            FILE NO.   1
 RECORD   1680           LENGTH   5040
  79  401   6  57  11   27.2  119.4    21.8   189.0     14.84      1.08   83.54 105.44              0
       0      0      0      0      0      0
                                          0      0      0      0      0      0      0
                                                                                  0      0      0
   0      0      0      0
                         0      0      0      0      0      0      0  79  401   6  57  19   27.3  119.
3    22.0   188.9     14.84      1.08   83.78 106.44              0      0      0      1      1
0      0
       1      1      0      1      1      1      0
                                                1      1      0      1      1      0      0
                                                                                          2      1
   0      0      0      0      0  79  401   6  57  27   27.5  119.2    22.2   188.8     14.83      1
.08   84.01 107.41              0      0      0      0      0      0      0
                                                                          1      1      1      1
1      0      0
              0      0      0      0      0      0      0
                                                      0      0      0      1      1      0      0  7
9  401   6  57  35   27.7  119.0    22.4   188.7     14.83      1.09   84.25 108.40              0
   0      0      3      3      2      0
                                     2      2      1      0      0      0      0
                                                                                  2      1      1
0      0      0      0
  22.6   188.6     14.82      1.09 1  84.49 1 109.38 1      0      0  79  401   6  57  43   2 .
   0      0      0      1      1      0      0
                                          0      0      0      1      1      0      0
0      0      0      0      0  79  401   6  57  51   28.1  118.8    22.8   188.5     14.82      1.09
  84.73 110.35              1      1      0      2      1      1      0      0      0      0      0
    0      0
           0      0      0      1      1      0      0
401   6  57  59   28.3  118.7    23.1   188.4     14.81      1.10 0  84.97 0 111.32 0      0      0  79
0      0      2      1      0      0      1      0      0      1      1      0      0
                                                                          1      1      1      1
    1      0      0
3.3   188.3     14.81      1  1.10 0  85.20 0 112.26 0      0      0  79  401   6  58   7   28.5  118.6    2
0      0      1      1      1      0      0
                                          0      0      0      0      0      0      0
                                                                                  1      0      0
85.43 113.20      0      0  79  401   6  58  15   28.8  118.4    23.5   188.2     14.80      1.10 0
                                                                          3      2      2      0      0
```

```
                                                  1     1     1     1     1     0     0

 TAPE NO.   1            FILE NO.   1
 RECORD   1681           LENGTH   5040
  79  401   6  58  23   29.0  118.3    23.8   188.1     14.80      1.11   85.66 114.14            1
      1     1     0     0     0     0
                                        1     1     0     0     0     0     0
                                                                                2     1     0
   0     0     0     0
                        0     0     0     3     3     0     0  79  401   6  58  31   29.3  118.
2    24.0   188.0     14.79      1.11   85.89 115.07            2     2     1     2     2
1     0
      0     0     0     0     0     0     0
                                                0     0     0     0     0     0     0
                                                                                0     0
   0     1     1     0     0  79  401   6  58  39   29.5  118.1    24.3   187.9     14.79      1
.12   86.12 116.00          0     0     0     3     3     2     0
                                                                0     0     0     0
0     0     0
            2     1     1     1     1     0     0
                                                0     0     0     3     3     0     0  7
9  401   6  58  47   29.7  117.9    24.6   187.8     14.78      1.12   86.33 116.86            0
   0     0     1     1     1     0
                                        1     1     0     0     0     0     0
                                                                                0     0     0
1     1     0     0
                  1     1     0     2     2     1     0  79  401   6  58  55   30.0  117.8
  24.9   187.7     14.78      1.13   86.56 117.76            1     1     1     1     1     0
   0
   1     0     0     0     0     0     0
                                        0     0     0     0     0     0     0
                                                                                0     0
0     1     1     0     0  79  401   6  59   3   30.3  117.7    25.2   187.6     14.77      1.13
   86.78 118.67          0     0     0     0     0     0     0
                                                                0     0     0     2     2
    0     0
          0     0     0     1     1     0     0
                                                0     0     0     2     2     1     0  79
401   6  59  11   30.6  117.6    25.4   187.5     14.77      1.14   87.00 119.56            2
2     1     0     0     0     0
                                        1     1     1     0     0     0     0
                                                                0     0     0     0
    0     0     0
                  0     0     0     0     0     0     0  79  401   6  59  19   30.8  117.5    2
5.7   187.4     14.76      1.14   87.21 120.42            2     2     2     3     3     1
0
2     2     2     0     0     0     0
                                        1     1     1     1     1     0     0
                                                                                0     0     0
   0     0     0     0  79  401   6  59  27   31.1  117.3    26.0   187.3     14.76      1.15
87.43 121.29          0     0     0     1     0     0     0
                                                                1     0     0     0     0
 0     0
      1     0     0     0     0     0     0
                                                0     0     0     0     0     0     0

 TAPE NO.   1            FILE NO.   1
 RECORD   1682           LENGTH   2240
  79  401   6  59  35   31.4  117.2    26.3   187.2     14.76      1.15   87.64 122.16            1
      0     0     3     3     1     0
                                        2     1     1     0     0     0     0
                                                                                0     0     0
   0     0     0     0
                        0     0     0     0     0     0     0  79  401   6  59  43   31.7  117.
```

```
      0      0      0      0      0      0      0
                                                0      0      0      1      1      0      0
                                                                                          0      0
   0      1      1      1      0  79  401   6  59  51   32.0  117.0    27.0   187.0     14.75      1
.16   88.05 123.34             0      0      0      0      0      0      0
                                                                          0      0      0      0
0      0      0
             0      0      0      0      0      0      0
                                                       1      0      0      1      1      0      0  7
9  401   6  59  59   32.3  116.8    27.3   186.8     14.74      1.17   88.26 124.68             0
   0      0      0      0      0      0
                                       1      0      0      2      2      1      0
                                                                                 1      0      0
0      0      0      0
                    1      0      0      1      1      0      0

 TAPE NO.   1            FILE NO.   2
 RECORD   1              LENGTH   5040
  79  322   6  12  47                  -23.7              2.51       .34      .38      .30      .38
3.0   10.0    9.0    3.0                 0  79  322   6  12  55                  -24.0              2
.50       .30      .45      .35      .32    6.0   10.0    4.0    2.0                 0  79  322   6  13
   3                 -24.3                2.49       .31      .35      .35      .34    2.0    3.0    1.0
    1.0                 0  79  322   6  13  11                  -24.5                2.48       .38
 .33      .34      .40    8.0    3.0    1.0    6.0                 0  79  322   6  13  19
    -24.8                2.47       .41      .33      .36      .35   11.0    2.0    4.0    1.0
      0  79  322   6  13  27                  -25.1                2.46       .37      .40      .32
.38    1.0    4.0    5.0    8.0                 0  79  322   6  13  35                  -25.4
      2.46       .38      .34      .35      .38    5.0    1.0    4.0    5.0                 0  79  322
  6  13  43                  -25.7                2.45       .29      .33      .34      .30    2.0    7.0
   10.0    3.0                 0  79  322   6  13  51                  -26.0                2.44
.31      .32      .37      .36    2.0    7.0   11.0    5.0                 0  79  322   6  13  59
           -26.3                2.43       .29      .38      .39      .33   11.0    3.0    8.0    2.0
             0  79  322   6  14   7                  -26.6                2.43       .33      .31      .
33      .31    7.0   10.0    3.0    4.0                 0  79  322   6  14  15                  -26.9
             2.42       .34      .36      .29      .35    2.0    9.0   10.0    1.0                 0  7
9  322   6  14  23                  -27.2                2.41       .32      .40      .25      .33    5.0
    6.0    5.0   10.0                 0  79  322   6  14  31                  -27.5                2.41
       .33      .33      .34      .32    1.0    6.0   10.0    2.0                 0  79  322   6  14  3
9                  -27.8                2.40       .36      .35      .31      .27   10.0    7.0    7.0
 9.0                 0  79  322   6  14  47                  -28.1                2.39       .29      .3
0      .30      .28    1.0    3.0    4.0   11.0                 0  79  322   6  14  55
 -28.4                2.39       .28      .31      .25      .22   11.0   11.0    7.0    7.0
   0  79  322   6  15   3                  -28.7                2.38       .24      .32      .29      .30
    3.0    2.0    8.0    6.0                 0  79  322   6  15  11                  -29.0
   2.37       .25      .28      .25      .27    8.0    5.0    5.0    8.0                 0  79  322   6
  15  19                  -29.3                2.37       .25      .24      .29      .25    2.0    4.0
 4.0    2.0                 0  79  322   6  15  27                  -29.6                2.36       .24
     .26      .24      .22    2.0    2.0    2.0    1.0                 0  79  322   6  15  35
        -29.9                2.35       .18      .21      .18      .22    8.0    3.0    1.0    2.0
          0  79  322   6  15  43                  -30.2                2.35       .23      .26      .19
    .17    9.0    4.0    4.0    2.0                 0  79  322   6  15  51                  -30.6
          2.34       .19      .17      .17      .19    6.0    3.0    1.0    1.0                 0  79
322   6  15  59                  -30.9                2.33       .22      .17      .17      .19   10.0
 6.0    2.0    9.0                 0  79  322   6  16   7                  -31.2                2.33
    .15      .16      .17      .15    3.0    1.0    4.0    5.0                 0  79  322   6  16  15
              -31.6                2.32       .15      .14      .15      .15    2.0    2.0    6.0    6.
0                 0  79  322   6  16  23                  -31.9                2.31       .14      .16
   .15      .15    8.0    4.0    7.0    1.0                 0  79  322   6  16  31                  -3
2.2                2.31       .13      .12      .11      .12    6.0    3.0    7.0    4.0
0  79  322   6  16  39                  -32.5                2.30       .18      .14      .13      .15
 1.0    6.0    9.0    1.0                 0  79  322   6  16  47                  -32.9
2.30       .17      .14      .12      .11    2.0    3.0    4.0    9.0                 0  79  322   6  1
6  55                  -33.2                2.29       .11      .09      .10      .12    9.0    6.0    5.
0    8.0                 0  79  322   6  17   3                  -33.6                2.29       .10
```

```
      0  79  322   6  17  19                  -34.3              2.28       .07      .05      .11
 .09    7.0    5.0    5.0   10.0                 0  79  322   6  27  59                  -65.4
      1.52       .14      .53      .81    1.10    1.0    2.0    4.0    5.0                  0

 TAPE NO.   1              FILE NO.   2
 RECORD   2                LENGTH   5040
  79  322   6  28   7                  -65.8              1.49      1.30    1.91    2.24    3.01
4.0    6.0    6.0    6.0                 0  79  322   6  28  15                  -66.2              1
.47      3.25    3.09    4.14    3.47    6.0    6.0    6.0    6.0                 0  79  322   6  28
  23                -66.6              1.44      4.82    4.02    3.77    3.79    6.0    6.0    5.0
    6.0                0  79  322   6  28  31                  -66.9              1.42      7.44
4.95    3.99    3.06    6.0    6.0    6.0    6.0                 0  79  322   6  28  39
    -67.3              1.39      2.82    3.77    3.11    2.46    5.0    1.0    5.0    6.0
      0  79  322   6  28  47                  -67.8              1.36      2.08    2.23    2.07    1
.85    5.0    6.0    5.0    4.0                 0  79  322   6  28  55                  -68.1
      1.34      1.75    1.84    1.52    1.71    6.0    6.0    6.0    6.0                 0  79  322
  6  29   3                -68.5              1.31      1.76    1.95    1.99    1.24    6.0    1.0
    1.0    4.0                0  79  322   6  29  11                  -68.9              1.27
.62      .57      .61      .07    1.0    3.0    3.0    2.0                 0  79  322   6  29  19
          -69.3              1.24       .10      .40      .02      .02    2.0    3.0    2.0    1.0
            0  79  322   6  32  15                  -77.5              23.91       .02      .02      .
02    5.12    1.0    1.0    1.0   14.0                 0  79  322   6  32  23                  -77.8
          23.81      5.73      .02      .02      .02    1.0    1.0    1.0    1.0                 0  7
9  322   6  34  47                  -81.3              20.99       .04      .17      .02      .03    1.0
    1.0    1.0    1.0                 0  79  322   6  35  51                  -80.6              19.43
      .04      .04      .12      .04    1.0    1.0    1.0    1.0                 0  79  322   6  38
7                  -75.9              17.33       .06      .09      .10      .08    2.0    1.0    1.0
 1.0                 0  79  322   6  38  15                  -75.5              17.25       .06      .0
9      .14      .13    1.0    1.0    1.0    1.0                 0  79  322   6  38  23
 -75.1              17.18       .23      .34      .34      .35    1.0    3.0    3.0    4.0
   0  79  322   6  38  31                  -74.7              17.11       .40      .44      .44      .53
   3.0    4.0    3.0    4.0                 0  79  322   6  38  39                  -74.3
  17.04       .58      .47      .34      .39    4.0    4.0    4.0    5.0                 0  79  322   6
  38  47                  -73.9              16.98       .31      .18      .25      .57    3.0    2.0
 3.0    5.0                0  79  322   6  38  55                  -73.6              16.91       .47
     .52      .45      .33    5.0    5.0    3.0    5.0                 0  79  322   6  39   3
        -73.2              16.85       .14      .07      .08      .09    1.0    1.0    1.0    2.0
          0  79  322   6  39  11                  -72.8              16.80       .07      .07      .10
    .07    8.0    1.0    1.0    5.0                 0  79  322   6  39  27                  -72.0
         16.70       .11      .12      .12      .10    1.0    1.0    1.0    1.0                 0  79
322   6  39  35                  -71.6              16.65       .13      .03      .03      .02    9.0
 1.0    1.0    1.0                 0  79  322   6  39  43                  -71.2              16.61
    .06      .13      .11      .03    1.0    8.0    1.0    1.0                 0  79  322   7  19   3
                72.0              12.71       .15      .21      .27      .38    9.0    8.0    6.0    6.
0                 0  79  322   7  19  11                  72.3              12.66       .36      .37
   .30      .34    5.0    5.0    5.0    5.0                 0  79  322   7  19  19                   7
2.6              12.61       .37      .26      .30      .25    5.0    2.0    9.0    7.0
0  79  322   7  19  27                  72.9              12.55       .36      .27      .33      .32
 5.0    9.0    5.0    6.0                 0  79  322   7  19  35                  73.2              1
2.49       .18      .30      .26      .28    9.0    5.0    5.0    9.0                 0  79  322   7  1
9  43                  73.5              12.43       .32      .41      .36      .45    5.0    5.0    6.
0    5.0                0  79  322   7  19  51                  73.7              12.37       .41
  .42      .33      .34    6.0    6.0    2.0    7.0                 0  79  322   7  19  59
      74.0              12.31       .41      .40      .36      .35    6.0    7.0    8.0    1.0
      0  79  322   7  20   7                  74.3              12.24       .45      .52      .53
 .53    6.0    6.0    6.0    8.0                 0  79  322   7  20  15                  74.6
      12.18       .42      .47      .34      .32    1.0    6.0    2.0    1.0                 0

 TAPE NO.   1              FILE NO.   2
 RECORD   3                LENGTH   5040
  79  322   7  20  23                  74.9              12.11       .42      .31      .16      .16
8.0    1.0    2.0    1.0                 0  79  322   7  20  31                  75.1              12
.04       .19      .19      .19      .18    2.0    1.0    1.0    1.0                 0  79  322   7  20
  39                  75.3              11.96       .24      .23      .27      .24    1.0    1.0    5.0
```

```
.28      .26      .27      3.0      3.0      3.0      3.0                0  79  322   7  20  55
     75.8             11.80       .32      .28      .25      .24      5.0      5.0      5.0      5.0
      0  79  322   7  21   3                76.1                11.72        .29      .53      .43
.29     4.0      6.0      4.0      5.0                0  79  322   7  21  11                76.3
     11.63        .47      .24      .23      .17      5.0      4.0      1.0      4.0                0  79  322
  7  21  19                76.6                11.55        .21      .12      .15      .12      3.0      3.0
    5.0      3.0                0  79  322   7  21  27                76.8                11.45
.10      .08      .11      .10      1.0      1.0      1.0      1.0                0  79  322   7  21  35
            77.1             11.36       .07      .07      .12      .17      1.0      1.0      1.0      1.0
             0  79  322   7  21  43                77.3                11.26        .15      .10      .
21      .09      1.0      1.0      1.0      1.0                0  79  322   7  21  51                77.5
            11.16        .12      .15      .07      .08      1.0      1.0      1.0      1.0                0  7
9  322   7  21  59                77.6                11.06        .09      .08      .12      .17      1.0
    1.0      1.0      1.0                0  79  322   7  22   7                77.8                10.96
       .22      .17      .04      .04      1.0      1.0      1.0      1.0                0  79  322   7  22  3
9                78.4             10.51        .04      .04      .08      .12      1.0      1.0      1.0
 1.0                0  79  322   7  25  19                78.7                7.85        .07      .1
2      .09      .10      1.0      1.0      1.0      1.0                0  79  322   7  26   7
  77.8             7.15       .10      .16      .12      .23      1.0      1.0      1.0      1.0
   0  79  322   7  26  15                77.7                7.04        .20      .16      .15      .10
    1.0      1.0      1.0      1.0                0  79  322   7  26  23                77.5
   6.93        .36      .42      .07      .05      1.0      1.0      1.0      1.0                0  79  322   7
  26  39                77.1             6.74        .07      .09      .11      .13      1.0      1.0
 1.0      1.0                0  79  322   7  26  47                76.8                6.64        .10
     .39      .21      .23      1.0      1.0      1.0      1.0                0  79  322   7  26  55
         76.6             6.55       .19      .25      .26      .27      1.0      2.0      1.0      1.0
          0  79  322   7  27   3                76.4                6.46        .25      .26      .34
    .50      1.0      1.0      1.0      1.0                0  79  322   7  27  11                76.2
          6.37        .33      .20      .19      .20      1.0      1.0      1.0      2.0                0  79
322   7  27  19                75.9                6.29        .28      .20      .17      .25      1.0
 1.0      1.0      2.0                0  79  322   7  27  27                75.6                6.21
    .24      .36      .36      .40      3.0      3.0      3.0      2.0                0  79  322   7  27  35
             75.3             6.14       .37      .40      .38      .34      3.0      2.0      3.0      2.
0                0  79  322   7  27  43                75.1                6.06        .35      .47
   .57      .54      3.0      3.0      4.0      4.0                0  79  322   7  27  51                7
4.8              5.99       .55      .62      .67      .59      3.0      4.0      3.0      4.0
0  79  322   7  27  59                74.6                5.92        .62      .66      .67      .58
 3.0      4.0      4.0      4.0                0  79  322   7  28   7                74.3
5.85        .62      .61      .50      .50      4.0      4.0      4.0      3.0                0  79  322   7  2
8  15                74.0             5.78        .39      .56      .51      .42      3.0      4.0      3.
0     3.0                0  79  322   7  28  23                73.7                5.72        .44
  .55      .31      .44      3.0      3.0      2.0      3.0                0  79  322   7  29   3
      72.2             5.44      0.00      1.02      1.07      1.02      0.0      4.0      5.0      5.0
       0  79  322   7  29  11                71.9                5.38      1.02      1.18      1.00
1.27     5.0      4.0      4.0      5.0                0  79  322   7  29  19                71.6
       5.33      1.20      1.71      1.63      1.54      5.0      1.0      1.0      5.0                0

 TAPE NO.   1              FILE NO.   2
 RECORD   4                LENGTH   5040
  79  322   7  29  27                71.3                5.28      2.40      3.15      2.56      2.03
1.0      2.0      1.0      1.0                0  79  322   7  29  35                70.9                5
.23      1.84      1.67      1.80      1.71      5.0      5.0      6.0      6.0                0  79  322   7  29
  43                70.6             5.19      1.23       .82       .75       .80      7.0      3.0      5.0
    7.0                0  79  322   7  29  51                70.3                5.14      1.18
1.42      2.18      1.40      5.0      1.0      1.0      1.0                0  79  322   7  29  59
     69.9             5.10      1.69      1.94      1.24      1.33      8.0      6.0      6.0      8.0
       0  79  322   7  30   7                69.6                5.06        .59      1.22       .63
.48      5.0      6.0      4.0      4.0                0  79  322   7  30  15                69.2
      5.01        .54       .41       .55       .38      4.0      3.0      3.0      3.0                0  79  322
  7  30  23                68.9             4.98       .38       .38       .43       .34      4.0      4.0
    4.0      4.0                0  79  322   7  30  31                68.6                4.94
.42       .92      1.11       .99      5.0      5.0      6.0      5.0                0  79  322   7  30  39
            68.3             4.90      1.01      1.44       .66       .76      5.0      6.0      5.0      6.0
             0  79  322   7  30  47                67.9                4.87        .54       .51      .
40       .19      4.0      4.0      4.0      3.0                0  79  322   8   9  11                -65.0
```

```
    1.0    2.0    2.0                 0  79  322   8   9  27                  -65.8                2.49
      .16     .35     .40     .43    3.0    3.0    4.0    4.0                  0  79  322   8   9  3
5                 -66.3                2.49      .35     .32     .60     .88    4.0    3.0    4.0
 5.0                 0  79  322   8   9  43                  -66.7                2.48      2.68    1.5
3    1.27     .73    6.0    5.0    5.0    4.0                  0  79  322   8   9  51
 -67.2                2.47     1.16     .34     .48     .34    5.0    3.0    4.0    3.0
   0  79  322   8   9  59                  -67.7                2.46      .79     .17     .24    4.83
    1.0    2.0    2.0    6.0                 0  79  322   8  10   7                  -68.1
   2.45     1.42     .10     .07     .05    5.0    1.0    1.0    1.0                  0  79  322   8
  10  15                 -68.6                2.44      .05     .49    1.06    2.86    1.0    3.0
 4.0    5.0                 0  79  322   8  10  23                  -69.0                2.43      3.37
     .06     .03     .05    4.0    1.0    1.0    1.0                  0  79  322   8  10  47
        -70.3                2.40      .05     .05     .08     .12    1.0    1.0    1.0    2.0
          0  79  322   8  10  55                  -70.7                2.38      .13     .03     .03
    .10    1.0    1.0    1.0    1.0                 0  79  322   8  11   3                  -71.2
          2.36      .13     .18     .03     .03    2.0    2.0    1.0    1.0                  0  79
322   8  11  11                  -71.7                2.36      .11     .08     .07     .17    1.0
 1.0    1.0    2.0                 0  79  322   8  11  19                  -72.1                2.35
    .69     .51     .84     .10    4.0    4.0    2.0    1.0                  0  79  322   8  19  59
              -78.4                15.72      .06     .11     .06     .07    1.0    1.0    1.0    1.
0                 0  79  322   8  20   7                  -78.0                15.68      .12     .13
   .08     .11    1.0    1.0    1.0    1.0                  0  79  322   8  20  15                  -7
7.5                15.66      .16     .08     .12     .12    1.0    1.0    1.0    1.0
0  79  322   8  20  23                  -77.1                15.63      .13    1.00     .21     .37
 1.0    1.0    1.0    1.0                 0  79  322   8  20  31                  -76.6                1
5.60      .33     .32     .35     .23    1.0    4.0    2.0    1.0                  0  79  322   8  2
0  39                 -76.2                15.58      .20     .30     .21     .23    1.0    1.0    1.
0    3.0                 0  79  322   8  20  47                  -75.7                15.55      .34
  .33     .24     .24    4.0    3.0    2.0    2.0                  0  79  322   8  20  55
     -75.3                15.53      .37     .19     .19     .20    1.0    1.0    1.0    1.0
       0  79  322   8  21   3                  -74.8                15.52      .10     .17     .13
 .11    1.0    1.0    1.0    1.0                 0  79  322   8  21  11                  -74.4
      15.50      .13     .11     .12     .09    1.0    1.0    1.0    2.0                  0

 TAPE NO.   1              FILE NO.   2
 RECORD   5                LENGTH   5040
  79  322   8  21  19                  -73.9                15.48      .14     .11     .12     .11
1.0    1.0    1.0    1.0                 0  79  322   8  21  27                  -73.5                15
.46      .11     .05     .04     .05    1.0    1.0    1.0    1.0                  0  79  322   8  21
  35                 -73.1                15.44      .05     .12     .11     .10    1.0    1.0    1.0
    1.0                 0  79  322   8  21  43                  -72.6                15.43      .07
 .10     .06     .10    1.0    1.0    1.0    7.0                  0  79  322   8  21  51
    -72.2                15.41      .05     .11     .05     .06    1.0    7.0    8.0    1.0
      0  79  322   8  21  59                  -71.8                15.40      .08     .09     .09
.18    9.0    1.0    7.0    6.0                 0  79  322   8  22   7                  -71.3
     15.39      .10     .06     .05     .21    1.0    5.0    7.0    5.0                  0  79  322
  8  22  15                  -70.9                15.38      .05     .12     .17     .09    6.0    6.0
    6.0    6.0                 0  79  322   8  22  23                  -70.4                15.36
.12     .05     .11     .09    5.0    4.0    4.0    4.0                  0  79  322   8  22  31
            -69.9                15.35      .14     .08     .13     .10    6.0    8.0    5.0    5.0
              0  79  322   8  22  39                  -69.5                15.34      .09     .16     .
02     .02    9.0    6.0    1.0    6.0                 0  79  322   8  59  51                  69.3
            13.51      .07     .07     .07     .11    1.0    2.0    2.0    1.0                  0  7
9  322   8  59  59                  69.7                13.49      .12     .16     .19     .22    1.0
    1.0    1.0    1.0                 0  79  322   9   0   7                  70.0                13.46
      .23     .32     .26     .21    2.0    1.0    3.0    4.0                  0  79  322   9   0  1
5                 70.4                13.43      .29     .34     .30     .34    2.0    2.0    8.0
 4.0                 0  79  322   9   0  23                  70.7                13.40      .30     .1
8     .19     .28    4.0    4.0    3.0    3.0                  0  79  322   9   0  31
  71.1                13.38      .31     .31     .34     .33    4.0    4.0    4.0    4.0
   0  79  322   9   0  39                  71.4                13.35      .38     .44     .42     .45
    4.0    8.0    4.0    3.0                 0  79  322   9   0  47                  71.8
  13.32      .44     .41     .40     .46    4.0    3.0    1.0    8.0                  0  79  322   9
   0  55                  72.1                13.29      .48     .41     .37     .38    1.0    8.0
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                                                                                                  0  79  322   9   1  11
          72.8                13.22        .32      .40      .43      .39     3.0     4.0     3.0     2.0
           0  79  322   9   1  19                    73.2                13.19        .45      .45      .55
     .60     3.0     2.0     2.0     4.0                 0  79  322   9   1  27                    73.5
          13.15        .49      .50      .63      .80     3.0     3.0     3.0     8.0                 0  79
322   9   1  35                    73.8                13.12        .81      .90      .74      .67     8.0
 7.0     8.0     4.0                 0  79  322   9   1  43                    74.2                13.08
     .75      .90      .83      .78     8.0     8.0     8.0     9.0                 0  79  322   9   1  51
                 74.6                13.04        .89      .80      .90      .97     7.0     4.0     8.0     7.
0                 0  79  322   9   1  59                    74.9                12.99        .77      .88
    .49      .56     3.0     7.0     4.0     4.0                 0  79  322   9   2   7                    7
5.2                12.94        .73     1.00      .66      .92     8.0     7.0     9.0     7.0
0  79  322   9   2  15                    75.6                12.90        .69      .76      .70      .85
 7.0     8.0     4.0     8.0                 0  79  322   9   2  23                    75.9                 1
2.86        .97     1.08      .99     1.03     7.0     7.0     6.0     8.0                 0  79  322   9
2  31                    76.2                12.81       1.20     1.14     1.05      .92     7.0     7.0     8.
0     7.0                 0  79  322   9   2  39                    76.6                12.76        .83
   .70      .73      .62     1.0     1.0     1.0     1.0                 0  79  322   9   2  47
        76.9                12.70        .51      .44      .28      .46     1.0     1.0     1.0     1.0
         0  79  322   9   2  55                    77.2                12.65        .82     1.14     1.35
1.46     1.0     1.0     1.0     1.0                 0  79  322   9   3   3                    77.5
       12.59       1.33     1.62     1.16     1.23     1.0     1.0     1.0     1.0                 0

 TAPE NO.   1              FILE NO.   2
 RECORD   6                LENGTH   5040
  79  322   9   3  11                    77.8                12.52       1.46     1.17     1.17     1.19
1.0     1.0     1.0     1.0                 0  79  322   9   3  19                    78.1                12
.45       1.04     1.09     1.21     1.16     1.0     1.0     1.0     1.0                 0  79  322   9   3
  27                    78.5                12.37       1.12     1.13      .92     1.02     1.0     1.0     1.0
    1.0                 0  79  322   9   3  35                    78.8                12.30       1.02
 .99     1.26     1.57     1.0     1.0     1.0     1.0                 0  79  322   9   3  43
      79.1                12.23       1.50     1.37     1.13     1.45     1.0     1.0     1.0     1.0
         0  79  322   9   3  51                    79.4                12.14       1.36     1.50     1.16     1
.07     1.0     1.0     1.0     1.0                 0  79  322   9   3  59                    79.6
      12.05       1.68     1.13      .99     1.08     1.0     1.0     1.0     1.0                 0  79  322
   9   4   7                    79.9                11.96        .98      .82     1.29      .98     1.0     1.0
     1.0     1.0                 0  79  322   9   4  15                    80.2                11.87
.99       .94      .82      .97     1.0     1.0     1.0     1.0                 0  79  322   9   4  23
              80.5                11.77        .67      .59      .79      .57     1.0     1.0     1.0     1.0
                0  79  322   9   4  31                    80.8                11.66        .49      .65      .
60     1.78     1.0     1.0     1.0     1.0                 0  79  322   9   4  39                    81.0
              11.54        .37      .35      .24      .23     1.0     1.0     1.0     1.0                 0  7
9  322   9   4  47                    81.2                11.42        .47      .45     1.35      .47     1.0
    1.0     1.0     1.0                 0  79  322   9   4  55                    81.5                11.29
        .11      .96      .07      .07     1.0     1.0     1.0     1.0                 0  79  322   9   5
3                   81.7                11.16       1.85     2.39     2.28     0.00     2.0     3.0     3.0
 4.0                 0  79  322   9   5  11                    81.9                11.01       3.32     1.7
3      .64     2.58     5.0     4.0     3.0     5.0                 0  79  322   9   5  19
   82.2                10.84        .66     1.27     1.77      .86     1.0     2.0     1.0     3.0
    0  79  322   9   5  27                    82.4                10.66        .78      .02      .03      .02
     2.0     2.0     2.0     1.0                 0  79  322   9   5  59                    83.0
    9.95        .19      .29      .39      .27     1.0     2.0     2.0     1.0                 0  79  322   9
   6   7                    83.1                9.73        .14      .04      .04      .02     1.0     1.0
 1.0     1.0                 0  79  322   9   6  47                    83.3                8.65        .15
      .12      .58      .33     1.0     1.0     1.0     1.0                 0  79  322   9   6  55
          83.3                8.42        .04      .07      .05     1.19     1.0     1.0     1.0     1.0
           0  79  322   9   7   3                    83.3                8.19        .27      .44     1.24
   1.24     1.0     1.0     1.0     1.0                 0  79  322   9   7  11                    83.2
           7.98        .98      .89      .64      .14     1.0     1.0     1.0     1.0                 0  79
322   9   7  19                    83.1                7.77        .12      .11      .06      .07     1.0
 1.0     1.0     1.0                 0  79  322   9   7  43                    82.8                7.16
    .10      .10      .09      .08     1.0     1.0     1.0     1.0                 0  79  322   9   8   7
                82.2                6.64        .16      .10      .08      .07     1.0     1.0     1.0     1.
0                 0  79  322   9   8  15                    82.0                6.48        .10      .06
    .10      .07     1.0     1.0     1.0     2.0                 0  79  322   9   9  27                    7
```

```
 1.0    1.0    1.0    1.0                 0  79  322   9   9  43                  79.0
5.17       .63      .65      .64      .62    1.0    1.0    1.0    1.0                 0  79  322   9
9  51                  78.7                 5.09       .70      .73      .77      .64    1.0    1.0    1.
0    1.0                 0  79  322   9   9  59                  78.4                 5.01       .68
  .63      .70      .56    1.0    1.0    1.0    1.0                 0  79  322   9  10   7
      78.0                4.93       .70      .63      .57      .59    1.0    1.0    1.0    1.0
       0  79  322   9  10  15                  77.7                 4.86       .48      .51      .42
 .50    1.0    1.0    1.0    1.0                 0  79  322   9  10  23                  77.4
       4.79       .44      .48      .45      .48    1.0    1.0    1.0    1.0                 0

 TAPE NO.   1              FILE NO.   2
 RECORD   76               LENGTH   5040
  79  401   4  55  43                  -62.4                 16.81       .09      .12      .08      .07   1
1.0   11.0    1.0   11.0                 0  79  401   4  55  51                  -62.0                 16
.77       .09      .03      .14      .02   11.0    1.0    1.0    1.0                 0  79  401   4  56
   7                  -61.2                16.70       .02      .02      .02      .10    1.0    1.0    1.0
   11.0                 0  79  401   4  56  15                  -60.8                 16.67       .08
 .05      .13      .21   11.0    1.0   10.0   11.0                 0  79  401   4  56  23
    -60.5                16.63       .08      .06      .21      .15   11.0    1.0   11.0   11.0
       0  79  401   5  28  31                  57.9                 13.83       .01      .03      .02    5
.12    1.0    1.0    1.0   14.0                 0  79  401   5  28  39                  58.3
     13.81       6.36      .02      .02      .03    1.0    1.0    1.0    1.0                 0  79  401
  5  32  15                  68.5                12.82       .05      .04      .03      .13    1.0    1.0
    1.0    1.0                 0  79  401   5  32  31                  69.2                 12.72
.02      .05      .20      .05    1.0    1.0    1.0    1.0                 0  79  401   5  32  39
            69.6                12.66       .03      .02      .49      .66    1.0    1.0   10.0    1.0
             0  79  401   5  32  47                  69.9                 12.60       .55      .51     .
43      .52    1.0    1.0    1.0    1.0                 0  79  401   5  32  55                  70.2
            12.55       .06      .02      .16      .35    1.0    1.0   11.0   11.0                 0  7
9  401   5  33   3                  70.5                12.49       .57      .45      .60      .54    1.0
   10.0   11.0   10.0                 0  79  401   5  33  11                  70.8                 12.42
       .28      .17      .04      .05    1.0   11.0    1.0    1.0                 0  79  401   5  33  1
9                  71.1                12.36       .14      .21      .37      .30   11.0   11.0   10.0
11.0                 0  79  401   5  33  27                  71.4                 12.29       .43      .5
5      .48      .31   11.0   10.0   11.0   11.0                 0  79  401   5  33  35
  71.7                12.22       .37      .39      .35      .36   11.0   11.0   11.0   10.0
   0  79  401   5  33  43                  72.0                 12.15       .32      .31      .49      .66
   10.0   11.0   10.0   11.0                 0  79  401   5  33  51                  72.2
  12.08       .63      .65      .54      .72   11.0   11.0   10.0   10.0                 0  79  401   5
  33  59                  72.5                12.00       .57      .60      .40      .58   11.0   10.0
11.0   11.0                 0  79  401   5  34   7                  72.8                 11.93       .62
     .30      .27      .45   10.0   10.0   11.0   10.0                 0  79  401   5  34  15
         73.1                11.85       .49      .46      .50      .53   11.0   11.0   11.0   10.0
          0  79  401   5  34  23                  73.3                 11.77       .38      .63      .80
    .60   11.0    9.0   10.0   10.0                 0  79  401   5  34  31                  73.6
         11.68       .66      .55      .68      .75   10.0    1.0    9.0   10.0                 0  79
401   5  34  39                  73.8                11.60       .87      .92      .86    1.03    9.0
 8.0    9.0    9.0                 0  79  401   5  34  47                  74.0                 11.51
    .50      .26      .89    1.10   11.0   11.0    9.0    7.0                 0  79  401   5  34  55
                74.2                11.42      1.11      .69    1.02      .82    7.0   10.0    6.0    9.
0                 0  79  401   5  35   3                  74.4                 11.33      1.01      .62
   .73      .95    9.0    9.0    1.0    1.0                 0  79  401   5  35  11                   7
4.6                11.23      1.06      .17      .20      .23    1.0    5.0    4.0    4.0
0  79  401   5  35  19                  74.8                11.14       .22      .35      .33      .38
 4.0    3.0    3.0    3.0                 0  79  401   5  35  27                  75.0                 1
1.04       .48      .30      .33      .32    3.0    3.0    3.0    3.0                 0  79  401   5  3
5  35                  75.2                10.94       .27      .30      .27      .21    1.0    3.0    3.
0    3.0                 0  79  401   5  35  43                  75.4                 10.83       .26
  .24      .25      .36    2.0    3.0    2.0    3.0                 0  79  401   5  35  51
      75.5                10.73       .34      .27      .37      .31    3.0    3.0    2.0    3.0
       0  79  401   5  35  59                  75.7                 10.62       .37      .54      .36
 .24    1.0    1.0    1.0    3.0                 0  79  401   5  36   7                  75.8
      10.51       .31      .29      .25      .27    3.0    1.0    2.0    1.0                 0
```

```
 79  401   5  36  15                  75.9              10.40       .21      .25      .29      .48
1.0     1.0     1.0     1.0                 0  79  401   5  36  23                  76.0              10
.28       .12      .11      .11     3.07     1.0     1.0     1.0     1.0                 0  79  401   5  36
  31                  76.1                10.17       .34      .12      .17      .14     1.0     1.0     1.0
    1.0                 0  79  401   5  36  39                  76.2              10.06       .41
 .15      .21      .20     1.0     1.0     1.0     1.0                 0  79  401   5  36  47
     76.3                9.94       .09      .13      .15      .27     1.0     1.0     1.0     1.0
      0  79  401   5  36  55                  76.3                9.83       .24      .19      .32     1
.44     1.0     1.0     1.0     1.0                 0  79  401   5  37   3                  76.4
      9.71       .10      .32      .14      .11     1.0     1.0     1.0     1.0                 0  79  401
  5  37  11                  76.4                9.59       .10      .13      .08      .12     1.0     1.0
    1.0     1.0                 0  79  401   5  37  19                  76.5                9.47
.12      .08      .10      .08     1.0     1.0     1.0     1.0                 0  79  401   5  37  27
            76.5                9.35       .18      .23      .36      .70     1.0     1.0     1.0     1.0
             0  79  401   5  37  35                  76.5                9.23       .77      .92     2.
74      .07     1.0     1.0     1.0     1.0                 0  79  401   5  37  43                  76.5
             9.11       .08      .16      .15      .19     1.0     1.0     1.0     1.0                 0  7
9  401   5  37  51                  76.5                8.98       .12      .18      .75      .29     1.0
    1.0     1.0     1.0                 0  79  401   5  37  59                  76.4                8.86
       .63      .22      .25      .23     1.0     1.0     1.0     1.0                 0  79  401   5  38
7                  76.3                8.75       .35      .33      .53      .18     1.0     1.0     1.0
 1.0                 0  79  401   5  38  15                  76.3                8.63       .46      .1
5      .15      .20     1.0     1.0     1.0     1.0                 0  79  401   5  38  23
  76.2                8.52       .45      .18      .76      .70     1.0     1.0     1.0     1.0
   0  79  401   5  38  31                  76.2                8.41       .19      .19      .27      .33
    1.0     1.0     1.0     1.0                 0  79  401   5  38  39                  76.1
   8.29       .23      .27      .31      .16     1.0     1.0     1.0     1.0                 0  79  401   5
  38  47                  76.0                8.17       .50      .33      .33      .73     1.0     1.0
 1.0     1.0                 0  79  401   5  38  55                  75.9                8.07       .55
     .44      .31      .24     1.0     1.0     1.0     1.0                 0  79  401   5  39   3
         75.7                7.97       .33      .31      .22      .27     1.0     1.0     1.0     1.0
          0  79  401   5  39  11                  75.6                7.86       .23      .31      .33
    .28     1.0     1.0     1.0     1.0                 0  79  401   5  39  19                  75.4
          7.76       .36      .26      .30      .41     1.0     1.0     1.0     1.0                 0  79
401   5  39  27                  75.3                7.65       .28      .43      .50     1.73     1.0
 1.0     1.0     1.0                 0  79  401   5  39  35                  75.1                7.55
    .96     1.54     2.95      .56     1.0     1.0     1.0     1.0                 0  79  401   5  39  43
                74.9                7.46       .48      .46      .64      .92     1.0     1.0     1.0     1.
0                 0  79  401   5  39  51                  74.7                7.36       .37      .81
  1.05     1.14     1.0     1.0     1.0     1.0                 0  79  401   5  39  59                   7
4.5                7.27      1.03     1.16     1.22     1.28     1.0     1.0     1.0     1.0
0  79  401   5  40   7                  74.3                7.18      1.28     1.28     1.29     1.31
 1.0     4.0     2.0     2.0                 0  79  401   5  40  15                  74.1
7.09      1.17     1.24     1.30     1.33     2.0     2.0     2.0     4.0                 0  79  401   5  4
0  23                  73.9                7.00      1.41     1.23      .96      .92     2.0     4.0     4.
0     5.0                 0  79  401   5  40  31                  73.7                6.92      1.16
 1.15     1.37     1.18     3.0     3.0     5.0     5.0                 0  79  401   5  40  39
      73.5                6.85      1.21     1.34     1.28     1.26     4.0     5.0     5.0     7.0
       0  79  401   5  40  47                  73.2                6.77      1.33     1.27     1.30
1.32     4.0     4.0     7.0     7.0                 0  79  401   5  40  55                  73.0
       6.69      1.29     1.22      .77      .83     8.0     7.0     3.0     2.0                 0

 TAPE NO.   1              FILE NO.   2
 RECORD   78               LENGTH   5040
  79  401   5  41   3                  72.7                6.61       .96      .80      .73      .70
7.0     2.0     6.0     5.0                 0  79  401   5  41  11                  72.4                6
.54       .61      .77      .70      .77     3.0     5.0     3.0     4.0                 0  79  401   5  41
  19                  72.2                6.47       .73      .63      .63      .76     6.0     5.0     5.0
    6.0                 0  79  401   5  41  27                  71.9                6.40       .80
 .65      .64      .72     5.0     6.0     6.0     7.0                 0  79  401   5  41  35
     71.7                6.33       .63      .65      .71     1.27     6.0     7.0     5.0     7.0
      0  79  401   5  41  43                  71.4                6.27       .95     1.31     1.23     1
.30     8.0     7.0     6.0     7.0                 0  79  401   5  41  51                  71.1
       6.21      1.24      .67      .59      .62     6.0     7.0     4.0     4.0                 0  79  401
```

```
.53     .27     .29     .27     4.0     3.0     4.0     4.0                 0  79  401   5  42  15
            70.2                6.03        .28      .39      .45      .40     3.0     3.0     4.0     5.0
             0  79  401   5  42  23                  69.9                 5.98        .48      .47
41      .39     4.0     3.0     3.0     5.0                 0  79  401   5  42  31                  69.6
            5.93        .23      .97      .90     1.67     3.0     6.0     9.0     8.0                 0  7
9  401   5  42  39                  69.3                 5.87      1.61     1.12      .97     1.65     9.0
    8.0     9.0     8.0                 0  79  401   5  42  47                  69.0                 5.82
      1.55     1.03      .94      .75     9.0     9.0     8.0     7.0                 0  79  401   5  43  2
7                  67.4                5.59      0.00      .43      .24      .21     0.0     3.0     3.0
 4.0                 0  79  401   5  43  35                  67.0                 5.54      1.34     2.6
1    2.77     1.08    10.0    10.0    10.0     1.0                 0  79  401   5  43  43
  66.7                5.50       .51      .35      .31      .24     1.0     1.0     4.0     4.0
   0  79  401   5  43  51                  66.4                 5.46       .29      .21      .35     1.78
    3.0     1.0     1.0    10.0                 0  79  401   5  43  59                  66.0
   5.42      2.53     2.57     2.53      .45    10.0    10.0    10.0     7.0                 0  79  401   5
  44   7                  65.7                 5.38       .13      .09      .08      .40     3.0     1.0
 1.0     1.0                 0  79  401   5  44  15                  65.4                 5.35       .44
     .30      .09      .06     1.0     1.0     1.0     1.0                 0  79  401   5  44  47
         63.9                5.21       .10      .11      .06      .07     5.0     1.0     1.0     1.0
          0  79  401   5  44  55                  63.5                 5.17       .11      .06      .06
    .15     2.0     1.0     2.0     6.0                 0  79  401   5  45   3                  63.2
          5.14        .17      .08      .06      .09     2.0     1.0     1.0     2.0                 0  79
401   5  45  11                  62.8                 5.11       .12      .04      .12      .10     8.0
 1.0     8.0     8.0                 0  79  401   6   9   3                 -23.4                 2.56
    .32      .34      .37      .35     7.0     4.0     3.0    10.0                 0  79  401   6   9  11
              -23.6                2.55       .35      .36      .35      .41     9.0     7.0     2.0     8.
0                 0  79  401   6   9  19                 -23.9                 2.54       .37      .38
   .35      .28     9.0     6.0     7.0     1.0                 0  79  401   6   9  27                  -2
4.1                2.54       .30      .39      .34      .39     1.0     8.0     5.0     8.0
0  79  401   6   9  35                 -24.4                 2.53       .36      .35      .34      .31
 8.0     6.0     2.0     6.0                 0  79  401   6   9  43                 -24.6
2.52       .35      .38      .34      .41     2.0     5.0     8.0     7.0                 0  79  401   6
9  51                 -24.9                2.51       .38      .36      .37      .35     3.0     1.0     4.
0    7.0                 0  79  401   6   9  59                 -25.2                 2.50       .31
  .35      .36      .37     2.0     6.0     3.0     9.0                 0  79  401   6  10   7
     -25.4                2.49       .34      .36      .30      .34     8.0     2.0     8.0     4.0
       0  79  401   6  10  15                 -25.7                 2.49       .35      .42      .32
 .36     8.0    10.0     8.0     5.0                 0  79  401   6  10  23                 -26.0
       2.48       .31      .34      .35      .34     9.0     4.0     1.0     2.0                 0

 TAPE NO.   1              FILE NO.   2
 RECORD   79               LENGTH   5040
  79  401   6  10  31                 -26.3                 2.47       .35      .36      .33      .35   1
0.0     5.0     6.0     9.0                 0  79  401   6  10  39                 -26.6                 2
.46       .36      .35      .32      .34     5.0     8.0     1.0     8.0                 0  79  401   6  10
  47                 -26.9                2.46       .40      .25      .39      .28     3.0     3.0     9.0
    8.0                 0  79  401   6  10  55                 -27.2                 2.45       .32
 .33      .35      .31     2.0     1.0     6.0    11.0                 0  79  401   6  11   3
    -27.5                2.44       .35      .35      .31      .24     6.0     8.0     5.0     1.0
       0  79  401   6  11  11                 -27.8                 2.44       .33      .24      .35
.29     4.0     2.0     2.0     5.0                 0  79  401   6  11  19                 -28.1
      2.43       .30      .35      .26      .31     5.0     8.0     4.0    11.0                 0  79  401
  6  11  27                 -28.5                2.42       .28      .23      .29      .27     7.0     4.0
    3.0    10.0                 0  79  401   6  11  35                 -28.8                 2.41
.27      .25      .24      .22     3.0     5.0     5.0     3.0                 0  79  401   6  11  43
          -29.1                2.41       .27      .24      .29      .26     8.0     3.0     7.0     6.0
             0  79  401   6  11  51                 -29.4                 2.40       .22      .23      .
23      .24     1.0     3.0     5.0    11.0                 0  79  401   6  11  59                 -29.7
            2.39       .23      .21      .23      .22     8.0     2.0     5.0     7.0                 0  7
9  401   6  12   7                 -30.0                 2.39       .22      .19      .23      .21     6.0
    3.0     5.0     2.0                 0  79  401   6  12  15                 -30.3                 2.38
       .18      .20      .24      .20     4.0     6.0     3.0    10.0                 0  79  401   6  12  2
3                 -30.6                2.37       .19      .19      .18      .23     7.0     4.0     2.0
 6.0                 0  79  401   6  12  31                 -31.0                 2.37       .17      .1
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  0  79  401   6  12  47                  -31.6                2.35       .14      .17      .15      .14
   6.0   11.0    2.0    2.0                  0  79  401   6  12  55                  -31.9
  2.35       .10      .14      .17      .16    4.0    4.0    4.0    6.0                  0  79  401   6
  13   3                  -32.3                2.34       .12      .11      .15      .11    6.0    8.0
 5.0    1.0                  0  79  401   6  13  11                  -32.6                2.34       .13
     .09      .13      .11    6.0    2.0   10.0    2.0                  0  79  401   6  13  19
        -32.9                2.33       .14      .09      .10      .12    6.0    2.0    4.0    4.0
          0  79  401   6  13  27                  -33.2                2.32       .09      .10      .12
    .12    9.0    7.0    3.0    5.0                  0  79  401   6  13  35                  -33.6
          2.32       .09      .09      .11      .09    1.0   11.0    4.0    8.0                  0  79
401   6  13  43                  -33.9                2.31       .09      .11      .10      .09    2.0
11.0    1.0    1.0                  0  79  401   6  13  51                  -34.3                2.30
    .09      .07      .11      .07    2.0    1.0    3.0   10.0                  0  79  401   6  23  51
                -63.2                1.64       .08      .15      .15      .23    1.0    2.0    1.0    5.
0                  0  79  401   6  23  59                  -63.6                1.62       .13      .16
   .18      .67    5.0    5.0    5.0    5.0                  0  79  401   6  24   7                  -6
4.0                1.59       .41      .19      .15      .16    5.0    2.0    2.0    2.0
0  79  401   6  24  15                  -64.4                1.57       .19      .31      .23      .28
 3.0    3.0    2.0    3.0                  0  79  401   6  24  23                  -64.8
1.55       .30      .31      .37      .43    6.0    4.0    2.0    5.0                  0  79  401   6  2
4  31                  -65.2                1.53       .38      .66      .46      .56    4.0    3.0    4.
0    5.0                  0  79  401   6  24  39                  -65.6                1.50       .52
  .55      .58      .57    4.0    6.0    5.0    4.0                  0  79  401   6  24  47
     -66.0                1.48       .56      .52    1.50      .44    5.0    5.0    7.0    4.0
       0  79  401   6  24  55                  -66.4                1.45       .38      .44      .41
 .50    3.0    5.0    3.0    5.0                  0  79  401   6  25   3                  -66.8
       1.43       .60      .77      .85      .70    5.0    4.0    4.0    5.0                  0

 TAPE NO.   1              FILE NO.   2
 RECORD   80               LENGTH   5040
  79  401   6  25  11                  -67.2                1.40       .76      .78      .84      .62
4.0    4.0    4.0    3.0                  0  79  401   6  25  19                  -67.6                1
.38       .48      .45      .36      .29    3.0    3.0    3.0    2.0                  0  79  401   6  25
  27                  -68.0                1.35       .20      .24      .23      .24    2.0    3.0    3.0
    3.0                  0  79  401   6  25  35                  -68.4                1.32       .24
 .31      .12      .11    3.0    1.0    1.0    2.0                  0  79  401   6  25  43
    -68.8                1.28       .11      .20      .12      .20    2.0    2.0    1.0    3.0
      0  79  401   6  25  51                  -69.2                1.25       .12      .17      .17
.11    1.0    2.0    1.0    1.0                  0  79  401   6  25  59                  -69.6
      1.21       .10      .14      .12      .09    2.0    1.0    1.0    1.0                  0  79  401
  6  27  27                  -73.8                .69       .06      .07      .07      .11    1.0    1.0
    1.0    1.0                  0  79  401   6  27  35                  -74.2                .63
.12      .08      .08      .07    1.0    1.0    1.0    1.0                  0  79  401   6  28  31
            -76.6                .10       .07      .11      .17      .09    1.0    1.0    1.0    1.0
              0  79  401   6  29  27                  -78.8                23.37       .09      .09      .
12      .13    1.0    1.0    1.0    1.0                  0  79  401   6  29  59                  -79.7
             22.85       .06      .05      .12      .12    1.0    1.0    1.0    1.0                  0  7
9  401   6  30   7                  -80.0                22.69       .15      .14      .14      .11    1.0
    1.0    1.0    1.0                  0  79  401   6  30  15                  -80.1                22.52
       .15      .27      .85      .59    1.0    1.0    1.0    1.0                  0  79  401   6  31  4
3                  -81.0                20.50       .02      .02      .02    1.65    1.0    1.0    1.0
 3.0                  0  79  401   6  31  51                  -80.9                20.32       .92      .9
1      .30      .18    2.0    2.0    1.0    1.0                  0  79  401   6  31  59
 -80.9                20.12       .09      .09      .14      .13    1.0    1.0    1.0    1.0
   0  79  401   6  32   7                  -80.8                19.92       .08      .11      .07      .04
    1.0    1.0    1.0    1.0                  0  79  401   6  32  31                  -80.3
  19.38       .20      .64      .05      .03    1.0    1.0    1.0    1.0                  0  79  401   6
  32  55                  -79.7                18.89       .03    6.17      .08      .14    2.0    3.0
 1.0    1.0                  0  79  401   6  33   3                  -79.5                18.76       .12
     .25      .97      .08    1.0    1.0    1.0    1.0                  0  79  401   6  33  11
        -79.3                18.63       .15      .09      .13      .12    1.0    2.0    1.0    1.0
          0  79  401   6  33  19                  -79.0                18.49       .13      .58      .16
    .08    1.0    1.0    1.0    1.0                  0  79  401   6  33  27                  -78.7
          18.35       .08      .07      .37    1.35    1.0    1.0    1.0    2.0                  0  79
```

```
    .26      .13      .21      .15      1.0      1.0      2.0      1.0                  0  79  401   6  33  51
                -77.8                18.00        .21      .27      .21      .10      1.0      1.0      1.0      1.
0                  0  79  401   6  33  59                        -77.5                17.90        .12      .10
   .14      .14      1.0      1.0      1.0      1.0                  0  79  401   6  34   7                    -7
7.2                17.79        .20      .24      .25      .25      4.0      1.0      1.0      1.0
0  79  401   6  34  15                    -76.9                17.69        .27      .26      .22      .13
 1.0      3.0      3.0      1.0                  0  79  401   6  34  23                    -76.6                1
7.61        .09      .11      .09      .31      1.0      1.0      1.0      1.0                  0  79  401   6  3
4  31                    -76.2                17.52        .06      .16      .14      .16      1.0      1.0      1.
0     1.0                  0  79  401   6  34  39                        -75.8                17.44        .35
  .25      .17      .25      1.0      1.0      1.0      1.0                  0  79  401   6  34  47
      -75.4                17.36        .27      .36      .30      .53      1.0      3.0      2.0      1.0
        0  79  401   6  34  55                        -75.1                17.28        .44      .42      .40
  .44      1.0      3.0      1.0      5.0                  0  79  401   6  35   3                    -74.7
       17.21        .43      .48      .39      .48      4.0      5.0      4.0      6.0                  0

 TAPE NO.   1              FILE NO.   2
 RECORD   81               LENGTH   1680
  79  401   6  35  11                    -74.3                17.14        .52      .63      .58      .52
4.0      6.0      5.0      6.0                  0  79  401   6  35  19                    -73.9                17
.08        .52      .62      .51      .50      5.0      5.0      5.0      4.0                  0  79  401   6  35
  27                    -73.6                17.02        .56      .42      .28      .37      6.0      5.0      4.0
    5.0                  0  79  401   6  35  35                        -73.2                16.96        .43
  .33      .28      .12      5.0      4.0      5.0      3.0                  0  79  401   6  35  43
      -72.8                16.90        .08      .13      .11      .09      3.0      3.0      4.0      4.0
        0  79  401   6  35  51                        -72.4                16.85        .12      .25      .25
.19      3.0      5.0      5.0      5.0                  0  79  401   6  35  59                    -72.0
       16.80        .17      .12      .16      .64      5.0      5.0      1.0      6.0                  0  79  401
  6  36   7                    -71.6                16.74        .58      .58      .46      .08      6.0      5.0
    6.0      3.0                  0  79  401   6  36  15                        -71.2                16.70
.10      .08      .12      .06      4.0      4.0      1.0      1.0                  0  79  401   6  37  35
            -67.0                16.31        .34      .02      .03      .12     10.0      1.0      1.0     10.0
              0  79  401   6  37  51                        -66.1                16.25        .02      .02      .
05      .33      1.0      1.0      1.0     11.0                  0  79  401   6  37  59                    -65.7
             16.22        .56      .38      .02      .03      9.0      7.0      1.0      1.0                  0

***** JOB DONE.
$WEO LPS

$ASS IN MT4 OUT MT1
$EXE TPDUPC BS
```

D-47133

DUMP OF TAPE LDOUT-1

```
INPUT TAPE  LDOUT-1 O,  9T4
DATA INPUT    DM OF 3 FL 3 1 0

                                                  1                                2                 79                   3                  22
FILE        1  RECORD          1  LENGTH      200BYTES
(       0)  173061300000  00000000 1726  474000000000  0000 17216000  000000000000  172454000000  00000000 1713  577305332563
(      48)  725317144512  751703302115  171471666213  207126011715  542233513615  237617164213  207126010142  171664570651
(      96)  767635551717  506517676355  442717177712  601014223351  172061156457  065176761721  455645706517  676417217124
(     144)  773716662132  172254146314  631463151723  420365605075  341217236456  050753412173  172450656050  753412170000
(     192)  000000000000  0000

          FILE   INPUT     DATA RECORDS     MAX.          READ ERROR SUMMARY          INPUT RETRIES
                 RECS.        INPUT         SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
            1    1079       1079            195         0      0       0      0       0      0

FILE        2  RECORD          1  LENGTH      200BYTES                79                   3                  22
(       0)  173060600006  00000000 1726  474000000000  0000 17216000  000000000000  172454000000  00000000 1713  577305332563
(      48)  725317144512  751703302115  171471666213  207126011715  542233513615  237617164213  207126010142  171664570651
(      96)  767635551717  506517676355  442717177712  601014223351  172061156457  065176761721  455645706517  676417217124
(     144)  773716662132  172254146314  631463151723  420365605075  341217236456  050753412173  172450656050  753412170000
(     192)  000000000000  0000

          FILE   INPUT     DATA RECORDS     MAX.          READ ERROR SUMMARY          INPUT RETRIES
                 RECS.        INPUT         SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
            2    2205       2205            195         0      0       0      0       0      0

FILE        3  RECORD          1  LENGTH      200BYTES                79                   3                  22
(       0)  173061300000  00000000 1726  474000000000  0000 17216000  000000000000  172454000000  00000000 1713  577305332563
(      48)  725317144512  751703302115  171471666213  207126011715  542233513615  237617164213  207126010142  171664570651
(      96)  767635551717  506517676355  442717177712  601014223351  172061156457  065176761721  455645706517  676417217124
(     144)  773716662132  172254146314  631463151723  420365605075  341217236456  050753412173  172450656050  753412170000
(     192)  000000000000  0000

          FILE   INPUT     DATA RECORDS     MAX.          READ ERROR SUMMARY          INPUT RETRIES
                 RECS.        INPUT         SIZE       PERM  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
            3    1649       1649            195         0      0       0      0       0      0

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

START TIME 01/07/72  16:45:46          STOP TIME 01/07/72  16:47:12
```

181/1980
6/29/80

546 DAYS FROM 1/1/79
-365
181

X RBS

```
NUMBER OF TAPE LLIN-1
INPUT TAPE  LLIN-1  ON  AT2
DATA INPUT    TP OF 1 FL 1 2 2

FILE        1  RECORD        1  LENGTH      120BYTES
(      0)   B0A0B5B4  B4B7B9B8  D2B3A0A0  B1B2B7B8  D2C2D3A0  A0A0B2B5  AEB6A0A0  B3B0AEB3  A0A0B5B2
(     40)   A2D2A0A0  B7B4AEB1  A0A0B9B6  AFB0A0B1  B1B7AEB7  A0B1B3B8  AEB9A0B1  B6B0AEB7  A0B1B8B2  AEB6A0B2
(     80)   C0B5AEB6  A0B2B2B7  AEB5A0B2  B5B0AEB0  A0B2B7B3  AEB5A0B2  B9B6AEB5  A0B3B2B0  AEB0A0B3  B8B6AEB3

FILE        1  RECORD        2  LENGTH      120BYTES
(      0)   B1B0A0A0  A0A0B1A0  A0A0A0A0  A0A0A0A0  A0A0A0A0  A0AEB1B6  B3B4C5A0  B0B2A0AE  B8B1B7B2  C5A0B0B1
(     40)   A0AEB1B6  B3B4C5A0  B0B2A0AE  B0B0B0B0  C5A0B0B1  A0AEB0B0  B0B0C5A0  B0B1A0AE  B1B6B3B4  C5A0B0B2
(     80)   A0AEB0B0  B0B0C5A0  B0B1A0AE  B0B0B0B0  C5A0B0B1  A0AEB0B0  B0B0C5A0  B0B1A0AE  B0B0B0B0  C5A0B0B1

FILE        1  RECORD     16758  LENGTH      120BYTES
(      0)   B1B0A0A0  B3B7B5A0  A0A0A0A0  A0A0A0A0  A0A0A0A0  A0AEB1B6  B1B7C5A0  B0B2A0AE  B8B0B8B7  C5A0B0B1
(     40)   A0AEB0B0  B0B0C5A0  B0B1A0AE  B0B0B0B0  C5A0B0B1  A0AEB8B0  B8B7C5A0  B0B1A0AE  B0B0B0B0  C5A0B0B1
(     80)   A0AEB0B0  B0B0C5A0  B0B1A0AE  B0B0B0B0  C5A0B0B1  A0AEB0B0  B0B0C5A0  B0B1A0AE  B0B0B0B0  C5A0B0B1

FILE        1  RECORD     16751  LENGTH      120BYTES
(      0)   B2B0A0B9  B3B7B5A0  A0A0A0A0  A0A0A0A0  A0A0A0A0  A0AEB0B0  B0B0C5A0  B0B1A0AE  B0B0B0B0  C5A0B0B1
(     40)   A0AEB0B0  B0B0C5A0  B0B1A0AE  B0B0B0B0  C5A0B0B1  A0AEB0B0  B0B0C5A0  B0B1A0AE  B1B2B3B5  C5A0B0B0
(     80)   A0A0A0A0  A0A0A0A0  A0A0A0A0  A0A0A0A0  A0A0A0A0  A0A0A0A0  A0A0A0A0  A0A0A0A0  A0A0A0A0  A0A0A0A0

        FILE   INPUT    DATA RECORDS    MAX.          READ ERROR SUMMARY          INPUT RETRIES
               RECS.      INPUT        SIZE       PERM.  ZERO B   SHORT  UNDEF.  #RECS.  TOTAL#
          1    16751    16752           120         1       0       0       0       1       8
      READ ERROR #    FILE #    RECORD #
          1           1         374

EOJ        DUMP STAMPED AFTER FILE   1          # OF PERMANENT READ ERRORS  1

START TIME 06/26/ 1  13:14:50        STOP TIME 06/26/ 1  13:19:10
```

7

B 0 | A 0 | 11011000 | 1100

10110000 | 10101000 | 01011000

0011 | 0010 20 | 58

30 | 0 10110010

32