

#455

HEOS-1 + 2

SINGLE POINT MAG. FIELD DATA

68-109A-02E'

72-005A-01D

72-005A-01E

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

HEADS 1

SINGLE POINT MAG. FIELD DATA

68-109A-02E SPHE-00644

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY IT CONTAINED FIVE 9-TRACK, 1600 BPI TAPES WRITTEN IN EBCDIC. THERE IS ONE RESTORED TAPE. THE TAPES ARE NOT IN TIME SEQUENTIAL ORDER. THE DR TAPE IS A 3480 CARTRIDGE AND THE DS TAPE IS 9-TRACK, 6250 BPI. THE ORIGINAL TAPES WERE CREATED ON A CDC 6600 COMPUTER. THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

| DR#      | DS#      | D#      | FILES | TIME SPAN           |
|----------|----------|---------|-------|---------------------|
| DR003939 | DS003939 | D031956 | 1     | 12/11/68 - 06/29/69 |
|          |          | D033428 | 2     | 01/01/71 - 12/31/71 |
|          |          | D033429 | 3     | 06/30/69 - 12/31/69 |
|          |          | D033430 | 4     | 01/01/72 - 01/26/74 |
|          |          | D033435 | 5     | 01/01/70 - 12/31/70 |

HEOS 2

SINGLE POINT MAG. FIELD DATA

72-005A-01D SPME-00001

This data set has been restored. There were originally eight 9-track, 1600 BPI tapes written EBCDIC. There are 2 restored tapes. The DR tapes are 3480 cartridges and the DS tapes are 6250 BPI. The original tapes were created on a 360 computer. The DR, DS, and DD numbers along with the time spans are given as follows:

| DR #<br>----- | DS #<br>----- | DD #<br>----- | FILES<br>----- | TIME SPAN<br>-----  |
|---------------|---------------|---------------|----------------|---------------------|
| DR02888       | DS02888       | D-33431       | 1              | 02/05/72 - 04/29/72 |
|               |               | D-33432       | 2              | 04/30/72 - 08/27/72 |
|               |               | D-33434       | 3              | 08/28/72 - 12/31/72 |
|               |               | D-33433       | 4              | 01/01/73 - 04/30/73 |
| DR02889       | DS02889       | D-33427       | 1              | 05/01/73 - 08/28/73 |
|               |               | D-33426       | 2              | 08/29/73 - 12/31/73 |
|               |               | D-33425       | 3              | 01/01/74 - 04/30/74 |
|               |               | D-33424       | 4              | 05/01/74 - 08/02/74 |

HEADS 2

REFORMATTED SINGLE POINT MAGFLD

72-005A-01E SPHE-00001

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY THERE WERE 2 9-TRACK, 1600 BPI TAPES WRITTEN IN BINARY. THE DR TAPES ARE ON 3480 CARTRIDGES AND THE DS TAPES ARE 9-TRACK, 6250 BPI. THE TAPES WERE CREATED ON AN IBM 360 COMPUTER. THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

| DR#     | DS#     | D#     | FILES | TIME SPAN           |
|---------|---------|--------|-------|---------------------|
| DR03343 | DS03343 | D35174 | 1     | 02/05/72 - 07/17/72 |
|         |         | D35252 | 2     | 07/17/72 - 08/02/74 |

REQ. AGENT  
VJP  
DEW

RAND NO.  
RDO722  
RD2048

ACQ. AGENT  
JIV

HEOS 1 & 2

SINGLE POINT MAG. FIELD DATA

68-109A-02E

72-005A-01D, 01E

This data set consists of 5 HEOS 1, 8 HEOS 2 (01D) and 2 HEOS 2 (01E) data tapes. The HEOS 1 and HEOS 2 (01D) are 9-track, 1600 BPI, EBCDIC with 1 file of data. The HEOS 2 (01E) tapes are 1600 BPI, Binary, 9-track with 1 file of data. HEOS 1 and HEOS 2 (01D) were created on a CDC 6600 computer. The HEOS 2 (01E) was created on an IBM computer. "EOF MARKERS" on these tapes are not recognized by the MODCOMP nor the IBM, so copy as one file.

HEOS 1

| <u>D#</u> | <u>C#</u> | <u>TIME SPAN</u>    |
|-----------|-----------|---------------------|
| D-31956   | C-20219   | 12/11/68 - 06/29/69 |
| D-33428   | C-20574   | 01/01/71 - 12/31/71 |
| D-33429   | C-20575   | 06/30/69 - 12/31/69 |
| D-33430   | C-20576   | 01/01/72 - 01/26/74 |
| D-33435   | C-20577   | 01/01/70 - 12/31/70 |

HEOS 2 (01D)

|         |         |                     |
|---------|---------|---------------------|
| D-33424 | C-20578 | 05/01/74 - 08/02/74 |
| D-33425 | C-20579 | 01/01/74 - 04/30/74 |
| D-33426 | C-20580 | 08/28/73 - 12/31/73 |
| D-33427 | C-20581 | 05/01/73 - 08/28/73 |
| D-33431 | C-20582 | 02/05/72 - 04/29/72 |
| D-33432 | C-20583 | 04/30/72 - 08/27/72 |
| D-33433 | C-20584 | 01/01/73 - 04/30/73 |
| D-33434 | C-20585 | 08/28/72 - 12/31/72 |

HEOS 2 (01E)

| <u>D#</u> | <u>C#</u> | <u>TIME SPAN</u>  |
|-----------|-----------|-------------------|
| D-35174   | C-20800   | 2/05/72 - 7/17/74 |
| D-35252   | C-20801   | 7/17/74 - 8/02/74 |

DATA TAPES ARE DIVIDED AS FOLLOWS

HEOS 1

|                    |           |
|--------------------|-----------|
| 1968 - 69 DAY 180  | 21 FILES  |
| 1969 DAY 181 - 365 | 19 FILES  |
| 1970               | 37 FILES  |
| 1971               | 37 FILES  |
| 1972 - 1975        | 142 FILES |

← *tape enclosed as first trial*

HEOS 2

|                   |          |
|-------------------|----------|
| 1972 DAY 36 - 120 | 9 FILES  |
| 121 - 240         | 12 FILES |
| 241 - 366         | 13 FILES |
| 1973 DAY 1 - 120  | 12 FILES |
| 121 - 240         | 12 FILES |
| 241 - 365         | 13 FILES |
| 1974 DAY 1 - 120  | 12 FILES |
| 121 - 214         | 10 FILES |

EACH FILE CONTAINS 10 DAYS DATA, i.e. DAYS 51 - 60 INCLUSIVE

HEOS REAL TIME COMPRESSED DATA TAPES

TAPE FORMAT - TAPES WERE ORIGINALLY 7-TRACK, 800 BPI, EVEN PARITY, BCD. THEY WERE RESTORED TO 9-TRACK, 6250 BPI, EBCDIC.

HEOS 1 UNLABELLED, MAXIMUM BLOCK SIZE 1,280 CHARACTERS, FIXED LENGTH RECORDS CONTAINING 40 CHARACTERS, VARIOUS NUMBERS OF FILES.

HEOS 2 UNLABELLED, MAXIMUM BLOCK SIZE 1,280 CHARACTERS, FIXED LENGTH RECORDS CONTAINING 45 CHARACTERS, VARIOUS NUMBERS OF FILES.

WRITTEN ON CDC 6600 UNDER SCOPE 3.4.1 WITH REQUEST AND FILE CARDS AS FOLLOWS:

REQUEST (TAPE,VSN= ,NOLABEL,FERMIT)

FILE(TAPE,RT+F,BT=K,MBL=3200,FL=40,CM=YES) HEOS 1

FILE(TAPE,RT=F,BT=K,MBL=3200,FL=45,CM=YES) HEOS 2

EACH RECORD YEAR, DAY, HOUR (in 1/1000th HR), XSGE, YSGE, ZSGE (in 1/100 RE), BXGSE, BYGSE, BZGSE (in 1/10 y), DUMMY (HEOS 2 ONLY)

FORMAT (I2,I3,715) HEOS 1  
(I2,I3,815) HEOS 2

NB \* ORBIT DATA CAN BE BAD, i.e. DAY 51, 1969. THIS RESULTS IN VALUES NEEDING A FIELD WIDTH GREATER THAN AVAILABLE. THESE VALUES ARE SET TO 99999.

\* NOTE \* THIS IS NOT OUR FAULT, THESE DATA ARE SUPPLIED TO US.



|         |          |          |          |          |          |          |          |          |          |          |
|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| ( 1000) | F7F240F3 | F5F1F2F9 | F8F94040 | F7F5F240 | 60F7F4F9 | 40F1F3F3 | F3404060 | F8F24060 | F2F0F340 | 4060F3F0 |
| ( 1040) | 4061F1F8 | F7F7F240 | F3F6F1F2 | F9F9F840 | 40F7F5F2 | 4060F7F4 | F940F1F3 | F3F34040 | 40F7F240 | 60F1F4F8 |
| ( 1080) | 404060F7 | F74060F1 | F9F2F7F2 | 40F3F6F1 | F3F0F0F7 | 4040F7F5 | F24060F7 | F4F940F1 | F3F3F340 | 4040F1F5 |
| ( 1120) | 4061F1F8 | F4404060 | F5F14060 | F1F9F4F7 | F240F3F6 | F1F3F0F1 | F64040F7 | F5F14060 | F7F4F540 | F1F3F2F9 |
| ( 1160) | 404040F3 | F14060F1 | F1F84040 | 60F2F840 | 60F1F9F6 | F7F240F3 | F6F1F3F0 | F2F54040 | F7F5F140 | 60F7F4F9 |
| ( 1200) | 40F1F3F2 | F9404040 | F1F54060 | F1F7F640 | 4060F3F6 | 4060F1F9 | F5F7F240 | F3F6F1F3 | F0F3F440 | 40F7F5F1 |
| ( 1240) | 4061F7F4 | F940F1F3 | F2F94040 | 40F3F440 | 60F1F6F6 | 404060F5 | F44060F1 | F9F8F7F2 | 40F3F6F1 | F3F0F4F3 |

FILE 1 RECORD 38 LENGTH 18BYTES

( ) 4B4B4B4B 00000000 00000000 00000000 0000

FILE 1 RECCRD 39 LENGTH 18BYTES

( ) 4B4B4B4C 00000000 00000000 00000000 0000

FILE 1 RECORD 40 LENGTH 18BYTES

( ) 4B4B4B4C 00000000 00000000 00000000 0000

FILE 1 RECCRD 41 LENGTH 18BYTES

( ) 4B4B4B4E 00000000 00000000 00000000 0000

FILE 1 RECORD 42 LENGTH 18BYTES

( ) 4B4B4B4F 00000000 00000000 00000000 0000

FILE 1 RECCRD 43 LENGTH 18BYTES

( ) 4B4B4B62 00000000 00000000 00000000 0000

FILE 1 RECORD 44 LENGTH 18BYTES

( ) 4B4B4BD1 00000000 00000000 00000000 0000

FILE 1 RECCRD 45 LENGTH 18BYTES

( ) 4B4B4BD2 00000000 00000000 00000000 0000

FILE 1 RECORD 46 LENGTH 18BYTES

( ) 4B4B4C4B 00000000 00000000 00000000 0000

FILE 1 RECCRD 47 LENGTH 18BYTES

( ) 4B4B4C4C 00000000 00000000 00000000 0000

FILE 1 RECORD 48 LENGTH 18BYTES

( ) 4B4B4C4D 00000000 00000000 00000000 0000

FILE 1 RECORD 49 LENGTH 1280BYTES

|        |          |          |          |          |          |          |          |          |          |          |
|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| ( )    | 4040F7F5 | F14060F7 | F4F940F1 | F3F2F940 | 4040F3F5 | 4060F1F8 | F1404060 | F4F94060 | F1F9F9F7 | F240F3F6 |
| ( 40)  | F1F3F0F5 | F24040F7 | F5F04060 | F7F4F840 | F1F3F2F5 | 404040F2 | F24060F1 | F7F14040 | 60F4F240 | 60F2F0F7 |
| ( 80)  | F7F240F3 | F5F1F3F0 | F6F14040 | F7F5F040 | 60F7F4F8 | 40F1F3F2 | F5404040 | 40F24060 | F1F8F040 | 4060F4F7 |
| ( 120) | 4061F2F1 | F1F7F240 | F3F6F1F3 | F0F6F940 | 40F7F5F0 | 4060F7F4 | F840F1F3 | F2F54040 | 4040F840 | 60F1F9F9 |
| ( 160) | 404060F4 | F64060F2 | F1F6F7F2 | 40F3F6F1 | F3F0F7F8 | 4040F7F5 | F04060F7 | F4F840F1 | F3F2F540 | 404060F1 |
| ( 200) | 4061F1F9 | F9404060 | F4F14060 | F2F1F9F7 | F240F3F6 | F1F3F0F8 | F74040F7 | F4F94060 | F7F4F740 | F1F3F2F1 |
| ( 240) | 40404060 | F84060F1 | F8F34040 | 60F1F640 | 60F2F2F1 | F7F240F3 | F6F1F3F0 | F9F64040 | F7F4F940 | 60F7F4F7 |
| ( 280) | 40F1F3F2 | F1404040 | 60F14060 | F1F7F040 | 4060F2F0 | 4060F2F2 | F7F7F240 | F3F6F1F3 | F1F0F540 | 40F7F4F5 |
| ( 320) | 4060F7F4 | F740F1F3 | F2F14040 | 4060F640 | 60F1F6F8 | 404060F5 | F04060F2 | F2F4F7F2 | 40F3F6F1 | F3F1F1F4 |
| ( 360) | 4040F7F4 | F94060F7 | F4F740F1 | F3F2F140 | 404060F8 | 4060F1F6 | F5404060 | F7F94060 | F2F2F6F7 | F240F3F6 |
| ( 400) | F1F3F1F2 | F34040F7 | F4F84060 | F7F4F640 | F1F3F1F8 | 404040F3 | F64060F1 | F5F34040 | 60F5F640 | 60F2F2F9 |
| ( 440) | F7F240F3 | F5F1F3F1 | F3F24040 | F7F4F840 | 60F7F4F6 | 40F1F3F1 | F8404040 | 60F14060 | F1F7F840 | 4060F6F0 |
| ( 480) | 4060F2F3 | F4F7F240 | F3F6F1F3 | F1F4F140 | 40F7F4F8 | 4060F7F4 | F640F1F3 | F1F84040 | 40F2F840 | 60F1F8F3 |
| ( 520) | 404060F4 | F34060F2 | F4F0F7F2 | 40F3F6F1 | F3F1F4F9 | 4040F7F4 | F84060F7 | F4F640F1 | F3F1F840 | 4040F2F3 |
| ( 560) | 4061F1F8 | F9404060 | F4F54060 | F2F2F6F7 | F240F3F6 | F1F3F1F5 | F84040F7 | F4F74060 | F7F4F540 | F1F3F1F4 |
| ( 600) | 40404040 | F74060F1 | F5F64040 | 60F3F440 | 60F2F2F9 | F7F240F3 | F6F1F3F1 | F6F74040 | F7F4F740 | 60F7F4F5 |
| ( 640) | 40F1F3F1 | F4404040 | 40F34060 | F2F0F040 | 4060F5F1 | 4060F2F2 | F6F7F240 | F3F6F1F3 | F1F7F640 | 40F7F4F7 |
| ( 680) | 4061F7F4 | F540F1F3 | F1F44040 | 40F3F040 | 60F1F8F8 | 404060F4 | F84060F2 | F2F9F7F2 | 40F3F6F1 | F3F1F8F5 |
| ( 720) | 4040F7F4 | F74060F7 | F4F540F1 | F3F1F440 | 4040F4F3 | 4060F1F8 | F8404060 | F5F44060 | F2F3F1F7 | F240F3F6 |
| ( 760) | F1F3F1F9 | F44040F7 | F4F64060 | F7F4F440 | F1F3F1F0 | 404040F2 | F74060F1 | F8F24040 | 60F6F740 | 60F2F2F9 |
| ( 800) | F7F240F3 | F6F1F3F2 | F0F34040 | F7F4F640 | 60F7F4F4 | 40F1F3F1 | F0404040 | F2F34060 | F1F9F940 | 4060F4F7 |
| ( 840) | 4061F2F2 | F6F7F240 | F3F6F1F3 | F2F1F240 | 40F7F4F6 | 4060F7F4 | F440F1F3 | F1F04040 | 40F2F040 | 60F1F6F5 |

|          |          |          |          |          |          |          |          |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| ( 96 )   | 404140F1 | F84160F1 | F7F841A0 | 60F7F440 | 60F2F3F8 | F7F240F3 | F6F1F3F2 | F3F84040 | F7F4F540 | 60F7F4F3 |
| ( 100 )  | 40F1F3F  | F5414040 | F3F94060 | F1F8F440 | 60F1F0F6 | 4060F2F4 | F0F7F240 | F3F6F1F3 | F2F4F740 | 40F7F4F5 |
| ( 1040 ) | 4060F7F4 | F340F1F3 | F0F64040 | 40F3F540 | 60F1F8F1 | 404060F8 | F54060F2 | F3F4F7F2 | 40F3F6F1 | F3F2F5F6 |
| ( 1080 ) | 4040F7F4 | F54060F7 | F4F340F1 | F3F0F640 | 4040F7F6 | 4060F1F7 | F3404060 | F8F34060 | F2F2F1F7 | F240F3F6 |
| ( 1120 ) | F1F3F2F6 | F54040F7 | F4F44060 | F7F4F240 | F1F3F0F2 | 404040F3 | F14060F1 | F6F94060 | F1F0F440 | 60F2F3F2 |
| ( 1160 ) | E7F14E3  | E5F1F3F2 | F7F44040 | F7F4F440 | 60F7F4F2 | 40F1F3F0 | F2404040 | F4F84060 | F1F7F340 | 4060F8F7 |
| ( 1200 ) | 4060F2F3 | F8F7F240 | F3F6F1F3 | F2F8F340 | 40F7F4F4 | 4060F7F4 | F240F1F3 | F0F24040 | 40F6F540 | 60F1F5F9 |
| ( 1240 ) | 404060F8 | F94060F2 | F4F0F7F2 | 40F3F6F1 | F3F2F9F2 | 4040F7F4 | F44060F7 | F4F240F1 | F3F0F240 | 4040F1F6 |

FILE 1 RECORD 8 LENGTH 18BYTES  
 ( 0 ) 4B4B4B4B 00000000 00000000 00000000 0000

| FILE | INPUT RECS. | DATA INPUT | RECORDS INPUT | MAX. SIZE | READ ERROR SUMMARY |      |   |      | INPUT RETRIES |        |
|------|-------------|------------|---------------|-----------|--------------------|------|---|------|---------------|--------|
|      |             |            |               |           | PERM               | ZERC | B | SECT | UNDEF.        | #RECS. |
| 1    | 7666        | 7666       |               | 1280      | 0                  | 0    | 0 | 0    | 0             | 0      |

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

START TIME 01/08/92 14:28:47 STOP TIME 01/08/92 14:30:05