

Data Set Catalog #131

PIONEER 6-Hourly Avg. Plasma Param
65-105A-06C 2 tapes

PIONEER 7-Hourly Avg. Plasma Param
66-075A-03C 1 tape

Table of Contents

1. Introduction
2. Errata/Change Log
3. LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM
4. Catalog Materials
 - a. Associated Documents
 - b. Core Catalog Materials

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

PIONEER 6

HR AVG PLASMA PARAMETERS ON MAG TAPE

65-105A-06C

THIS DATA SET HAS BEEN RESTORED. THERE WERE ORIGINALLY 2 9-TRACK, 800 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 TAPES WERE CREATED ON AN IBM 360 COMPUTER. THE DR AND DS NUMBER ALONG WITH THE CORRESPONDING D NUMBERS AND TIME SPANS ARE AS FOLLOWS:

DR#	DS#	DD#	FILES	TIME SPAN
DR02715	DS02715	DD06367	1	12/18/65 - 12/31/65
		DD06366	2	01/01/66 - 03/04/66

PIONEER 7

PIONEER 8

HR. AVG. PLASMA PARAMETERS

HOURLY AVERAGED VECTORS ON TAPE

66-075A-03C

67-123A-01C

THESE DATA SETS HAVE BEEN RESTORED. THE ORIGINAL TAPES WERE 9-TRACK, 800 BPI AND 1600 BPI. THE TAPES WERE CREATED ON AN IBM 360 COMPUTER. THE DR TAPE IS A 3480 CARTRIDGE AND THE DS TAPE IS 9-TRACK, 6250 BPI. THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR02871	DS02871	D06364	1	08/19/66 - 11/28/66 (PI07)
		D23793	2	12/17/67 - 12/30/69 (PI08)

PIONEER VI AND PIONEER VII - HOURLY AVG PLASMA PARAM

65-105A-06C - Pioneer VI
66-075A-03C - Pioneer VII

The tapes in the 2 data sets are 800 BPI, binary, 9 track, and contain 1 file. Each file consists of many short records. There is one logical record per physical record. There is a header record of 14 words, followed by a data record of up 53 words. There are 2 control words preceding the actual word 1 of the header record.

The tapes are hex dumped using TD-00. Start and stop times are in seconds since beginning of the year, and are converted to days. January 1=Day 0.

65-105A-06C
Pioneer 6 - Hourly Avg Plasma Param

<u>D#</u>	<u>C#</u>	<u>#File</u>	<u>Start</u>	<u>Stop</u>
D-06366	C-04565	1	01/01/66-03/04/66	
D-06367	C-04566	1	12/18/65-12/31/65	

66-075A-03C
Pioneer 7 - Hourly Avg Plasma Param

<u>D#</u>	<u>C#</u>	<u>#File</u>	<u>Start</u>	<u>Stop</u>
D-06364	C-04567	1	08/19/66-11/28/66	

MEMBER STOP TIME OF
D-6366

5242880
65536
45056
3328

5356770 ^{seconds} see time report
5356770 ÷ 86400 = 61.86370

61 days

.86370 × 24 = 20.72880

20 hrs

.72880 × 60 = 43.72800

43 min

LAST LOGICAL RECORD (STOP TIME)

1487.6704 hrs ÷ 24 = 61.98626

61 days

.98626 × 24 = 23.67024

23 hrs

.67024 × 60 = 40.21440

40 min

D-6367 BEGINNING

2
2112
2560
61440
917504
12582912
161777216
30,341,746

30,341,746 FIELD START
● $30,341,746 \div 86400 = 351.15346$
DAY 351
 $.15346 \times 24 = 3.68304$
3 hrs
 $.68304 \times 60 = 40.98240$
40 mins

1st Logical Record START
 $8428.82420 \text{ hrs} \div 24 = 351.20100$
DAY 351
 $.20100 \times 24 = 4.82400$
48 mins
● $.82400 \times 60 = 49.44000$
49 mins

STOP TIME of D-6367

3
16
768
12228
65536
14680064
16,777,216
31,535,831

HEADING

$$31,535,831 \div 86400 = 364.86231$$

DAY 364

$$.86231 \times 24 = 20.69544$$

HR 20

$$.69544 \times 60 = 41.72640$$

MIN 41

LAST LOGICAL RECORD STOP TIME

$$8759.51170 \text{ hrs} \div 24 = 364.97965$$

364 DAY

$$.97965 \times 24 = 23.51160$$

HR 23

$$.51160 \times 60 = 30.69600$$

MIN 30

Bryon
START D-6364 MEMBER

16,777,214
2,097,152
983,040
12,288
2304

19872000

19,87200 \div 86400 = 230.000

DAY 230

HR 0

MIN 0

1ST LOGICAL RECORD START TIME

5520.00000 HRS \div 24 = 230.00000

DAY 230

HR 0

MIN 0

START Brian
D-6364 MEMBER

16,777,214
2,097,152
983,040
12,288
2304

19872000

19,87200 \div 86400 = 230.000

DAY 230

HR 0

MIN 0

1ST LOGICAL RECORD START TIME

5520.00000 HRS \div 24 = 230.00000

DAY 230

HR 0

MIN 0

END of D-6364 HEADER

STOP time

0
80
1792
57344
262144
11534336
16177214

281632912

$$281632912 \div 86400 = 331.34512$$

DAY 331

$$.34512 \times 24 = 8.28288$$

HR 8

$$.28288 \times 60 = 16.97280$$

min 16

LAST Logical Record STOP

$$17753.3086 \div 24 = 331.38785$$

DAY 331

$$.38785 \times 24 = 9.30840$$

HR 9

$$.30840 \times 60 = 18.50400$$

min 18

66-075A-03C
65-105A-06C

Project 1064-7 Technical Note

Originator: Edyth M. Henderson

Date: April 20, 1971

Subject: Format of Parameter Hourly Averages Tape

This note describes the content and format of a tape which is produced by the Time Averaging Program. The tape contains averages of parameters within hourly time intervals.

This is a 9 track non-labeled binary tape written with a density of 800 BPI. It is written with variable length un-blocked records.

Format of Parameter Hourly Averages Tape

365
24
1460
730
8760

a. Header record - 14 words

<u>Word</u>	<u>Name</u>	<u>Format</u>	<u>Description</u>
1	IPSTART	Integer	The starting time of data on this tape in seconds since the beginning of the year.
2	IPSTOP	Integer	The stop time of data on this tape in seconds since the beginning of the year.
3	NPION	Integer	Spacecraft ID or Pioneer number.
4	Spare integer word not presently being used.		
5	NYEAR1	Integer	The year corresponding to the time in word 1.
6	Spare integer word not presently being used.		
7	NYEAR2	Integer	The year corresponding to the time in word 2.
8 - 12	Spare integer words not presently being used.		

b. Data Record - variable length up to 53 words

<u>Word</u>	<u>Name</u>	<u>Format</u>	<u>Description</u>
1	HRTIME	Real	Mean time of the interval. <i>all words</i>
2	AN	Real	The number of points in the interval. <i>1.4</i>
3	NWHOUT	Integer	The number of parameter averages written in the record. <i>3.4</i>

Words 4 through NWHOUT+3 contain parameter averages within the time interval. Each word corresponds to a given parameter as follows: All parameter averages are in real format.

CAL SQUARE LIMIT - 2.100

Format of Parameter Hourly Averages Tape

365
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1460
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a. Header record - 14 words

<u>Word</u>	<u>Name</u>	<u>Format</u>	<u>Description</u>
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b. Data Record - variable length up to 53 words

<u>Word</u>	<u>Name</u>	<u>Format</u>	<u>Description</u>
1	HRTIME	Real	Mean time of the interval. <i>all words in 2.4</i>
2	AN	Real	The number of points in the interval. <i>2.4</i>
3	NWHOUT	Integer	The number of parameter averages written in the record.

Words 4 through NWHOUT+3 contain parameter averages within the time interval. Each word corresponds to a given parameter as follows: All parameter averages are in real format.

CAL SQUARE LIMIT - 2.100