DATA SET CATALOG #23

Explorer 35 solar soft X-RAY

67-070A-01B 5 tapes

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

IMP-E

STD TAPES OF EXP DATA PART OF 01A

67-070A-01B

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY IT CONTAINED FIVE 7-TRACK, 800 BPI TAPES WRITTEN IN BCD. THERE IS ONE RESTORED TAPE WRITTEN IN ASCII. THE DR TAPE IS A 3480 CARTRIDGE AND THE DS TAPE IS 9-TRACK, 6250 BPI. THE ORIGINAL TAPES WERE CREATED ON A 418 COMPUTER AND WERE RESTORED ON THE MODCOMP. THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR004303	DS004303	D002728	1	07/25/67 - 05/21/68
		D002729	2	05/21/68 - 09/17/68
		D000276	3	09/17/68 - 05/06/69
		D007089	4	05/07/69 - 08/12/69
		D005878	5	08/13/69 - 05/26/70

TABLE OF CONTENTS

Format of Tape	1
Description of Program	2
Printout from Program (same format as microfilm)	3
Partial List of Tape	4
List of Program	5
Sample microfilm output	6

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
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)

This data set consists of 5 tapes. They are 800 BPI, 7 track, BCD with 1 file. The time spans of the tapes are:

D#	C#	TIME SPAN
D-02728	C-01914	7/26/67 - 5/22/68
D-02729	C-01915	5/22/68 - 9/18/68
D-00276	C-03862	9/18/68 - 5/07/69
D-07089	C-05596	5/08/69 - 8/13/69
D-05878	C-04570	8/14/69 - 5/27/70

Solar Soft X-Ray Data Explorer 33 (66-058A-05A)

This program reads the Exploer 33 Solar Soft X-Ray data on logical tape unit A5. The program converts the decimal dat to month, calender day, hour, minute and second. Before conversion the data fraction is corrected by 32.2 seconds and the day is corrected by one 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 had 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.

The subrountines are incorporated in the program, WRIT4, UNPK, ERPR. WRIT4 had a routine which will read the 510 character record blocks into storage. A rountine from UNPK is then used to unpack and convert the variables in each record to their fixed point and floating point formats. ERPR is only used if an error is encountered in the convert rountine of UNPK.

The output tape from this program is on logical unit 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 accommodate the 800 BPI tapes used on Explorer 35.

Explorer 35 data on the following dates exist in tabular form but are not present on the microfilm plots due to programming difficulties.

Year	Month	Day	Hours (UT)
1968	October	19	~~12-24~~ 0-12
1968	November	6	12-24
1968	November	9	12-24
1968	November	22	0-12
1968	December	26	12-24
1969	January	31	0-12
1969	February	17	12-24
1969	February	20	12-24
1969	March	8	12-24
1969	April	9	12-24
1969	April	10	0-12
1969	May	2	12-24
1969	May	5	12-24
1969	June	7	12-24
1969	June	26	12-24
1969	June	29	12-24
1969	July	13	12-24
1969	August	2	0-12

NOT INCLUDED

EXPLORER 35 SOLAR SOFT X-RAY DATA (67-070A-01C)
PREPARED BY THE NATIONAL SPACE SCIENCE DATA CENTER

PAG

YEAR	MONTH	DAY	HOUR	MIN	SEC	FLUX	INTERNAL SEQUENCE NUMBER	GEOMETRIC OBLIQUITY FACTOR
1967	7	26	19	51	45	6.563	21882.	5.90
1967	7	26	19	53	7	5.676	21883.	5.90
1967	7	26	19	54	29	5.412	21884.	5.90
1967	7	26	19	55	50	5.474	21885.	5.90
1967	7	26	19	57	12	5.106	21886.	5.90
1967	7	26	19	58	34	5.301	21887.	5.9
1967	7	26	19	59	55	5.448	21888.	5.90
1967	7	26	20	1	18	5.607	21889.	5.90
1967	7	26	20	2	40	5.372	21890.	5.90
1967	7	26	20	4	1	5.313	21891.	5.97
1967	7	26	20	5	23	5.649	21892.	5.9
1967	7	26	20	6	45	5.006	21893.	5.97
1967	7	26	20	9	28	4.844	21895.	5.9
1967	7	26	20	10	50	5.007	21896.	5.9
1967	7	26	20	12	12	5.342	21897.	5.9
1967	7	26	20	13	34	5.263	21898.	5.9
1967	7	26	20	16	18	5.335	21900.	5.9
1967	7	26	20	17	39	5.536	21901.	5.9
1967	7	26	20	19	1	5.817	21902.	5.9
1967	7	26	20	20	23	5.196	21903.	5.9
1967	7	26	20	21	44	5.213	21904.	5.9
1967	7	26	20	23	6	5.450	21905.	5.9
1967	7	26	20	24	29	5.174	21906.	5.9
1967	7	26	20	25	50	5.043	21907.	5.9
1967	7	26	20	27	12	5.366	21908.	5.9
1967	7	26	20	28	34	5.340	21909.	5.9
1967	7	26	20	31	17	5.393	21911.	5.9
1967	7	26	20	32	39	5.273	21912.	5.9
1967	7	26	20	34	1	5.472	21913.	5.9
1967	7	26	20	35	23	5.365	21914.	5.9
1967	7	26	20	36	45	6.054	21915.	5.9
1967	7	26	20	38	7	5.604	21916.	5.9
1967	7	26	20	39	28	5.764	21917.	5.9
1967	7	26	20	40	50	5.958	21918.	5.9
1967	7	26	20	42	12	5.189	21919.	5.9
1967	7	26	20	43	33	5.142	21920.	5.9

3

INTERNAL SEQUENCE NUMBER	GEOMETRIC OBLIQUITY FACTOR
21882.	5.90
21883.	5.90
21884.	5.90
21885.	5.90
21886.	5.90
21887.	5.90
21888.	5.90
21889.	5.90
21890.	5.90
21891.	5.90
21892.	5.90
21893.	5.90
21895.	5.90
21896.	5.90
21897.	5.90
21898.	5.90
21900.	5.90
21901.	5.90
21902.	5.90
21903.	5.90
21904.	5.90
21905.	5.90
21906.	5.90
21907.	5.90
21908.	5.90
21909.	5.90
21911.	5.90
21912.	5.90
21913.	5.90
21914.	5.90
21915.	5.90
21916.	5.90
21917.	5.90
21918.	5.90
21919.	5.90
21920.	5.90

EXPLORER 35 SOLAR SOFT X-RAY DATA (67-070A-01C)
PREPARED BY THE NATIONAL SPACE SCIENCE DATA CENTER

YEAR	MONTH	DAY	HOUR	MIN	SEC	FLUX	INTERNAL SEQUENCE NUMBER	GEOME OBLIQ FACT
1967	7	26	20	44	55	5.763	21921.	5
1967	7	26	20	46	18	4.972	21922.	5
1967	7	26	20	47	40	6.192	21923.	5
1967	7	26	20	49	1	6.794	21924.	5
1967	7	26	20	50	23	6.326	21925.	5
1967	7	26	20	53	6	5.675	21927.	5
1967	7	26	20	54	28	5.516	21928.	5
1967	7	26	21	12	12	5.247	21941.	5
1967	7	26	21	14	55	5.578	21943.	5
1967	7	26	21	16	17	4.796	21944.	5
1967	7	26	21	17	39	4.932	21945.	5
1967	7	26	21	19	1	5.157	21946.	5
1967	7	26	21	20	23	4.504	21947.	5
1967	7	26	21	21	45	4.521	21948.	5
1967	7	26	21	23	6	4.690	21949.	5
1967	7	26	21	24	28	4.521	21950.	5
1967	7	26	21	25	50	4.336	21951.	5
1967	7	26	21	27	11	4.617	21952.	5
1967	7	26	21	28	33	4.373	21953.	5
1967	7	26	21	29	55	4.220	21954.	5
1967	7	26	21	31	17	4.576	21955.	5
1967	7	26	21	32	39	4.338	21956.	5
1967	7	26	21	34	1	4.780	21957.	5
1967	7	26	21	36	44	4.723	21959.	5
1967	7	26	21	38	6	4.785	21960.	5
1967	7	26	21	39	28	4.787	21961.	5
1967	7	26	21	40	50	4.643	21962.	5
1967	7	26	21	42	12	4.675	21963.	5
1967	7	26	21	43	34	4.622	21964.	5
1967	7	26	21	44	55	4.958	21965.	5
1967	7	26	21	46	17	5.151	21966.	5
1967	7	26	21	47	39	5.024	21967.	5
1967	7	26	21	49	-0	5.344	21968.	5
1967	7	26	21	50	22	5.447	21969.	5
1967	7	26	21	51	44	5.684	21970.	5
1967	7	26	21	53	6	5.751	21971.	5

INAL NCE ER	GEOMETRIC OBLIQUITY FACTOR
921.	5.90
1922.	5.90
923.	5.90
1924.	5.90
925.	5.90
1927.	5.90
928.	5.90
1941.	5.90
1943.	5.90
1944.	5.90
945.	5.90
1946.	5.90
1947.	5.90
1948.	5.90
949.	5.90
1950.	5.90
1951.	5.90
1952.	5.90
1953.	5.90
1954.	5.90
1955.	5.90
1956.	5.90
1957.	5.90
1959.	5.90
1960.	5.90
1961.	5.90
1962.	5.90
1963.	5.90
1964.	5.90
1965.	5.90
1966.	5.90
1967.	5.90
1968.	5.90
1969.	5.90
1970.	5.90
1971.	5.90

```
C***
      WRITE(61,105)IYEAR,JMO,JDA,JHR,JMIN,JSEC,FLUX(K),SEQNUM(K),
     1OBLIQ(K)
 105  FORMAT(10X,2H19, 6(I2,4X),F9.3,4X,F9.0,4X,F8.2)
      LINE = LINE+1
      IF (LINE.EQ.36) GO TO 50
      GO TO 200
 50   IPAGE =IPAGE+1
      WRITE(61,110) IPAGE
 110  FORMAT( 1H1,20X,47HEXPLORER 35 SOLAR SOFT X-RAY DATA (67-070A-01C),
     112X,4HPAGE,I5/,
     21 9X,50HPREPARED BY THE NATIONAL SPACE SCIENCE DATA CENTER///,
     361X,8HINTERNAL,5X,7HGEOMETRIC/,
     461X,8HSEQUENCE,5X,9HOBLIQUITY/,
     510X,4HYEAR,2X,5HMONTH,2X,3HDAY,3X,4HHOUR,2X,3HMIN,3X,3HSEC,8X,
     64HFLUX,8X,6HNUMBER,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 RLTND
      END FILE 51
      STOP
      END
```

```
UM (K),
                                        70

                                        80
(67-070A-01C),
ENTER///,

,34SEC,6X,

                                        85
                                        86
                                        87
                                        88
```

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	00256	I	IYEAR	00257	I
J	00261	I	JDAY	00262	I
DAY	00264	R	FRAC	00265	R
IREC	00267	I	LINE	00270	I
ID3	00272	I	ID4	00273	I
ICODE	00275	I	N	00276	I
IDAY	00300	I	LEAPYR	00301	I
I	00303	I	JDA	00304	I
ISEC	00306	I	ROUND	00307	R
JMIN	00311	I	JSEC	00312	I

ENTRY POINTS

..... SECTION 2

SUBROUTINES CALLED

IDFEMV	SECTION	3	CAMRAV	SECTION	4
SCOUTV	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
F.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	25A	00577	3	23A	00566
4	37A	00693	200	81A	01114
20	61A	00730	105	FORMAT	00356
115	FORMAT	00474			

THE FIRST LOCATION NOT USED BY THIS PROGRAM IS 01166.

M

AM VARIABLES

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

AM 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			

TS

S CALLED

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

ESPONDENCE

LOCATION	EFN	IFN	LOCATION
00551	30	85A	01117
00566	150	FORMAT	00345
01114	10	59A	00726
00356	50	79A	01100