[redacted]

DSC # 728

PIONEER 10
72-012A-01I
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

[redacted]

PIONEER 10

15-MINUTE HVM INTERPLANETARY DATA,SFDU

72-012A-01I

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

Pioneer 10
72-012A-011

CCSD3ZF0000100000001CCSD3VS00002MRK**001

Vol_Ident: USA_NASA_NSSD_P10A_0001

Vol_Creation_Date: 1993-03-17

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: None

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

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 large-scale 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- Hz passband. The instrument switches automatically among 8 ranges, plus 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 full-scale 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.

HEX DUMP OF 1MUA1:HVM_P10_72A.DAT

RECORD 1 372 BYTES

(0)	31393732	2D30332D	30335430	303A3030	20534820	20203930	30202020	2020302E	30303020	20202020
(40)	302E3030	30202020	2020302E	30303020	20202020	20302E20	20202020	20302E20	2020302E	30303030
(80)	3030452B	30302020	20302E30	30303030	30452B30	30202020	302E3030	30303030	452B3030	20202030
(120)	2E303030	30303045	2B303020	2020302E	30303030	3030452B	30302020	20302E30	30303030	30452B30
(160)	30202020	302E3030	30303030	452B3030	20202030	2E303030	30303045	2B303020	2020302E	30303030
(200)	3030452B	30302020	20302E30	30303030	30452B30	30202020	302E3030	30303030	452B3030	20202030
(240)	2E303030	30303045	2B303020	2020302E	30303030	3030452B	30302020	20302E30	30303030	30452B30
(280)	30202020	302E3134	38333238	452B3039	20202D30	2E323138	30303045	2D303220	2020302E	31363236
(320)	3539452B	30332020	20302E31	34383331	37452B30	39202020	302E3030	30303030	452B3030	20202030
(360)	2E313632	36343645	2B303320							

HEX DUMP OF 1MUA1:HVM_P10_72A.DAT

RECORD 11520 372 BYTES

(0)	31393732	2D30362D	33305432	333A3435	20534820	20203930	30202020	3838302E	33313320	38353530
(40)	392E3739	37203836	3334392E	37323720	20383630	31302E20	20383638	35302E20	2020302E	31373533
(80)	3331452B	30302020	2D302E31	30303837	38452B30	3120202D	302E3334	31373733	452B3030	20202030
(120)	2E353038	32313145	2D303120	202D302E	31373234	3233452B	30302020	2D302E35	39373337	39452D30
(160)	31202020	302E3130	32313730	452B3031	20202030	2E333432	35353045	2B303020	2020302E	31323437
(200)	3134452B	30302020	20302E31	36303339	36452B30	3020202D	302E3932	32353930	452B3030	20202D30
(240)	2E333132	35323045	2B303020	2020302E	31303933	3339452B	30312020	20302E31	31393732	33452B30
(280)	31202020	302E3237	39383430	452B3039	20202D30	2E323037	31393945	2B303120	2020302E	32353733
(320)	3935452B	30332020	20302E31	35323039	36452B30	39202020	302E3230	32363337	452D3034	20202030
(360)	2E323739	32343745	2B303320							

Pioneer 11
73-019A-01H

PIONEER 11

15-MINUTE HVM INTERPLANETARY DATA, SFDU

73-019A-01H

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 - 08/01/92

CCSD3ZF0000100000001CCSD3VS00002MRK**001

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

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 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 large-scale 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:

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 full-scale 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

HEX DUMP OF HV3P11

FILE 8 RECORD 1 2048 BYTES

(0)	31393831	2D303120	30315430	303A3030	20534820	20203930	30202020	3130382E	30303020	20203738
(40)	322E3030	30202020	3834322E	30303420	20203537	39302E20	20203538	35302E20	2020302E	31323335
(80)	3736452B	30302020	2D302E33	34323135	39452B30	30202020	302E3135	30313535	452B3030	20202030
(120)	2E313734	34313445	2D303120	202D302E	34323033	3436452D	30312020	20302E31	38353433	34452D30
(160)	31202020	302E3131	37383439	452B3030	20202D30	2E353137	30373945	2D303120	2020302E	32333731
(200)	3037452D	30312020	20302E33	30393735	36452B30	3020202D	302E3836	31383934	452B3030	20202030
(240)	2E333735	37323745	2B303020	2020302E	33393734	3837452B	30302020	20302E31	35393030	31452B30
(280)	30202020	302E3134	38323438	452B3130	20202030	2E393731	36333545	2B303120	2020302E	31393531
(320)	3331452B	30332020	20302E31	34373130	33452B30	3920202D	302E3138	30303030	452D3033	20202030
(360)	2E313030	34393345	2B303320	31393831	2D30312D	30315430	303A3135	20534820	20203930	30202020
(400)	3930302E	30303020	20203930	322E3030	39202031	3734322E	30373420	20203539	31302E20	20203637
(440)	35302E20	2020302E	31313638	3236452B	30302020	2D302E33	32333931	33452B30	30202020	302E3136
(480)	38383637	452B3030	20202030	2E313634	34383545	2D303120	202D302E	33373433	3332452D	30312020
(520)	20302E31	39373333	30452D30	31202020	302E3130	35383336	452B3030	20202D30	2E353434	37323345
(560)	2D303120	2020302E	32393437	3238452D	30312020	20302E32	39383334	30452B30	3020202D	302E3833
(600)	34323935	452B3030	20202030	2E343335	31373945	2B303020	2020302E	33383835	3834452B	30302020
(640)	20302E31	35313735	38452B30	30202020	302E3134	38323438	452B3130	20202030	2E393731	36343845
(680)	2B303120	2020302E	31393531	3332452B	30332020	20302E31	34373130	33452B30	3920202D	302E3138
(720)	30303030	452D3033	20202030	2E313030	35303445	2B303320	31393831	2D30312D	30315430	303A3330
(760)	20534820	20203930	30202020	3930302E	30303020	20313830	322E3037	39202032	3634322E	31343320
(800)	20203638	31302E20	20203736	35302E20	2020302E	31323939	3232452B	30302020	2D302E33	32353436
(840)	35452B30	30202020	302E3135	36373138	452B3030	20202030	2E323035	34343245	2D303120	202D302E
(880)	34313738	3630452D	30312020	20302E32	30323639	32452D30	31202020	302E3130	36363438	452B3030
(920)	20202D30	2E353039	35353245	2D303120	2020302E	32353732	3139452D	30312020	20302E33	32393937
(960)	34452B30	3020202D	302E3833	36303537	452B3030	20202030	2E343031	35353645	2B303020	2020302E
(1000)	33393030	3136452B	30302020	20302E31	35323931	33452B30	30202020	302E3134	38323439	452B3130
(1040)	20202030	2E393731	36363245	2B303120	2020302E	31393531	3332452B	30332020	20302E31	34373130
(1080)	33452B30	3920202D	302E3138	30303030	452D3033	20202030	2E313030	35313445	2B303320	31393831
(1120)	2D30312D	30315430	303A3435	20534820	20203930	30202020	3930302E	30303020	20323730	322E3134
(1160)	38202033	3534322E	32313320	20203737	31302E20	20203835	35302E20	2020302E	31323039	3131452B
(1200)	30302020	2D302E33	31373831	30452B30	30202020	302E3137	38383132	452B3030	20202030	2E313730
(1240)	30303245	2D303120	202D302E	33383336	3433452D	30312020	20302E32	31343139	37452D30	31202020
(1280)	302E3130	31383733	452B3030	20202D30	2E353636	37393245	2D303120	2020302E	33323936	3932452D
(1320)	30312020	20302E33	30383937	36452B30	3020202D	302E3831	38303336	452B3030	20202030	2E343630
(1360)	39393545	2B303020	2020302E	33383836	3136452B	30302020	20302E31	35313834	32452B30	30202020
(1400)	302E3134	38323439	452B3130	20202030	2E393731	36373545	2B303120	2020302E	31393531	3333452B
(1440)	30332020	20302E31	34373130	33452B30	3920202D	302E3138	30303030	452D3033	20202030	2E313030
(1480)	35323545	2B303320	31393831	2D30312D	30315430	313A3030	20534820	20203930	30202020	3930302E
(1520)	30303020	20333630	322E3231	38202034	3434322E	32383320	20203836	31302E20	20203934	35302E20
(1560)	2020302E	31313438	3835452B	30302020	2D302E33	30333938	33452B30	30202020	302E3138	37353132
(1600)	452B3030	20202030	2E313538	34373445	2D303120	202D302E	33343733	3634452D	30312020	20302E32
(1640)	31343734	30452D30	31202020	302E3933	31333539	452D3031	20202D30	2E353638	30383345	2D303120
(1680)	2020302E	33363238	3637452D	30312020	20302E32	39393239	39452B30	3020202D	302E3830	30383236
(1720)	452B3030	20202030	2E343933	33383345	2B303020	2020302E	33383031	3336452B	30302020	20302E31
(1760)	34353237	30452B30	30202020	302E3134	38323439	452B3130	20202030	2E393731	36383845	2B303120
(1800)	2020302E	31393531	3333452B	30332020	20302E31	34373130	33452B30	3920202D	302E3138	30303030
(1840)	452D3033	20202030	2E313030	35333545	2B303320	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E
(1880)	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E
(1920)	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E
(1960)	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E
(2000)	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E	5E5E5E5E
(2040)	5E5E5E5E	5E5E5E5E								

D- 101563

ASCII LIST OF HV3P11

FILE 8   RECORD 1   2048 BYTES

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1981-01-01T00:00 SH   900   108.000   782.000   842.004   5790.   5850.   0.123576E+00  -0.342159E+00   0.150155E+00   0.174414E-01
 -0.420346E-01   0.185434E-01   0.117849E+00  -0.517079E-01   0.237107E-01   0.309756E+00  -0.861894E+00   0.375727E+00   0.397487E+
00   0.159001E+00   0.148248E+10   0.971635E+01   0.195131E+03   0.147103E+09  -0.180000E-03   0.100493E+03 1981-01-01T00:15 SH   90
0   900.000   902.009  1742.074   5910.   6750.   0.116826E+00  -0.323913E+00   0.168867E+00   0.164485E-01  -0.374332E-01   0.19733
0E-01   0.105836E+00  -0.544723E-01   0.294728E-01   0.298340E+00  -0.834295E+00   0.435179E+00   0.388584E+00   0.151758E+00   0.14
8248E+10   0.971648E+01   0.195132E+03   0.147103E+09  -0.180000E-03   0.100504E+03 1981-01-01T00:30 SH   900   900.000  1802.079  2
642.143   6810.   7650.   0.129922E+00  -0.325465E+00   0.156718E+00   0.205442E-01  -0.417860E-01   0.202692E-01   0.106648E+00  -0
.509552E-01   0.257219E-01   0.329974E+00  -0.836057E+00   0.401556E+00   0.390016E+00   0.152913E+00   0.148249E+10   0.971662E+01
  0.195132E+03   0.147103E+09  -0.180000E-03   0.100514E+03 1981-01-01T00:45 SH   900   900.000  2702.148  3542.213   7710.   8550.
  0.120911E+00  -0.317810E+00   0.178812E+00   0.170002E-01  -0.383643E-01   0.214197E-01   0.101873E+00  -0.566792E-01   0.329692E-
01   0.308976E+00  -0.818036E+00   0.460995E+00   0.388616E+00   0.151842E+00   0.148249E+10   0.971675E+01   0.195133E+03   0.14710
3E+09  -0.180000E-03   0.100525E+03 1981-01-01T01:00 SH   900   900.000  3602.218  4442.283   8610.   9450.   0.114885E+00  -0.30398
3E+00   0.187512E+00   0.158474E-01  -0.347364E-01   0.214740E-01   0.931359E-01  -0.568083E-01   0.362867E-01   0.299299E+00  -0.80
0826E+00   0.493383E+00   0.380136E+00   0.145270E+00   0.148249E+10   0.971688E+01   0.195133E+03   0.147103E+09  -0.180000E-03   0
.100535E+03 ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
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PIONEER 10

1-MINUTE HVM INTERPL CRUISE DATA

72-012A-01J

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, P10MAGMN.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

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CCSD3ZF0000100000001CCSD3VS00002MRK**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

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 large-scale 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