

#761

PIONEER 10 & 11

72-012A-12C 73-019A-12D

6-HR INTERPLANETARY DATA-SFD

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## 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

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

6-HOUR INTERPLANETARY DATA-SFDU

72-012A-12C SPHE-00070

THIS DATA SET CONSISTS OF ONE MAGNETIC TAPE. THE TAPE IS 9-TRACK, 6250 BPI WRITTEN IN ASCII, AND CREATED ON THE VAX COMPUTER. THE DATA WAS DOWNLOADED AND COPIED TO TAPE FROM THE ANON\_DIR:[COHO.P10CRT]. A COPY OF THE TAPE FORMAT, VOLDESC AND A DIRECTORY LIST HAS BEEN INCLUDED IN THE CATALOG. THE D AND C NUMBER ALONG WITH THE TIME SPAN IN LISTED BELOW.

<u>D#</u>	<u>C#</u>	<u>LABEL</u>	<u>FILES</u>	<u>TIMESPAN</u>
D-100519	C-029885	P10CRT	49	03/03/72-12/31/94

CCSD3FF0000500000001CCSD3CS00004MRK\*\*001  
ADIDNAME=NSSD0117;  
CCSD\$\$MARKERM RK\*\*001CCSD3KS00002MRK\*\*001

SUBM\_NAME: Dr. Nand Lal  
SUBM\_ADDR: Goddard Space Flight Center  
Code 664  
Greenbelt, MD 20771

Electronic mail: nand@voycrs.gsfc.nasa.gov  
LHEAVX::LAL

SUBM\_DATE: 1991-03-15  
TITLE: Format for Pioneer-10 CRT Cruise Data Archive Data Set  
DESCR: Format description of the Pioneer-10 Cosmic Ray Telescope  
cruise phase energetic particle data measurements  
archive data set, March 1972 through 1990.  
REL\_DATE: 1991-03-15

CCSD\$\$MARKERM RK\*\*002CCSD3DF0000200000001

FILE\_CLASS\_NAME:Format for Pioneer-10 CRT Cruise Data Archive Data Set  
FILE\_TYPE\_NAME: CRT\_AVG\_FILE  
RECORD\_TYPE\_NAME: CRT\_AVG\_REC  
RECORD\_STRUCTURE: Fixed length, no control fields.  
RECORD\_LENGTH: 1024 ASCII characters  
RECORD\_FIELD\_MNEMONICS: TIME,  
PROTONFLUX1,  
PROTONFLUX2,  
PROTONFLUX3,  
HELIUMFLUX1,  
HELIUMFLUX2,  
HELIUMFLUX3,  
HELIUMFLUX4,  
ELECTRONFLUX,  
R1,  
R2A,  
R2B,  
R3A,  
R9A,  
R9B,  
R9C,  
R9D,  
R10A,  
R10B,  
R10C,  
R10D,  
R10E,  
R10F,  
R10G,  
R10H,  
R11A,  
R11B,  
R12A,  
R12B,  
R15A,  
R15B,  
R15C,  
R15D,  
R16A,

CCSD3ZF0000100000001CCSD3VS00002MRK\*\*001

/\* SFDU files: VOLDESC\_V02.SFD - updated 3/1/96 by J. F. Cooper, HSTX/SSDOO \*/

VOL\_IDENT: USA\_NASA\_NSSD\_P10L\_0001

VOL\_CREATION\_DATE: 1991-03-15

MEDIUM\_DESCRIPTION: 1/2 inch, 9-track, 6250 bpi magnetic tapes

TECHNICAL\_CONTACT: Dr. Nand Lal  
Goddard Space Flight Center  
Code 664  
Greenbelt, MD 20771

Electronic Mail: LHEAVX::LAL  
Electronic Mail: Bitnet, nand@voycrs.gsfc.nasa.gov  
Telephone: 301-286-5668

PREV\_VOLS: None

CCSD\$MARKERM RK\*\*001CCSD3SS00002MRK\*\*002

DATA\_SET\_NAME: PIONEER-10 CRT DATA ARCHIVE

DATA\_SOURCE: Pioneer-10 Cosmic Ray Telescope

SCIENTIFIC\_CONTACT: Dr. Frank McDonald  
Institute for Physical Science and Technology  
University of Maryland  
College Park, MD 20742

Electronic Mail: fm27@umail.umd.edu  
Telephone: 301-405-4861

SPACECRAFT\_CHARACTERISTICS: Pioneer-10 was launched on March 3, 1972 and encountered Jupiter on December 4, 1973. After passing Jupiter the spacecraft trajectory is taking it toward the tail of the sun's heliosphere. At the end of 1990 it was about 51 AU from the sun, in the ecliptic plane at about +3 degrees celestial latitude, and 73 degrees (measured eastward from the vernal equinox) celestial longitude. The spacecraft is instrumented with a full suite of magnetic field, plasma and energetic particle and cosmic ray sensors. The spacecraft is spin-stabilized about the axis of the large disk antenna, which is usually kept pointed in the direction of the earth.

INVESTIGATION\_OBJECTIVES: This instrument is designed to exploit to the fullest practical degree the proposed trajectories of Pioneer F and G. The significance of these measurements will be greatly enhanced by concurrent measurements with similar particle telescopes on satellites such as IMP or similar series in near-earth orbits. The principle scientific objectives of this experiment are:

- 1.) To measure the flow patterns of energetic solar and galactic particles separately in the inter-planetary field. To interpret this measurement, simultaneous determination of the energy spectrum, radial gradient, angular distribution, and streaming parameters is required for each nuclear species and over as wide an energy range as is practicable.



Directory ANON\_DIR: [COHO.P10CRT]

CRT_P10_72A.DAT;1	936	1-JUN-1992	00:00:00.00
CRT_P10_72B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_73A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_73B.DAT;1	1312	4-JUN-1992	00:00:00.00
CRT_P10_74A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_74B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_75A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_75B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_76A.DAT;1	1456	4-JUN-1992	00:00:00.00
CRT_P10_76B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_77A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_77B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_78A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_78B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_79A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_79B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_80A.DAT;1	1456	4-JUN-1992	00:00:00.00
CRT_P10_80B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_81A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_81B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_82A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_82B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_83A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_83B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_84A.DAT;1	1456	4-JUN-1992	00:00:00.00
CRT_P10_84B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_85A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_85B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_86A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_86B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_87A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_87B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_88A.DAT;1	1456	4-JUN-1992	00:00:00.00
CRT_P10_88B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_89A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_89B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_90A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_90B.DAT;1	1472	4-JUN-1992	00:00:00.00
CRT_P10_91A.DAT;1	1448	4-JUN-1992	00:00:00.00
CRT_P10_91B.DAT;1	1472	4-JUN-1992	00:00:00.00
FORMAT.SFD;1	31	29-MAY-1992	00:00:00.00
TEMP.LIS;1	0	5-MAY-1995	16:14:50.06
VOLDESC.SFD;2	49	4-JUN-1992	00:00:00.00

Total of 43 files, 57840 blocks.

3/6/92 \*

Pioneer II - 6 HR

PIONEER 11

6-HOUR INTERPLANETARY DATA-SFDU

73-019A-12D SPHE-00199

THIS DATA SET CONSISTS OF ONE MAGNETIC TAPE. THE TAPE IS 9-TRACK, 6250 BPI WRITTEN IN ASCII, AND CREATED ON THE VAX COMPUTER. THE DATA WAS DOWNLOADED AND COPIED TO TAPE FOR THE ANON\_DIR:[COHO.P11CRT]. A COPY OF THE TAPE FORMAT, VOLDESC AND A DIRECTORY LIST HAS BEEN INCLUDED IN THE CATALOG. THE D AND C NUMBER ALONG WITH THE TIME SPAN IS LISTED BELOW.

D#	C#	LABEL	FILES	TIMESPAN
D-100520	C-029886	P11CRT	47	04/06/73-12/31/94

CCSD3FF0000500000001CCSD3CS00004MRK\*\*001

ADIDNAME=NSSD0118;

CCSD\$\$MARKERM RK\*\*001CCSD3KS00002MRK\*\*001

SUBM\_NAME: Dr. Nand Lal  
SUBM\_ADDR: Goddard Space Flight Center  
Code 664  
Greenbelt, MD 20771

Electronic mail: nand@voycrs.gsfc.nasa.gov  
LHEAVX::LAL

SUBM\_DATE: 1992-12-09  
TITLE: Format for Pioneer-11 CRT Cruise Data Archive Data Set  
DESCR: Format description of the Pioneer-11 Cosmic Ray Telescope  
cruise phase energetic particle data measurements  
archive data set, April 1973 through 1991.  
REL\_DATE: 1991-03-15

CCSD\$\$MARKERM RK\*\*002CCSD3DF0000200000001

FILE\_CLASS\_NAME:Format for Pioneer-11 CRT Cruise Data Archive Data Set

FILE\_TYPE\_NAME: CRT\_AVG\_FILE

RECORD\_TYPE\_NAME: CRT\_AVG\_REC

RECORD\_STRUCTURE: Fixed length, no control fields.

RECORD\_LENGTH: 1024 ASCII characters

RECORD\_FIELD\_MNEMONICS: TIME,  
PROTONFLUX1,  
PROTONFLUX2,  
PROTONFLUX3,  
HELIUMFLUX1,  
HELIUMFLUX2,  
HELIUMFLUX3,  
HELIUMFLUX4,  
ELECTRONFLUX,  
R1,  
R2A,  
R2B,  
R3A,  
R9A,  
R9B,  
R9C,  
R9D,  
R10A,  
R10B,  
R10C,  
R10D,  
R10E,  
R10F,  
R10G,  
R10H,  
R11A,  
R11B,  
R12A,  
R12B,  
R15A,  
R15B,  
R15C,  
R15D,  
R16A,

CCSD3ZF0000100000001CCSD3VS00002MRK\*\*001

/\* SFDU file: VOLDESC\_V02.SFD - updated 3/1/96 by J. F. Cooper, HSTX/SSDOO \*/

VOL\_IDENT: USA\_NASA\_NSSD\_P11L\_0001

VOL\_CREATION\_DATE: 1992-12-09

MEDIUM\_DESCRIPTION: 1/2 inch, 9-track, 6250 bpi magnetic tapes

TECHNICAL\_CONTACT: Dr. Nand Lal  
Goddard Space Flight Center  
Code 664  
Greenbelt, MD 20771  
  
Electronic Mail: LHEAVX::LAL  
Electronic Mail: nand@voycrs.gsfc.nasa.gov  
Telephone: 301-286-5668

PREV\_VOLS: None

CCSD\$MARKERMK\*\*001CCSD3SS00002MRK\*\*002

DATA\_SET\_NAME: PIONEER-11 CRT DATA ARCHIVE

DATA\_SOURCE: Pioneer-11 Cosmic Ray Telescope

SCIENTIFIC\_CONTACT: Dr. Frank McDonald  
Institute for Physical Science and Technology  
University of Maryland  
College Park, MD 20742

Electronic Mail: fm27@umail.umd.edu  
Telephone: 301-405-4861

SPACECRAFT\_CHARACTERISTICS: Pioneer-11 was launched on April 6, 1973, encountered Jupiter on December 4, 1974, used Jupiter's gravitational field to alter its trajectory radically, and encountered Saturn on September 1, 1979. It is currently (1990) near 30 AU and +16 deg celestial latitude, following an escape trajectory from the solar system toward the nose of the heliosphere. The spacecraft is instrumented with a full suite of magnetic field, plasma and energetic particle and cosmic ray sensors. Telemetry coverage was 40 - 60 % from 1976 through 1989, and about 30% in 1990. The spacecraft is spin-stabilized about the axis of the large disk antenna, which is usually kept pointed in the direction of the earth.

INVESTIGATION\_OBJECTIVES: This instrument is designed to exploit to the fullest practical degree the proposed trajectories of Pioneer F and G. The significance of these measurements will be greatly enhanced by concurrent measurements with similar particle telescopes on satellites such as IMP or similar series in near-earth orbits. The principle scientific objectives of this experiment are:

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Directory ANON\_DIR: [COHO.P11CRT]

CRT_P11_73A.DAT;1	720	15-JUN-1993	00:00:00.00
CRT_P11_73B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_74A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_74B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_75A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_75B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_76A.DAT;1	1456	16-JUN-1993	00:00:00.00
CRT_P11_76B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_77A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_77B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_78A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_78B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_79A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_79B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_80A.DAT;1	1456	16-JUN-1993	00:00:00.00
CRT_P11_80B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_81A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_81B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_82A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_82B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_83A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_83B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_84A.DAT;1	1456	16-JUN-1993	00:00:00.00
CRT_P11_84B.DAT;1	32	16-JUN-1993	00:00:00.00
CRT_P11_85A.DAT;1	504	16-JUN-1993	00:00:00.00
CRT_P11_85B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_86A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_86B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_87A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_87B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_88A.DAT;1	1456	16-JUN-1993	00:00:00.00
CRT_P11_88B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_89A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_89B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_90A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_90B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_91A.DAT;1	1448	16-JUN-1993	00:00:00.00
CRT_P11_91B.DAT;1	1472	16-JUN-1993	00:00:00.00
CRT_P11_92A.DAT;1	1459	1-MAR-1996	10:44:59.51
CRT_P11_92B.DAT;1	1475	1-MAR-1996	10:45:02.04
CRT_P11_93A.DAT;1	1451	1-MAR-1996	10:45:12.34
CRT_P11_93B.DAT;1	1475	1-MAR-1996	10:45:15.39
CRT_P11_94A.DAT;1	1451	1-MAR-1996	10:45:22.90
CRT_P11_94B.DAT;1	1475	1-MAR-1996	10:45:25.44
FORMAT_V01.SFD;1	32	15-JUN-1993	00:00:00.00
TEMP.LIS;2	0	1-MAR-1996	11:25:18.34
TEMP.LIS;1	5	5-MAY-1995	16:14:41.80
VOLDESC_V02.SFD;2	47	1-MAR-1996	11:24:50.73

Total of 48 files, 61270 blocks.