[redacted]

#653

VOYAGER 1 & 2

HOURLY AVERAGED SOLAR WIND PLASMA

77-084A-06F

77-076A-06F

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

Voyager 2
1-Hr. Solar Wind Plasma Data
77-076A-06S SPHE-00487
~~SPAE-00487~~

These datasets has been updated on one CD-RW, and supersedes dataset 77-076A-06F (SPAE-00487). The original datasets were written on 9trk, 6250 bpi tapes. The replacement CD-RW incubuses the data that existed previously and data that were generated since the DD and DC tapes were created. The data has been downloaded from /raid/ftp/spacecraft_data/voyager2/plasma/hour/ and written in ASCII format. The KD and KW numbers along with the time spans are as follows:

KD #	KW #	DD #	DC #	Files	Time Span
KD022365	KW000194				08/22/1977-09/15/2004
		DD109276	DC033154	87	08/22/1977-07/28/2003

REQ.AGENT	RAND NO.	ACQ. AGENT
SAR	VO340	HKH

VOYAGER 1

HOURLY AVERAGED SOLAR WIND PLASMA

77-084A-06F SPHE-00078

THIS DATA SET CONSISTS OF ONE MAGNETIC TAPE. THE TAPE IS 9-TRACK 6250 BPI, ASCII WITH ONE FILE OF DATA. THE TAPE WAS CREATED ON AN IBM COMPUTER. THE D AND C NUMBER ALONG WITH THE TIME SPAN IS AS FOLLOWS:

D#	C#	TIME SPAN
D-84004	C-28210	09/07/77 - 11/13/80

*****PLEASE NOTE*****

The magnetic field data included on this tape is not reliable in all regards. NSSDC has a separate data set of IMF data provided by the Voyager Magnetometer Team which has fully reliable data.

VOYAGER 1

77-084A-06F

HOURLY AVERAGED SOLAR WIND PLASMA FORMAT

WORD	TYPE/ LENGTH	NAME	DESCRIPTION
1	I*4	YR	YEAR OF DATA
2	I*4	DAY	DAY OF YEAR
3	I*3	HR	HOUR OF DAY
4	I*4	NUMBER	NUMBER OF SAMPLE POINTS
5	F7.1	VR(mom)	R COMP OF FLOW VELOCITY[KM/SEC] MOMENT IN RTN SYSTEM
6	F7.1	VT(mom)	T COMP OF FLOW VELOCITY[KM/SEC] MOMENT IN RTN SYSTEM
7	F7.1	VN(mom)	N COMP OF FLOW VELOCITY[KM/SEC] MOMENT IN RTN SYSTEM
8	F8.4	DEN(mom)	-DENSITY MOMENT [n/cc]
9	F8.4	DEN(fit)	-DENSITY FIT [n/cc]
10	F6.1	W(mom)	-THERMAL SPEED IN km/sec FROM MOMENT
11	F6.1	W(fit)	-THERMAL SPEED IN km/sec FROM FIT
12	F5.1	100*N/Np(fit)	
13	F8.4	BR	-COMPONENTS OF LOCAL IMF FIELD VECTORS [nT]
14	F8.4	BT	-COMPONENTS OF LOCAL IMF FIELD VECTORS [nT]
15	F8.4	BN	-COMPONENTS OF LOCAL IMF FIELD VECTORS [nT]
16	F7.3	RAU	-SPACECRAFT DISTANCE FROM SUN UN A.U.

NOTE:The RTN system is fixed to the sun-spacecraft line. The R axis is the radial direction to the spacecraft, the T axis is the cross product of the solar rotation axis and the R axis is the cross product of R and T. At zero heliographic latitude, when the spacecraft is in the solar equatorial plane, the N and rotation axes are parallel

77-076A-06F

REQ.AGENT	RAND NO.	ACQ. AGENT
SAR	V0340	HKH

VOYAGER 2

HOURLY AVERAGED SOLAR WIND PLASMA

77-076A-06F SPHE-00078

THIS DATA SET CONSISTS OF ONE MAGNETIC TAPE. THE TAPE IS 9-TRACK 6250 BPI, BINARY WITH ONE FILE OF DATA. THE TAPE WAS CREATED ON AN IBM COMPUTER. THE D AND C NUMBER ALONG WITH THE TIME SPAN IS AS FOLLOWS:

D#	C#	TIME SPAN
D-74162	C-26149	08/21/77 - 12/26/85

*****PLEASE NOTE*****

The magnetic field data included on this tape is not reliable in all regards. NSSDC has a separate data set of IMF data provided by the Voyager Magnetometer Team which has fully reliable data.

Voyager Plasma Data (Solar wind)

HOURLY AVERAGE tape
DD=UNIT=TAPE9,LABEL=(,BLP),DCB=(RECFM=VBS,LRECL=~~7200~~ 752,BLKSIZE=~~7294~~ 17600,
~~TRTCH=C~~),VOL=SER=

FT09F001

0	N number of words following in record		I4
1	Source of data (tape label)		A*8
2			
3	tape of source EDR, summary, etc.		A4
4	Date of averaging run	IY*1000+IDAY	I*4
5	spare		
6	S/C ID		A4
7	Date of Data	Year(1977)	I*4
8		Day(Jan 1=1)	I*4
9		Hour(0 - 23)	I*4
1-10	speed km/sec (MOM)	average	R*4
11		standard deviation	R*4
12		# values in average	I*4
2-13,14,15	density (MOM) #/cm^3	average, SD, ,#	R*4,R*4,I4
3-16,17,18	thermal speed(MOM) km/sec		
4-19,20,21	flux	cm^{-2}sec^{-1}	
5-22,23,24	thermal speed/bulk speed		
6-25,26,27	E-W angle (positive from west) degrees		
7-28,29,30	N-S angle (positive from south)		
8-31,32,33	density alphas	#/cm^3	
9-34,35,36	$V_\alpha - V_p$	km/sec ans(63)	
10-37,38,39	W_α		
11-40,41,42	T_{E1}		
12-43,44,45	T_{E2}		
13-46,47,48	electron flux		

not filled

14-49,50,51	B	magnitude of B field γ
15-52,53,54	E-W angle B field	degrees
16-55,56,57	N-S angle B field	"
17-58,59,60	VR	km/sec
18-61,62,63	VT	"
19-64,65,66	Vn	"
20-67,68,69	BR	
21-70,71,72	BT	
22-73,74,75	BN	
23-76,77,78	density(fit) #cc	
24-79,80,81	speed(fit	km/sec
25-82,83,84	thermal speed(fit)	km/sec
26-85,86,87	VR(fit)	km/sec
27-88,89,90	VT(fit)	km/sec
28-91,92,93	VN(fit)	km/sec
29-94,95,96	anisotropy,mon	
30-97,98,99	anisotropy,(fit)	
31-100,101,102	anisotropy(alphas)	
32-103,104,105-	density of alphas from fit	
33-106,107,108	$(V_\alpha \mid \mid V_\rho)$ from fit	
34-109,110,111	abs. value of delta velocity between alphas & protons $\lvert V_\alpha - V_\rho \rvert$ $\lvert$Ans(63)$\rvert$	
35-112,113,114	1 if $\lvert (n_{mom}-n_{fit})/n_{fit} \rvert > .1$ 0 if $\lvert (n_{mom}-n_{fit})/n_{fit} \rvert \leq .1$ Preset if no fit	
36-115,116,117	Range of sc in AU	
37-118,119,120	Longitude in RAD	
38-121,122,123	Latitude in RAD	

39-124,125,126	average moment thermal width	km/sec
40-127,128,129	average fit thermal width	km/sec
41- 50	spare	
51-160,161,162	density moment	#/cc
52-163,164,165	velocity (radial)	km/sec
53-166,167,168	velocity (tangential)	km/sec
54-169,170,171	velocity (normal)	km/sec
55-172,173,174	speed	km/sec
56-175,176,177	$W_{mom} \equiv ((W_A^2 + W_B^2 + W_C^2)/3)^{\frac{1}{2}}$	km/sec
57-178,179,180	density (D cup)	#/cc
58-181,182,183	velocity(D cup)	km/sec
59-184,185,186	thermal width (D cup)	km/sec

DUMP OF TAPE SOUT45

Voyager 1 & 2
D-74162
C-26149

INPUT TAPE SOUT45 ON HTO
DATA INPUT HS NF 1 FL 1 1 1

FILE	1 RECORD	152 1	LENGTH	186 / 17600BYTES V200	420	SUM			VOY 2	1977 08/21/77-12/26/85
(0)	44C 0000	2F00000	00000BA	E5F2F0F0	F4F2F040	E2E4D440	00000000	00000000	E5D6E8F2	000007B9
(40)	000 00E9	00000003	431C0046	40CF623A	00000003	4143F030	3F91C456	00000003	4223968A	407B521B
(80)	000 0003	43782AC0	4211FC71	00000003	FFFFFFFF	00000000	00000000	402DA838	4011025A	00000003
(120)	411BE316	403CA7B8	00000003	415BD867	00000000	00000001	411A5ECF	00000000	00000001	421D9D34
(160)	000 0000	00000001	44EDD770	44CDF69F	00000003	45361B4A	452F287A	00000003	49B9C650	49A0E457
(200)	000 0003	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(240)	431C0046	40CF623A	00000003	411BE34D	4011025A	00000003	402D9A4D	403CA7B8	00000003	00000000
(280)	000 0000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	41436AA1	3F76A8C0
(320)	000 0003	431BFE40	40EB26A9	00000003	422151EF	40AA1B19	00000003	431BFCE2	40B504F3	00000003
(360)	C1164D7A	411DA236	00000003	41DA0640	407FF800	00000003	41167B5A	401200AB	00000003	4116BA29
(400)	40198FD3	00000003	411535BF	00000000	00000001	403D9B77	00000000	00000001	41101300	00000000
(440)	000 0001	411A5ECF	00000000	00000001	00000000	00000000	00000003	41102BBB	00000000	00000003
(480)	4146881E	00000000	00000003	401F2EC1	00000000	00000003	42237B94	408CDAC3	00000003	4221378D
(520)	40C5BA22	00000003	48208D0A	481C336E	00000003	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000
(560)	000 0000	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000
(600)	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF
(640)	000 0000	00000000	4145451F	40102FB9	00000002	431C4FF0	00000000	00000001	4177BAC0	00000000
(680)	000 0001	419E8AD8	00000000	00000001	431C4FCD	408F1BBD	00000002	42389B71	00000000	00000002
(720)	000 0000	00000000	00000002	00000000	00000000	00000002	00000000	00000000	00000002	02F00000
(760)	000 00BA	E5F2F0F0	F4F2F040	E2E4D440	00000000	00000000	E5D6E8F2	000007B9	000000E9	00000004
(800)	431BFB1E	41251508	00000024	41430067	40236AE2	00000024	4224A62E	411321C2	00000024	43765C5C
(840)	423DAFA1	00000024	FFFFFFFF	00000000	00000000	C02C5C93	4042C482	00000024	411B4840	405B275A
(880)	000 0024	415A01DA	402D23EB	00000012	4127BF31	412801E7	00000012	421D3AB1	411804B4	00000012
(920)	4516FADB	4423C7F5	00000024	456C3790	45268B14	00000024	4A10EA14	4879CAD6	00000024	00000000
(960)	000 0000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	431BFB1E	41251508
(1000)	000 0024	411B4650	4042C482	00000024	C02C2954	405B275A	00000024	00000000	00000000	00000000
(1040)	000 0000	00000000	00000000	00000000	00000000	00000000	41423676	4028319E	00000024	431BFA01
(1080)	412748E8	00000024	4221CB07	4113E5E7	00000024	431BF7B4	41252E3E	00000024	4115A776	412CB21C
(1120)	000 0024	41D52387	412103FD	00000024	411655E7	4035BB6E	00000024	4116B656	403C19C3	00000024
(1160)	4113636D	405B11B2	00000012	403B5FF6	3F22F79B	00000012	40529000	411275C3	00000012	412A44A5
(1200)	41252BA6	00000012	00000000	00000000	00000024	41102B94	3E9C04E0	00000024	414689A7	00000000
(1240)	000 0024	401F31C4	3E174303	00000024	4223F387	40EFA24E	00000024	422178FF	41193E4F	00000024
(1280)	48394CF9	47E84756	00000024	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF
(1320)	000 0000	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000
(1360)	000 0000	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000
(1400)	4145A48B	4026B8F3	00000024	431C4386	411C8429	00000012	41D133C0	411ED8C8	00000012	41D063E8
(1440)	4122D43C	00000012	431C47E8	4127A7D9	00000024	4238AD2B	41134A4F	00000024	00000000	00000000
(1480)	00000024	00000000	00000000	00000024	00000000	00000000	00000024	02F00000	000000BA	E5F2F0F0
(1520)	F4F2F040	E2E4D440	00000000	00000000	E5D6E8F2	000007B9	000000E9	00000005	431BB74E	41290D85
(1560)	000 0025	41417CD0	4020C4D4F	00000025	4224699F	411B4319	00000025	437296C1	424F95C5	00000025
(1600)	FFFFFFFF	00000000	00000000	C058D1A5	406E627A	00000025	4114D6AA	40613874	00000025	415B7896
(1640)	40546964	00000010	4124B7B9	4136C758	00000010	421C33A2	4122C450	00000010	45174DE1	442A37D0
(1680)	000 0025	45731160	45220CC6	00000025	4A10DE56	48BADB67	00000025	00000000	00000000	00000000
(1720)	000 0000	00000000	00000000	00000000	00000000	00000000	431BB74E	41290D85	00000025	4114DC8F
(1760)	406E627A	00000025	C058CDB1	40613874	00000025	00000000	00000000	00000000	00000000	00000000
(1800)	000 0000	00000000	00000000	00000000	413FD295	4034C491	00000025	431BB2C3	412CB394	00000025
(1840)	4222BEBE	411DFE1A	00000025	431BB4FF	4129A798	00000025	412AF394	412F11EC	00000025	41A1438A
(1880)	4134BFBC	00000025	411637BD	40367763	00000025	41157227	40501A4A	00000025	411149C5	404D5C51
(1920)	000 0010	403B189E	3F442B1C	00000010	40732400	411DAB9D	00000010	4130976D	412BD206	00000010
(1960)	000 0000	00000000	00000025	41102B46	3EAAAAAA	00000025	41468D52	00000000	00000025	401F38F9
(2000)	3D8 0000	00000025	42254923	41248064	00000025	4222D6F1	412A1EB0	00000025	483A5898	47D78061
(2040)	000 0025	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000
(2080)	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF
(2120)	000 0000	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000	4143FDF6	4026960C
(2160)	000 0025	431C29DE	411F3793	00000010	41DD43F1	4148DC35	00000010	419035A3	413D8BFB	00000010
(2200)	431C2591	412393E9	00000025	423A6DB5	4119EE79	00000025	00000000	00000000	00000025	00000000
(2240)	000 0000	00000025	00000000	00000000	00000025	02F00000	000000BA	E5F2F0F0	F4F2F040	E2E4D440
(2280)	000 0000	00000000	E5D6E8F2	000007B9	000000E9	00000006	431B4245	41304995	00000026	413CA966

(11040)	3F9DF3E[illegible]	3E1E768D	00[illegible]000 5	431CE884	412585F9	00000005	C0E676D3	4140E32F	00000005	4225BA00
(11080)	417CED9[illegible]	00000005	FFFFFFFF	00000000	00000000	4375D330	429C1A3F	00000005	FFFFFFFF	00000000
(11120)	[illegible]	FFFFFFFF	[illegible]	00000000	FFFFFFFF	00000000	00000000	02F00000	000000BA	E5F2F1F0
(11160)	F1F7F040	E2E4D440	00[illegible]0	00000000	E5D6E8F2	000007C1	00000168	00000017	431D59A4	4121A019
(11200)	00[illegible]0004	3F8D5A3C	3E4[illegible]E9[illegible]2	00000004	42126BE7	41214618	00000004	41FB51B0	4068CAB7	00000004
(11240)	FFFFFFFF	0000000	[illegible]	40910931	401A3790	00000004	41370F68	4027D04A	00000004	FFFFFFFF
(11280)	[illegible]	[illegible]	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000	451D645B	452DC51A
(11320)	000[illegible]0004	461EE323	461[illegible]9E2	00000004	473182C1	47120932	00000004	00000000	00000000	00000000
(11360)	000[illegible]0000	00000000	[illegible]	00000000	00000000	00000000	431D59A4	4121A019	00000004	41371052
(11400)	401A379[illegible]	00000004	409[illegible]FF8	4027D04A	00000004	00000000	00000000	00000000	00000000	00000000
(11440)	[illegible]	00000000	[illegible]	00000000	3F908B34	3E36E4D2	00000004	431D47BA	412353B9	00000004
(11480)	41F[illegible]DDFC	40565136	00[illegible]004	431D4BB2	41227C99	00000004	C14A2900	41146A91	00000004	421C3019
(11520)	4[illegible]C2240E	00000004	41296C50	41162D6A	00000004	408FC44C	40435F2D	00000004	FFFFFFFF	00000000
(11560)	000[illegible]0000	FFFFFFFF	[illegible]	00000000	FFFFFFFF	00000000	00000000	FFFFFFFF	00000000	00000000
(11600)	000[illegible]0000	00000000	[illegible]4	00000000	00000000	00000004	00000000	00000000	00000004	00000000
(11640)	000[illegible]0000	00000004	41FCE134	403A2634	00000004	421016AC	406B01FE	00000004	47C47670	4720E1B9
(11680)	000[illegible]0004	478E3788	46A34CA0	00000004	454D75E0	45292747	00000004	48192367	481015D8	00000004
(11720)	C615A57E	4661A191	[illegible]4	00000000	00000000	00000004	00000000	00000000	00000004	00000000
(11760)	000[illegible]0000	00000004	[illegible]	00000000	00000004	00000000	00000000	00000004	3F90101C	3E13DDC0
(11800)	000[illegible]0004	431CDF75	4113BB46	00000004	C1140445	413014E7	00000004	4220DF3E	413F10EC	00000004
(11840)	FFFFFFFF	00000000	[illegible]	43663E34	42DB621B	00000004	3EF7BBC2	00000000	00000001	428F1EA0
(11880)	000[illegible]0000	00000001	43725258	00000000	00000001					

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	1756	1757	17600	0	0	0	0	0	0

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

START TIME 10/27/86 17:22:50 STOP TIME 10/27/86 17:24:25

$$