

DSC # 728

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PIONEER 10 72-012A-011 15-MIN INTERPLANETARY DATA, SFDU

PIONEER 11 73-019A-01H 15-MIN INTERPLANETARY DATA, SFDU

PIONEER 10 72-012A-01J 1-MIN HVM INTERPLANETARY CRUISE DATA

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

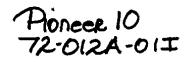
### PIONEER 10

15-MINUTE HVM INTERPLANETARY DATA, SFDU

72-012A-011 SPHE-00494

THIS DATA SET CONSISTS OF ONE MAGNETIC TAPE. THE TAPE IS 9-TRACK, 6250 BPI,WRITTEN IN ASCII. THE TAPE IS VAX LABELED. THE LABEL NAME CAN BE FOUND BELOW WITH THE D AND C NUMBER ALONG WITH THEIR TIME SPAN.

D#	C#	VOLLBL	FILES	TIMESPAN
				······
D#101188	C#030649	HVMP10	10	03/03/72-11/17/75



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f ∽=⊥_Creation_Date:	1993-03-17					
Medium_Description:	Half-inch magnetic tape, 9 track, 6250 bpi					
<pre>Fechnical_Contact:</pre>	Joyce Wolf Mail Stop 169-506 Jet Propulsion Laboratory 4800 Oak Grove Drive Pasadena, CA 91109					
	Electronic Mail (SPAN): JPLSP::JWOLF Phone: 818-354-7361					
Prev_Vols:	None					
CCSD\$\$MARKERMRK**001CCS	D3SS00002MRK**002					
Data_Set_Name:	Pioneer 10 HVM Cruise Data Archive					
Data_Source:	Pioneer 10 Helium Vector Magnetometer					
Scientific_Contact:	Dr. Edward J. Smith Jet Propulsion Laboratory Mail Stop 169-506 4800 Oak Grove Drive Pasadena, CA 91109					

Electronic Mail: JPLSP::ESMITH Telephone: 818-354-2248

Spacecraft\_Characteristics: Launched on March 3, 1972, Pioneer 10 made its closest approach to Jupiter on Dec. 2, 1973. Since then, it has been heading out of the Solar System, downstream with respect to the direction of the interstellar wind. In 1990 it was 50 AU from the sun.

The spacecraft's spin axis is directed toward the Earth. On board are twelve instruments for measuring fields and particles. The spacecraft is powered by radioisotope thermal generators (RTG's).

Investigation Objectives: The primary investigation objectives for the Pioneer 10 Helium Vector Magnetometer cruise data were to determine the largescale structure and dynamics of the interplanetary magnetic field in the outer solar system and to study how they are influenced by changing solar activity.

#### Instrument\_Attributes:

A. Instrument Description: The Helium Vector Magnetometer produces measurements of the 3 orthogonal components of the ambient magnetic field in a 0- Iz passband. The instrument switches automatically among 8 ranges, plus The minus 4, 14, 42, 144, 640, 4000, 22000, and 140000 nT. The measurements and digitized to 8 bits and a sign bit, giving a sensitivity of 1/256 of fullscale in each range. For more information, refer to Smith, E. J., B. V. Connor, and G. T. Foster, Jr., "Measuring the magnetic fields of Jupiter and the outer solar system," IEEE Trans. Magn., vol. MAG-11, pp. 962-980, 1975.

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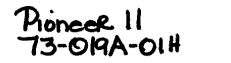
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ì	320)	3539452B	30332020	20302E31	34383331	37452B30	39202020	302E3030	30303030	452B3030	20202030
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(	280)	31202020	302E3237								
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#### PIONEER 11

#### 15-MINUTE HVM INTERPLANETARY DATA, SFDU

73-019A-01H SPHE-00667

THIS DATA SET CONSISTS OF 5 MAGNETIC TAPES. THE TAPES ARE 9 TRACK, 6250 BPI, WRITTEN IN ASCII, AND VAX LABELED. THE LABEL NAMES CAN BE FOUND BELOW WITH THE D AND C NUMBERS ALONG WITH THEIR TIME SPANS.

D#	C#	VOLUME LABEL	DATA FILES	TIME SPAN
D-101189	C-030647	HVMP11	10	04/06/73 - 12/31/76
D-101190	C-030648	HV2P11	10	01/01/77 - 12/31/80
D-101563	C-031127	HV3P11	10	01/01/81 - 12/31/84
D-101564	C-031128	HV4P11	10	01/01/85 - 12/31/88
D-101565	C-031129	HV5P11	10	01/01/89 - 08/0 <b>‡</b> /92

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9-JUL-1993 17:37

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Vol_Ident:	USA_NASA_NSSD_P11A_0003
Vol_Creation_Date:	1993-07-09
Medium_Description:	Half-inch magnetic tape, 9 track, 6250 bpi
Technical_Contact:	Joyce Wolf Mail Stop 169-506 Jet Propulsion Laboratory 4800 Oak Grove Drive Pasadena, CA 91109
	Electronic Mail (SPAN): JPLSP::JWOLF Phone: 818-354-7361
Prev_Vols:	USA_NASA_NSSD_P11A_0001 USA_NASA_NSSD_P11A_0002

CCSD\$\$MARKERMRK\*\*001CCSD3SS00002MRK\*\*002

Data_Set_Name:	Pioneer	11 HVM Cruise Data Archive	
Data Source:	Pioneer	11 Helium Vector Magnetometer	2

Dr. Edward J. Smith Jet Propulsion Laboratory Mail Stop 169-506 4800 Oak Grove Drive Pasadena, CA 91109

Electronic Mail: JPLSP::ESMITH Telephone: 818-354-2248

Spacecraft\_Characteristics: Launched in April of 1973, Pioneer 11 made its closest approach to Jupiter on Dec. 3, 1974. During late 1975 and early 1976, Pioneer 11 attained heliographic latitudes of 16 deg and higher; the sector structure of the IMF disappeared at these latitudes. On Sept. 1, 1979, Pioneer 11 made its closest approach to Saturn. Since then, it has been heading out of the Solar System, upstream with respect to the direction of the interstellar wind. It passed Neptune's orbit in 1990.

The spacecraft spins at about 7.8 rpm, with the spin axis directed toward the Earth. It carries 12 instruments for measuring fields and particles, and is powered by radioisotope thermal generators (RTG's).

Investigation Objectives: The primary investigation objectives for the Pioneer 11 Helium Vector Magnetometer cruise data are to determine the largescale structure and dynamics of the interplanetary magnetic field in the outer solar system and to study how they are influenced by changing solar activity, and the interaction of the solar wind with the interstellar medium.

#### Instrument Attributes:

Scientific Contact:

A. Instrument Description: The Helium Vector Magnetometer produces measurements of the 3 orthogonal components of the ambient magnetic field in a 0-3 Hz passband. The instrument switches automatically among 8 ranges, plus or minus 4, 14, 42, 144, 640, 4000, 22000, and 140000 nT. The measurements are digitized to 8 bits and a sign bit, giving a sensitivity of 1/256 of fullscale in each range. For more information, refer to Smith, E. J., B. V. Connor, and G. T. Foster, Jr., "Measuring the magnetic fields of Jupiter and the outer solar system," IEEE Trans. Magn., vol. MAG-11, pp. 962-980, 1975.

D-101563

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HEX DUMP OF HV3P11

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(1880)	5E5E5E5E	<b>SESESESE</b>	<b>SESESESE</b>	SESESESE	SESESESE	SESESESE	SESESESE	SESESESE	SESESESE	5E5E5E5E
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( 2000)	5E5E5E5E	SESESESE	SESESESE	5E5E5E5E	SESESESE	SESESESE	5E5E5E5E	SESESESE	SESESESE	SESESESE
(2040)	SESESESE	5E5E5E5E						ocococococ	JEJEJEJE	JUJUJUJU
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#### ASCII LIST OF HV3P11

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#### PIONEER 10

1-MINUTE HVM INTERPL CRUISE DATA

72-012A-01J SPHE-00195

THIS DATA SET CONSISTS OF 1 MAGNETIC TAPE. THE TAPE IS 9-TRACK, 6250 BPI, CREATED ON A VAX COMPUTER, WRITTEN IN ASCII, WITH A LABEL NAME OF "PIOMIN". A DIRECTORY OF THE TAPE, AS WELL AS COPIES OF THE TEXT FILES, PIOMAGMN.FMT, P10HVM\_15M.SFD AND P10MAGMN.CAT HAVE BEEN INCLUDED. THE D AND C NUMBER ALONG WITH IT'S TIMESPAN IS LISTED BELOW.

D#	C#	FILES	TIMESPAN
D-108212	C-031959	55	03/03/72-11/17/75

\*\*DATA WAS DOWNLOADED AND COPIED FROM ANON\_DIR: [COHO.P10MAG.MINUTE] \*\*

#### NSSDCA:: ANON DIR: [COHO.P10MAG.MINUTE] P10HVM\_15M.SFD

Note: this document is an extract from the SFDU metadata text for the 15-minute averaged IMF data in NSSDC data set 72-012A-01I. The mission, experiment, and data processing details also apply to the 1-minute data, except that the new one-minute data in 72-012A-01J have been supplied to NSSDC in RTN coordinates with SCET-UT times.

JFC 7/12/95

# CCSD3ZF000010000001CCSD3VS00002MRK\*\*001

/\* VOLDESC.SFD file \*/

Technical\_Contact: Joyce Wolf Mail Stop 169-506 Jet Propulsion Laboratory 4800 Oak Grove Drive Pasadena, CA 91109 Electronic Mail (SPAN): JPLSP::JWOLF Phone: 818-354-7361

CCSD\$\$MARKERMRK\*\*001CCSD3SS00002MRK\*\*002

Data_Set_Name:	Pioneer 10 HVM Cruise Data Archive
Data_Source:	Pioneer 10 Helium Vector Magnetometer
Scientific_Contact:	Dr. Edward J. Smith Jet Propulsion Laboratory Mail Stop 169-506 4800 Oak Grove Drive Pasadena, CA 91109
	TIASTROPIS Mail, IDICD. FRMTTH

Electronic Mail: JPLSP::ESMITH Telephone: 818-354-2248

Spacecraft\_Characteristics: Launched on March 3, 1972, Pioneer 10 made its closest approach to Jupiter on Dec. 2, 1973. Since then, it has been heading out of the Solar System, downstream with respect to the direction of the interstellar wind. In 1990 it was 50 AU from the sun.

The spacecraft's spin axis is directed toward the Earth. On board are twelve instruments for measuring fields and particles. The spacecraft is powered by radioisotope thermal generators (RTG's).

Investigation Objectives: The primary investigation objectives for the Pioneer 10 Helium Vector Magnetometer cruise data were to determine the largescale structure and dynamics of the interplanetary magnetic field in the outer solar system and to study how they are influenced by changing solar activity.

#### Instrument Attributes:

A. Instrument Description: The Helium Vector Magnetometer produces measurements of the 3 orthogonal components of the ambient magnetic field in a