DATA SET CATALOG # 22

Explorer 33 solar soft x-RAY

66-058A-05B 2-tapes

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

IMP-D

SOLAR SOFT X-RAY, MAGTAPES

66-058A-05B

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY THERE WERE TWO 7-TRACK, 556 BPI TAPES WRITTEN IN BCD. THERE IS ONE RESTORED TAPE, WRITTEN IN EBCDIC, WHICH WAS PADDED DURING THE RESTORATION PROCESS. THE DR TAPE IS A 3480 CARTRIDGE AND THE DS TAPE IS 9-TRACK, 6250 BPI. THE ORIGINAL TAPES WERE CREATED ON AN IBM 7094 COMPUTER. THE DR AND DS NUMBER ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR003431	DS003431	D002592	1	07/02/66 - 07/26/67
		D000267	2	07/26/67 - 09/27/68

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Microfilm - M04130 - M04131

FORMAT FOR EXPLORER 33 AND EXPLORER 35
SOLAR SOFT X-RAY DATA

12 LOGICAL RECORDS PER PHYSICAL RECORD
DATA CREATED ON UNIVAC 418

RECORD POSITION	FORMAT	DESCRIPTION
1 - 6		Fortran look ahead (only at the beginning of a physical record)
7 - 10	I4	Last two digits of year
11 - 20	F10.5	Decimal day and day fraction (Jan 1 = decimal day 0)
21 - 29	F9.3	Absolute value of x-ray flux in milli-ergs/cm^2 sec
30 - 38	F9.0	Intenal clock sequence number
39 - 46	F8.2	Empirical geometic obliquity factor, F(α)

The 2 tapes in this data set are 556 BPI, 7-track BCD with one file per tape.

The time spans for the tapes are:

D#	C#	Time Span
D-2592	C-1708	7/2/66 - 7/26/67
D-267	C-3861	7/26/67 - 9/27/68

Solar Soft X-Ray Data
Explorer 53 (66-058A-05B)

This program reads the Explore 53 Solar Soft X-Ray data on logical tape unit A5. The program converts the decimal dat to month, calendar day, hour, minute and second. Before conversion the data fraction is corrected by 32.2 seconds and the day is corrected by the due to starting with January 1st as day zero. The program has two tables for looking up the calendar day. The first table is for non-leap years and the second for leap years.

The input tape is a seven track, BCD tape written at 556 BPI and has a six character fortran look ahead record prefixed to each record block. These six characters and the final twenty-four characters of each block are not used by this program.

Three subroutines are incorporated in the program, WRIT4, UNPK, ERPR. WRIT4 had a routine which will read the 510 character record blocks into store. A routine from UNPK is then used to unpack and convert the variable in each record to clear fixed point and floating point formats. ERPR only used if an error is encountered in the convert rountine to UNPK output tape from this program is an logical unfo A7.This tape is in the proper format for the SC-4020 plotter to create either microfilm or hardcopy.

A modified version of this program is also available for the Explorer 35 Solar Soft X-Ray data (67-070A-01A). The modifications were necessary to accomodate the 800 BPI tapes used on Explorer 35

EXPLORER 33 SOLAR SOFT X-RAY DATA (66-058A-05C) PAGE
PREPARED BY THE NATIONAL SPACE SCIENCE DATA CENTER

YEAR	MONTH	DAY	HOUR	MIN	SEC	FLUX	INTERNAL SEQUENCE NUMBER	GEOMETRIC OBLIQUITY FACTOR
1966	7	2	23	35	58	3.988	45103.	903.75
1966	7	2	23	37	20	2.291	45104.	903.64
1966	7	2	23	38	41	3.478	45105.	903.52
1966	7	2	23	48	14	1.695	45112.	903.71
1966	7	2	23	49	36	2.796	45113.	902.60
1966	7	2	23	50	57	2.248	45114.	902.48
1966	7	2	23	52	20	3.050	45115.	902.37
1966	7	2	23	53	42	2.955	45116.	902.25
1966	7	2	23	55	4	4.065	45117.	902.14
1966	7	2	23	56	25	2.117	45118.	902.02
1966	7	2	23	57	47	3.048	45119.	901.91
1966	7	2	23	59	9	2.963	45120.	901.79
1966	7	3	0	14	9	1.265	45131.	898.11
1966	7	3	0	15	31	2.108	45132.	897.96
1966	7	3	0	16	53	3.456	45133.	897.80
1966	7	3	0	18	14	0.843	45134.	897.65
1966	7	3	0	27	47	1.515	45141.	896.56
1966	7	3	0	29	9	3.114	45142.	896.41
1966	7	3	0	34	35	2.859	45146.	895.79
1966	7	3	0	35	57	2.018	45147.	895.64
1966	7	3	0	37	20	2.144	45148.	895.48
1966	7	3	0	38	41	2.438	45149.	895.33
1966	7	3	0	40	3	6.051	45150.	895.17
1966	7	3	0	41	25	4.958	45151.	895.02
1966	7	3	0	42	47	4.705	45152.	894.86
1966	7	3	0	44	8	4.284	45153.	894.71
1966	7	3	0	45	30	2.939	45154.	894.55
1966	7	3	0	50	58	4.196	45158.	893.94
1966	7	3	0	52	19	2.266	45159.	893.78
1966	7	3	0	53	41	6.292	45160.	893.63
1966	7	3	0	55	3	7.465	45161.	893.47
1966	7	3	0	56	24	9.477	45162.	893.32
1966	7	3	0	57	46	2.012	45163.	893.17
1966	7	3	0	59	9	9.054	45164.	893.01
1966	7	3	1	0	30	9.975	45165.	892.86
1966	7	3	1	1	52	9.051	45166.	892.70

3

INTERNAL SEQUENCE NUMBER	GEOMETRIC OBLIQUITY FACTOR
45103.	903.75
45104.	903.64
45105.	903.52
45112.	902.71
45113.	902.60
45114.	902.48
45115.	902.37
45116.	902.25
45117.	902.14
45118.	902.02
45119.	901.91
45120.	901.79
45131.	898.11
45132.	897.96
45133.	897.80
45134.	897.65
45141.	896.56
45142.	896.41
45146.	895.79
45147.	895.64
45148.	895.48
45149.	895.33
45150.	895.17
45151.	895.02
45152.	894.86
45153.	894.71
45154.	894.55
45158.	893.94
45159.	893.78
45160.	893.63
45161.	893.47
45162.	893.32
45163.	893.17
45164.	893.01
45165.	892.86
45166.	892.70

EXPLORER 33 SOLAR SOFT X-RAY DATA (66-058A-05C)
PREPARED BY THE NATIONAL SPACE SCIENCE DATA CENTER

YEAR	MONTH	DAY	HOUR	MIN	SEC	FLUX	INTERNAL SEQUENCE NUMBER	GEOMETRIC OBLIQUITY FACTOR
1966	7	3	1	3	14	8.798	45157.	892.55
1966	7	3	1	4	36	5.529	45158.	892.40
1966	7	3	1	5	57	11.225	45159.	892.24
1966	7	3	1	7	19	16.583	45170.	892.09
1966	7	3	1	8	41	4.103	45171.	891.93
1966	7	3	1	10	3	4.102	45172.	891.78
1966	7	3	1	11	25	6.362	45173.	891.63
1966	7	3	1	12	47	7.030	45174.	891.47
1966	7	3	1	14	8	5.774	45175.	891.32
1966	7	3	1	15	30	10.625	45176.	891.16
1966	7	3	1	16	52	1.506	45177.	891.01
1966	7	3	1	18	13	2.091	45178.	890.86
1966	7	3	1	19	35	1.589	45179.	890.70
1966	7	3	1	29	8	3.675	45186.	889.63
1966	7	3	1	30	30	9.102	45187.	889.47
1966	7	3	1	33	14	11.186	45189.	889.17
1966	7	3	1	34	36	5.842	45190.	889.01
1966	7	3	1	35	57	3.755	45191.	888.86
1966	7	3	1	37	19	9.762	45192.	888.71
1966	7	3	1	41	24	2.668	45195.	888.25
1966	7	3	1	42	46	1.584	45196.	888.09
1966	7	3	1	44	8	1.834	45197.	887.94
1966	7	3	1	45	30	12.169	45198.	887.79
1966	7	3	1	49	35	3.166	45201.	887.33
1966	7	3	1	50	57	6.247	45202.	887.17
1966	7	3	1	52	19	6.079	45203.	887.02
1966	7	3	2	11	24	4.071	45217.	884.88
1966	7	3	2	12	46	3.914	45218.	884.73
1966	7	3	2	14	7	3.571	45219.	884.57
1966	7	3	2	15	29	2.325	45220.	884.42
1966	7	3	2	16	52	3.736	45221.	884.27
1966	7	3	2	18	14	0.498	45222.	884.12
1966	7	3	2	19	35	3.983	45223.	883.96
1966	7	3	2	20	57	3.319	45224.	883.81
1966	7	3	2	22	19	3.070	45225.	883.66
1966	7	3	2	23	40	2.240	45226.	883.50

```
C***
      WRITE(61,105)IYEAR,JMO,JDA,JHR,JMIN,JSEC,FLUX(K),SEQNUM(K),
     1OBLIQ(K)
 105  FORMAT(10X,2I19, 6(I2,4X),F6.3,4X,F9.0,4X,F8.2)
      LINE = LINE+1
      IF (LINE.EQ.36) GO TO 50
      GO TO 200
 50   IPAGE =IPAGE+1
      WRITE(6,,110) IPAGE
 110  FORMAT(1H1,20X,47HEXPLORER 33 SOLAR SOFT X-RAY DATA (66-059A-05C),
     112X,4HPAGE,I5/,
     219X,50HPREPARED BY THE NATIONAL SPACE SCIENCE DATA CENTER///,
     361X,8HINTERNAL,5X,9HGEOMETRIC/,
     461X,8HSEQUENCE,5X,9HOBLIQUITY/,
     510X,4HYEAR,2X,5HMONTH,2X,3HDAY,3X,4HHOUR,2X,3HMIN,3X,3HSEC,6X,
     64HFLUX,3X,5HNUMBER,7X,6HFACTOR//)
      LINE=0
 200  CONTINUE
      GO TO 1
 30   WRITE(3,115) IREC
 115  FORMAT(1H1,13X,11H END OF JOB,5X,5HIREC=,I5)
      REWIND 5
      CALL PLTND
      END FILE 61
      STOP
      END
```

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-05C).

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85

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87
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M VARIABLES

TYPE	SYMBOL	LOCATION	TYPE
I	DA	00017	R
R	ORLIQ	00063	R
I			

M VARIABLES

TYPE	SYMBOL	LOCATION	TYPE
I	JMO	00260	I
I	DY	00263	R
R	IPAGE	00266	I
I	ID2	00271	I
I	N	00274	I
I	K	00277	I
I	JYR	00302	I
I	SEC	00305	R
R	JHR	00310	I
I			

S

E CALLED

ICN	4	FRAMEV	SECTION	5
ION	7	BCDRD	SECTION	8
ICN	10	PLTND	SECTION	11
ICN	13	.UN61.	SECTION	14
ICN	16	.UN03.	SECTION	17
ION	19	E.2	SECTION	20
ICN	22	CC.1	SECTION	23
ION	25	CC.4	SECTION	26

ESPONDENCE

LOCATION	EFN	IFN	LOCATION
00551	30	85A	01117
00555	150	FORMAT	00345
01114	10	59A	00726
00356	50	79A	01100

SAFETY FILM KODAK

07/31/69

TEST

STORAGE MAP

MAIN PROGRAM

DIMENSIONED PROGRAM VARIABLES

SYMBOL	LOCATION	TYPE	SYMBOL	LOCATION	TYPE
ID1	00001	I	IYR	00003	I
FLUX	00033	R	SEQNUM	00047	R
IBUF	00077	I	IDAYR	00224	I

UNDIMENSIONED PROGRAM VARIABLES

SYMBOL	LOCATION	TYPE	SYMBOL	LOCATION	TYPE
MOD	00250	I	IYEAR	00257	I
J	00251	I	JDAY	00252	I
DAY	00254	R	FRAC	00255	R
IREC	00267	I	LINE	00270	I
IC3	00272	I	ID4	00273	I
ICODE	00275	I	M	00276	I
IDAY	00300	I	LEAPYR	00301	I
I	00303	I	JDA	00304	I
ISEC	00306	I	POUND	00307	R
JMIN	00311	I	JSEC	00312	I

ENTRY POINTS

..... SECTION 2

SUBROUTINES CALLED

IDFRMV	SECTION	3	CANRAV	SECTION	4
SCCLTV	SECTION	6	.FWRD.	SECTION	7
CVTNUM	SECTION	9	.FRWT.	SECTION	10
.FEFT.	SECTION	12	.EXIT.	SECTION	13
.FFIL.	SECTION	15	.FCNV.	SECTION	16
.UNOS.	SECTION	18	E.1	SECTION	19
E.3	SECTION	21	E.4	SECTION	22
CC.2	SECTION	24	CC.3	SECTION	25
SYSLOC	SECTION	27			

EFN IFN CORRESPONDENCE

EFN	IFN	LOCATION	EFN	IFN	LOCATION
110	FORMAT	00365	1	18A	00551
2	23A	00577	3	23A	00555
4	37A	00643	200	81A	01114
20	61A	00730	105	FORMAT	00356
115	FORMAT	00474			

THE FIRST LOCATION NOT USED BY THIS PROGRAM IS 01155.

KODAK SAFETY FILM