

DATA SET CATALOG #49

Edited Flare Reports	5 tapes
Group Solar Flares	2 tapes
Flare summaries	1 tape
Solar Flare Reports	1 tape
Solar Radio Emission	5 tapes

CORREFR
CORRG5F
CORRF2
CORRSFR
CORRSRE

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 This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system.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

151 + 152

CARD CATALOGUE

Page 100 of 100
CARD 100

151 + 152

COUNTRY	DESCRIPTION	REMARKS
1	blank	
2 - 5	12	defines grouped flare record
6	blank	
7	beginning date	
8 - 9	year	
10 - 11	month	
12 - 13	day	
14	first reported beginning time (U.T.)	
15 - 16	hours	
17 - 18	minutes	
19	2 - less than	flare started before observed beginning time blank otherwise.
20	same beginning time	(U.T.)
21 - 22	same maximum time	(U.T.)
23 - 24	same ending time	(U.T.)
25 - 26	25 reported ending time	(U.T.)

ITEM CARD CATALOGUE

1. *Journal of the American Medical Association*, 1997; 278: 1019-1024.

01234567891011121314151617181920212223242526272829303132333435363738394041424344454647484950515253545556575859606162636465666768697071727374757677787980818283848586878889909192939495969798991001011021031041051061071081091101111121131141151161171181191201211221231241251261271281291301311321331341351361371381391401411421431441451461471481491501511521531541551561571581591601611621631641651661671681691701711721731741751761771781791801811821831841851861871881891901911921931941951961971981992002012022032042052062072082092102112122132142152162172182192202212222232242252262272282292302312322332342352362372382392402412422432442452462472482492502512522532542552562572582592602612622632642652662672682692702712722732742752762772782792802812822832842852862872882892902912922932942952962972982993003013023033043053063073083093103113123133143153163173183193203213223233243253263273283293303313323333343353363373383393403413423433443453463473483493503513523533543553563573583593603613623633643653663673683693703713723733743753763773783793803813823833843853863873883893903913923933943953963973983994004014024034044054064074084094104114124134144154164174184194204214224234244254264274284294304314324334344354364374384394404414424434444454464474484494504514524534544554564574584594604614624634644654664674684694704714724734744754764774784794804814824834844854864874884894904914924934944954964974984995005015025035045055065075085095105115125135145155165175185195205215225235245255265275285295305315325335345355365375385395405415425435445455465475485495505515525535545555565575585595605615625635645655665675685695705715725735745755765775785795805815825835845855865875885895905915925935945955965975985996006016026036046056066076086096106116126136146156166176186196206216226236246256266276286296306316326336346356366376386396406416426436446456466476486496506516526536546556566576586596606616626636646656666676686696706716726736746756766776786796806816826836846856866876886896906916926936946956966976986997007017027037047057067077087097107117127137147157167177187197207217227237247257267277287297307317327337347357367377387397407417427437447457467477487497507517527537547557567577587597607617627637647657667677687697707717727737747757767777787797807817827837847857867877887897907917927937947957967977987998008018028038048058068078088098108118128138148158168178188198208218228238248258268278288298308318328338348358368378388398408418428438448458468478488498508518528538548558568578588598608618628638648658668678688698708718728738748758768778788798808818828838848858868878888898908918928938948958968978988999009019029039049059069079089099109119129139149159169179189199209219229239249259269279289299309319329339349359369379389399409419429439449459469479489499509519529539549559569579589599609619629639649659669679689699709719729739749759769779789799809819829839849859869879889899909919929939949959969979989991000100110021003100410051006100710081009101010111012101310141015101610171018101910201021102210231024102510261027102810291030103110321033103410351036103710381039104010411042104310441045104610471048104910501051105210531054105510561057105810591060106110621063106410651066106710681069107010711072107310741075107610771078107910801081108210831084108510861087108810891090109110921093109410951096109710981099110011011102110311041105110611071108110911101111111211131114111511161117111811191120112111221123112411251126112711281129113011311132113311341135113611371138113911401141114211431144114511461147114811491150115111521153115411551156115711581159116011611162116311641165116611671168116911701171117211731174117511761177117811791180118111821183118411851186118711881189119011911192119311941195119611971198119912001201120212031204120512061207120812091210121112121213121412151216121712181219122012211222122312241225122612271228122912301231123212331234123512361237123812391240124112421243124412451246124712481249125012511252125312541255125612571258125912601261126212631264126512661267126812691270127112721273127412751276127712781279128012811282128312841285128612871288128912901291129212931294129512961297129812991300

[illegible]

CARD/COLL	DESCRIPTION	REMARKS
36	N = northern hemisphere; S = southern hemisphere	
37 - 38	central meridian distance (degrees)	
39	W = western hemisphere; E = eastern hemisphere	
40 - 41	1000 scale (1 = 1, 2 = 2)	
42 - 45	average reported corrected area for groups with more than one report (square degrees X 10 ¹⁰)	
47 - 51	original group number	
52 - 53	number of slave reports	
	time of central meridian passage	
54 - 55	year	
56 - 57	month	
58 - 59	day X 10	
61 - 62	number of slave number	
63 - 64	central meridian X 10 ¹⁰	
	corrected distance	

IDM CARD CATALOGUE

Yearly Place Summer (1966th)
CASH 107-4

[The page contains faint, illegible markings or bleed-through from the reverse side.]

LAND CODE	DESCRIPTION	REMARKS
1	longitude	
2	latitude	
3-4	site	
5-6	longitude N or S	
7	site	
8-9	longitude E or W	
10-11	site	
12-13	Station Plane number	
14-15	site	
16-17	reporting stations	Total no. of stations reporting event
18-19	site	
20-21	reporting stations	number of stations cinematographic
22-23	site	
24-25	reporting stations	number of stations calling it subflare
26-27	reporting stations	number of stations cinematographic

IBM CARD CATALOGUE

Size 3.5 cm (1.4 in) long

1-15-65

INITIATED

CONFIDENTIAL

[illegible]

CARD COLUMN	DESCRIPTION	REMARKS
1-2	Identification	Duplicate #3
3-5	Blank	over
6-11	Date	Year-month-day
12-13	Blank	SKIP. If more than 1 card needed, on 2nd card punch X in col. 13, 3rd card 2, etc. (See Layout Form.)
14-17	Start time	
18	Symbol	(Alpha) SKIP if not shown.
19-22	Stop time	
23	Symbol	(Alpha) SKIP if not shown.
24-27	Maximum time	
28	Symbol	(Alpha) SKIP if not shown.
29-30	SMT (type)	Right justify.
31-32	Importance and sign	Sign col. 32 + or -. SKIP if not shown.
33-35	Absorption	Right justify.
36-37	SCMA and sign	Sign in col. 37. SKIP if not shown.
38-39	SMA and sign	Sign in col. 39. SKIP if not shown.
40-41	SMA on demand	Right justify.
42-43	SES and sign	Sign in col. 43. SKIP if not shown.
44-45	SW	Do not punch decimal fraction.
47-48	Burst and sign	Sign in col. 48. SKIP if not shown.
49-50	Wide Spread Index	Right justify.
51-73	Station	Punch as shown. Do not punch over 999.
74-76	Known Flare and sign	Sign in col. 76. If not shown punch 0 in col. 76.
79-80	Blank	SKIP

TABLE 1

[illegible]

Card format for Sudden Ionospheric Disturbances or (Sudden Ionospheric Effects) SUBJ:ARIES
from July, 1957 thru Dec., 1964

from July, 1957 thru Dec., 1964

* See next page for 1965 format

Conclusions

MULTIPLE LAYOUT FORM
FOR ELECTRIC ACCOUNTING MACHINE CARDS

[illegible]

SOLAR DATA FORMAT

D-04697

Grouped Flare Report
TYPE OF DATA

JUL 9 1963

CARD COLUMN	DESCRIPTION	REMARKS
1-3	Blank	
4-5	"42"	Card Code for Grouped Flares
6-8	Blank	
9-14	Date	
15-18	First Beginning Time	
19	"E" or Blank	
20-23	Mean Beginning Time	
24-27	Mean Maximum Time	"9999" if no mean max.
28-31	Mean End Time	
32-35	Last End Time	
36	"D" or Blank	
37	Alpha of Latitude	N=North S=South
38-39	Mean Latitude	
40	Alpha of CMD	E=East W=West
41-42	Mean Central	Meridian Distance

SOLAR DATA FORMAT

Grouped Flare Report

TYPE OF DATA

JUL 3 1969

CARD COLUMN	DESCRIPTION	REMARKS
43-44	Mean Importance	Based on area: 10-S;
		20-1; 30-2; 40-3; 50-4
45-46	Mean imp.	Based on brilliance:
		20-F; 30-N; 40-B
47-51	Mean measured area	area in sq. degrees (x100)
52-56	Group serial number	
57-62	Central meridian passage date	
64-68	Mc Math Plage	
69-72	Central distance (X1000)	
73-74	Number of stations reporting event	
75-76	Number of imp estimates	
77-78	Number of area estimates	
79-80	Number of stations observing at time of mean max and not reporting	
	group-(Nov., Dec., 67)	
	Total number of stations observing at time of mean max (Jan. 68 on)	
81-82	Number of flare reports grouped in this event	

Grouped Flare Report
TYPE OF DATA

JUL 3 1967

[illegible]

D-00151 7/1/55 - 6/30/57
D-00152 7/1/55 - 6/30/57
D-00153 7/1/57 - 12/31/58
D-00154 1/1/59 - 7/9/60
D-00155 7/10/60 - 12/30/61
D-00156 File 1 - 7/1/57 - 12/24/62
File 2 - 3/1/58 - 6/30/65
D-00157 1/1/62 - 4/1/64
D-02697 1/2/62 - 12/31/64



WORLD DATA CENTER A

Upper Atmosphere Geophysics
NATIONAL OCEANIC AND ATMOSPHERE ADMINISTRATION
Boulder, Colorado 80302

SOLAR AND INTERPLANETARY PHENOMENA,
IONOSPHERIC PHENOMENA, FLARE ASSOCIATED
EVENTS, AURORA, COSMIC RAYS, AIRGLOW

May 5, 1971



TELEPHONE: AREA CODE 303
547-1000 EXT. 3381
CABLE ADDRESS: SOLAB

IN REPLY REFER TO:
R437/975

Mr. Charles Mack
NASA Goddard Space Flight Center
NSSDC
Greenbelt, Maryland 20771

Dear Charles:

Enclosed are four (4) magnetic tapes and the data
formats. All of the tapes are written at 556 NPI instead
of 800 NPI for the SRE data as I had planned.

If you have any problems please let me know.

Sincerely yours,

Viola J. Hill

Viola J. Hill

Computer Programmer

Enclosures

WORLD DATA CENTERS CONDUCT INTERNATIONAL EXCHANGES OF GEOPHYSICAL OBSERVATIONS IN ACCORDANCE WITH THE PRINCIPLES SET
FORTH BY THE INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS. INITIATED FOR THE INTERNATIONAL GEOPHYSICAL YEAR 1957-59, THE
DATA EXCHANGE CONTINUES UNDER RECOMMENDATION OF VARIOUS ICSU SCIENTIFIC ORGANIZATIONS. WDC-A IN THE UNITED STATES IS
ESTABLISHED UNDER THE AUSPICES OF THE NATIONAL ACADEMY OF SCIENCES.

WORLD DATA CENTER A
UPPER ATMOSPHERE GEOPHYSICS
ENVIRONMENTAL SCIENCE SERVICES ADMIN.
U.S. DEPARTMENT OF COMMERCE
BOULDER, COLORADO

MAY 17 1971

The enclosed tape was written as follows: 105C 110 - D-06082

DENSITY 556 BPI BITS PER INCH

PARITY EVEN MODE BCD TRACK 7

DATE WRITTEN MAR 31, 1971 COMPUTER USED CDC 3800

LABEL NONE

FORMAT OF TAPE:

LENGTH OF RECORDS 104 CHARACTERS

NUMBER OF RECORDS _____

NUMBER OF FILES ONE

BASIC FORMAT OF THE DATA SEE ATTACHED FORM

CONTENTS OF THE TAPE:

TYPE OF DATA GROUPED FLARES

DATES CONTAINED MAR 1, 1969 - JUL 31, 1970

STATIONS _____

COMMENTS:

2-
COLU

1-3

4-5

6-8

9-14

15-18

19

20-23

24-27

28-31

32-35

36

37

38-39

40

41-42

43-44

GROUPED FLARE REPORT FORMAT

2-20-68

INITIATED

For data Oct. 1967 - On

COLUMN	DESCRIPTION	REMARKS
1-3	Blank	
4-5	"42"	42 indicates report is a flare
6-8	Blank	
9-14	Date	Year Month Day
15-18	Earliest reported beginning time	
19	"E" or Blank	E indicates observation began when flare in progress
20-23	Mean beginning time	
24-27	Mean time of flare maximum	"9999" If no mean max.
28-31	Mean End Time	
32-35	Last reported end time	
36	"D" or Blank	D indicates observation ended before end of flare
37	Alpha of Latitude	N=North; S=South
38-39	Mean Latitude	
40	Alpha of CMD	E=East; W=West
41-42	Mean central meridian distance	
43-44	Mean importance	Based on area $\geq 25=5$ $\geq 40=3$ $\geq 60=2$ $\geq 80=1$ $> 80=4$

GROUPED FLARE REPORT FORMAT

2-20-68

INITIATED

For data Oct. 1967 - On

COLUMN	DESCRIPTION	REMARKS
45-46	Mean importance	Based on brilliance:
		$235 \leq P, 264 \leq N, > 64 \leq B$
47-51	Mean meas.	area in square degrees (x100)
52-56	Group serial number	
	Central meridian	
57-62	passage date	Year Month Day
64-68	McMath Plage Number	
69-72	Central distance (x1000)	
73-74	Number of stations reporting event	
75-76	Number of importance estimates	
77-78	Number of area estimates	
79-80	Number of stations observing at time of	mean maximum and not reporting
	group-(Nov., Dec., 67)	
	total number of stations observing at	time of mean maximum (Jan. 68 on)
81-82	Number of flare reports grouped in this event	
83	Number of composite reports in group	

GROUPED FLARE REPORT FORMAT

2-20-68

For data Oct. 1967 - On

INITIALED

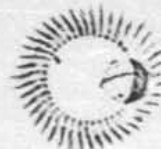
COLUMN	DESCRIPTION	REMARKS
84-88	Mt. Wilson Spot Number	Assigned to group-beginning Nov. 1968
89	"A" or Blank	"A" indicates mean maximum given is taken from times of measurements
90	"C" or Blank	"C" indicates group was listed as a confirmed event in Part 2
91-104	Blank	For Oct. 1967-April 1968
	Beginning May 1968	
91-92	Number of brightenings	1 1" first 2 1" second etc.
93-94	Number of stations reporting in multiple maximum	
95-96	Number of stations not reporting for multiple maximum	
97-98	"S", "C", or "U"	Machine confirmation S=Well confirmed but small C=Confirmed U=Unconfirmed
99-104	Blank	

SOLAR RADIO EMISSION



WORLD DATA CENTER A

Upper Atmosphere Geophysics
Environmental Science Services Administration
Boulder, Colorado 80302



SOLAR AND INTERPLANETARY PHENOMENA,
IONOSPHERIC PHENOMENA, FLARE-ASSOCIATED
EVENTS, AURORA, COSMIC RAYS, AIRGLOW

TELEPHONE AREA CODE 303
447-1000 EXT. 3381
CABLE ADDRESS: SOLAR
IN REPLY REFER TO:

May 26, 1970

AIR MAIL

R437

Mr. Charles Marks
NASA Goddard Space Flight Center
Code 601
Greenbelt, Maryland 20771

Dear Mr. Marks:

REF: Telephone call of 3-23-70

Enclosed are two magnetic tapes containing Solar Radio Emission Distinctive Events for April 1966 - November 1969. The data from January 1965 - March 1966 have not been punched and there are no plans to do it in the near future. I separated the April 1965 - December 1968 data on one tape and January 1969 - November 1969 to another because of the greatly increased number of records in 1969. The tapes were written with a system card-to-tape routine so no record counts are available but I did make a guess on the enclosed tape format sheet. Unfortunately the cards were not in very good order. For April 1966 - September 1968 the Ottawa data for each month is separate and behind each month's regular data. This may also be done with some Penn. State data during that period.

Generally, I would expect some days to be out of order because these cards have been pulled, listed etc. many times. Hopefully, this won't completely destroy your programs. Also enclosed are the Grouped Flare formats for February 1967 - March 1969. Two or three more months should be available by the time you actually get the tapes. You will probably have questions about the tape formats and data so call or write after June 22 as I will be out of town until then.

Sincerely yours,

Viola Hill, Computer Programmer
World Data Center A
Upper Atmosphere Geophysics

Enclosure

JUN 5 1970

WORLD DATA CENTER CONDUCTS INTERNATIONAL EXCHANGES OF GEOPHYSICAL OBSERVATIONS IN ACCORDANCE WITH THE PRINCIPLES SET FORTH BY THE INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS INITIATED FOR THE INTERNATIONAL GEOPHYSICAL YEAR 1957 BY THE DATA EXCHANGE CONTINUITY UNDER RECOMMENDATION OF VARIOUS INTERNATIONAL SCIENTIFIC ORGANIZATIONS WHICH IN THE UNITED STATES IS ESTABLISHED UNDER THE AUSPICES OF THE NATIONAL ACADEMY OF SCIENCES

WORLD DATA CENTER A
UPPER ATMOSPHERE GEOPHYSICS
ENVIRONMENTAL SCIENCE SERVICES ADMIN.
U.S. DEPARTMENT OF COMMERCE
BOULDER, COLORADO

The enclosed tape was written as follows:

DENSITY 156 BITS PER INCH
PARITY EVEN MODE BCD TRACK 7
DATE WRITTEN 5/25/70 COMPUTER USED CDC 3600
LABEL None

FORMAT OF TAPE:

LENGTH OF RECORDS 50 CHARACTERS
NUMBER OF RECORDS about 17000 on WDC #36
NUMBER OF FILES 1 tape
BASIC FORMAT OF THE DATA ATTACHED

CONTENTS OF THE TAPE:

TYPE OF DATA Some BCD encoded distinct events
DATES CONTAINED April 1967 - December on WDC #36
STATIONS WDC #36 - NOV 707 on WDC #36

CONTENTS:

IBM CARD CATALOGUE

Solar Radio Emission
Outstanding Occurrences

INITIATED

CARD TITLE

CARD COLUMN	DESCRIPTION	REMARKS
6-7	YEAR	
8-9	MONTH	
10-11	DAY	
14-18	FREQUENCY	always numeric
19-22	STATION	4 letter code
24-28	START TIME	TO TENTHS
29	S	E-EVENT STARTED BEFORE THIS TIME D= " " " " " "
		U-UNCERTAIN TIME BLANK
30-34	MAX TIME	TO TENTHS
35	S	
36-40	DURATION	TO TENTHS
41	S	
42-44	TYPE	
45-51	PEAK FLUX	TO TENTHS
52	S	
		!

Solar Radio Emission Outstanding Occurrences

CARD TITLE

[illegible]

THE
THEY +
RECON

WORLD DATA CENTER A
UPPER ATMOSPHERE GEOPHYSICS
ENVIRONMENTAL SCIENCE SERVICES ADMIN.
U.S. DEPARTMENT OF COMMERCE
BOULDER, COLORADO

GROUPED FLARES WOULD BE
THE ENCLOSED TAPE WAS WRITTEN AS FOLLOWS:

DENSITY 750 BITS PER INCH
PARITY EVEN MODE BCD TRACK 7
DATE WRITTEN _____ COMPUTER USED CDC 3600
LABEL NONE

FORMAT OF TAPE:

LENGTH OF RECORDS 104 CHARACTERS
NUMBER OF RECORDS WOULD HAVE EXACT COUNT PER MONTH (IS ABOUT 18,000)
NUMBER OF FILES CAN HAVE ONE FILE PER MONTH OR ONE FILE
BASIC FORMAT OF THE DATA ATTACHED PER TAPE WHICH EVER YOU WANT

CONTENT OF THE TAPE:

TYPE OF DATA GROUPED FLARES
DATES CONTAINED FEB 1962 - MAR 1962
STATIONS _____

COMMENTS:

THE MAR 1962 - MAR 1962 DATA IS INDIVIDUAL FLARES ONLY -
THEY HAVE NOT BEEN GROUPED. IT WOULD ALSO BE SO THE
RECORDS

IBM CARD CATALOGUE

8/4/57

INITIATED

SOLAR FLARE REPORTS

CARD TITLE

1955-March 1967 on C1447

CARD COLUMN	DESCRIPTION	REMARKS
37	nature and completeness of observations	
38-41	time of measurement	
42-46	measured area in square degrees (X100)	
47-51	corrected area in square degrees (X100)	
52-56	maximum effective line width in Balmer (X100)	
57-59	maximum intensity in percent	
60-62	duration in minutes	
63	"P" or blank	"P" indicates uncertain duration
64-67	McKinn series number of the plage region	
*68-71	observer's name	
*72	observing conditions	"1"=; "2"=fair; "3"=good
*73-76	remarks in the IAU system or notes	
79-80	month and year the card was punched (Oct. 5; Nov. 1; Dec. 3)	
*Observer's name is in column 50-78 for 1952-1963 data		

IBM CARD CATALOGUE

September 13, 1967

INITIATED

Mean importance and area "Rectified" for
Feb. and March 67 Flare groups.
(Reported area used from April 67 on)

Grouped Solar Flare Format

CARD TITLE

For Data Feb. 67 - July 67

CARD COLUMN	DESCRIPTION	REMARKS
1 - 3	Blank	
4 - 5	42	42 indicates report is a flare
6 - 8	Blank	
9 - 10	Year	
11 - 12	Month	
13 - 14	Day	
15 - 18	Earliest reported beginning time	
19	E or blank	E indicates observation began when flare in progress
20 - 23	Mean beginning time	
24 - 27	Mean time of flare maximum	
28 - 31	Mean end time	
32 - 35	Latest reported end time	
36	D or blank	D indicates observation ended before end of flare
37 - 38	Mean latitude	
39	N or S	N = north; S = south

Sept
1

CARD COLUMN
40 - 41
42
43 - 44
45 - 49
50 - 54
55 - 56
57 - 63
64 - 68
69 - 72
73
74 - 75
76 - 77
78 - 79
80
81 - 104

IBM CARD CATALOGUE

September 13, 1967
INITIATED

Grouped Solar Flare Format
CARD TITLE
(Program Group 1A and Group 2A)

CARD COLUMN	DESCRIPTION	REMARKS
40 - 41	Mean central meridian distance	
42	E or W	E = east; W = west
43 - 44	Mean importance	(x10) on 1 to 5 scale (1=5; 2=1; 3=2; 4=3; 5=4) (Apr. 67 -) (x10) on 1 to 9 scale (1=1; 2=1...9=3) (for Feb. 67 - 67)
45 - 49	Mean projected area	(x100) in square degrees
50 - 54	Group number	A serial number assigned to flare
55 - 56	Number of flare reports	in group (For Feb., Mar., April 67)
57 - 63	Number of stations observing the flare	(For data beginning in May 67)
64 - 68	Time of central meridian passage or position of the flare in year, month, day, 10th of day.	
69 - 72	Mt. Wilson sunspot number assigned to flare	
73	Central distance	(x1000)
74 - 75	Blank	
76 - 77	Number of valid importance estimates	
78 - 79	Number of valid area estimates	(For data beginning with May 67)
80	Number of flare reports in group	(These reports follow group report on tape)
81 - 104	Mean importance based on brilliance (2=N; 5=N; 8=B, from March 67 on)	
	Blank	

IBM CARD CATALOGUE

2/20/68

INITIATED

Grouped Flare Report

CARD TITLE

For data from Aug. 67 - Sept. 67

CARD COLUMN	DESCRIPTION	REMARKS
1-3	Blank	
4-5	"42"	Card Code
6-8	Blank	
9-14	Date	
15-18	First Beginning	
19	"E" or Blank	
20-23	Mean Beginning	
24-27	Mean Maximum	"9999" If no mean max.
28-31	Mean End	
32-35	Last End	
36	"D" or Blank	
37	Alpha of Latitude	
38-39	Mean Latitude	
40	Alpha of CMD	
41-42	Mean Central	Meridian Distance

IBM CARD CATALOGUE

2-20-68

INITIATED

Grouped Flare Report

CARD TITLE

Aug. - Sept. 67

CARD COLUMN	DESCRIPTION	REMARKS
43-44	Mean Importance	Based on area: 10=5; 20=1; 30=2; 40=3; 50=4
45	Mean Importance	Based on brilliance: 2=F; 5=N; 8=B
46-50	Mean Measured area in square degrees (X100)	
51-55	Group Serial Number	
56-62	Central Meridian Passage Date	
63-67	Mc Math Flare number assigned to Event	
68-71	Central Distance (X1000)	
72-73	Number of stations reporting this event	
74-75	Number of importance estimates	
76-77	Number of area estimates	
78-79	Number of flare reports grouped in this event	
80	Number of composite* reports in group	
81-104	Blank	

*See attached explanation of composite reports.

IBM CARD CATALOGUE

GRADED FINAL REPORTS

INITIATED

CARD TITLE

OCT 1967 - ON

FORMAT FOR ROL 1-194 SAME AS AUG - SEPT - 67 DATA

CARD COLLON	DESCRIPTION	REMARKS
45-46	Mean imp.	Based on brilliance;
		20°F; 50°N; 80°E
47-51	Mean meas.	area in sq. degrees (x100)
52-56	Group serial number	
57-62	Central meridian passage date	
64-68	Mc Vack Plage	
69-72	Central distance (X100%)	
73-74	Number of stations reporting event	
75-76	Number of temp estimates	
77-78	Number of area estimates	
79-80	Number of stations observing at time of mean max and not reporting	
	from (Jan., Dec., 67)	
	Count Number of stations observing at time of mean max (Jan. 68 on)	
81-82	Number of flare reports grouped in this event	
83	Number of composite reports in group.	

PAGE 1 OF 2

IBM CARD CATALOGUE

INITIALS

Grouped Flare Reports

CARD TITLE

October 1967-ON

CARD COLUMN	DESCRIPTION	REMARKS
84-88	Mt. Wilson Spot	Assigned to group-beginning Nov. 1968
89	"A" or Blank	"A" indicates mean maximum given is taken from times of measurements
90	"C" or Blank	"C" indicates group was listed as a confirmed event in Part 2
91-104	Blank	For Oct. 1967-April 1968
	Beginning May 1968	
91-92	Number of brightenings	1 if first 2 if second etc.
93-94	Number of stations reporting in mult. max.	
95-96	Number of stations not reporting for mult. max.	
97-98	"S", "C", or "U"	Machine confirmation S=Well confirmed but small C=Confirmed U=Unconfirmed

WORLD DATA CENTER A
UPPER ATMOSPHERE GEOPHYSICS
ENVIRONMENTAL SCIENCE SERVICES ADMIN.
U.S. DEPARTMENT OF COMMERCE
BOULDER, COLORADO

MAY 17 1971

The enclosed tape was written as follows: WDC 131 D-06083

DENSITY 556 BITS PER INCH
PARITY EVEN MODE BCD TRACK 7
DATE WRITTEN APR 1, 1971 COMPUTER USED CDC 3800
LABEL NONE

FORMAT OF TAPE:

LENGTH OF RECORDS 80 CHAR
NUMBER OF RECORDS _____
NUMBER OF FILES ONE
BASIC FORMAT OF THE DATA SEE FORMAT SHEET

CONTENTS OF THE TAPE:

TYPE OF DATA SOLAR RADIO EMISSION - SPECTRAL EVENTS
DATES CONTAINED DEC 1, 1968 - JAN 31, 1971
STATIONS _____

COMMENTS:

IBM CARD CATALOGUE

INITIATED

SOLAR SPECTRAL OBS.
CARD TITLE

CARD COLUMNS	DESCRIPTION	REMARKS
1-5	STATION	
6-7	YEAR	
8-9	MONTH	
10-11	DAY	
12-15	START	OBSERVING TIME
16-19	END	OBSERVING TIME
20	BLANK	
21-25	START TIME	DECIMETER BURSTS
26	E, D, U or BLANK	"E"-EVENT BEGAN BEFORE THIS TIME "D"- " " " AFTER " " "U"-UNCERTAIN
27	BLANK	
28-32	END TIME	DECIMETER BURSTS
33	S	
34	INTENSITY	
35	BLANK OR "-"	IF "-" DATA IN COLUMNS 21-33 IS NOT A DECIMETER BURST AND WILL BE REPEATED IN EITHER COLUMNS 36-48 OR 51-63

IBM CARD CATALOGUE

INITIATED

SOLAR SPECTRAL OBS.
CARD TITLE

CARD COLUMN	DESCRIPTION	REMARKS
36-40	START TIME	METER BURST
41	S	
42	BLANK	
43-47	END TIME	METER BURST
48	S	
49	INTENSITY	
50	BLANK	
51-55	START TIME	DEKAMETER BURST
56	S	
57	BLANK	
58-62	END TIME	DEKAMETER BURST
63	S	
64	INTENSITY	
65-68	BLANK	
69-80	SPECTRAL TYPE	

SOLAR DATA FORMAT

Solar Spectral Observations
TYPE OF DATA

Began January 1, 1971

CARD COLUMN	DESCRIPTION	REMARKS
1- 4	Station	
5- 6	Year	
7- 8	Month	
9-10	Day	
11-14	Start time of observation	
15-18	End time of observation	
19-23	Start time	Centimeter in hours, minutes, tenths
24	Code*	
25-29	End time	Centimeter in hours, minutes, tenths
30	Code	
31	Intensity	1-3
32-36	Start time	Decimeter in hours, minutes, tenths
37	Code	
38-42	End time	Decimeter in hours, minutes, tenths
43	Code	
44	Intensity	1-3

*Code E=Event began before this time
 D=Event began after this time
 U=Uncertain ~~Code~~
 Blank

Page 1 of 2

SOLAR DATA FORM

Solar Spectral Observations
TYPE OF DATA

Began January 1, 1971

CARD COLUMN	DESCRIPTION	REMARKS
45-49	Start time	Meter in hours, minutes, tenths
50	Code	
51-55	End time	Meter in hours, minutes, tenths
56	Code	
57	Intensity	1-3
58-62	Start time	Dekameter in hours, minutes, tenths
63	Code	
64-68	End time	Dekameter in hours, minutes, tenths
69	Code	
70	Intensity	1-3
71-80	Spectral Type	Left justified, alphanumeric

WORLD DATA CENTER A
UPPER ATMOSPHERE GEOPHYSICS
ENVIRONMENTAL SCIENCE SERVICES ADMIN.
U.S. DEPARTMENT OF COMMERCE
BOULDER, COLORADO

MAY 17 1971

The enclosed tape was written as follows: WDC 147 **D-06089**

DENSITY ~~800~~ 556 BITS PER INCH

PARITY EVEN MODE BCD TRACK 7

DATE WRITTEN APR 22, 1971 COMPUTER USED CDC 3800

LABEL NONE

FORMAT OF TAPE:

LENGTH OF RECORDS 50 CHAR

NUMBER OF RECORDS

NUMBER OF FILES ONE

BASIC FORMAT OF THE DATA SEE FORMAT SHEET

CONTENTS OF THE TAPE:

TYPE OF DATA SOLAR RADIO EMISSION - FIXED FREQUENCY EVENTS

DATES CONTAINED JAN 1, 1970 - OCT 31, 1970

STATIONS

COMMENTS:

WORLD DATA CENTER A
UPPER ATMOSPHERE GEOPHYSICS
ENVIRONMENTAL SCIENCE SERVICES ADMIN.
U.S. DEPARTMENT OF COMMERCE
BOULDER, COLORADO

The enclosed tape was written as follows: WDC 142 D-06084

DENSITY REC 556 BITS PER INCH

PARITY EVEN MODE BCD TRACK 7

DATE WRITTEN APR 22, 1971 COMPUTER USED CDC 3600

LABEL NONE

FORMAT OF TAPE:

LENGTH OF RECORDS 50 CHAR

NUMBER OF RECORDS

NUMBER OF FILES - ONE

BASIC FORMAT OF THE DATA SEE FORMAT SHEET

CONTENTS OF THE TAPE:

TYPE OF DATA SOLAR RADIO EMISSION - FIXED FREQUENCY EVENTS

DATES CONTAINED JAN 1, 1969 - DEC 31, 1969

STATIONS

COMMENTS:

SOLAR DATA FORMAT

Solar Radio Noise
 Fixed Frequency Events
 TYPE OF DATA

CARD COLUMN	DESCRIPTION	REMARKS
1-5	Blank	
6-7	Year	
8-9	Month	
10-11	Day	
12-13	Blank	
14-18	Frequency	Numeric
19-22	Station	Alphanumeric
23	Blank	
24-28	Start Time	Hours, Minutes, Tenths
29	Code*	
30-34	Max Time	Hours, Minutes, Tenths
35	Code*	
36-40	Duration	Minutes, tenths
41	Code*	
42-44	Type	Numeric
45-51	Peak Flux	$10^{-22} \text{ W m}^{-2} \text{ Hz}^{-1}$ in Tenths

*Code E=Event Began Before This Time
 D=Event Ended After This Time or Greater Than
 U=Uncertain
 Blank

Page 1 of 2

Solar Radio Noise
Fixed Frequency Events
TYPE OF DATA

[illegible]

42	550701134621346	13501330	31N65E17	0	1 155 7 64	921	1 0	00
42	5507011503 1503	13111311	31N64E17	0	2 155 7 64	915	1 0	00
42	5507012129 2129221122432243	30N61E13		0	3 155 7 65	805	1 0	00
34	5507012310	2400						00
34	5507020000	0040						00
42	550702 7262 0726	07300730	15N61E 0	0	4 155 7 69	876	0 0	33
34	5507021740	1630						00
42	5507021345 1345134513521852	23N48E12		0	5 155 7 64	807	1 0	00
42	5507021913 1918192119291929	33N47E12		0	6 155 7 63	799	1 0	00
42	5507021932 1932194019471947	29N54E12		0	7 155 7 69	862	1 0	00
34	5507031140	1330						00
42	5507031656 1656170517261726	34N43E12		0	8 155 7 69	771	1 0	00
42	5507031953 1953195520102010	32N38E18		0	9 155 7 670000	717	1 0	00
34	5507040220	0530						00
42	550704092120921	09270927	30N30E10	0	10 155 7 66	628	1 0	00
42	5507040930E0931093410221030	33S 05E40		0	11 455 7 51	607	2 0	00
42	5507041025 1027103610511056	28N29E13		0	12 355 7 66	602	2 0	00
42	5507041547 1547155715531512	26N43E22		0	13 255 71 09	991	2 0	00
42	5507042305 2305230923532355034	503E18		0	14 255 7 52	608	1 0	00
34	5507050200	0140						00
42	5507051531 1531154215591559	36S 06W12		0	15 155 7 52	641	1 0	00
34	5507050250	0400						00
34	5507061220	1310						33
42	5507061315 1315132614401440	34S16W12		0	16 155 7 54	649	1 0	00
42	5507061433 1433144615061506	28N56E13		0	17 155 71 08	853	1 0	00
42	5507061520 1520152715241534	30N04W13		0	18 155 7 53	449	1 0	00
42	5507061543 1543155316011601	25N55E12		0	19 155 71 08	838	1 0	00
42	5507061613 1613161616331635	30N04W13		0	20 155 7 64	449	1 0	00
42	5507061750 1750175318371837	32S20E12		0	21 155 7 82	647	1 0	00
42	5507061923 1923192819431945	33S 20W12		0	22 155 7 53	658	1 0	00

EDITED
FLARE
REPORTS

				EDITED FLARE REPORTS	REC	1. LENGTH	80 D-00151
1	155 7 64	921	1 0 00		REC	1. LENGTH	80 FIRSTRECS
2	155 7 64	915	1 0 00		REC	2. LENGTH	80
3	155 7 65	865	1 0 00		REC	3. LENGTH	80
			00		REC	4. LENGTH	80
			00		REC	5. LENGTH	80
4	155 7 59	876	0 0 33		REC	6. LENGTH	80
			00		REC	7. LENGTH	80
5	155 7 64	807	1 0 00		REC	8. LENGTH	80
6	155 7 63	799	1 0 00		REC	9. LENGTH	80
7	155 7 60	842	1 0 00		REC	10. LENGTH	80
			00		REC	11. LENGTH	80
8	155 7 69	771	1 0 00		REC	12. LENGTH	80
9	155 7 570000	717	1 0 00		REC	13. LENGTH	80
			00		REC	14. LENGTH	80
10	155 7 66	628	1 0 00		REC	15. LENGTH	80
11	155 7 51	507	2 0 00		REC	16. LENGTH	80
12	155 7 66	602	2 0 00		REC	17. LENGTH	80
13	155 7 09	991	2 0 00		REC	18. LENGTH	80
14	155 7 52	608	1 0 00		REC	19. LENGTH	80
			00		REC	20. LENGTH	80
15	155 7 52	641	1 0 00		REC	21. LENGTH	80
			00		REC	22. LENGTH	80
			00		REC	23. LENGTH	80
16	155 7 54	649	1 0 00		REC	24. LENGTH	80
17	155 7 08	853	1 0 00		REC	25. LENGTH	80
18	155 7 63	449	1 0 00		REC	26. LENGTH	80
19	155 7 08	838	1 0 00		REC	27. LENGTH	80
20	155 7 64	440	1 0 00		REC	28. LENGTH	80
21	155 7 82	647	1 0 00		REC	29. LENGTH	80
22	155 7 53	658	1 0 00		REC	30. LENGTH	80

42	5507061938 1938194219501950 25N55E12	0	23 155 7109	838 1 0	00
34	5507062000	2400			00
42	5507062035 2035204020442044 25N55E12	0	24 155 7110	830 1 0	00
34	5507070000	0210			00
42	5507070727E0727 07490746 31N06W12	0	25 155 7 69	468 1 0	00
42	5507080005 0905000900240024 32N17W18	0	26 155 7 67	576 1 0	00
42	5507080116 0116012001310131 32N15W18	0	27 155 7 69	523 1 0	00
34	5507081200	1300			00
34	5507081830	1930			00
42	5507082325 232523302335233529N33W12	0	28 155 7 65	645 1 0	00
42	5507082353 2353240224242429 32N32W18	0	29 155 7 66	658 1 0	00
34	5507090350	0540			00
42	5507091225E1225 12451245031439W13	0	30 255 7 66	714 2 0	00
42	5507091358E1359141215211525 32S57W39	0	31 355 7 53	905 2 0	00
42	5507100549E0549055306060606 20N45W59	0	32 155 7 69	759 1 0	00
34	5507101310	2300			00
34	5507111120	1310			00
42	5507111344 1344 14351435028N40E16	0	32 155 7146	706 1 0	00
34	5507121210	1250			00
34	5507132040	2130			00
34	5507140040	0200			00
34	5507141740	1940			00
34	5507141942	2250			00
34	5507142252	2340			00
34	5507160315	0315			00
34	5507180210	0440			00
34	5507181310	1410			00
42	550718191501915192019291929 22S52W12	0	34 155 7149	843 1 0	00

23 155 7109	838	1 0	00	REC	31. LENGTH	80
			00	REC	32. LENGTH	80
24 155 7111	838	1 0	00	REC	33. LENGTH	80
			00	REC	34. LENGTH	80
25 155 7 69	468	1 0	00	REC	35. LENGTH	80
26 155 7 67	526	1 0	00	REC	36. LENGTH	80
27 155 7 69	523	1 0	00	REC	37. LENGTH	80
			00	REC	38. LENGTH	80
			00	REC	39. LENGTH	80
28 155 7 65	645	1 0	00	REC	40. LENGTH	80
29 155 7 66	658	1 0	00	REC	41. LENGTH	80
			00	REC	42. LENGTH	80
30 255 7 66	714	2 0	00	REC	43. LENGTH	80
31 355 7 53	905	2 0	00	REC	44. LENGTH	80
32 155 7 69	759	1 0	00	REC	45. LENGTH	80
			00	REC	46. LENGTH	80
			00	REC	47. LENGTH	80
33 155 7146	706	1 0	00	REC	48. LENGTH	80
			00	REC	49. LENGTH	80
			00	REC	50. LENGTH	80
			00	REC	51. LENGTH	80
			00	REC	52. LENGTH	80
			00	REC	53. LENGTH	80
			00	REC	54. LENGTH	80
			00	REC	55. LENGTH	80
			00	REC	56. LENGTH	80
			00	REC	57. LENGTH	80
34 155 7142	843	1 0	00	REC	58. LENGTH	80

42	5706291247E124712471253125331578E17	0 5616 157 7 840000 988 1 0 00
42	5706291249 1249124913061315 23553W11	0 5617 257 62553000 848 2 0 00
42	5706291345 1345135014011402 29578E14	0 5614 457 7 840000 987 4 0 00
42	5706291400 1405141014371450 10N09E24	0 5615 657 63030000 199 4 0 00
42	5706291445 1445145014551455 29578E19	0 5620 457 7 550000 987 4 0 00
42	5706291527 1527153115351535 30578E14	0 5621 157 7 550000 988 1 0 00
42	5706291530 1530154015301530 24547W12	0 5622 157 62610000 785 1 0 00
42	5706291555 1555160016051605 32587E14	0 5623 157 7 6200001000 1 0 00
42	5706291630 1630163316381638 32587E14	0 5624 157 7 6200001000 1 0 00
42	5706291651E1551 16511651D28578E16	0 5625 157 7 560000 987 1 0 00
42	5706291723 1723172617351736 33586E14	0 5626 257 7 620000 999 2 0 00
42	5706291740 1740174818131810 09N09E13	0 5627 157 63040000 188 1 0 00
42	5706291740 1740174317551755 16523E12	0 5628 157 7 150000 493 1 0 00
42	5706291803 1803181018201820 33588E14	0 5629 157 7 6400001000 1 0 00
42	5706291820 1820182518301830 11555E12	0 5630 157 7 390000 833 1 0 00
42	5706291812E1812 18121812D26358E21	0 5631 157 7 490000 949 1 0 00
42	5706300303E0303030403440346 10N87E17	0 5632 157 7 440000 839 1 0 00
42	5706300445 0445045305230534 14S16E10	0 5633 357 7 140000 304 2 0 00
42	5706300554E0554 05060606012458E11	0 5634 157 7 460000 849 1 0 00
42	5706300555 0555 05080612 14521E12	0 5635 257 7 260000 575 2 0 00
42	5706300557 0557055806000600033569E22	0 5636 157 7 540000 962 1 0 00
42	5706300710 07100725074707442013N69E17	0 5637 857 7 550000 933 8 0 00
42	5706300710E0710 073008060822 09N00E26	0 5638 257 63030000 106 2 0 00
42	5706300710E0710 07400740 12N56E16	0 5639 157 7 450000 830 1 0 00
42	5706300710E0710 07300730 22543W 6	0 5640 157 62560000 915 1 0 00
42	5706300814 0820082609030915 30S57E27	0 56411057 7 46 895 7 0 00
42	5706300908E0908 091709170124N68E17	0 5642 257 7 550000 926 2 0 00
42	5706300924 0926100112251332010403W44	0 56431257 63020000 133 11 0 00
42	5706301533 1533 15411541 17N07W15	0 5644 157 63010000 140 1 0 00

000 988 1 0 00	REC 116, LENGTH 80
000 845 2 0 00	REC 117, LENGTH 80
000 987 4 0 00	REC 118, LENGTH 80
000 199 4 0 00	REC 119, LENGTH 80
000 987 4 0 00	REC 120, LENGTH 80
000 988 1 0 00	REC 121, LENGTH 80
000 785 1 0 00	REC 122, LENGTH 80
001000 1 0 00	REC 123, LENGTH 80
001000 1 0 00	REC 124, LENGTH 80
000 987 1 0 00	REC 125, LENGTH 80
000 999 2 0 00	REC 126, LENGTH 80
00188 1 0 00	REC 127, LENGTH 80
00493 1 0 00	REC 128, LENGTH 80
01000 1 0 00	REC 129, LENGTH 80
00833 1 0 00	REC 130, LENGTH 80
00949 1 0 00	REC 131, LENGTH 80
00839 1 0 00	REC 132, LENGTH 80
00394 2 0 00	REC 133, LENGTH 80
00849 1 0 00	REC 134, LENGTH 80
00575 2 0 00	REC 135, LENGTH 80
00962 1 0 00	REC 136, LENGTH 80
00933 8 0 00	REC 137, LENGTH 80
00106 2 0 00	REC 138, LENGTH 80
00830 1 0 00	REC 139, LENGTH 80
00915 1 0 00	REC 140, LENGTH 80
00895 7 0 00	REC 141, LENGTH 80
00926 2 0 00	REC 142, LENGTH 80
00133 11 0 00	REC 143, LENGTH 80
00140 1 0 00	REC 144, LENGTH 80

42 57

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42	5706301835 1835183818531853 12N64E13	0 5645 157 7 560000 898	1 0	00
42	5706301850 1850185318581853 10N09W13	0 5646 157 63010000 197	1 0	00
42	5706301903 1903191819231925 12N64E13	0 5647 157 7 560000 848	1 0	00
42	5706301945 1945194519551955 13N12W13	0 5648 157 62990000 268	1 0	00
42	5706302335 233523382+002+07003411W13	0 5649 157 63020000 209	1 0	00

57 7 563000 848 1 0 00

REC 145. LENGTH 80

57 63010000 197 1 0 00

REC 146. LENGTH 80

57 7 560000 843 1 0 00

REC 147. LENGTH 80

57 62990000 268 1 0 00

REC 148. LENGTH 80

57 63020000 209 1 0 00

REC 149. LENGTH 80

42	690301	157	158	204	218	224	S16E	82040	86211616903017	9957	204	3	3	3	4	3017165	1	0	05
42	690301	442	442	447	500	500	N21W890020	6000	77211626902241	9946	953	1	1	1	4	1017163	1	0	0U
42	690301	650	653	700	722	739	S20E	02438	193211636903013	9957	221	5	5	5	0	7117165	C	1	0
42	690301	908	906	915	936	948	S16E	27050	166211646903015	9957	156	4	3	3	0	6117165	C	1	0
42	690301	1200	1200	1205	1215	1215	N13E453050	0000	140211656903049	9953	755	1	1	1	3	1017159	1	0	0U
42	690301	1507	1507	1515	1530	1530	N12W852050	0000	31211666902233	9946	998	1	1	1	4	1017163	1	0	0U
42	690301	1608	1608	1608	1614	1614	S18W	22050	27211676903015	9957	190	1	1	1	4	1017165	1	0	0U
42	690301	1710	1710	1719	1733	1733	S20W	62050	68211686903013	9957	243	2	2	2	2	2017165	1	0	05
42	690301	1844	1844	1849	1856	1856	N11W892020	0000	31211696902231	9946	1000	2	1	1	2	2017163	1	0	05
42	690301	1868	1868	1869	1902	1902	S17W	42080	10211706903015	9957	183	1	1	1	3	1017164	1	0	0U
42	690301	1906	1906	1907	1920	1920	N16E522050	0000	70211716903057	9966	834	2	2	2	2	2017170	C	1	0
42	690301	2032	2032	2038	2062	2062	S29W902050	0000	0211726902231	9946	998	1	1	0	2	10	0	1	0
42	690301	2104	2104	2139	2204	2204	N	6W893050	52211736902232	9946	1000	3	1	1	1	3017163	C	1	0
42	690301	2213	2213	2214	2252	2252	S18W	70080	119211746903014	9957	221	2	2	2	1	2017164	C	1	0
42	690301	2253	2254	2255	2306	2306	S18W	62050	162211756903015	9957	212	2	2	2	1	2017165	C	1	0
42	690302	20	20	23	31	31	N13E552020	0000	41211766903061	9966	850	1	1	1	4	1017177	1	0	0U
42	690302	250	251	257	317	332	N16E472644	0000	146211776903056	9966	788	5	5	5	1	5017170	C	1	0
42	690302	251	252	256	322	3520	S26W	54370	532211786903017	9957	332	6	6	6	0	6017165	C	1	0
42	690302	504E	504	510	518	5180	S26W	72020	52211796903017	9957	341	1	1	1	2	1017169	1	0	0U
42	690302	1110	1110	1115	1134	1135	N11E682565	0000	175211806903076	9966	940	2	2	2	2	2017173	C	1	0
42	690302	1201	1201	1205	1220	1220	N14E472050	0000	72211816903076	9966	780	2	2	2	4	2017177	C	1	0
42	690302	1413	1413	1414	1417	1417	N13E682020	0000	26211826903077	7966	943	1	1	1	5	1017173	1	0	0U

86211616903017	9957	204	3	3	3	4	3117165	1	0	05	REC	1. LENGTH	108	
7211626902241	9946	953	1	1	1	4	1017163	1	0	00	REC	2. LENGTH	108	
13211636903013	9957	221	5	5	5	0	7117165	C	1	0	0C	REC	3. LENGTH	108
6211646903015	9957	156	4	3	3	0	6117165	C	1	0	0C	REC	4. LENGTH	108
0211656903049	9953	755	1	1	1	3	1017169	1	0	00	REC	5. LENGTH	108	
1211666902233	9946	998	1	1	1	4	1017163	1	0	00	REC	6. LENGTH	108	
7211676903015	9957	100	1	1	1	4	1017165	1	0	00	REC	7. LENGTH	108	
1211686903013	9957	243	2	2	2	2	2017165	1	0	05	REC	8. LENGTH	108	
211696902231	9946	1006	2	1	1	2	2017163	1	0	05	REC	9. LENGTH	108	
211706903015	9957	183	1	1	1	3	1017164	1	0	00	REC	10. LENGTH	108	
211716903057	9966	834	2	2	2	2	2017170	C	1	0	05	REC	11. LENGTH	108
211726902231	9946	998	1	1	0	2	10	0	1	0	0C	REC	12. LENGTH	108
111736902232	9946	1000	3	1	1	1	3117163	C	1	0	0C	REC	13. LENGTH	108
111746903014	9957	221	2	2	2	1	2017164	C	1	0	0C	REC	14. LENGTH	108
11754903015	9957	212	2	2	2	1	2017165	C	1	0	0C	REC	15. LENGTH	108
11766903061	9966	850	1	1	1	4	1017177A	1	0	00	REC	16. LENGTH	108	
11776903056	9966	788	5	5	5	1	5017170	C	1	0	0C	REC	17. LENGTH	108
11786903017	9957	332	6	6	6	0	6017165	C	1	0	0C	REC	18. LENGTH	108
1796903017	9957	341	1	1	1	2	1017165A	1	0	00	REC	19. LENGTH	108	
1806903076	9966	940	2	2	2	2	2017173	C	1	0	0C	REC	20. LENGTH	108
1816903060	9966	780	2	2	2	4	2017177	C	1	0	00	REC	21. LENGTH	108
1826903077	9966	943	1	1	1	5	1017173	1	0	00	REC	22. LENGTH	108	

DO6082

GROUP SOLAR
FLARES

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42 6903021432 14351444145515020520W162035 0000	52211816903714 9957 344 2 2 2 5 2017165	1 0
42 6903021450 1450150015141515 N13E682065 0000	56211846903077 9966 943 2 2 2 4 2017173 C 1 0	
42 6903021532 1432153515451548 N17E562250 0000	98211856903068 9964 870 5 5 5 1 5017172 C 1 0	
42 6903021846 1846185218551855 N19E562050 0000	31211856903070 9966 875 1 1 1 0 1017172	1 0
42 6903022000E20002026212721270N13E652050 0000	26211876903077 9966 925 2 1 1 1 2017173A	1 0
42 69030220100 210211021162118 S19W182050 0000	35211886903015 9957 360 1 1 1 2 1017165A	1 0 0
42 6903022107 2113212121292157 S13E252065 0000	75211896903048 9964 427 3 2 2 0 3017166	1 0 0
42 6903022247 2248230023412357 N16E382740 0000	146211976903058 9966 607 3 3 3 1 3017170 C 1 0 0	
42 690303 121 122 127 145 153 S19W192050 0000	96211916903016 9957 373 4 4 4 2 4017165 C 1 0 0	
42 690303 324E 324 327 332 333 N11W903050 0000	296211926902244 99451000 1 1 1 5 1017163	1 0 0
42 690303 440 440 443 453 453 N18E492050 0000	52211936903069 9964 815 1 1 1 4 1017172	1 0 00
42 6903031148 1148115011591152 N12E542050 0000	30211946903075 9966 839 1 1 1 4 1017173A	1 0 00
42 6903031315 1319133013471350 N16E292350 0000	125211956903067 9966 601 4 4 4 4 4017170	1 0 00
42 6903031616 1617161916251627 S14E152035 0000	29211966903048 9964 279 2 2 2 4 2017166	1 0 05
42 6903031717 1717172117251725 N16W432020 0000	18211976902285 9975 749 1 1 1 1 10	0 1 0 05
42 6903031728 1728172917331733 N11E532020 0000	41211986903077 9966 827 1 1 1 1 1017173	1 0 05
42 6903031739 1739174017471747 S19W292050 0000	26211996903016 9957 508 1 1 1 1 1017165	1 0 05
42 6903031749 1749175018151815 S19W292050 0000	26212006903016 9957 508 1 1 1 1 1017165	1 0 05
42 6903031910 1910192320152015 S16E132050 0000	93212016903048 9964 265 1 1 1 1 1017167 C 1 0 05	
42 6903032100 2100210421142117 S18E102065 0000	96212026903046 9964 251 2 2 2 1 2017167 C 1 0 05	
42 6903032215 2216222523072323 N12E463565 0000	296212036903074 9966 762 4 4 4 0 4017173 C 1 0 00	

52211816903014	9957	344	2 2 2 5	2017165	1 0 00	REC	23. LENGTH	108
56211846903077	9966	943	2 2 2 4	2017173	C 1 0 00	REC	24. LENGTH	108
90211856903068	9966	870	5 5 5 1	5017172	C 1 0 00	REC	25. LENGTH	108
31211856903070	9966	875	1 1 1 1	1017172	1 0 05	REC	26. LENGTH	108
26211876903077	9966	926	2 1 1 1	2017173A	1 0 05	REC	27. LENGTH	108
35211886903015	9957	360	1 1 1 2	1017165A	1 0 05	REC	28. LENGTH	108
75211896903048	9964	427	3 2 2 0	3017166	1 0 05	REC	29. LENGTH	108
166211906903058	9966	697	3 3 3 1	3017170	C 1 0 00	REC	30. LENGTH	108
96211916903016	9957	373	4 4 4 2	4017165	C 1 0 05	REC	31. LENGTH	108
206211926902244	99461000	1 1 1 5	1017163	1 0 00	REC	32. LENGTH	108	
52211936903069	9966	615	1 1 1 4	1017172	1 0 00	REC	33. LENGTH	108
30211946903075	9966	839	1 1 1 4	1017173A	1 0 00	REC	34. LENGTH	108
25211956903057	9966	601	4 4 4 4	4017170	1 0 00	REC	35. LENGTH	108
29211966903048	9964	270	2 2 2 4	2017166	1 0 05	REC	36. LENGTH	108
18211976902285	9975	749	1 1 1 1	10	0 1 0 05	REC	37. LENGTH	108
11211986903077	9966	827	1 1 1 1	1017173	1 0 05	REC	38. LENGTH	108
16211996903016	9957	508	1 1 1 1	1017165	1 0 05	REC	39. LENGTH	108
6212006903016	9957	508	1 1 1 1	1017165	1 0 05	REC	40. LENGTH	108
3212016903048	9964	266	1 1 1 1	1017167	C 1 0 05	REC	41. LENGTH	108
6212026903046	9964	251	2 2 2 1	2017167	C 1 0 05	REC	42. LENGTH	108
1212036903074	9966	762	4 4 4 0	4017173	C 1 0 00	REC	43. LENGTH	108

42	7007301540	1541154416141625 N 3W232535	20432126700729910851	392	4	4	2	6	4018043	C	1	0
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42	7007301558	1602160516231625 N17E692075	3132127700804810860	929	2	2	1	7	2018049		1	0
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42	7007301646	1648165117111716 S 7E 62020	2132128700731210853	241	3	3	1	4	3918041		1	0
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42	7007301652	1653165517101722 N 5W192020	3132129700729310851	324	3	3	1	4	3018043		1	0
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42	7007301703	1703170417121712 N14W822065	2132130700724610845	987	2	2	1	4	2018033		1	0
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42	7007301708	1708171117551755 N 6W202020	6232131700729210851	340	2	1	1	6	2018043		1	0
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42	7007301712E	1712171417341734DN12E703080	97321327007805010860	936	1	1	1	6	1018049A		1	0
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42	7007301758	1758180118301830 N12E732020	21321337007805210860	952	1	1	1	3	1018049		1	0
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42	7007301830	1807181018441850 S 7E 62558	21432134700731210853	241	4	4	2	2	4018041	C	1	0
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42	7007301927	1927211922042208 S22W373060	13432135700728010847	714	4	3	1	0	4018038	C	1	0
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42	7007302122	21222134220022000N 5W222020	5232136700729210851	373	2	1	1	2	2018043		1	0
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42	7007302229	2229223122352236 S 7E 72020	2632137700731510853	249	2	2	1	1	2018041		1	0
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42	7007302252	2252230223302348 S 7E 52580	18632138700731310853	235	4	4	2	0	4018041	C	1	0
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42	7007302341	2341995924172417 N22W303050	21732139700728710846	549	1	1	1	2	1018046		1	0
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42	7007302343	2343995924262426 N12W823020	5232140700724810845	989	1	1	1	3	1018033		1	0
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42	700731 53	56 101 125 130 N 6W222020	032141700729410851	373	2	2	0	2	2018043		1	0
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42	700731 211	2119999 226 326 N 5W212020	8332142700729510851	357	1	1	1	1	1018043		1	0
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42	700731 323	3239999 345 345 N12W902020	41321437007244108451000	1	1							

35	20432126700724910851	392 4 4 2 5 4018043 C 1 0 05	REC 11267, LENGTH 108
35	3132127700804810860	929 2 2 1 7 2018049 1 0 0U	REC 11268, LENGTH 108
36	2132128700731210853	241 3 3 1 4 3018041 1 0 05	REC 11269, LENGTH 108
36	3132129700729310851	324 3 1 1 4 3018043 1 0 05	REC 11270, LENGTH 108
36	2132130700724410845	987 2 2 1 4 2018037 1 0 05	REC 11271, LENGTH 108
36	6232131700729210851	340 2 1 1 6 2018043 1 0 0U	REC 11272, LENGTH 108
36	9732132700905010860	036 1 1 1 6 1018049A 1 0 0U	REC 11273, LENGTH 108
36	2132133700805210860	052 1 1 1 3 1018049 1 0 0U	REC 11274, LENGTH 108
36	21832134700731210853	241 4 4 2 2 4018041 C 1 0 0C	REC 11275, LENGTH 108
36	13432135700728010847	714 4 3 1 0 4018038 C 1 0 0C	REC 11276, LENGTH 108
36	5232136700729210851	373 2 1 1 2 2018043 1 0 05	REC 11277, LENGTH 108
36	2632137700731510853	249 2 2 1 1 2018041 1 0 05	REC 11278, LENGTH 108
36	18632138700731310853	235 4 4 2 0 4018041 C 1 0 0C	REC 11279, LENGTH 108
36	21732139700728710845	549 1 1 1 2 1018045 1 0 0U	REC 11280, LENGTH 108
36	5232140700724810845	988 1 1 1 3 1018033 1 0 0U	REC 11281, LENGTH 108
36	032141700729410851	373 2 2 0 2 2018043 1 0 05	REC 11282, LENGTH 108
36	8332142700729510851	357 1 1 1 1 1018043 1 0 05	REC 11283, LENGTH 108
36	41321437007244108451000	1 1 1 2 1018033 1 0 0U	REC 11284, LENGTH 108
36	0321447007244108451000	1 1 0 3 1018033 1 0 0U	REC 11285, LENGTH 108
36	14332145700729210851	438 1 1 1 4 1018043A 1 0 0U	REC 11286, LENGTH 108
36	19632146700729210851	467 8 8 5 5 8018043 C 1 0 0C	REC 11287, LENGTH 108
36	12032147700729310851	462 7 7 5 3 7018043 C 1 0 0C	REC 11288, LENGTH 108

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42 700731 944E 944 945 946 946DN26W422020 9032148700728310845 706 1 1 1 8 10180354 1 0 0U
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42 7007311134 1140114411581203DS RW 42255 11432149700731210851 246 7 4 5 4 7018041 C 1 0 0C
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42 7007311128 1228123013001300 N 5W292020 2132150700729310851 482 1 1 1 9 1018043 1 0 0U
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42 7007311127 1329133213521406 S13W502260 12032151700727810847 799 6 5 5 3 6018037 C 1 0 0C
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42 7007311135 1339134114031418 N17W532035 3132152700727610846 799 2 2 1 7 4118048 1 0 0U
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42 70073111343 1343134813531353 N 7W292050 6232153700729410851 482 1 1 1 6 1018043 1 0 0U
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42 70073111335 1345140015281542 N16W542030 3132154700727510845 808 3 3 2 5 8218034 1 0 0S
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42 70073111474 1407141514271429 N 7W282060 6232155700729510851 467 3 3 1 5 3018043 1 0 0S
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42 70073111526 1526152915401540DN 7W302050 4132156700729410851 498 1 1 110 1018043 1 0 0U
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42 70073111637 1642165417001704 N 5W342520 12432157700729110851 557 2 2 2 3 2018043 1 0 0S
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42 70073111811 1814181818331845 S13W542560 14632158700727710847 837 6 4 3 0 8118037 C 1 0 0C
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42 70073111942 1942194719581958DS14W562020 6232159700727610847 857 1 1 1 1 1018037 1 0 0U
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42 7007312055 2055210521152115 S 1W432020 032160700728610851 688 1 1 0 3 1018043 1 0 0U
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42 7007312124 2130213121452146DN13E552035 3132161700805210860 816 2 2 1 2 2018049 1 0 0S
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42 7007312322 2322999923422342 S 9E 32020 17532162700801210857 259 1 1 1 2 1018045 1 0 0U
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42 7007312325 2326232723352337 N14E542035 032163700805010860 804 2 2 0 1 2018049 1 0 0S
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49700728310846	706	1	1	1	8	1018035A	1	0	0U	REC 11289, LENGTH	108	
497007231210853	246	7	6	5	4	7018041	C	1	0	0C	REC 11290, LENGTH	108
507007229110851	482	1	1	1	9	1018043		1	0	0U	REC 11291, LENGTH	108
517007287810847	799	6	6	5	3	6018037	C	1	0	0C	REC 11292, LENGTH	108
527007227610846	799	2	2	1	7	4118048		1	0	0U	REC 11293, LENGTH	108
53700729410851	482	1	1	1	8	1018043		1	0	0U	REC 11294, LENGTH	108
547007227510846	808	3	3	2	5	8218074		1	0	0S	REC 11295, LENGTH	108
5700729510851	467	3	3	1	5	3018043		1	0	0S	REC 11296, LENGTH	108
5700729410851	498	1	1	1	10	1018043		1	0	0U	REC 11297, LENGTH	108
7700729110851	557	2	2	2	3	2018043		1	0	0S	REC 11298, LENGTH	108
9700727710847	837	6	6	3	0	8118037	C	1	0	0C	REC 11299, LENGTH	108
9700727610847	857	1	1	1	3	1018037		1	0	0U	REC 11300, LENGTH	108
9700728610851	688	1	1	0	3	1018043		1	0	0U	REC 11301, LENGTH	108
700805010860	816	2	2	1	2	2018049		1	0	0S	REC 11302, LENGTH	108
700801210857	259	1	1	1	2	1018045		1	0	0U	REC 11303, LENGTH	108
700805010860	806	2	2	0	1	2018049		1	0	0S	REC 11304, LENGTH	108

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32	681	070357	1213	2322	2232				0000
32	1121	070357	1254	2443	2014				0000
32	108	071757	11230	1142		1	112	20	0000
32	2411	072157	12425	1346	1317				0000
32	2931	072357	0615	0740	2944				0000
32	3231	072457	1401	2025	1843				0000
32	3241	072457	2322	2449	2323				0000
32	3911	073157	1900	1608	1534				0000
32	4141	080157	1354	1334	1321				0000
32	4391	080257	2435	0034	0007				0000
32	4461	080357	2414	29420	0912				0000
32	485	080557	3611	0621		1	512	20	0000
32	5841	081057	1351	1338	1322				0000
32	6311	082157	1330	1353	1342				0000
32	6561	082657	2110	2130	2132				0000
32	7101	082857	24130	1404	1955				0000
32	8021	090257	1245	12540	1103				0000
32	8061	090257	1813	14100	1330				0000
32	8431	090457	2320	0039	0013				0000
32	8491	090557	1206	13073	1240				0000
32	8941	090957	3124	2222	0132				0000
32	9541	091257	1533	1524	1505				0000
32	9661	091357	0602	0707	0623				0000
32	10051	091457	1347	1435	1410				0000
32	10741	091857	33502	0855	0410				0000
32	10941	092057	1545	0447	0430				0000
32	11671	092457	0253	0350	0315				0000
32	12861	100257	1745	1624	1756				0000
32	14031	101157	1420	1310	1442				0000
32	1439	101357	09015	09100	2924	1	507	042	0000
32	14671	101457	1321	1324	1315				0000
32	16001	102257	1433	2012	2005				0000

FLARE SUMMARIES

D-00/56

FIRST RECS
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0000	REC	32. LENGTH	84

[illegible]

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05 E36	1 1	0000	REC 45, LENGTH	84
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		0000	REC 47, LENGTH	84
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08 W75	1	0000	REC 49, LENGTH	84
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0 E86	1 1	0000	REC 54, LENGTH	84
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		0000	REC 56, LENGTH	84
5 W54	1 1	0000	REC 57, LENGTH	84
1 E04	1 1	0000	REC 58, LENGTH	84
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		0000	REC 60, LENGTH	84
E62	1 1	0000	REC 61, LENGTH	84
W34	1	0000	REC 62, LENGTH	84
E20	1 1	0000	REC 63, LENGTH	84
W90	1	0000	REC 64, LENGTH	84

5803 MAR 1958

35SUM580301	0120 0154	SL 3120K AN	
35SUM580301	0340 0515	SL 53 TC AD KO OK SY CWHD	
36SUM580301	0815	0840 2 3 PU HQ	
35SUM580301	0913 0925	S 426NE JU KO CWSO CWBR	0911
36SUM580301	0914 0922 0917	X 1 ED	
36SUM580301	0915 1015 0920	3 3 ED PU	
35SUM580301	0929 0959	S 42 NE JU KO CWSO	0925
36SUM580301	1618 1629 1620	1 1 30SP	
36SUM580301	1635 1648	1 1 RE	
36SUM580301	1647 1742 1657	2 5 ED A1 A4 80 DE DU MC NE SP	
36SUM580301	1648 1725 1655	2 5 3780 MC RE SP	
35SUM580301	1649 1725	S 526PR BE HU MC NE WS	
36SUM580302	1138 1214U1144	2 3 ED PU	
35SUM580303	1010 1145	S 536PU MA NE SW TO CWSO CWBR	1009E
36SUM580303	1010 1219 1026	3 5 ED DU NE PU	
36SUM580303	1013 1110 1030U	X 1 ED	
36SUM580303	1530 1558 1538D	16 3 A4 DU	
36SUM580305	1317 1352 1324	1 3 ED PU	

OK AN

REC 1. LENGTH 80

TC AD KO OK SY CWHO

REC 2. LENGTH 80

3 PU HO

REC 3. LENGTH 80

NE JU KO CWSO CWBR

0911

REC 4. LENGTH 80

1 ED

REC 5. LENGTH 80

3 ED PU

REC 6. LENGTH 80

NE JU KO CWSO

0925

REC 7. LENGTH 80

1 30SP

REC 8. LENGTH 80

1 RE

REC 9. LENGTH 80

5 ED A1 A4 B0 DE DU MC NE SP

REC 10. LENGTH 80

5 3780 MC RE SP

REC 11. LENGTH 80

PR BE HU MC NE WS

REC 12. LENGTH 80

3 ED PU

REC 13. LENGTH 80

U MA NE SW TO CWSO CWBR

1008E

REC 14. LENGTH 80

5 ED DU NE PU

REC 15. LENGTH 80

1 ED

REC 16. LENGTH 80

3 A4 DU

REC 17. LENGTH 80

3 ED PU

REC 18. LENGTH 80

REC 19. LENGTH 80

D-00152
FIRST
RECS FILE
2

52

T

F.I.E

2

45 650625 1722 1724

1 480 MC

45 650628 1718 1722

1 480 MC

45 650628 1833 1836

1 480 MC

45 650630 1810 1814

16 4MC 00

45 650630 1814 1817

16 4MC 80

D-00156

LAST REELS

FILE 2

480 MC

REC 1. LENGTH 80

480 MC

REC 2. LENGTH 80

480 MC

REC 3. LENGTH 80

4MC 80

REC 4. LENGTH 80

4MC 80

REC 5. LENGTH 80

0000000000000000	00000062	1	10	5	0000000
0000000000000000	753000062	1	20	6	0000000
0230048000000000	260000061	112231	95	12000000	
0700021000000000	130630261	112231	95	2000000	
0000000000000000	1200000062	1	26	6	0000000
1200004000000000	140000061	112286	95	4000000	
0000120000000000	190000061	112280	99	6000000	
600021000184122	72630361	112285	97	3000000	
100042000200135	140630261	112285	97	5000000	
930000000534000	130630361	112278100	0000000		
3000060000000000	250000062	1	90	95	6000000
0000000000000000	150000062	1	46	6	0000000
0000000000000000	450000062	1	66	6	0000000
0000000000000000	153000062	1	68	6	0000000
0000000000000000	300000062	1	72	7	0000000
0000000000000000	150000062	1	74	7	0000000
2000020000000000	120000062	1	80	33	4000000
0000000000000000	150000062	1	81	7	0000000
0000300000000000	340000062	1	74	39	12000000
0000000000000000	150000062	1	91	7	0000000
0000400000000000	800000062	1	68	64	4000000
0000000000000000	450000062	1	100	7	0000000
0000000000000000	150000062	1	102	7	0000000
0015000000000000	160000062	1184100	5000000		
0020000000000000	340631962	1185100	11000000		
0020000000000000	240631962	1185100	10000000		
0020000000000000	150631962	1185100	8000000		
0000000000000000	150000062	1	85	74	0000000
0000000000000000	800000062	1	106	48	0000000
0000000000000000	300000062	1	126	7	0000000
0000000000000000	750000062	1	126	7	0000000
0000000000000000	600000062	1	129	7	0000000

SOLAR FLARE REPORTS

REC	1. LENGTH	84
REC	2. LENGTH	84
REC	3. LENGTH	84
REC	4. LENGTH	84
REC	5. LENGTH	84
REC	6. LENGTH	94
REC	7. LENGTH	84
REC	8. LENGTH	84
REC	9. LENGTH	84
REC	10. LENGTH	84
REC	11. LENGTH	84
REC	12. LENGTH	84
REC	13. LENGTH	84
REC	14. LENGTH	84
REC	15. LENGTH	84
REC	16. LENGTH	84
REC	17. LENGTH	84
REC	18. LENGTH	84
REC	19. LENGTH	84
REC	20. LENGTH	84
REC	21. LENGTH	84
REC	22. LENGTH	84
REC	23. LENGTH	84
REC	24. LENGTH	84
REC	25. LENGTH	84
REC	26. LENGTH	84
REC	27. LENGTH	84
REC	28. LENGTH	84
REC	29. LENGTH	84
REC	30. LENGTH	84
REC	31. LENGTH	84
REC	32. LENGTH	84

DOV 51
FIRST
RECS.

000000000000 900000062 1136 8 0000000

REC 33. LENGTH 84

000000000014 800000062 1204100 4000000

REC 34. LENGTH 84

040000000020 130631962 1204100 4000000

REC 35. LENGTH 84

000000000000 310631962 1203100 0000000

REC 36. LENGTH 84

020000000020 100631962 1206100 4000000

REC 37. LENGTH 84

000000000010 900000062 1 91 90 4000000

REC 38. LENGTH 84

020000271120 410631062 1 90 92 23000000

REC 39. LENGTH 84

000000000057 190631962 1251 98 10000000

REC 40. LENGTH 84

000000000000 150000062 1143 8 0000000

REC 41. LENGTH 84

000000000000 300000062 1143 8 0000000

REC 42. LENGTH 84

050000000020 210000062 1 94 95 10000000

REC 43. LENGTH 84

080000000010 130000062 1103 90 5000000

REC 44. LENGTH 84

000000000000 300000062 1159 8 0000000

REC 45. LENGTH 84

49100156000 840631262 1102 99 9000000

REC 46. LENGTH 84

000000000000 60631262 1 97100 0000000

REC 47. LENGTH 84

000000000000 000000062 1153 99 0000000

REC 48. LENGTH 84

000000000000 140000062 1 98100 3000000

REC 49. LENGTH 84

00000098114 500000062 1198 75 0000000

REC 50. LENGTH 84

000000000000 280631962 1191 65 0000000

REC 51. LENGTH 84

400000000000 300631962 1192 68 2000000

REC 52. LENGTH 84

430000000000 130631962 1190 64 3000000

REC 53. LENGTH 84

000000000000 90631962 1193 65 0000000

REC 54. LENGTH 84

010000000052 70631962 1191 66 3000000

REC 55. LENGTH 84

000000000000 130000062 1184 55 4000000

REC 56. LENGTH 84

000000000000 110631962 1185 54 2000000

REC 57. LENGTH 84

000000000000 150000062 1170 8 0000000

REC 58. LENGTH 84

000000000000 380000062 1244100 1500000

REC 59. LENGTH 84

000000000000 170000062 1246100 6000000

REC 60. LENGTH 84

200000000000 600000062 1193 48 4000000

REC 61. LENGTH 84

000000000000 200000062 1202 58 6000000

REC 62. LENGTH 84

000000000000 200000062 1245100 1000000

REC 63. LENGTH 84

000000000000 310000062 1246100 11000000

REC 64. LENGTH 84

140016403260612 2635 0000 00 00000000000000000000 250000064 3263 12 0000000
340006403260659 0255 0000 00 00000000000000000000 500000064 3264 12 0000000
340002403260613 0730 0000 00 00000000000000000000 210000064 3264 12 0000000
340006403261235 1315 0000 00 00000000000000000000 430000064 3265 12 0000000
340006403270115 0825 0000 00 00000000000000000000 430000064 3271 12 0000000
340032403270200 0825 0000 00 00000000000000000000 250000064 3271 12 0000000
3431464032705520335 0995 N148902000555000000000042000 6718764 3209100 3000000
340006403270423 0235 0000 00 00000000000000000000 150000064 3274 12 0000000
346426403271420 143701421 509845131142100020000200000000 170715564 3310 70 1000000
340006403280110 0145 0000 00 00000000000000000000 350000064 3280 12 0000000
340006403280110 0545 0000 00 00000000000000000000 275000064 3280 12 0000000
34645640328140351 43601419 N148710000000004900000000000017 330000064 3221100 16000000
341916403281405 1433 1420 N1489100142000200000000000000 270000064 3220100 1400000
340006403290425 0525 0000 00 00000000000000000000 500000064 3292 12 0000000
340006403290430 0500 0000 00 00000000000000000000 300000064 3292 12 0000000
340006403290310 0525 0000 00 00000000000000000000 150000064 3292 12 0000000
346596403292144 2232 2130 N09290101215000030001500000010 180000064 4 57100 6000000
346596403290036 0100 0041 N09292231004100040002000000010 240720164 4 58100 5000000
340006403300502 0545 0000 00 00000000000000000000 450000064 3302 12 0000000
340006403301140 1155 0000 00 00000000000000000000 150000064 3305 12 0000000
340006403302203 2015 0000 00 00000000000000000000 150000064 3308 12 0000000
340006403302203 2115 0000 00 00000000000000000000 850000064 3308 12 0000000
340006403310545 0550 0000 00 00000000000000000000 150000064 3312 11 0000000
340006403310625 0705 0000 00 00000000000000000000 400000064 3313 11 0000000
340006403310623 1130 0000 00 00000000000000000000 170000064 3313 11 0000000
340026403311044 1657 1547 N10413100164700020000200000000 130000064 3307 23 3000000
340006403311015 1425 0000 00 00000000000000000000 100000064 3318 11 0000000
340006403311915 1425 0000 00 00000000000000000000 100000064 3318 11 0000000
340006403312000 2400 0000 00 00000000000000000000 240000064 3318 11 0000000
340006403312005 2035 0000 00 00000000000000000000 300000064 3318 11 0000000
340006403312110 2130 0000 00 00000000000000000000 200000064 3319 11 0000000

0000000000 250000064 3263 12 00000000	REC 128, LENGTH 84
0000000000 500000064 3264 12 00000000	REC 129, LENGTH 84
0000000000 200000064 3254 12 00000000	REC 130, LENGTH 84
0000000000 400000064 3265 12 00000000	REC 131, LENGTH 84
0000000000 300000064 3271 12 00000000	REC 132, LENGTH 84
0000000000 250000064 3271 12 00000000	REC 133, LENGTH 84
0000420000 60718964 3205100 30000000	REC 134, LENGTH 84
0000000000 150000064 3274 12 00000000	REC 135, LENGTH 84
0000000000 170715564 3310 70 10000000	REC 136, LENGTH 84
0000000000 350000064 3280 12 00000000	REC 137, LENGTH 84
0000000000 275000064 3280 12 00000000	REC 138, LENGTH 84
0000000017 330000064 3221100 16000000	REC 139, LENGTH 84
0000000000 370000064 3220100 14000000	REC 140, LENGTH 84
0000000000 600000064 3292 12 00000000	REC 141, LENGTH 84
0000000000 300000064 3292 12 00000000	REC 142, LENGTH 84
0000000000 150000064 3292 12 00000000	REC 143, LENGTH 84
0000000010 180000064 4 57100 60000000	REC 144, LENGTH 84
0000000010 240720164 4 56100 50000000	REC 145, LENGTH 84
0000000000 450000064 3302 12 00000000	REC 146, LENGTH 84
0000000000 150000064 3305 12 00000000	REC 147, LENGTH 84
0000000000 150000064 3308 12 00000000	REC 148, LENGTH 84
0000000000 450000064 3308 12 00000000	REC 149, LENGTH 84
0000000000 150000064 3312 11 00000000	REC 150, LENGTH 84
0000000000 400000064 3313 11 00000000	REC 151, LENGTH 84
0000000000 120000064 3313 11 00000000	REC 152, LENGTH 84
0000000000 130000064 3307 23 30000000	REC 153, LENGTH 84
0000000000 100000064 3318 11 00000000	REC 154, LENGTH 84
0000000000 100000064 3318 11 00000000	REC 155, LENGTH 84
00000000240000064 3318 11 00000000	REC 156, LENGTH 84
0000000000 300000064 3318 11 00000000	REC 157, LENGTH 84
0000000000 200000064 3319 11 00000000	REC 158, LENGTH 84

00000000000000 050000064 3219 11 0000000

REC 150, LENGTH 84

00000000000000 050000064 4 10 11 0000000

REC 150, LENGTH 84

SOLAR RADIATION EMISSION

CULG	6812010000700	01395	-	01395	1	01395	1	IIIB	0000
WEIS	68120102051745	0905	1745	-					0000
SGMR	68120111002200	1100	2200	-					0000
BOUL	68120113482346	14419	14425	-	14419	14425	2	III	0000
HARV	68120114012334	1720	2210	- 1720	2210	1		IN	0000
BOUL	68120113482346	20185	20188	-	20185	20188	2	III	0000
CULG	68120120242400	21245	-	21245	1	21245	1	IIIB	0000
BOUL	68120113482346	21257	21262	-	21257	21262	1	IIIG	0000
BOUL	68120113482346	22206	22222	-	22206	22222	1	IIIG	0000
CULG	68120200000656	0000	0656	-					0000
WEIS	68120208201507	0820	1507	-					0000
SGMR	68120211002200	1100	2200	-					0000
HARV	68120214012334	1401	1800	- 1401	1800	1		IN	0000
BOUL	68120213472345	15350	15352	- 15350	15352	2		III	0000
BOUL	68120213472345	16187	16194	- 16187	16194	2	16187	16194	2
BOUL	68120213472345	16340	16344	- 16340	16344	2	16340	16344	2
BOUL	68120213472345	17099	17101	- 17099	17101	1		III	0000
BOUL	68120213472345	17179	17253	- 17179	17253	1		IIIG	0000
BOUL	68120213472345	17345	17388	- 17345	17388	1	17345	17388	1
HARV	68120214012334	2114	2115	2 2114	2141	3	2117	2141	211
BOUL	68120213472345	21148	21175	- 21148	21175	3	21148	21175	3
CULG	68120220252400	2115	2116	- 2115	2116	2		IIIG	0000
CULG	68120220252400	2115	2143	- 2115	2147	2	2115	2147	211H
BOUL	68120213472345	21160	21332	- 21160	21332	3	21160	21332	311
BOUL	68120213472345	21175	21520	- 21175	21520	3	21175	21520	3
HARV	68120214012334	2119	2120	2 2119	2126	2		IIIGG	0000
CULG	68120300000658	00105	-	00105	1			IIIB	0000
CULG	68120300000658	0019	-	0019	1			IIIB	0000
CULG	68120300000658	0452	0640	- 0452	0640	1		I	0000
WEIS	68120308101448	0855	1440	- 0855	1440	1		IS	0000
SGMR	68120311002200	1100	2200	-					0000
HARV	68120314012334	1401	1520	- 1401	1520	1		I	0000
HARV	68120314012334	1520	1920	- 1520	1920	1		IN	0000

1395	1	IIIE	0000	REC	1. LENGTH	84
			0000	REC	2. LENGTH	84
			0000	REC	3. LENGTH	84
4419	14425 2	III	0000	REC	4. LENGTH	84
		IN	0000	REC	5. LENGTH	84
2135	20138 2	III	0000	REC	6. LENGTH	84
245	1	IIIB	0000	REC	7. LENGTH	84
257	21262 1	IIIG	0000	REC	8. LENGTH	84
206	22222 1	IIIG	0000	REC	9. LENGTH	84
			0000	REC	10. LENGTH	84
			0000	REC	11. LENGTH	84
			0000	REC	12. LENGTH	84
		IN	0000	REC	13. LENGTH	84
		III	0000	REC	14. LENGTH	84
97	16195 2	IIIG	0000	REC	15. LENGTH	84
40	16344 2	III	0000	REC	16. LENGTH	84
		III	0000	REC	17. LENGTH	84
		IIIG	0000	REC	18. LENGTH	84
45	17388 1	IIIG	0000	REC	19. LENGTH	84
7	2141 2II		0000	REC	20. LENGTH	84
18	21175 3	IIIGG	0000	REC	21. LENGTH	84
		IIIG	0000	REC	22. LENGTH	84
	2147 2IIH		0000	REC	23. LENGTH	84
10	21332 3II		0000	REC	24. LENGTH	84
5	21520 3 IV		0000	REC	25. LENGTH	84
		IIIGG	0000	REC	26. LENGTH	84
		IIIB	0000	REC	27. LENGTH	84
		IIIB	0000	REC	28. LENGTH	84
		I	0000	REC	29. LENGTH	84
		IS	0000	REC	30. LENGTH	84
			0000	REC	31. LENGTH	84
		I	0000	REC	32. LENGTH	84
		IN	0000	REC	33. LENGTH	84

SOLAR RADIO
EMISSION

D-06083

HARV 68120314012334	1757	1803	-	1757	1803	1		IIIG	0000
CULG 68120320362400	2036	2400	-						0000
BOUL 68120318002300	20526	20537	-	20526	20537	1	20526 20537 1	IIIG	0000
CULG 68120400000653	01465	-	00465	1				IIIG	0000
CULG 68120400000653	01145	-	01145	1	01145	1		IIIG	0000
CULG 68120400000653	01455	-	01455	1				IIIG	0000
SGMR 68120411002200	1100	2200	-					IIIG	0000
WEIS 68120407351525	1153	1450	-	1153	1450	2		IS	0000
WEIS 68120407351525	13060	13067	-	13060	13067	1		IIIG	0000
HARV 68120414012334	1409	1840	-	1409	1840	1		IN	0000
HARV 68120414012334	1646	1647	-	1646	1647	2	1646 1647 3	IIIG	0000
BOUL 68120413472345	16465	16474	-	16465	16474	2	16465 16474 2	III	0000
BOUL 68120413472345	17577	17582	-	17577	17582	2	17577 17582 2	III	0000
HARV 68120414012334	1758	1759	-	1758	1759	2	1758 1759 2	IIIG	0000
HARV 68120414012334	1805	1806	-	1805	1806	2	1805 1806 2	IIIG	0000
BOUL 68120413472345	18054	18059	-	18054	18059	2	18054 18059 2	III	0000
HARV 68120414012334	1927	2024	-	1927	2024	1		I	0000
BOUL 68120413472345	19397	19399	-	19397	19399	1		III	0000
BOUL 68120413472345	20341	20361	-	20341	20361	2	20341 20361 2	IIIG	0000
HARV 68120414012334	2036	2036	2	2034	2036	3	2034 2036 3	IIIGG	0000
WEIS 68120507501600	0815	1430	-	0815	1430	2		IS	0000
WEIS 68120507501600	10537	10539	-	10537	10539	1		III,OP,RS	0000
SGMR 68120511002200	13375	13383	-	13375	13383			IIIG	0000
HARV 68120514012335	1405	1430	-	1405	1430	1		I	0000
BOUL 68120513472345	14080	21040	-	14080	21040	1	14080 21040 1	CONT	0000
HARV 68120514012335	1430	2336	-	1430	2336	1		IN	0000
BOUL 68120513472345	14427	14493	-	14427	14493	2	14427 14493 2	IIIGG	0000
BOUL 68120513472345	14498	14582	-	14498	14582	3	14498 14582 3	IIIGG	0000
BOUL 68120513472345	15469	15473	-	15469	15473	2	15469 15473 2	III	0000
HARV 68120514012335	1547	3	1547	3	1547	3		IIIG	0000
BOUL 68120513472345	22217	22244	-	22217	22244	2		IIIG	0000
BOUL 68120513472345	22285	22382	-	22285	22382	2	22285 22382 2	IIIG	0000

		IIIG	0000	REC	34. LENGTH	84	
			0000	REC	35. LENGTH	84	
20526	20537	1	IIIG	0000	REC	36. LENGTH	84
			IIIB	0000	REC	37. LENGTH	84
01145		1	IIIB	0000	REC	38. LENGTH	84
			IIIB	0000	REC	39. LENGTH	84
			0000	REC	40. LENGTH	84	
		IS	0000	REC	41. LENGTH	84	
		IIIG	0000	REC	42. LENGTH	84	
		IN	0000	REC	43. LENGTH	84	
646	1547	3	IIIG	0000	REC	44. LENGTH	84
6465	15474	2	III	0000	REC	45. LENGTH	84
7577	17582	2	III	0000	REC	46. LENGTH	84
758	1759	2	IIIG	0000	REC	47. LENGTH	84
005	1805	2	IIIG	0000	REC	48. LENGTH	84
054	18059	2	III	0000	REC	49. LENGTH	84
		I	0000	REC	50. LENGTH	84	
397	19309	1	III	0000	REC	51. LENGTH	84
341	20361	2	IIIG	0000	REC	52. LENGTH	84
74	2036	3	IIIGG	0000	REC	53. LENGTH	84
		IS	0000	REC	54. LENGTH	84	
		III, DR. RS	0000	REC	55. LENGTH	84	
75	13383		IIIB	0000	REC	56. LENGTH	84
		I	0000	REC	57. LENGTH	84	
30	21040	1	CONT	0000	REC	58. LENGTH	84
		IN	0000	REC	59. LENGTH	84	
17	14493	2	IIIGG	0000	REC	60. LENGTH	84
18	14582	3	IIIGG	0000	REC	61. LENGTH	84
9	15473	2	III	0000	REC	62. LENGTH	84
		1	IIIG	0000	REC	63. LENGTH	84
			IIIG	0000	REC	64. LENGTH	84
5	22382	2	IIIG	0000	REC	65. LENGTH	84

WEIS71011508281522	08485 08487 2	IIIG,DP	0000
WEIS710115	11175 11178 1	IIIR	0000
WEIS710115	13501 13506 2	IIIG	0000
WEIS710115	15034 15035 1	IIIR	0000
WEIS71011607531523	0755 1430 1	IS,CONF	0000
WEIS710116	12009 12020 1	IIIG	0000
WEIS71011707531523	11279 11290 1	IIIR	0000
WEIS710117	12225 12227 1	IIIG	0000
WEIS710117	1219 1431 2	IS	0000
WEIS710117	12761 12366 2	IIIG,DP,RS0000	
WEIS71011807530655	0826 1510 1	IN	0000
WEIS71011810001520	14461 14467 2	IIIG	0000
WEIS71011907501526	10271 10297 2	IIIG	0000
WEIS710119	10375 10378 1	IIIR	0000
WEIS710119	0925 1800 1	IN	0000
WEIS710119	12595 13051 2	IIIG,DP	0000
WEIS710119	13122 13126 3	IIIGG,RS	0000
WEIS710119	14331 1435 1	IIIG	0000
WEIS710119	14362 14450 3	IIIGG,DP	0000
WEIS71012007481526	0753 1526 2	IS,CONF	0000
WEIS710120	12390 12393 3	IIIG	0000
WEIS710120	14138 14143 2	IIIG	0000
WEIS71012111251240	1125 1525 1	IN,CONF	0000
WEIS71012113131520	14232 14247 1	IIIG	0000
WEIS71012207461420	0840 1500 1	IS,CONF	0000
WEIS710122	11050 11059 1	IIIG	0000
WEIS71012214451535			0000
WEIS71012307441536	0747 1525 1	IN	0000
WEIS710123	13471 13473 1	IIIR	0000
WEIS71012407440825			0000
WEIS71012408381534	12014 12036 2	IIIG,DP	0000
WEIS710124	13155 13160 1	IIIG	0000

08487 2	IIIG,DP	0000	REC 19762, LENGTH	84
11178 1	IIIB	0000	REC 19763, LENGTH	84
13506 2	IIIG	0000	REC 19764, LENGTH	84
15035 1	IIIB	0000	REC 19765, LENGTH	84
1430 1	IS, CONT	0000	REC 19765, LENGTH	84
12020 1	IIIG	0000	REC 19767, LENGTH	84
11280 1	IIIB	0000	REC 19768, LENGTH	84
12227 1	IIIG	0000	REC 19769, LENGTH	84
1431 2	IS	0000	REC 19770, LENGTH	84
	IIIG,DP,RS0000		REC 19771, LENGTH	84
510 1	IN	0000	REC 19772, LENGTH	84
4467 2	IIIG	0000	REC 19773, LENGTH	84
0297 2	IIIG	0000	REC 19774, LENGTH	84
0378 1	IIIB	0000	REC 19775, LENGTH	84
500 1	IN	0000	REC 19776, LENGTH	84
3051 2	IIIG,DP	0000	REC 19777, LENGTH	84
1126 3	IIIGG,RS	0000	REC 19778, LENGTH	84
139 1	IIIG	0000	REC 19779, LENGTH	84
1450 3	IIIGG,DP	0000	REC 19780, LENGTH	84
26 2	IS, CONT	0000	REC 19781, LENGTH	84
393 3	IIIG	0000	REC 19782, LENGTH	84
143 2	IIIG	0000	REC 19783, LENGTH	84
25 1	IN, CONT	0000	REC 19784, LENGTH	84
247 1	IIIG	0000	REC 19785, LENGTH	84
12 1	IS, CONT	0000	REC 19786, LENGTH	84
	IIIG	0000	REC 19787, LENGTH	84
		0000	REC 19788, LENGTH	84
5 1	IN	0000	REC 19789, LENGTH	84
73 1	IIIB	0000	REC 19790, LENGTH	84
		0000	REC 19791, LENGTH	84
36 2	IIIG,DP	0000	REC 19792, LENGTH	84
50 1	IIIG	0000	REC 19793, LENGTH	84

WEIS71012508351533	08357 08384 1	IIIG	0000
WEIS710125	08350 10250 1	IS	0000
WEIS71012607351536	09437 09442 1	IIIG	0000
WEIS710126	10377 10396 2	IIIGG,09850000	
WEIS710126	13272 13299 1	IIIG	0000
WEIS710126	15139 15140 1	IIIG	0000
WEIS71012707300920			0000
WEIS71012709281538			0000
WEIS71012807431540	12281 12283 1	IIIG	0000
WEIS710128	13135 13140 1	IIIG	0000
WEIS71012907551420	07570 1420 2	I	0000
WEIS71012914241548	13506 13510 1	IIIG	0000
WEIS71013007401550	07410 1538 2	IN	0000
WEIS71013107401549	07450 1549 2	IS	0000
WEIS710131	12597 14390 1	IIIG	0000

184 1	IIIG	0000	REC 19794, LENGTH	84
50 1	IS	0000	REC 19795, LENGTH	84
42 1	IIIG	0000	REC 19796, LENGTH	84
96 2	IIIG, DPRS0000		REC 19797, LENGTH	84
99 1	IIIG	0000	REC 19798, LENGTH	84
	IIIG	0000	REC 19799, LENGTH	84
		0000	REC 19800, LENGTH	84
		0000	REC 19801, LENGTH	84
13 1	IIIB	0000	REC 19802, LENGTH	84
10 1	IIIG	0000	REC 19803, LENGTH	84
2	I	0000	REC 19804, LENGTH	84
0 1	IIIB	0000	REC 19805, LENGTH	84
2	IN	0000	REC 19806, LENGTH	84
2	IS	0000	REC 19807, LENGTH	84
0 1	IIIG	0000	REC 19808, LENGTH	84