#666

AMPTE_CCE

6.4 MIN MASS ENERGY SPECTRA (HPCE)
84-088A-01B

6.4 MIN MASS ENERGY SPECTRA (MEPA)
84-088A-02B

CHARGE ENERGY MASS SPECTROMETER
84-088A-03B

62 SECOND AVERAGE AND PEAK VALUES
84-088A-04B

MAGNETIC FIELD VECTORS
84-088A-05B

REQ. AGENT	RAND NO.	ACQ. AGENT
DHG		RP

AMPTE-CCE

6.4 MIN MASS ENERGY SPECTRA (HPCE)
84-088A-01B

6.4 MIN MASS ENERGY SPECTRA (MEPA)
84-088A-02B

CHARGE ENERGY MASS SPECTROMETER
84-088A-03B

62 SECOND AVERAGE AND PEAK VALUES
84-088A-04B

MAGNETIC FIELD VECTORS
84-088A-05B

THIS DATA SET CATALOG CONTAINS 87 TAPES. THEY ARE ALL 9 TRACK, 6250 BPI, BIN, IN SFDU FORMAT (STANDARD FORMATTED DATA UNITS). EACH TAPE HAS A VOLUME HEADER FILE, AND EACH DATA FILE HAS A FILE HEADER BLOCK WRITTEN IN ASCII AND DESCRIBING THE STRUCTURE OF THE DATA. THE D AND C NUMBERS AND TIME SPANS FOLLOW:

84-088A-01B:	D#	C#	FILES	TIME SPANS
	D-78524	C-27384	64	08/16/84 - 10/05/84
	D-78525	C-27385	53	10/05/84 - 11/14/84
	D-78526	C-27386	58	11/14/84 - 12/30/84
	D-78727	C-27387	46	01/01/85 - 02/08/85
	D-78728	C-27388	53	02/08/85 - 03/20/85
	D-78729	C-27389	64	03/20/85 - 04/29/85
	D-78730	C-27390	44	04/29/85 - 06/08/85
	D-78731	C-27391	44	06/08/85 - 07/18/85
	D-78732	C-27392	45	07/18/85 - 08/27/85
	D-78733	C-27393	111	08/27/85 - 10/07/85
	D-78734	C-27394	67	10/07/85 - 11/15/85
	D-78735	C-27395	52	11/15/85 - 12/31/85
	D-78736	C-27396	45	01/01/86 - 02/08/86
	D-78737	C-27397	42	02/08/86 - 03/20/86
	D-78738	C-27398	44	03/20/86 - 04/29/86
	D-78739	C-27399	44	04/29/86 - 06/08/86
	D-78740	C-27400	44	06/08/86 - 07/18/86
	D-79286	C-27401	45	07/18/86 - 08/27/86
	D-79287	C-27402	44	08/27/86 - 10/26/86

84-088A-01B (CONT):

D#	C#	FILES	TIME SPANS
D-79288	C-27403	45	10/06/86 - 11/15/86
D-79289	C-27404	50	11/15/86 - 12/31/86
D-79765	C-27405	43	01/01/87 - 02/08/87
D-79766	C-27406	44	02/08/87 - 03/20/87
D-79767	C-27407	45	03/20/87 - 04/29/87
D-79768	C-27408	44	04/29/87 - 06/08/87
D-79769	C-27409	44	06/08/87 - 07/18/87
D-80300	C-27628	44	07/18/87 - 08/27/87
D-80301	C-27629	44	08/27/87 - 10/06/87
D-80302	C-27630	44	10/06/87 - 11/15/87
D-80303	C-27631	50	11/15/87 - 12/31/87
D-82524	C-28082	122	01/01/88 - 02/08/88
D-82525	C-28083	44	02/09/88 - 03/11/88
D-82526	C-28084	43	03/20/88 - 04/28/88
D-82527	C-28085	48	04/29/88 - 06/07/88
D-82528	C-28086	45	06/08/88 - 07/17/88

84-088A-02B:

D-78527	C-27411	50	08/21/84 - 10/05/84
D-78528	C-27412	43	10/06/84 - 11/14/84
D-78529	C-27513	40	11/14/84 - 12/30/84
D-78741	C-27413	30	01/01/85 - 02/08/85
D-78742	C-27414	34	02/08/85 - 03/20/85
D-78743	C-27514	34	03/20/85 - 04/29/85
D-78744	C-27415	31	04/29/85 - 06/08/85
D-78745	C-27515	34	06/08/85 - 07/18/85
D-78746	C-27416	29	07/18/85 - 08/26/85
D-78747	C-27417	25	09/04/85 - 10/07/85
D-78748	C-27418	33	10/07/85 - 11/15/85
D-78749	C-27516	35	11/15/85 - 12/24/85

84-088A-03B:

D-77765	C-26805	34	08/27/84 - 09/25/84
D-77766	C-26806	90	09/26/84 - 12/30/84
D-78750	C-27437	90	01/01/85 - 03/29/85
D-78751	C-27438	94	03/30/85 - 06/27/85
D-78752	C-27439	95	06/28/85 - 09/26/85
D-78753	C-27440	102	09/26/85 - 12/31/85
D-78754	C-27441	91	01/01/86 - 03/30/86
D-78755	C-27442	94	03/30/86 - 06/28/86
D-79290	C-27443	77	06/28/86 - 09/10/86
D-79291	C-27444	87	10/10/86 - 12/31/86
D-79770	C-27445	93	01/01/87 - 03/30/87
D-79771	C-27446	94	03/30/87 - 06/28/87
D-80304	C-27632	94	06/28/87 - 09/26/87
D-80305	C-27633	94	09/26/87 - 12/31/87
D-82529	C-28087	94	01/01/88 - 03/29/88
D-82530	C-28088	93	03/30/88 - 06/27/88

84-088A-04B (CONT):

D#	C#	FILES	TIME SPANS
D-75344	C-26807	13	08/18/84 - 12/30/84
D-78756	C-27447	120	01/01/85 - 04/29/85
D-78757	C-27448	125	04/29/85 - 08/27/85
D-78758	C-27449	132	08/27/85 - 12/31/85
D-78759	C-27450	121	01/01/86 - 04/29/86
D-78760	C-27451	124	04/29/86 - 08/27/86
D-79292	C-27452	130	08/27/86 - 12/31/86
D-79772	C-27453	123	01/01/87 - 04/29/87
D-79773	C-27454	124	04/29/87 - 08/27/87
D-80306	C-27634	130	08/27/87 - 12/31/87
D-82531	C-28089	124	01/01/88 - 04/28/88
D-82532	C-28090	123	04/29/88 - 08/26/88

84-088A-05B:

D-77767	C-26808	138	08/18/84 - 12/29/84
D-78761	C-27455	120	01/01/85 - 04/29/85
D-78762	C-27456	124	04/29/85 - 08/27/85
D-78763	C-27457	132	08/27/85 - 12/31/85
D-78764	C-27458	121	01/01/86 - 04/29/86
D-78765	C-27459	124	04/29/86 - 08/27/86
D-79293	C-27460	130	08/27/86 - 12/31/86
D-79774	C-27461	123	01/01/87 - 04/29/87
D-79775	C-27462	124	04/29/87 - 08/27/87
D-80307	C-27635	130	08/27/87 - 12/31/87
D-82533	C-28091	124	01/01/88 - 04/28/88
D-82534	C-28092	122	04/29/88 - 08/26/88

84-088A-01B

84-088A - 01B

Received March 88

DSC#66

****

DUMP OF AMPTE CCE Science Data Center SFDU Tape H001A for HPCE Instrument
Physical Volume Header File, Block # 1

C C S D 1 Z 0 0 0 0 0 1	0 0 0 2 8 6 5 2
Z Z Z Z 1 D 0 0 L 0 0 1	0 0 0 0 0 9 4 6

ADI: ZZZZ0001
CLASS: S
DATE: 05 Feb 87
TITLE: PHYSICAL VOLUME HEADER DESCRIPTION
DESCRIPTION: Describes the content categories of a physical volume header used for exchanging data on magnetic tape.
ORIGINATOR: Stuart Nylund
The Johns Hopkins University Applied Physics Laboratory
Johns Hopkins Road
Laurel, MD 20707
USA
DDL: English/ASCII
OBJECT DESCRIPTION: The value field is divided into three categories called 'Volume Contents', 'Physical Format' and 'Volume Directory.' The entries under these categories are self explanatory. Line feed and carriage control character pairs are used to provide display format control.

Z Z Z Z 1 S 0 0 0 0 0 1	0 0 0 0 6 9 6 6

P H Y S I C A L V O L U M E H E A D E R

Volume Contents:
The volume contains data files for the AMPTE CCE Hot-Plasma Composition Experiment (HPCE) which consists of an energetic ion-mass spectrometer and an electron background-environment monitor (EBEM), and ephemeris, attitude, and events data for the AMPTE CCE spacecraft. The mass spectrometer covers the entire mass per charge range from below 1 to >150 amu/e and the energy per charge range from 0 eV/e (spacecraft potential) to 17 keV/e. The EBEM measures elctrons between 50 eV and 25 keV in eight broad energy bands.

Investigators:
Drs. E. G. Shelley and D. M. Klumpar
Lockheed Palo Alto Research Laboratories
Palo Alto, CA 94304
USA

Reference:
E. G. Shelly, A. Ghielmetti, E. Hertzberg, S. J. Battel, K. Altwegg-Von Burg, and H. Balsiger, The AMPTE/CCE Hot-Plasma Composition Experiment (HPCE), IEEE Trans. Geosci., Vol GE-25, pp 241-245, May 1985.

Physical Format:

Tape Format:	9 Track
Density:	6250 bpi
Physical Block Size:	28672 bytes
Volume Creation Date:	20-NOV-1987
Volume Sequence Number:	AMPTE-H001a
Access Method to Data Blocks:	Sequential
SFDU-to-physical Block Relations:	1:1

Volume Format Map:
Physical Volume Header
EOF marker
Ephemeris Data File
Data File Format:
File Header SFDU
Data Block 1 SFDU
Data Block 2 SFDU
Data Block 3 SFDU
.
.
.
Data Block N SFDU
File Trailer SFDU
EOF marker
Attitude Data File

84-088A-02B

```
$NOP
$NCF ************************ JPB1 ***************************
$EXE TFLIST ES

INPUT PARAMETERS ARE:  AS SR=1=1 1 1 1

 TAPE NO.   1                FILE NO.   1
 RECORD   1                  LENGTH   28672
CCSD12CCCCC1CCC28E52ZZZZ1DCCL001CCCC946  ADI:              ZZZZ0CC1    CLASS:              S    DATE:
          5 Feb 87    TITLE:              PHYSICAL VOLUME HEADER DESCRIPTION    DESCRIPTION:    Des
cribes the content categories of a physical volume                    header used for exchanging d
ata or magnetic tape.    ORIGINATOR:       Stuart Nylund                    The Johns Hopkins Unive
rsity Applied Physics Laboratory                    Johns Hopkins Road                    Laurel,
 MD  20707                    USA    DDL:                English/ASCII    OBJECT DESCRIPTION:  The va
lue field is divided into three categories                    called 'Volume Contents',  'Phys
ical Format' and                    'Volume  Directory.'  The  entries  under these
                 categories are self explanatory.  Line feed and                    carriage  c
ontrol  character pairs are  used  to                    provide display format control.  ZZZZ
1SCCCCC1000C6966P P Y S I C A L   V O L U M E   H E A D E R   Volume Contents:  The  volume  con
tains  data files for the AMPTE CCE Hot-Plasma Composition  Experiment (HPCE) which consists of a
n energetic ion-mass spectrometer and  an  electron  background environment monitor  (EEEM),
 and  ephemeris,  attitude,  and  events  data  for  the  AMPTE  CCE  spacecraft.  The mass  s
pectrometer  covers the entire mass per charge range from below 1 to >150  amu/e and the energy p
er  charge  range from 0 eV/e (spacecraft potential)  to 17 keV/e.  The EEEM measures electrons be
tween 50 eV and 25 keV in eight  broad energy  bands.    Investigators:    Drs. E. G. Shelle
y and C. M. Klumpar          Lockheed Palo Alto Research Laboratories          Palo Alto, CA 94304
        USA    Reference:      E. G. Shelly, A. Ghielmetti, E. Hertzberg, S. J. Battel,      K. Alt
wegg-Von Burg, and H. Balsiger, The AMPTE/CCE Hot-Plasma      Composition Experiment (HPCE), IEEE
Trans. Geosci., Vol GE-25,      pp 241-245, May 1985.    Physical Format:    Tape Format:
                 9 Track    Density:                    6250 bpi    Physical Block Size:
            28672 bytes    Volume Creation Date:                20-NOV-1987    Volume Sequence Number
:            AMPTE-H001a    Access Method to Data Blocks:      Sequential    SFDU-to-physical Blo
ck Relations:   1:1    Volume Format Map:      Physical Volume Header      EOF marker      Ephem
eris Data File        Data File Format:              File Header  SFDU              Data Block 1 SFDU
          Data Block 2 SFDU              Data Block 3 SFDU                                  .
                .                Data Block N SFDU              File Trailer SFDU      EOF marker
 Attitude Data File        Data File Format:              File Header  SFDU              Data Block 1
SFDU              Data Block 2 SFDU              Data Block 3 SFDU                .
 .                .                Data Block N SFDU              File Trailer SFDU      EOF marker
     Events Data File        Data File Format:              File Header  SFDU              Data Block
 1 SFDU              Data Block 2 SFDU              Data Block 3 SFDU                .
 .                .                Data Block N SFDU              File Trailer SFDU      EOF mark
er       HPCE Instrument Data File 1        Data File Format:              File Header  SFDU
    Data Block 1 SFDU              Data Block 2 SFDU              Data Block 3 SFDU                .
                .                .                Data Block N SFDU              File Trailer SFDU
      EOF marker        HPCE Instrument Data File 2        EOF marker        HPCE Instrument Data File
 3       EOF marker                .                .                .                HPCE Instrument Data File N
      EOF marker        EOF marker    Formats, Notations and Conventions:      Time Format:
year-of-century (two digits),        day-of-year (up to 3 digits),        second-of-day (up to 5
digits).      Numeric Value Representation Notations:        A*n is n-byte ASCII character string
          I*2 is 2-byte, 2's complement, binary integer        I*4 is 4-byte, 2's complement, binary
 integer        R*4 is 4-byte, DEC VAX compatible, floating point datum        R*8 is 8-byte, DEC
 VAX compatible, floating point datum      Termination Character:        To end a line of ASCII te
xt:        ASCII line feed character and carriage return character.      Fill Characters:
  ASCII  fill character:  ASCII blank.        Binary fill character:  Binary 0.      Mathematical
notation:        Exponentiation is represented by two asterisks.        Subscripts are enclosed w
ith the angle bracket characters "<" and ">".      Storage order of array elements:        A one-d
imensional array is written with its first        element in the first storage location and its la
st        element in the last storage location of the sequence.        A multidimensional array i
s stored so that the        leftmost subscripts vary most rapidly.      Volume Directory (Time spans
):    Data File   1: 84 229 58288 to 84 230    15    Data File   2: 84 230    26 to 84 231    7
 Data File   3: 84 231    14 to 84 232    7    Data File   4: 84 232    12 to 84 233    5    Data
 File   5: 84 233    11 to 84 234    3    Data File   6: 84 234    9 to 84 235    2    Data File
   7: 84 235    7 to 84 236    5    Data File   8: 84 236    5 to 84 236 86398    Data File   9:
 84 237    4 to 84 237 15358    Data File  10: 84 237 15358 to 84 237 16892    Data File  11: 84 2
37 16892 to 84 237 67145    Data File  12: 84 237 67195 to 84 237 69116    Data File  13: 84 237 69
```

CC 27384
(DD 78524)

84-088A-01B

08/16/84-10/05/84

116 to 84 237 86397 Data File 14: 84 238 2 to 84 238 48384 Data File 15: 84 238 48384 t
o 84 238 86395 Data File 16: 84 239 1 to 84 239 86334 Data File 17: 84 239 86399 to 84
240 86392 Data File 18: 84 240 86397 to 84 241 66022 Data File 19: 84 241 86396 to 84 242 8
6389 Data File 20: 84 242 86389 to 84 243 86387 Data File 21: 84 243 86393 to 84 244 68351
Data File 22: 84 244 68351 to 84 244 73340 Data File 23: 84 244 73340 to 84 244 86386 Da
ta File 24: 84 244 86391 to 84 245 86384 Data File 25: 84 245 86390 to 84 246 86383 Data Fi
le 26: 84 247 266 to 84 248 259 Data File 27: 84 248 26 to 84 249 9 Data File 2
8: 84 249 25 to 84 250 13 Data File 29: 84 250 23 to 84 251 6 Data File 30: 84
250 86382 to 84 251 86375 Data File 31: 84 251 86380 to 84 252 86373 Data File 32: 84 252
86379 to 84 253 86372 Data File 33: 84 253 86377 to 84 254 86370 Data File 34: 84 255 15
to 84 256 8 Data File 35: 84 256 14 to 84 257 7 Data File 36: 84 256 86368 to 8
4 257 86365 Data File 37: 84 257 86371 to 84 258 86364 Data File 38: 84 258 86369 to 84 259
86362 Data File 39: 84 259 86368 to 84 260 86361 Data File 40: 84 260 86366 to 84 261 8635
9 Data File 41: 84 261 86365 to 84 262 86358 Data File 42: 84 262 86363 to 84 263 86356
Data File 43: 84 264 1 to 84 264 86394 Data File 44: 84 264 86360 to 84 265 86353 Data
File 45: 84 265 86359 to 84 266 86352 Data File 46: 84 266 86357 to 84 267 86350 Data File
47: 84 268 78332 to 84 269 8 Data File 48: 84 269 23 to 84 270 3 Data File 49:
84 270 12 to 84 271 5 Data File 50: 84 271 10 to 84 272 3 Data File 51: 84 27
2 9 to 84 273 2 Data File 52: 84 273 7 to 84 274 6 Data File 53: 84 274
6 to 84 274 86399 Data File 54: 84 275 4 to 84 275 86397 Data File 55: 84 276 3 to
84 276 72958 Data File 56: 84 276 72958 to 84 276 86396 Data File 57: 84 277 1 to 84 2
77 86394 Data File 58: 84 278 0 to 84 278 86392 Data File 59: 84 278 86398 to 84 279 32
638 Data File 60: 84 279 32638 to 84 279 86391 ZZZZ1FC0LC03CCC2C6E0

84-088A-02B

Received March 88

DSC # 666

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DUMP OF AMPTE CCE Science Data Center SFDU Tape M001A for MEPA Instrument
Physical Volume Header File, Block # 1

CSD1Z000001	00022508
ZZZZ1D00L001	00000946

ADI: ZZZZ0001
CLASS: S
DATE: 05 Feb 87
TITLE: PHYSICAL VOLUME HEADER DESCRIPTION
DESCRIPTION: Describes the content categories of a physical volume header used for exchanging data on magnetic tape.
ORIGINATOR: Stuart Nylund
The Johns Hopkins University Applied Physics Laboratory
Johns Hopkins Road
Laurel, MD 20707
USA
DDL: English/ASCII
OBJECT DESCRIPTION: The value field is divided into three categories called 'Volume Contents', 'Physical Format' and 'Volume Directory.' The entries under these categories are self explanatory. Line feed and carriage control character pairs are used to provide display format control.

ZZZZ1S000001	00006842

PHYSICAL VOLUME HEADER

Volume Contents:
The volume contains files of averaged data for the AMPTE CCE medium-energy particle analyzer (MEPA), which is designed to measure the spectra and composition of magnetospheric particle populations from 10 keV per nucleon (for oxygen) to more than 6 Mev, and ephemeris, attitude, and events data for the AMPTE CCE spacecraft. The instrument provides for high background rejection and a geometry factor large enough (10**-2 cm**2 sr) to be sensitive to rare natural species and tracer ions beyond geosynchronous orbit, while having the ability to operate in the very high flux regions of the inner magnetosphere. The MEPA telescope measures time of flight and thus velocity of energetic ions from a thin front foil to a rear solid-state total-energy detector, determining the incident ion mass. The telescope is capable of isotropic resolution of hydrogen and helium, of elemental resolution up through oxygen, and can resolve major species and groups to beyond iron with 32-sector angular resolution and temporal resolution of 0.2 - 24 s.

Investigators:
Drs. R. W. McEntire and A. T. Y. Lui
Applied Physics Laboratory
The Johns Hopkins University
Laurel, MD 20707
USA

Reference:
R. W. McEntire, E. P. Keath, D. E. Fort, A. T. Y. Lui, and S. M. Krimigis, The Medium-Energy Particle Analyzer (MEPA) on the AMPTE CCE Spacecraft, IEEE Trans. Geosci., Vol GE-25, pp 230-233, May 1985.

Physical Format:

Density:	6250 bpi
Physical Block Size:	22528 bytes
Volume Creation Date:	05-JAN-1988
Volume Sequence Number:	AMPTE-M001A
Access Method to Data Blocks:	Sequential
SFDU-to-physical Block Relations:	1:1

Volume Format Map:
Physical Volume Header
EOF marker
Ephemeris Data File
Data File Format:
File Header SFDU
Data Block 1 SFDU
Data Block 2 SFDU
Data Block 3 SFDU

84-088A-03B

```
$NCF
$NOP
$NOP
$NCF ********************* LIST OF B40UT ******************
$EXE TFLIST ES

INPUT PARAMETERS ARE:  AS SR=1=1 1 1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   22528
CCSD1Z000001000022500ZZZZ1D00L00100000946  ACI:              ZZZZ0001    CLASS:            S    DATE:
              05 Feb 87    TITLE:            PHYSICAL VOLUME HEADER DESCRIPTION    DESCRIPTION:     Des
cribes the content categories of a physical volume                    header used for exchanging d
ata or magnetic tape.    ORIGINATOR:      Stuart Nylund                    The Johns Hopkins Unive
rsity Applied Physics Laboratory                    Johns Hopkins Road                    Laurel,
 MD  20707                    USA    DDL:              English/ASCII    OBJECT DESCRIPTION:  The va
lue field is divided into three categories                    called 'Volume Contents', 'Phys
ical Format' and                    'Volume  Directory.'  The  entries  under these
                categories are self explanatory.  Line feed and                    carriage  c
ontrol  character pairs are  used  to                    provide display format control.  ZZZZ
ISCCCCC1000C5502P H Y S I C A L   V O L U M E   H E A D E R   Volume Contents:   The  volume  con
tains files of averaged data for the AMPTE CCE medium-energy   particle  analyzer  (MEPA),  which
is  designed  to  measure the spectra and   composition  of  magnetospheric particle populations f
rom 10 keV per nucleon   (for oxygen) to more than 6 Mev, and  ephemeris,  attitude,  and events d
ata   for the  AMPTE  CCE  spacecraft. The instrument provides for high background   rejection  a
nd  a  geometry  factor  large  enough  (10**-2  cm**2 sr) to be   sensitive  to  rare  natural  s
pecies  and tracer ions beyond geosynchronous   orbit,  while having the ability to operate in the
 very high flux regions of   the  inner  magnetosphere.  The MEPA telescope measures time of  flig
ht  and   thus velocity of energetic ions from a thin front foil to a rear solid-state   total-en
ergy detector, determining the incident ion mass.  The telescope  is   capable  of  isotropic  res
olution  of  hydrogen  and  helium,  of elemental   resolution  up through oxygen, and can resolve
 major species and  groups  to   beyond  iron  with 32-sector angular resolution and temporal  res
olution  of   0.2 - 24 s.      Investigators:      Drs. R. W. McEntire and A. T. Y. Lui          A
pplied Physics Laboratory        The Johns Hopkins University        Laurel, MD 20707        USA
    Reference:       R. W. McEntire, E. P. Keath, D. E. Fort, A. T. Y. Lui,        and S. M. Krimigi
s, The Medium-Energy Particle Analyzer        (MEPA) on the AMPTE CCE Spacecraft,        IEEE Trans.
Geosci., Vol GE-23, pp 231-233, May 1985.      Physical Format:      Density:
  6250 bpi     Physical Block Size:                22528 bytes     Volume Creation Date:
   01-MAR-1988     Volume Sequence Number:                AMPTE-M004A     Access Method to Data Blocks:
      Sequential     SFDU-to-physical Block Relations:      1:1     Volume Format Map:       Physical Vol
ume Header       EOF marker       Ephemeris Data File       Data File Format:       File Hea
der  SFDU            Data Block 1 SFDU            Data Block 2 SFDU            Data Block 3 SFDU
                                                                                Data Block N SFDU          F
ile Trailer SFDU       EOF marker       Attitude Data File       Data File Format:       Fil
e Header  SFDU            Data Block 1 SFDU            Data Block 2 SFDU            Data Block 3 SF
DU                                                                                Data Block N SFDU
    File Trailer SFDU       EOF marker       Events Data File       Data File Format:
File Header  SFDU            Data Block 1 SFDU            Data Block 2 SFDU            Data Block 3
 SFDU                                                                                Data Block N SFDU
      File Trailer SFDU       EOF marker       MEPA Instrument Data File 1       Data File Forma
t:            File Header  SFDU            Data Block 1 SFDU            Data Block 2 SFDU
  Data Block 3 SFDU                                                                Data Blo
ck N SFDU            File Trailer SFDU       EOF marker       MEPA Instrument Data File 2       EOF
 marker       MEPA Instrument Data File 3       EOF marker
      MEPA Instrument Data File N       EOF marker       EOF marker    Formats, Notations and
Conventions:       Time Format:       year-of-century (two digits),       day-of-year (up to 3 d
igits),       second-of-day (up to 5 digits).      Numeric Value Representation Notations:
  A*n is n-byte ASCII character string       I*2 is 2-byte, 2's complement, binary integer
  I*4 is 4-byte, 2's complement, binary integer       R*4 is 4-byte, DEC VAX compatible, floating
 point datum       R*8 is 8-byte, DEC VAX compatible, floating point datum      Termination Chara
cter:       To end a line of ASCII text:       ASCII line feed character and carriage return
character.      Fill Characters:       ASCII  fill character:  ASCII blank.       Binary fill c
haracter:  Binary 0.      Mathematical notation:       Exponentiation is represented by two aster
isks.       Subscripts are enclosed with the angle bracket characters "<" and ">".      Storage o
rder of array elements:       A one-dimensional array is written with its first       element i
n the first storage location and its last       element in the last storage location of the seque
```

DD78741
84-088A-02B
01/01/85
02/08/85

nce. A multidimensional array is stored so that the leftmost subscripts vary most r
apidly. Volume Directory (Time spans): Data File 1: 85 1 17 17 to 85 1 86246 Data Fi
le 2: 85 1 86271 to 85 2 86249 Data File 3: 85 2 86250 to 85 3 86228 Data File
4: 85 3 86253 to 85 4 86231 Data File 5: 85 4 86257 to 85 5 86235 Data File 6: 85
5 86261 to 85 6 86238 Data File 7: 85 6 86264 to 85 7 86242 Data File 8: 85 8
86246 to 85 9 86224 Data File 9: 85 9 86249 to 85 10 62175 Data File 10: 85 11 11306
to 85 11 11901 Data File 11: 85 16 61849 to 85 16 86223 Data File 12: 85 16 86248 to 8
5 17 86201 Data File 13: 85 17 86227 to 85 18 86155 Data File 14: 85 19 873 to 85 19
86218 Data File 15: 85 19 86234 to 85 20 86212 Data File 16: 85 20 86237 to 85 21 8621
5 Data File 17: 85 21 86265 to 85 22 86194 Data File 18: 85 22 86219 to 85 23 86197
Data File 19: 85 23 86222 to 85 24 86200 Data File 20: 85 24 86226 to 85 25 86204 Data
File 21: 85 25 86229 to 85 26 86207 Data File 22: 85 26 86233 to 85 27 86186 Data File
23: 85 27 86211 to 85 28 86189 Data File 24: 85 28 86214 to 85 29 63208 Data File 25:
85 38 67547 to 85 38 86187 Data File 26: 85 38 86212 to 85 39 86166 ZZZZ1F00L003C0015600

84-086A-03B

DSC # 666

DUMP OF AMPTE CCE Science Data Center SFDU Tape for CHEM Instrument
Absolute block # 1

CCSD1Z000001	00020460
ZZZZ1D00L001	00000946

ADI: ZZZZ0001
CLASS: S
DATE: 05 Feb 87
TITLE: PHYSICAL VOLUME HEADER DESCRIPTION
DESCRIPTION: Describes the content categories of a physical volume header used for exchanging data on magnetic tape.
ORIGINATOR: Stuart Nylund
The Johns Hopkins University Applied Physics Laboratory
Johns Hopkins Road
Laurel, MD 20707
USA
DDL: English/ASCII
OBJECT DESCRIPTION: The value field is divided into three categories called 'Volume Contents', 'Physical Format' and 'Volume Directory.' The entries under these categories are self explanatory. Line feed and carriage control character pairs are used to provide display format control.

ZZZZ1S000001	00005692

PHYSICAL VOLUME HEADER

Volume Contents:
The volume contains files of averaged data for the AMPTE CCE Charge-Energy-Mass (CHEM) Spectrometer which is designed to measure the mass and charge-state compositions as well as the energy spectra and pitch-angle distributions of all major ions from H through Fe with energies from 0.3 to 300 keV/charge and a time resolution of less than 1 minute in the Earth's magnetosphere and magnetosheath. The volume also contains and ephemeris, attitude, and events data for the AMPTE CCE spacecraft.

Investigators:
Drs. G. Gloeckler, F. M. Ipavich, D. C. Hamilton
Department of Physics and Astronomy
University of Maryland
College Park, MD 20742
USA

Reference:
G. Gloeckler, F. M. Ipavich, W. Studemann, B. Wilken, D. C. Hamilton, G. Kremser, D. Hovestadt, F. Gliem, R. A. Lundgren, W. Rieck, E. O. Tums, J. C. Cain, L. S. Masung, W. Weiss, and P. Winterhof, The Charge-Energy-Mass Spectrometer for 0.3-300 keV/e Ions on the AMPTE CCE, IEEE Trans. Geosci., Vol GE-25, pp 234-240, May 1985.

Physical Format:

Tape Format:	9 Track
Density:	6250 bpi
Physical Block Size:	20480 bytes
Volume Creation Date:	10-SEP-1987
Volume Sequence Number:	AMPTE-C001A
Access Method to Data Blocks:	Sequential
SFDU-to-physical Block Relations:	1:1

Volume Format Map:
Physical Volume Header
EOF marker
Ephemeris Data File
Data File Format:
File Header SFDU
Data Block 1 SFDU
Data Block 2 SFDU
Data Block 3 SFDU
.
.
.
Data Block N SFDU
File Trailer SFDU
EOF marker

84-088A-04B

D77765
8/27/84 - 9/25/84

```
$NOF
$NOP
$NOP ******************* D3OUT ****************
$EXE TPLIST BS

INPUT PARAMETERS ARE:  AS SR=1=1 1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   20480
CCSD1Z000001C0C2(46CZZZZ1D00L001C00C0946  ACI:              ZZZZ0C01    CLASS:            S    DATE:
              05 Feb 87    TITLE:              PHYSICAL VOLUME HEADER DESCRIPTION    DESCRIPTION:     Des
cribes the content categories of a physical volume                    header usec for exchanging d
ata on magnetic tape.    ORIGINATOR:       Stuart Nylund                    The Johns Hopkins Unive
rsity Applied Physics Laboratory                    Johns Hopkins Road                    Laurel,
 MD  20707                    USA    DCL:                English/ASCII    OBJECT DESCRIPTION:  The va
lue field is divided into three categories                    called 'Volume Contents', 'Phys
ical Format' and                    'Volume  Directory.'  The  entries  under these
                categories are self explanatory.  Line feed and                    carriage  c
ontrol  character pairs are  used  to                    provide display format control.  ZZZZ
1S00000100005692P H Y S I C A L   V O L U M E   H E A D E R   Volume Contents:   The volume con
tains files of averaged data for the AMPTE CCE Charge-    Energy-Mass  (CHEM) Spectrometer which is
 designed to measure the mass    and charge-state compositions as well as the energy spectra and pi
tch-    angle  distributions of all major ions from H through Fe with energies    from 0.3 to 300 k
eV/charge and a time resolution of less than 1 minute    in  the  Earth's  magnetosphere and magnet
osheath.  The  volume  also    contains  and  ephemeris, attitude, and events data for the AMPTE
CCE    spacecraft.      Investigators:       Drs. G. Gloeckler, F. M. Ipavich, D. C. Hamilton
   Department of Physics and Astronomy        University of Maryland        College Park, MD 2074
2          USA    Reference:       G. Gloeckler, F. M. Ipavich, W. Studemann, B. Wilken, D. C. Hamil
ton,        G. Kremser, D. Hovestadt, F. Gliem, R. A. Lundgren, W. Rieck,        E. O. Tums, J. C. Ca
in, L. S. Masung, W. Weiss, and P. Winterhof,        The Charge-Energy-Mass Spectrometer for 0.3-300
 keV/e Ions on the        AMPTE CCE, IEEE Trans. Geosci., Vol GE-25, pp 234-240, May 1985.    Physic
al Format:    Tape Format:                    9 Track    Density:                    62
5C bpi    Physical Block Size:                    20480 bytes    Volume Creation Date:                    1C
-SEP-1987    Volume Sequence Number:                    AMPTE-C001A    Access Method to Data Blocks:
 Sequential    SFDU-to-physical Block Relations:    1:1    Volume Format Map:        Physical Volume
Header        ECF marker        Ephemeris Data File        Data File Format:                    File Header
 SFDU                Data Block 1 SFDU                Data Block 2 SFDU                Data Block 3 SFDU
                .                .                .                Data Block N SFDU                File
Trailer SFDU        EOF marker        Attitude Data File        Data File Format:                    File He
acer  SFDU                Data Block 1 SFDU                Data Block 2 SFDU                Data Block 3 SFDU
                .                .                .                Data Block N SFDU
File Trailer SFDU        EOF marker        Events Data File        Data File Format:                    File
 Header  SFDU                Data Block 1 SFDU                Data Block 2 SFDU                Data Block 3 SFD
U                .                .                .                Data Block N SFDU
   File Trailer SFDU        EOF  marker        CHEM Instrument Data File 1        Data File Format:
            File Header  SFDU                Data Block 1 SFDU                Data Block 2 SFDU                Da
ta Block 3 SFDU                .                .                .                Data Block N
 SFDU                File Trailer SFDU        EOF  marker        CHEM Instrument Data File 2        EOF mar
ker        CHEM Instrument Data File 3        EOF  marker                .                .                .
        CHEM Instrument Data File N        EOF  marker        EOF  marker        Formats, Notations and Co
nventions:        Time Format:        year-of-century (two digits),        day-of-year (up to 3 dig
its),        second-of-day (up to 5 digits).        Numeric Value Representation Notations:
A*n is n-byte ASCII character string        I*2 is 2-byte, 2's complement, binary integer
I*4 is 4-byte, 2's complement, binary integer        R*4 is 4-byte, DEC VAX compatible, floating p
oint datum        R*8 is 8-byte, DEC VAX compatible, floating point datum        Termination Charact
er:        To end a line of ASCII text:        ASCII line feed character and carriage return ch
aracter.        Fill Characters:        ASCII  fill character:  ASCII blank.        Binary fill cha
racter:  Binary 0.        Mathematical notation:        Exponentiation is represented by two asteris
ks.        Subscripts are enclosed with the angle bracket characters "<" and ">".        Storage ord
er of array elements:        A one-dimensional array is written with its first        element in
the first storage location and its last        element in the last storage location of the sequenc
e.        A multidimensional array is stored so that the        leftmost subscripts vary most rap
idly.        Volume Directory (Time spans):        Data File    1: 84 240 79453 to 84 240 85708        Data File
   2: 84 241    58 to 84 241 65567        Data File    3: 84 242    183 to 84 242 85767        Data File    4:
 84 243    124 to 84 243 85712        Data File    5: 84 244    77 to 84 244 85844        Data File    6: 84 2
45    202 to 84 245 85805        Data File    7: 84 246    162 to 84 246 85760        Data File    8: 84 247
```

PRINTED IN U.S.A.

307 to 84 247 85911 Data File 9: 84 248 79 to 84 248 85683 Data File 10: 84 249 230 t
o 84 249 85651 Data File 11: 84 250 204 to 84 250 85996 Data File 12: 84 251 171 to 84
251 85776 Data File 13: 84 252 141 to 84 252 85744 Data File 14: 84 253 108 to 84 253 8
5149 Data File 15: 84 254 75 to 84 254 85685 Data File 16: 84 255 50 to 84 255 85849
Data File 17: 84 256 207 to 84 256 86006 Data File 18: 84 257 174 to 84 257 85792 Da
ta File 19: 84 258 149 to 84 258 85766 Data File 20: 84 259 123 to 84 259 85742 Data Fi
le 21: 84 260 100 to 84 260 85910 Data File 22: 84 261 78 to 84 261 85885 Data File 2
3: 84 262 53 to 84 262 85866 Data File 24: 84 263 34 to 84 263 85653 Data File 25: 84
264 200 to 84 264 85823 Data File 26: 84 264 86202 to 84 265 85797 Data File 27: 84 266
155 to 84 266 85588 Data File 28: 84 267 135 to 84 267 85751 Data File 29: 84 268 109
to 84 268 85730 Data File 30: 84 269 88 to 84 269 85891 ZZZZ1F00L003C0013762

PRINTED IN U.S.A.

84-088A - 04B

DSC # 666

DUMP OF AMPTE CCE Science Data Center SFDU Tape for PWE Instrument
Absolute block # 1

CCSD1Z000001	00012268
ZZZZ1D00L001	00000946

ADI: ZZZZ0001
CLASS: S
DATE: 05 Feb 87
TITLE: PHYSICAL VOLUME HEADER DESCRIPTION
DESCRIPTION: Describes the content categories of a physical volume header used for exchanging data on magnetic tape.
ORIGINATOR: Stuart Nylund
The Johns Hopkins University Applied Physics Laboratory
Johns Hopkins Road
Laurel, MD 20707
USA
DDL: English/ASCII
OBJECT DESCRIPTION: The value field is divided into three categories called 'Volume Contents', 'Physical Format' and 'Volume Directory.' The entries under these categories are self explanatory. Line feed and carriage control character pairs are used to provide display format control.

ZZZZ1S000001	00009986

PHYSICAL VOLUME HEADER

Volume Contents:
The volume contains data files for the AMPTE CCE Plasma Wave Experiment, which has five plasma center frequencies of 100 Hz, 730 Hz, 5.4 kHz, 30 kHz and 178 kHz, and ephemeris, attitude, and events data for the AMPTE CCE spacecraft.

Investigator:
Dr. F. L. Scarf
TRW Space and Technology Group
Redondo Beach, CA 90278
USA

Reference:
F. L. Scarf, The AMPTE CCE Plasma Wave Investigation, IEEE Trans. Geosci., Vol GE-25, pp 250-252, May 1985.

Physical Format:

Tape Format:	9 Track
Density:	6250 bpi
Physical Block Size:	12288 bytes
Volume Creation Date:	08-SEP-1987
Volume Sequence Number:	AMPTE-P001B
Access Method to Data Blocks:	Sequential
SFDU-to-physical Block Relations:	1:1

Volume Format Map:
Physical Volume Header
EOF marker
Ephemeris Data File
Data File Format:
File Header SFDU
Data Block 1 SFDU
Data Block 2 SFDU
Data Block 3 SFDU
.
.
.
Data Block N SFDU
File Trailer SFDU
EOF marker
Attitude Data File
Data File Format:
File Header SFDU
Data Block 1 SFDU
Data Block 2 SFDU
Data Block 3 SFDU
.
.

84-088A-05B

D 75344
8/28/84 - 12/30/84

```
$ACF
$NOP
$NOP
$ACF ***************** D2OUT ******************
$EXE TPLIST ES

INPUT PARAMETERS ARE:  AS SR=1=1 1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   12288
CCSD1200000100001226822221DC0L001000 1946  ADI:              ZZZZ0001    CLASS:              S    DATE:
              5 Feb 87    TITLE:            PHYSICAL VOLUME HEADER DESCRIPTION    DESCRIPTION:    Des
cribes the content categories of a physical volume                                  header used for exchanging d
ata or magnetic tape.    ORIGINATOR:      Stuart Nylund                                  The Johns Hopkins Unive
rsity Applied Physics Laboratory                                  Johns Hopkins Road                                  Laurel,
 MD  20707                          USA    DDL:                English/ASCII    OBJECT DESCRIPTION:  The va
lue field is divided into three categories                                  called 'Volume Contents',  'Phys
ical Format' and                                  'Volume  Directory.'  The  entries  under  these
                categories are self explanatory.  Line feed and                                  carriage  c
ontrol  character pairs are  used  to                                  provide display format control.  ZZZZ
1S0000010000C986P H Y S I C A L   V O L U M E   H E A D E R    Volume Contents:    The volume conta
irs data files for the AMPTE CCE Plasma Wave Experiment,    which  has  five  plasma  center freque
ncies of 100 Hz, 730 Hz, 5.4 kHz,    30  kHz and 178 kHz,  and  ephemeris,  attitude,  and events da
ta for the    AMPTE CCE spacecraft.    Investigator:      Dr. F. L. Scarf          TRW Space and
Technology Group          Redondo Beach, CA 90278          USA    Reference:      F. L. Scarf, The A
MPTE CCE Plasma Wave Investigation,        IEEE Trans. Geosci., Vol GE-25, pp 250-252, May 1985.
Physical Format:    Tape Format:                                  9 Track    Density:
     6250 bpi    Physical Block Size:                                  12288 bytes    Volume Creation Date:
      08-SEP-1987    Volume Sequence Number:                                  AMPTE-P001B    Access Method to Data Blocks:
         Sequential    SFDU-to-physical Block Relations:    1:1    Volume Format Map:        Physical V
olume Header          EOF marker          Ephemeris Data File          Data File Format:                  File H
eader  SFDU                Data Block 1 SFDU                Data Block 2 SFDU                Data Block 3 SFDU
                                                                                                Data Block N SFDU
 File Trailer SFDU          EOF marker          Attitude Data File          Data File Format:                  F
ile Header  SFDU                Data Block 1 SFDU                Data Block 2 SFDU                Data Block 3
SFDU                                                                                                Data Block N SFDU
       File Trailer SFDU          EOF marker          Events Data File          Data File Format:
  File Header  SFDU                Data Block 1 SFDU                Data Block 2 SFDU                Data Block
 3 SFDU                                                                                                Data Block N SFDU
         File Trailer SFDU          EOF marker          PWE Instrument Data File 1          Data File Form
at:          File Header  SFDU                Data Block 1 SFDU                Data Block 2 SFDU
   Data Block 3 SFDU                                                                                                Data Bl
ock N SFDU                File Trailer SFDU          EOF marker          PWE Instrument Data File 2          EOF
 marker          PWE Instrument Data File 3          EOF marker
 .          PWE Instrument Data File N          EOF marker          EOF marker    Formats, Notations and Co
nventions:          Time Format:          year-of-century (two digits),          day-of-year (up to 3 dig
its),          second-of-day (up to 5 digits).          Numeric Value Representation Notations:
A*n is n-byte ASCII character string          I*2 is 2-byte, 2's complement, binary integer
I*4 is 4-byte, 2's complement, binary integer          R*4 is 4-byte, DEC VAX compatible, floating p
oint datum          R*8 is 8-byte, DEC VAX compatible, floating point datum          Termination Charact
er:          To end a line of ASCII text:          ASCII line feed character and carriage return ch
aracter.          Fill Characters:          ASCII  fill character:  ASCII blank.          Binary fill cha
racter:  Binary 0.          Mathematical notation:          Exponentiation is represented by two asteris
ks.          Subscripts are enclosed with the angle bracket characters "<" and ">".          Storage orde
r of array elements:          A one-dimensional array is written with its first          element in
the first storage location and its last          element in the last storage location of the sequenc
e.          A multidimensional array is stored so that the          leftmost subscripts vary most rap
idly.    Volume Directory (Time spans):    Data File   1: 84 230    15 to 84 231    5    Data File
  2: 84 231    9 to 84 232    7    Data File   3: 84 232    7 to 84 233    5    Data File   4:
84 233    6 to 84 234    3    Data File   5: 84 234    4 to 84 235    2    Data File   6: 84 2
35    2 to 84 236    0    Data File   7: 84 236    0 to 84 236 86358    Data File   8: 84 236 86
359 to 84 237 86397    Data File   9: 84 237 86397 to 84 238 86395    Data File  10: 84 238 86396 t
o 84 239 86334    Data File  11: 84 239 86394 to 84 240 86392    Data File  12: 84 240 86392 to 84
241 66026    Data File  13: 84 241 86391 to 84 242 86389    Data File  14: 84 242 86389 to 84 243 8
6387    Data File  15: 84 243 86388 to 84 244 86386    Data File  16: 84 244 86386 to 84 245 86384
   Data File  17: 84 245 86385 to 84 246 86383    Data File  18: 84 247    261 to 84 248    259    Da
```

ta File 19: 84 248 21 to 84 249 13 Data File 20: 84 249 20 to 84 250 16 Data Fi
le 21: 84 250 18 to 84 251 9 Data File 22: 84 250 86377 to 84 251 86375 Data File 2
3: 84 251 86375 to 84 252 86373 Data File 24: 84 252 86374 to 84 253 86372 Data File 25: 84
253 86372 to 84 254 86370 Data File 26: 84 255 10 to 84 256 8 Data File 27: 84 256
9 to 84 257 7 Data File 28: 84 256 86368 to 84 257 86365 Data File 29: 84 257 86366
to 84 258 86364 Data File 30: 84 258 86365 to 84 259 86362 Data File 31: 84 259 86363 to 8
4 260 86361 Data File 32: 84 260 86361 to 84 261 86359 Data File 33: 84 261 86360 to 84 262
86358 Data File 34: 84 262 86358 to 84 263 86356 Data File 35: 84 263 86397 to 84 264 8639
4 Data File 36: 84 264 86355 to 84 265 86353 Data File 37: 84 265 86354 to 84 266 86352
Data File 38: 84 266 86352 to 84 267 86350 Data File 39: 84 268 10 to 84 269 8 Data
File 40: 84 269 10 to 84 270 6 Data File 41: 84 270 7 to 84 271 5 Data File
42: 84 271 5 to 84 272 3 Data File 43: 84 272 4 to 84 273 2 Data File 44:
84 273 2 to 84 274 0 Data File 45: 84 274 1 to 84 274 86399 Data File 46: 84 27
4 86399 to 84 275 86397 Data File 47: 84 275 86398 to 84 276 86396 Data File 48: 84 276 863
96 to 84 277 86394 Data File 49: 84 277 86395 to 84 278 86392 Data File 50: 84 278 86393 to
84 279 86391 Data File 51: 84 279 86392 to 84 280 86389 Data File 52: 84 280 86390 to 84 2
81 86388 Data File 53: 84 281 86388 to 84 282 86386 Data File 54: 84 282 86387 to 84 283 86
385 Data File 55: 84 283 86385 to 84 284 86383 Data File 56: 84 284 86384 to 84 285 86382
Data File 57: 84 286 2 to 84 286 86380 Data File 58: 84 287 100 to 84 287 84623 Dat
a File 59: 84 288 13747 to 84 288 86377 Data File 60: 84 288 86378 to 84 289 68789 Data Fil
e 61: 84 290 8776 to 84 290 86374 Data File 62: 84 290 86315 to 84 291 86313 Data File 63
: 84 291 86313 to 84 292 86311 Data File 64: 84 292 86371 to 84 293 86369 Data File 65: 84
293 86370 to 84 294 86368 Data File 66: 84 294 86368 to 84 295 86366 Data File 67: 84 295 8
6367 to 84 296 86339 Data File 68: 84 297 6516 to 84 297 86363 Data File 69: 84 297 86367
to 84 298 86362 Data File 70: 84 298 86362 to 84 299 86360 Data File 71: 84 299 86361 to 84
300 75798 Data File 72: 84 301 17772 to 84 301 82425 Data File 73: 84 301 82426 to 84 302
82424 Data File 74: 84 302 82424 to 84 303 82422 Data File 75: 84 303 82423 to 84 304 82421
Data File 76: 84 304 82421 to 84 305 82419 Data File 77: 84 305 82420 to 84 306 82418 D
ata File 78: 84 306 82418 to 84 307 82416 Data File 79: 84 307 82417 to 84 308 82415 Data F
ile 80: 84 308 82415 to 84 309 82413 Data File 81: 84 309 82414 to 84 310 82411 Data File
82: 84 310 82412 to 84 311 82410 Data File 83: 84 311 82411 to 84 312 82408 Data File 84: 8
4 312 82409 to 84 313 82407 Data File 85: 84 313 82407 to 84 314 82405 Data File 86: 84 314
84944 to 84 315 82404 Data File 87: 84 315 82404 to 84 316 82402 Data File 88: 84 316 8240
3 to 84 317 86333 Data File 89: 84 317 86333 to 84 318 86331 Data File 90: 84 318 86332 to
84 319 86329 Data File 91: 84 319 86330 to 84 320 86328 Data File 92: 84 320 86329 to 84 32
1 86326 Data File 93: 84 321 86327 to 84 322 24666 Data File 94: 84 323 71500 to 84 323 863
23 Data File 95: 84 323 86325 to 84 324 86321 Data File 96: 84 324 86329 to 84 325 86319
Data File 97: 84 325 86320 to 84 326 79512 Data File 98: 84 326 86318 to 84 327 86316 Data
File 99: 84 327 86316 to 84 328 86314 Data File 100: 84 328 86314 to 84 329 86312 Data File
101: 84 329 86312 to 84 330 86310 Data File 102: 84 330 86311 to 84 331 86309 Data File 103:
84 331 86309 to 84 332 86307 Data File 104: 84 332 86308 to 84 333 86306 Data File 105: 84 3
34 86305 to 84 335 86302 Data File 106: 84 335 86303 to 84 336 86301 Data File 107: 84 336 86
302 to 84 337 86299 Data File 108: 84 337 86300 to 84 338 86298 Data File 109: 84 338 86298 t
o 84 339 86296 Data File 110: 84 339 86297 to 84 340 86295 Data File 111: 84 340 86236 to 84
341 86234 Data File 112: 84 341 86294 to 84 342 86292 Data File 113: 84 343 86291 to 84 344 8
6288 Data File 114: 84 344 86230 to 84 345 86227 Data File 115: 84 345 86288 to 84 346 86285
Data File 116: 84 346 86286 to 84 347 86284 Data File 117: 84 347 86285 to 84 348 86282 Da
ta File 118: 84 348 86283 to 84 349 86281 Data File 119: 84 349 86284 to 84 350 86279 Data Fi
le 120: 84 350 86284 to 84 351 86277 Data File 121: 84 351 86283 to 84 352 86275 Data File 12
2: 84 352 86276 to 84 353 86273 Data File 123: 84 353 86274 to 84 354 86271 Data File 124: 84
354 86272 to 84 355 86270 Data File 125: 84 355 86270 to 84 356 86268 Data File 126: 84 356
86269 to 84 357 86266 Data File 127: 84 357 86267 to 84 358 86265 Data File 128: 84 358 86266
to 84 359 86263 Data File 129: 84 359 86264 to 84 360 86262 Data File 130: 84 360 86262 to 8
4 361 86260 Data File 131: 84 361 86264 to 84 362 86259 Data File 132: 84 362 86259 to 84 363
86257 Data File 133: 84 363 86258 to 84 364 86256 Data File 134: 84 364 86256 to 84 365 5402
1 ZZZZ1F00L00300001276

05B

DUMP OF AMPTE CCE Science Data Center SFDU Tape for MAG Instrument
Absolute block # 1

CCSD1Z000001	00012268
ZZZZ1D00L001	00000946

ADI: ZZZZ0001
CLASS: S
DATE: 05 Feb 87
TITLE: PHYSICAL VOLUME HEADER DESCRIPTION
DESCRIPTION: Describes the content categories of a physical volume header used for exchanging data on magnetic tape.
ORIGINATOR: Stuart Nylund
The Johns Hopkins University Applied Physics Laboratory
Johns Hopkins Road
Laurel, MD 20707
USA
DDL: English/ASCII
OBJECT DESCRIPTION: The value field is divided into three categories called 'Volume Contents', 'Physical Format' and 'Volume Directory.' The entries under these categories are self explanatory. Line feed and carriage control character pairs are used to provide display format control.

ZZZZ1S000001	00010531

PHYSICAL VOLUME HEADER

Volume Contents:
The volume contains files of averaged data for the AMPTE CCE Magnetometer, and ephemeris, attitude, and events data for the AMPTE CCE spacecraft. The instrument has 7 automatically switchable ranges from +-16 to +-65536 nT (full scale) and resolutions commensurate with a 13-bit A/D converter in each range (+-0.002 to +-8 nT). Approxiamtely 8.06 vector-samples/sec are acquired, with information on fluctuating fields in the 5-50-Hz range provided by a system of filters and peak detectors.

Investigators:
Drs. T. A. Potemra and L. J. Zanetti
Applied Physics Laboratory
The Johns Hopkins University
Laurel, MD 20707
USA
Dr. M. H. Acuna
Laboratory for Extraterrestrial Physics
NASA Goddard Space Flight Center
Greenbelt, MD 20771

Reference:
T. A. Potemra, L. J. Zanetti, and M. H. Acuna,
The AMPTE CCE Magnetic Field Experiment,
IEEE Trans. Geosci., Vol GE-25, pp 246-249, May 1985.

Physical Format:

Tape Format:	9 Track
Density:	6250 bpi
Physical Block Size:	12288 bytes
Volume Creation Date:	10-SEP-1987
Volume Sequence Number:	AMPTE-B001A
Access Method to Data Blocks:	Sequential
SFDU-to-physical Block Relations:	1:1

Volume Format Map:
Physical Volume Header
EOF marker
Ephemeris Data File
Data File Format:
File Header SFDU
Data Block 1 SFDU
Data Block 2 SFDU
Data Block 3 SFDU
.
.
.
Data Block N SFDU
File Trailer SFDU

```
$NOP
$NOP
$NOP ***************** DIOUT ******************
$EXE TPLIST BS

INPUT PARAMETERS ARE:  AS SR=1=1 1 1

 TAPE NO.   1              FILE NO.   1
 RECORD   1                LENGTH   12288
CCSD1ZCC0C01CCC12288ZZZZ1DCCL001CCCC0946 ADI:              ZZZZCCC1    CLASS:            S    DATE:
              05 Feb 87    TITLE:              PHYSICAL VOLUME HEADER DESCRIPTION    DESCRIPTION:     Des
cribes the content categories of a physical volume                          header used for exchanging d
ata or magnetic tape.    ORIGINATOR:       Stuart Nylund                          The Johns Hopkins Unive
rsity Applied Physics Laboratory                          Johns Hopkins Road                          Laurel,
 MD  20707                    USA     DDL:                English/ASCII     OBJECT DESCRIPTION:  The va
lue field is divided into three categories                                  called 'Volume Contents', 'Phys
ical Format' and                          'Volume  Directory.'  The  entries  under these
                  categories are self explanatory.  Line feed and                          carriage  c
ontrol  character pairs are  used  to                          provide display format control.  ZZZZ
1SCCCCC100C10531F H Y S I C A L   V O L U M E   H E A D E R   Volume Contents:   The volume con
tains files of averaged data for the AMPTE CCE Magnetometer,    and  ephemeris,  attitude,  and eve
nts data for the  AMPTE  CCE  spacecraft.    The instrument has 7 automatically switchable ranges f
rom +-16 to +-65536 nT    (full  scale)  and  resolutions  commensurate  with  a 13-bit A/D conver
ter    in  each  range  (+-0.002 to +-8 nT).  Approxiamtely 8.06 vector-samples/sec    are acquired
,  with information  on  fluctuating fields in the 5-50-Hz range    provided by a system of filters
 and peak detectors.      Investigators:       Drs. T. A. Potemra and L. J. Zanetti          Applied
 Physics Laboratory        The Johns Hopkins University          Laurel, MD 20707          USA
 Dr. M. H. Acuna          Laboratory for Extraterrestrial Physics          NASA Goddard Space Flight
Center          Greenbelt, MD 20771     Reference:        T. A. Potemra, L. J. Zanetti, and M. H. Acur
a,        The AMPTE CCE Magnetic Field Experiment,        IEEE Trans. Geosci., Vol GE-25, pp 246-249,
 May 1985.     Physical Format:     Tape Format:                          9 Track     Density:
                  6250 bpi    Physical Block Size:                  12288 bytes     Volume Creation Da
te:                  10-SEP-1987    Volume Sequence Number:                  AMPTE-B001A     Access Method t
o Data Blocks:        Sequential     SFDU-to-physical Block Relations:    1:1     Volume Format Map:
     Physical Volume Header        ECF marker        Ephemeris Data File          Data File Format:
          File Header  SFDU              Data Block 1 SFDU              Data Block 2 SFDU              Data
 Block 3 SFDU
                                                                                                          Data
FDU              File Trailer SFDU          EOF marker          Attitude Data File          Data File Format
:              File Header  SFDU              Data Block 1 SFDU              Data Block 2 SFDU
 Data Block 3 SFDU                                                                                        Data Bloc
k N SFDU              File Trailer SFDU          EOF marker          Events Data File          Data File For
mat:              File Header  SFDU              Data Block 1 SFDU              Data Block 2 SFDU
     Data Block 3 SFDU                                                                                    Data B
lock N SFDU              File Trailer SFDU          EOF marker          Magnetometer Instrument Data File 1
          Data File Format:              File Header  SFDU              Data Block 1 SFDU              Dat
a Block 2 SFDU              Data Block 3 SFDU
                                                                                                          Magnetometer
Instrument Data File 2          EOF marker          Magnetometer Instrument Data File 3          EOF marker
                                                                                                          EOF ma
rker          ECF marker          Formats, Notations and Conventions:          Time Format:          year-of-cent
ury (two digits),          day-of-year (up to 3 digits),          second-of-day (up to 5 digits).
  Numeric Value Representation Notations:          A*n is n-byte ASCII character string          I*2
is 2-byte, 2's complement, binary integer          I*4 is 4-byte, 2's complement, binary integer
     R*4 is 4-byte, DEC VAX compatible, floating point datum          R*8 is 8-byte, DEC VAX compati
ble, floating point datum          Termination Character:          To end a line of ASCII text:
  ASCII line feed character and carriage return character.          Fill Characters:          ASCII  fil
l character:  ASCII blank.          Binary fill character:  Binary 0.          Mathematical notation:
     Exponentiation is represented by two asterisks.          Subscripts are enclosed with the angl
e bracket characters "<" and ">".          Storage order of array elements:          A one-dimensional a
rray is written with its first          element in the first storage location and its last          e
lement in the last storage location of the secuence.          A multidimensional array is stored so
that the          leftmost subscripts vary most rapidly.          Volume Directory (Time spans):          Data F
ile   1: 84 230     19 to 84 230 86338     Data File   2: 84 231     9 to 84 231 86328     Data File
 3: 84 232     7 to 84 232 86386     Data File   4: 84 233     6 to 84 233 86364     Data File   5: 8
4 234     4 to 84 234 86362     Data File   6: 84 235     2 to 84 235 86321     Data File   7: 84 236
     0 to 84 236 86319     Data File   8: 84 236 86399 to 84 237 86338     Data File   9: 84 237 8639
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7 to 84 238 86316 Data File 10: 84 238 86396 to 84 239 86255 Data File 11: 84 239 86394 to 84 240 86373 Data File 12: 84 240 86392 to 84 241 65998 Data File 13: 84 241 86391 to 84 242 86350 Data File 14: 84 242 86389 to 84 243 86308 Data File 15: 84 243 86388 to 84 244 86347 Data File 16: 84 244 86386 to 84 245 86305 Data File 17: 84 245 86385 to 84 246 86324 Data File 18: 84 247 261 to 84 248 240 Data File 19: 84 248 21 to 84 248 86340 Data File 20: 84 249 20 to 84 249 86359 Data File 21: 84 250 18 to 84 250 86397 Data File 22: 84 250 86377 to 84 251 86336 Data File 23: 84 251 86375 to 84 252 86314 Data File 24: 84 252 86374 to 84 253 86352 Data File 25: 84 253 86372 to 84 254 86311 Data File 26: 84 255 10 to 84 255 86389 Data File 27: 84 256 9 to 84 256 86328 Data File 28: 84 256 86368 to 84 257 86287 Data File 29: 84 257 86366 to 84 258 86345 Data File 30: 84 258 86365 to 84 259 86284 Data File 31: 84 259 86363 to 84 260 86322 Data File 32: 84 260 86361 to 84 261 86320 Data File 33: 84 261 86360 to 84 262 86279 Data File 34: 84 262 86358 to 84 263 86277 Data File 35: 84 263 86357 to 84 264 86316 Data File 36: 84 264 86355 to 84 265 86274 Data File 37: 84 265 86354 to 84 266 86273 Data File 38: 84 266 86352 to 84 267 86331 Data File 39: 84 268 10 to 84 268 86389 Data File 40: 84 269 10 to 84 269 86349 Data File 41: 84 270 7 to 84 270 86346 Data File 42: 84 271 5 to 84 271 86364 Data File 43: 84 272 4 to 84 272 86363 Data File 44: 84 273 2 to 84 273 86321 Data File 45: 84 274 1 to 84 274 86379 Data File 46: 84 274 86399 to 84 275 86338 Data File 47: 84 275 86398 to 84 276 86376 Data File 48: 84 276 86396 to 84 277 86315 Data File 49: 84 277 86395 to 84 278 86373 Data File 50: 84 278 86393 to 84 279 86312 Data File 51: 84 279 86392 to 84 280 86311 Data File 52: 84 280 86390 to 84 281 86329 Data File 53: 84 281 86388 to 84 282 86327 Data File 54: 84 282 86387 to 84 283 86326 Data File 55: 84 283 86385 to 84 284 86364 Data File 56: 84 284 86384 to 84 285 86323 Data File 57: 84 286 2 to 84 286 86361 Data File 58: 84 287 100 to 84 287 84592 Data File 59: 84 288 13747 to 84 288 86345 Data File 60: 84 288 86378 to 84 289 68723 Data File 61: 84 290 8776 to 84 290 86319 Data File 62: 84 290 86315 to 84 291 86293 Data File 63: 84 291 86313 to 84 292 86292 Data File 64: 84 292 86371 to 84 293 86310 Data File 65: 84 293 86370 to 84 294 86348 Data File 66: 84 294 86368 to 84 295 86287 Data File 67: 84 295 86367 to 84 296 60332 Data File 68: 84 297 65516 to 84 297 86321 Data File 69: 84 297 86367 to 84 298 86326 Data File 70: 84 298 86362 to 84 299 86281 Data File 71: 84 299 86361 to 84 300 75735 Data File 72: 84 301 17772 to 84 301 82400 Data File 73: 84 301 82426 to 84 302 82365 Data File 74: 84 302 82424 to 84 303 82383 Data File 75: 84 303 82423 to 84 304 82342 Data File 76: 84 304 82421 to 84 305 82340 Data File 77: 84 305 82420 to 84 306 82359 Data File 78: 84 306 82418 to 84 307 82337 Data File 79: 84 307 82417 to 84 308 82356 Data File 80: 84 308 82415 to 84 309 82374 Data File 81: 84 309 82414 to 84 310 82372 Data File 82: 84 310 82412 to 84 311 82331 Data File 83: 84 311 82411 to 84 312 82389 Data File 84: 84 312 82409 to 84 313 82368 Data File 85: 84 313 82407 to 84 314 82327 Data File 86: 84 314 84944 to 84 315 82401 Data File 87: 84 315 82404 to 84 316 82323 Data File 88: 84 316 82403 to 84 317 86274 Data File 89: 84 317 86333 to 84 318 86272 Data File 90: 84 318 86332 to 84 319 86251 Data File 91: 84 319 86330 to 84 320 86289 Data File 92: 84 320 86329 to 84 321 86247 Data File 93: 84 321 86327 to 84 322 24629 Data File 94: 84 323 71500 to 84 323 86254 Data File 95: 84 323 86325 to 84 324 86304 Data File 96: 84 324 86329 to 84 325 86307 Data File 97: 84 325 86326 to 84 326 79487 Data File 98: 84 326 86318 to 84 327 86237 Data File 99: 84 327 86316 to 84 328 86294 Data File 100: 84 328 86314 to 84 329 86293 Data File 101: 84 329 86312 to 84 330 86251 Data File 102: 84 330 86311 to 84 331 86230 Data File 103: 84 331 86309 to 84 332 86248 Data File 104: 84 332 86308 to 84 333 86247 Data File 105: 84 334 86305 to 84 335 86263 Data File 106: 84 335 86303 to 84 336 86262 Data File 107: 84 336 86302 to 84 337 86221 Data File 108: 84 337 86300 to 84 338 86219 Data File 109: 84 338 86298 to 84 339 86237 Data File 110: 84 339 86297 to 84 340 86216 Data File 111: 84 340 86236 to 84 341 86214 Data File 112: 84 341 86234 to 84 342 86213 Data File 113: 84 343 86291 to 84 344 86210 Data File 114: 84 344 86230 to 84 345 86188 Data File 115: 84 345 86288 to 84 346 86207 Data File 116: 84 346 86286 to 84 347 86245 Data File 117: 84 347 86285 to 84 348 86204 Data File 118: 84 348 86283 to 84 349 86202 Data File 119: 84 349 86284 to 84 350 86203 Data File 120: 84 350 86284 to 84 351 86242 Data File 121: 84 351 86283 to 84 352 86261 Data File 122: 84 352 86276 to 84 353 86254 Data File 123: 84 353 86274 to 84 354 86193 Data File 124: 84 354 86272 to 84 355 86191 Data File 125: 84 355 86270 to 84 356 86229 Data File 126: 84 356 86269 to 84 357 86227 Data File 127: 84 357 86267 to 84 358 86246 Data File 128: 84 358 86266 to 84 359 86185 Data File 129: 84 359 86264 to 84 360 86223 Data File 130: 84 360 86262 to 84 361 86241 Data File 131: 84 361 86264 to 84 362 86223 Data File 132: 84 362 86259 to 84 363 86178 Data File 133: 84 363 86258 to 84 364 86197 Data File 134: 84 364 86256 to 84 365 53947 ZZZZ1F001003000C731