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NO. 513 MAY 1987

Part II (Comprehensive Reports)

DATA FOR
NOVEMBER 1986

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BOULDER, COLORADO

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S O L A R - G E O P H Y S I C A L D A T A

NUMBER 513

(Issued in Two Parts)

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C O N T E N T S

PART I (PROMPT REPORTS)

	Page
DETAILED INDEX FOR 1986-1987	2
DATA FOR APRIL 1987.	3- 29
DATA FOR MARCH 1987.	31- 85
LATE DATA.	87- 91
Cosmic Ray Neutron Monitor Thule January-February 1987	
Geomagnetic Activity Indices February 1987	

PART II (COMPREHENSIVE REPORTS)

	Page
DETAILED INDEX FOR 1986-1987	2
DATA FOR NOVEMBER 1986.	3-27

DETAILED INDEX OF OBSERVATIONS PUBLISHED IN "SOLAR-GEOPHYSICAL DATA"

CODE	KIND OF OBSERVATION	SEP 86	OCT	NOV	DEC	JAN 87	FEB	MAR	APR
A. SOLAR AND INTERPLANETARY EVENTS									
A.1	Sunspot Drawings	507A 36	508A 29	509A 29	510A 27	511A 31	512A 31	513A 37	
A.2aa	Internat. Provisional Sunspot Numbers	511A 80	511A 80	511A 80	511A 80	510A 7	511A 9	512A 7	513A 9
A.2c	American Sunspot Numbers	511A 81	511A 81	511A 81	511A 81	510A 7	511A 9	512A 7	513A 9
A.3a	Mt. Wilson Magnetograms	507A 36	508A 29	509A 29	510A 27	511A 31	512A 31	513A 37	
A.3b	Mt. Wilson Sunspot Magnetic Class	507A 66	508A 60	509A 59	510A 58	511A 62	512A 59	513A 68	
A.3c	Kitt Peak Magnetograms	508A 89	508A 29	509A 29	510A 27	511A 31	512A 31	513A 37	
A.3d	Mean Solar Magnetic Field (Stanford)	506A 20	507A 24	508A 21	509A 20	510A 20	511A 23	512A 23	513A 29
A.3e	Stanford Magnetograms	507A 36	508A 29	509A 29	510A 27	511A 31	512A 31	513A 37	
A.4	H-alpha Filtergrams	507A 36	508A 29	509A 29	510A 27	511A 31	512A 31	513A 37	
A.5	Calcium Plage Photographs/Drawings	509A 93	511A106	511A110	511A114				
A.5a	Calcium Plage Regions	511A 95	511A 98	511A102					
A.5b	Daily Calcium Plage Indices	511A 96	511A100	511A104					
A.6	H-alpha Synoptic Charts	508A 88	508A 24	509A 22	510A 22	512A 81	512A 26	513A 32	
A.6b	Active Region Carte Synoptique (Paris)	511B 4	512B 4	513B 4					
A.6c	Stanford Solar Mag Field Synoptic Maps	507A 30	508A 25	509A 23	510A 23	511A 27	512A 27	513A 33	
A.6d	Kitt Peak " Mag Field Synoptic Maps	507A 32	508A 28	509A 28	510A 26	511A 30	512A 30	513A 36	
A.6e	Mass Ejections from the Sun	511B 20	512B 38	---					
A.6f	Active Prominences and Filaments	511B 21	512B 39	513B 23					
A.6g	Sac Peak Coronal Line Synoptic Maps	507A 34	508A 26	509A 24	510A 24	511A 28	512A 28	513A 34	
A.7g	Kitt Peak Helium Synoptic Maps	May 85 in 491A 27							
A.7h	Coronal Line Emission (Sac Peak)	507A 36	508A 29	509A 29	510A 27	511A 31	512A 31	513A 37	
A.8aa	2800 MHz - Solar Flux (Ottawa)	506A 7	507A 9	508A 7	509A 7	510A 7	511A 9	512A 7	513A 9
A.8ac	2800 MHz - Adj. Solar Flux (Ottawa)	506A 7	507A 9	508A 7	509A 7	510A 7	511A 9	512A 7	513A 9
A.8g	Adjusted Daily Solar Fluxes (Sagamore)	506A 7	507A 9	508A 7	509A 7	510A 7	511A 9	512A 7	513A 9
A.10a	Interferometric Chart (164 MHz) Nancy	508A 93	508A 94	508A 19	509A 18	---	511A 20	512A 19	513A 26
A.10c	East-West Scans - 21 cm - Fleurs	506A 16	507A 21	508A 17	510A 76	510A 16	511A 18	512A 17	513A 24
A.10d	East-West Scans - 43 cm - Fleurs	506A 16	507A 22	508A 18	510A 77	510A 17	511A 19	512A 18	513A 25
A.10e	East-West Scans - 10 cm - Ottawa	506A 15	507A 20	508A 16	509A 15	510A 15	511A 17	512A 16	513A 23
A.10f	East-West Scans - 3 cm - Toyokawa	506A 14	507A 19	508A 15	509A 14	510A 14	511A 16	512A 15	513A 22
A.11g	Solar X-ray GOES (graphs/event table)	511B 13	512B 29	513B 16					
A.12e	Solar Particles (IMP H & J)	Jan 84-Apr 85 in 505B 34; May-Aug 85 in 510B 26							
A.13d	Solar Wind from IP Scintillations	Dec 84 in 486A 92							
A.13e	Solar Plasma (IMP H & J)	Feb-Mar 86 in 509B 34; Mar-Oct 86 in 511B 26							
A.13f	Solar Wind (Pioneer 12)	Aug 83-Jan 84 in 487A 82							
A.16a	SMM Solar Irradiance	Dec 84 in 490B 18							
A.16b	NIMBUS Solar Irradiance	Nov 78-Oct 84 in 499B 26							
A.17	Interplanetary Mag Field (Pioneer 12)	Dec 84 in 488A 80; Feb-Sep 86 in 511A 82							
A.17c	Inferred Interplanetary Mag Field	Mar 86 in 500A 21; Mar 87 in 512A 21							
B. IONOSPHERIC RADIO PROPAGATION									
B.52	Field Strength Graphs-North Atlantic	507A 78	508A 84	509A 76	510A 72	511A 76	512A 72	513A 84	
B.53	Quality Indices on Paths to Germany	507A 77	508A 83	509A 78	510A 74	511A 75	512A 74	513A 83	
C. SOLAR FLARE-ASSOCIATED EVENTS									
C.1a	H-alpha Flares	506A 12	507A 14	508A 12	509A 12	510A 12	511A 14	512A 12	513A 14
C.1ba	H-alpha Flare Groups	511B 7	512B 6	513B 6					
C.1d	Flare Patrol Observations	506A 13	507A 18	508A 14	509A 13	510A 13	511A 15	512A 14	513A 21
C.1d	Flare Patrol Observations	511B 9	512B 14	513B 10					
C.3	Radio Bursts Fixed Freq.	511B 11	512B 16	513A 12					
C.3	Radio Bursts Fixed Freq. Selected	506A 18	507A 23	508A 20	509A --	510A 18	511A 21	512A 20	513A 27
C.4d	Radio Bursts Spectral (Culgoora)	507A 68	508A 69	509A 65	510A 61	511A 66	512A 62	513A 75	
C.4e	Radio Bursts Spectral (Weissenau)	508A 95		509A 65	510A 61	511A 66	512A 62	513A 75	
C.4f	Radio Bursts Spectral (Sagamore Hill)	507A 68	508A 69	509A 65	510A 61	511A 66	512A 62	513A 75	
C.4i	Radio Bursts Spectral (Bleien)	---	---	---	---	---	---	---	
C.4k	Radio Bursts Spectral (Learmonth)	507A 68	508A 69	509A 65	510A 61	511A 66	512A 62	513A 75	
C.4l	Radio Bursts Spectral (Palahua)	507A 68	508A 69	509A 65	510A 61	511A 66	512A 62	513A 75	
C.6	Sudden Ionospheric Disturbances	507A 67	508A 67	509A 63	510A 60	511A 64	512A 60	513A 73	
D. GEOMAGNETIC & MAGNETOSPHERIC EVENTS									
D.1a	Geomagnetic Indices	507A 73	508A 79	509A 72	510A 67	511A 71	513A 91	513A 79	
D.1ba	27-day Chart of Kp Indices	507A 75	508A 81	509A 74	510A 69	511A 73	512A 70	513A 81	
D.1c	27-day Chart of C _g	510A 70	510A 70	510A 70	510A 70				
D.1d	Principal Magnetic Storms	507A 76	508A 82	509A 75	510A 71	511A 74	512A 71	513A 82	
D.1f	Sudden Commencements/Flare Effects	508A101	509A 83	511A 94	511A 94	512A 80			
D.1g	Equatorial Indices Dst	508A100	510A 89	511A 92	511A 93	512A 82			
F. COSMIC RAYS									
F.1a	Cosmic Ray Neutron Cts (Deep River)	507A 69	508A 78	509A 71	510A 66	511A 67	512A 67		
F.1b	Cosmic Ray Neutron Cts (Climax)	510A 86	509A 82	510A 88	510A 66	511A 67	512A 67		
F.1e	Cosmic Ray Neutron Cts (Alert)	507A 69	508A 78	509A 71	510A 66	511A 67	512A 67		
F.1h	Cosmic Ray Neutron Cts (Thule)	507A 69	508A 78	509A 71	510A 66	513A 88	513A 89	513A 78	
F.1i	Cosmic Ray Neutron Cts (Kiel)	507A 69	509A 82	510A 88	510A 66	511A 67	512A 67	513A 78	
F.1j	Cosmic Ray Neutron Cts (Tokyo)	507A 69	512A 76	512A 77	512A 78	512A 79	512A 67	513A 78	
F.1l	Cosmic Ray Neutron Cts (Huancayo)	510A 86	510A 87	510A 88	510A 66				
F.1m	Cosmic Ray Neutron Cts (Predigtstuhl)	Feb 86 in 500A 67							
H. MISCELLANEOUS									
H.60	IUWDS Alert Periods	506A 4	507A 5	508A 4	509A 4	510A 4	511A 5	512A 4	513A 5

The entry "507A 36" under Sep 1986, for example, means that the sunspot drawings for Sep 1986 appear in SOLAR-GEO-PHYSICAL DATA No. 507, Part I, and that they begin on page 36. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

C O N T E N T S

Comprehensive Reports

DATA FOR NOVEMBER 1986

Number 513 Part II

	Page
MEUDON CARTE SYNOPTIQUE	
Synoptic Solar Maps	4
Active Regions and Filaments.	5
SOLAR FLARES	
H-alpha Solar Flare Groups.	6- 9
Intervals of No Flare Patrol Observation.	10
Number of Solar Flares August 1966 - present.	11
SOLAR RADIO BURSTS AT FIXED FREQUENCIES.	12-15
INTERPLANETARY SOLAR PARTICLES AND PLASMA (Unavailable at time of publication.)	
SOLAR X-RAY RADIATION FROM GOES SATELLITE Graphs	16-20
Preliminary Event List.	21
Preliminary Daily Average Background.	22
MASS EJECTIONS FROM THE SUN (None reported.)	
ACTIVE PROMINENCES AND FILAMENTS	23-27
SOLAR IRRADIANCE (Unavailable at time of publication.)	

4
Nov 86

CARTE SYNOPTIQUE
ACTIVE REGIONS
CARRINGTON ROTATION 1782

(10 November to 7 December 1986)

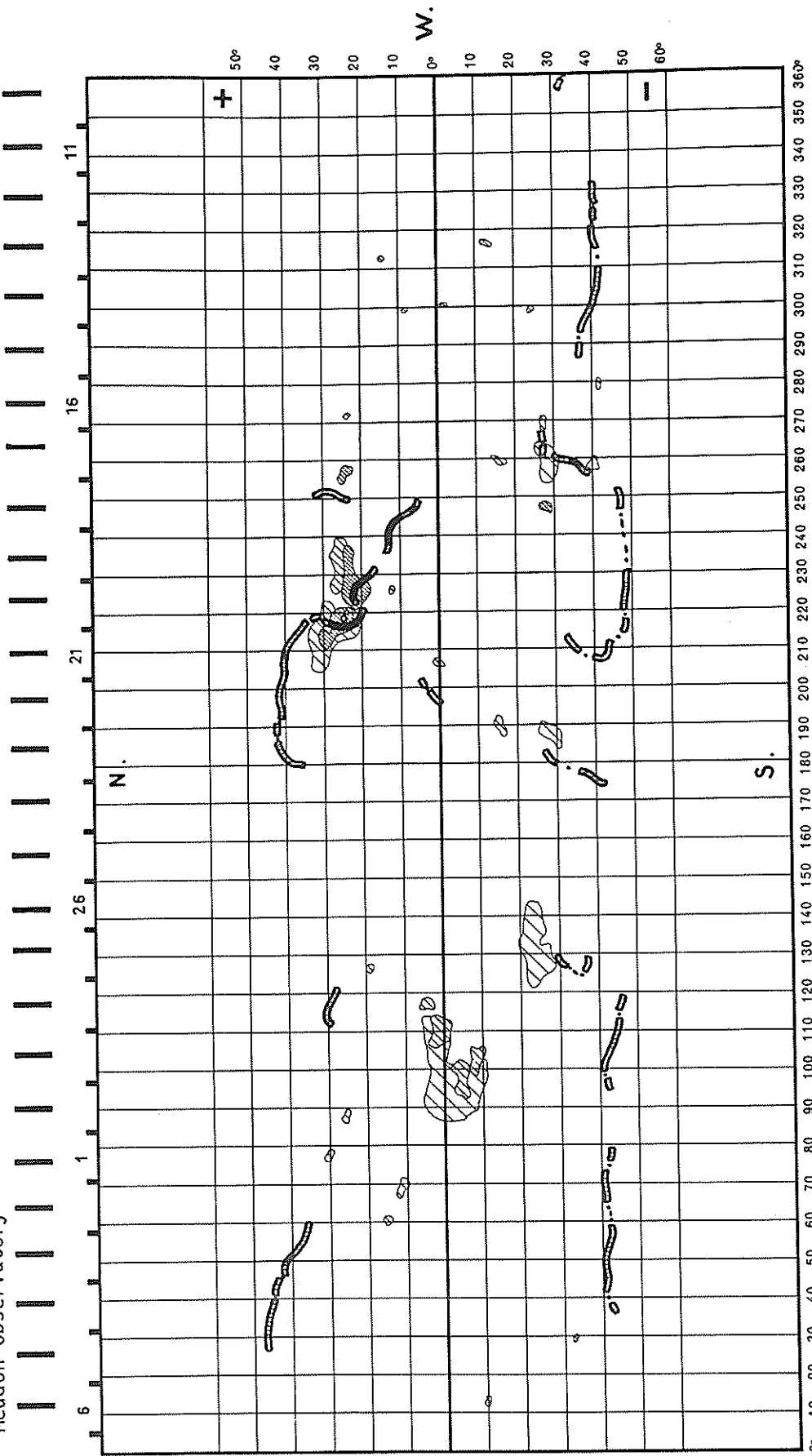
Region No.	Coordinates		Imp	Age at	Spotless Region	Region No. in Rotation 1781	Activity at West Limb
	Lat.	Long.		CMP (Days)			
1	12°S	316	1	-2	x		disappeared
2	27°S	270	1	-4	x		disappeared
3	15°S	260	1	-2	x		disappeared
4	24°N	257	1	+5	x		disappeared
5	28°S	247	1	-3	x		(?)
6	26°N	232	1	>6	x		decreasing
7	22°N	229	1	>6	x		decreasing
8	26°N	216	3	>6			decreasing
9	28°N	215	1	>6	x		decreasing
10	5°N	117	1	+2	x		disappeared
11	1°N	110	1	>6	x		decreasing
12	8°S	103	1	>6	x		dispersed
13	4°S	98	1	>6	x		dispersed
14	26°N	88	1	+2	x		disappeared

CARTE SYNOPTIQUE

CARRINGTON ROTATION NUMBER 1782
(10 November to 7 December 1986)

November 1986

Meudon Observatory



E.

Heliographic Longitude

H - ALPHA SOLAR FLARES

NOVEMBER 1986

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	See	Obs Type	Time (UT)	Area Measurement		Remarks
																	(10 ⁻⁶ Disk)	Corr (Sq Deg)	
0001		01	05422	0545*	0628	N01	E22	4755	11	2.9	46	SN					95	1.9	
	PURP	01	0542	0626	0656	N00	E24	4755	11	3.0	74	SN				0626	164	1.9	
	LEAR	01	0544	0545	0559	N02	E21	4755	11	2.8	15	SF		3	C		26		
0002		01	0758	0736*	0748	N00	E17	4754	11	2.6	1430	1N	C	3.1			228	4.5	EFHJ
	TACH	01	0720E		0812D	S02	E20	4754	11	2.8	52D	1N				0721	398	4.5	EJ
	SVTO	01	0732E	0736	0748	N02	E18	4754	11	2.6	16D	SN		2	C		61		FH
	LEAR	01	0758	0905	0929D	N00	E12	4754	11	2.2	91D	1F	C	3.1	3	C	224		F
		01	0930		0954	No Flare Patrol													
0003	SVTO	01	0956E	0959	1005	N00	E11	4754	11	2.2	9D	SF					24		
		01	1720		1732	No Flare Patrol													
		01	1840		1945	No Flare Patrol													
		01	2048		2108	No Flare Patrol													
		01	2129		2229	No Flare Patrol													
0004	TACH	02	0633E		0702D	S03	E08	4754	11	2.9	29D	SB				0639	124	1.3	D
0005		02	07332	07351	0746	N02	E16	4755	11	3.5	13	SN	C	1.1			64		EFH
	SVTO	02	0732E	0736	0748	N02	E18	4755	11	3.6	16D	SN	C	1.1	2	C	61		FH
	LEAR	02	0733	0735	0748	N03	E15	4755	11	3.4	15	SN	C	1.1	3	C	66		FH
	KANZ	02	0735	0735	0742	N02	E16	4755	11	3.5	7	SB		2					E
0006	SVTO	02	1039	1040	1051	S03	E05	4754	11	2.8	12	SF					69		F
		02	1051		1100	No Flare Patrol													
		02	1102		1110	No Flare Patrol													
		02	1112		1116	No Flare Patrol													
		02	1216		1229	No Flare Patrol													
		02	1239		1244	No Flare Patrol													
		02	1456		1531	No Flare Patrol													
0007	RAMY	02	1723	1723	1728	N02	E05	4755	11	3.1	5	SF					27		
0008		02	1728	1728	1737	N04	W04	4754	11	2.4	9	SN					42		
	PALE	02	1725E	1728U	1734	N03	W04	4754	11	2.4	9D	SF			2	C	25		
	RAMY	02	1728	1728	1740	N04	W05	4754	11	2.3	12	SN			3	C	58		
0009	RAMY	02	2056	2057	2104	S01	E06	4755	11	3.3	8	SF					42		
		02	2125		2159	No Flare Patrol													
		03	1509		1537	No Flare Patrol													
		03	2023		2038	No Flare Patrol													
		03	2056		2117	No Flare Patrol													
		03	2130		2201	No Flare Patrol													
0010	LEAR	04	0410	0412	0422	N02	W10	4755	11	3.4	12	SF					29		
0011		04	0702	0703	0724	N03	W11	4755	11	3.5	22	SN					24		EF
	LEAR	04	0702	0703	0709	N03	W11	4755	11	3.5	7	SF			3	C	24		F
	KANZ	04	0707E	0707U	0740	N03	W11	4755	11	3.5	33D	SN			1				E
0012		04	11003	11033	1111	N01	W12	4755	11	3.6	11	SN					30	.3	E
	HPR	04	1100	1106	1115	N01	W11	4755	11	3.6	15	SN				1106	30	.3	E
	KANZ	04	1103	1103	1107	N01	W14	4755	11	3.4	4	SF			1				
0013		04	11321	11361	1144	N01	W12	4755	11	3.6	12	SN					40	.4	E
	HPR	04	1132	1136	1147	N01	W11	4755	11	3.6	15	SN				1136	40	.4	E
	KANZ	04	1133	1137	1140	N01	W13	4755	11	3.5	7	SF			1				
0014	HPR	04	1148	1154	1200	S04	W02	4755	11	4.3	12	SF				1154	20	.2	CE
0015	HPR	04	1201	1205	1209	N01	W10	4755	11	3.7	8	SF				1205	10	.1	
0016	HPR	04	1210	1240	1320	S06	W12		11	3.6	70	SF				1240	30	.3	
0017	KANZ	04	1312	1312	1316	N02	W15	4755	11	3.4	4	SF							

8
Nov 86

H - ALPHA SOLAR FLARES

NOVEMBER 1986

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Dur Day	Imp (Min)	Opt	Xray	Obs See	Type	Area Measurement		Remarks	
																Time (UT)	Apparent (10 ⁻⁶ Disk)		Corr (Sq Deg)
			08 0605		0616														
			08 0625		0629														
0038		08	0628	06331	0638	N03	W62	4755	11	3.6	10	SF					18		
	LEAR	08	0628	0634	0639	N03	W63	4755	11	3.6	11	SF	3	C			17		
	SVTO	08	0630E	0633	0637	N03	W62	4755	11	3.6	7D	SF	3	C			20		
		08	2357		2400														
		09	0000		0041														
		09	0058		0106														
		09	0133		0219														
		09	0331		0503														
		09	1923		2343														
		10	1516		1547														
		10	1612		1618														
		11	0336		0407														
		11	2145		2206														
		12	1455		1519														
		12	1523		1901														
		12	1910		1950														
		12	2015		2124														
		12	2155		2201														
		13	0337		0455														
		13	0546		0602														
		13	0605		0620														
		13	0634		0637														
		13	1330		1335														
		13	1356		1406														
		13	1433		1447														
0039	RAMY	13	1724E	1725U	1729D	N31	E89		11	20.7	5D	SF	3	C				F	
		13	1730		1746														
		13	1912		1954														
		13	2103		2151														
		14	2012		2020														
0040		15	1139	11461	1200	N22	E66	4757	11	20.5	21	SN					17	F	
	KANZ	15	1139	1146	1158	N22	E66	4757	11	20.5	19	SF	2						
	RAMY	15	1139	1147	1202	N23	E65	4757	11	20.5	23	SN	3	C			17	F	
		15	1533		1552														
		15	1648		1652														
		15	1822		1844														
		15	1851		1901														
		16	1803		1815														
		16	1848		2204														
0041		17	08111	08111	0822	N26	E50	4757	11	21.2	11	SF					32		
	KANZ	17	0811	0811	0826	N25	E50	4757	11	21.2	15	SF	1						
	SVTO	17	0812	0812	0819	N26	E49	4757	11	21.1	7	SF	3	C			32		
		17	1530		1534														
		17	1644		1651														
		17	2108		2117														
0042	PALE	19	0226	0226	0227	N24	E20	4757	11	20.6	1	SF	3	C			24		
		20	0325		0342														
0043		20	08544	09151	0959	N24	E05	4757	11	20.7	65	1F	C	1.6			278	FU	
	SVTO	20	0854	0915	1015	N24	E00	4757	11	20.4	81	1N	C	1.6	3	C	402	UF	
	KANZ	20	0857	0915	0959	N24	E07	4757	11	20.9	62	1F			2			UF	
	LEAR	20	0858	0916	0944	N25	E09	4757	11	21.1	46	SF	C	1.6	3	C	155	UF	
		21	0642		0703														
		21	0917		1056														
		22	0955		1057														
0044	LEAR	23	0146	0146	0159	N27	W47	4758	11	19.4	13	SF	3	C			17		

H - ALPHA SOLAR FLARES

9
Nov 86

NOVEMBER 1986

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Apparent (10 ⁻⁶ Disk)	Measurement Corr (Sq Deg)	Remarks	
			23 0943		1059			No Flare Patrol												
			23 1548		1604			No Flare Patrol												
0045	HOLL	23	1852	1858	1910	S28	W66	4759	11	18.6	18	SF		3	C			20		
0046		23	1946	1955	1956	S28	W66	4759	11	18.7	10	SF						20		
	HOLL	23	1946	1955	1956	S28	W65	4759	11	18.7	10	SF		4	C			22		
	RAMY	23	1956E		1957D	S28	W66	4759	11	18.7	10	SF		3	C			19		
0047	HOLL	23	2038	2038	2107	S28	W69	4759	11	18.5	29	SF		4	C			46		
			23 2119		2151			No Flare Patrol												
			23 2218		2228			No Flare Patrol												
			24 0012		0017			No Flare Patrol												
			24 1007		1104			No Flare Patrol												
			24 1124		1130			No Flare Patrol												
0048	RAMY	24	1222	1226	1236	S30	W75	4759	11	18.6	14	SF		3	C			11		
0049	RAMY	24	1411E	1413	1417	S29	W76	4759	11	18.6	6D	SF		3	C			11		
			25 1323		1336			No Flare Patrol												
			26 0012		0016			No Flare Patrol												
			26 0438		0441			No Flare Patrol												
0050	HTPR	26	1008	1016	1031	N05	E27		11	28.4	23	SF			C	1016		30	.3	E
			26 1953		2028			No Flare Patrol												
0051		28	1154I	11582	1210	S04	E23		11	30.2	16	SN						94		FGH
	SVTO	28	1154	1200	1211	S03	E22		11	30.1	17	SF		3	C			94		FH
	KANZ	28	1155	1158	1209	S04	E24		11	30.3	14	SN		2						G
			28 1529		1539			No Flare Patrol												
			28 2031		2041			No Flare Patrol												
			29 0541		0547			No Flare Patrol												

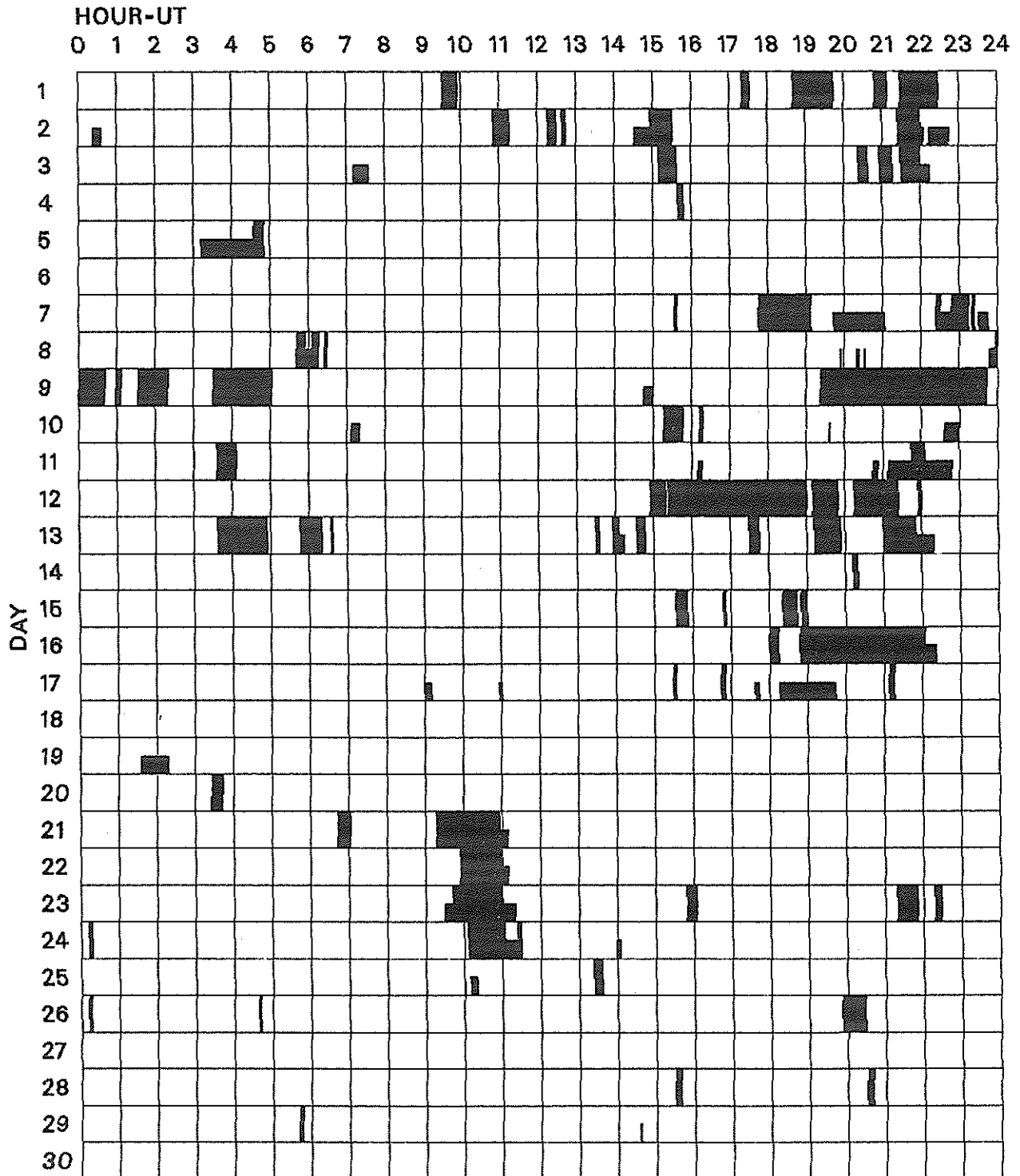
Remarks

- A = Eruptive prominence whose base is less than 90 degrees from central meridian.
- B = Probably the end of a more important flare.
- C = Invisible 10 minutes before.
- D = Brilliant point.
- E = Two or more brilliant points.
- F = Several eruptive centers.
- G = No visible spots in the neighborhood.
- H = Flare accompanied by high-speed dark filament.
- I = Active region very extended.
- J = Distinct variations of plage intensity before or after the flare.
- K = Several intensity maxima.
- L = Existing filaments show signs of sudden activity.
- M = White-light flare.
- N = Continuous spectrum shows effects of polarization.

- O = Observations have been made in the H and K lines of Ca II.
- P = Flare shows Helium D3 in emission.
- Q = Flare shows Balmer continuum in emission.
- R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
- S = Brightness follows disappearance of filament in same position.
- T = Region active all day.
- U = Two bright branches, parallel or converging.
- V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.
- W = Great increase in area after time of maximum intensity.
- X = Unusually wide H-alpha line.
- Y = System of loop-type prominences.
- Z = Major sunspot umbra covered by flare.

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

NOVEMBER 1986



Times of no flare patrol, shown here as shaded areas, combine reports from the observatories listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind, that is, of neither visual nor cinematographic; portions of a panel with only the bottom half shaded mark times of strictly visual patrol.

Abastumani
Bucharest
Holloman

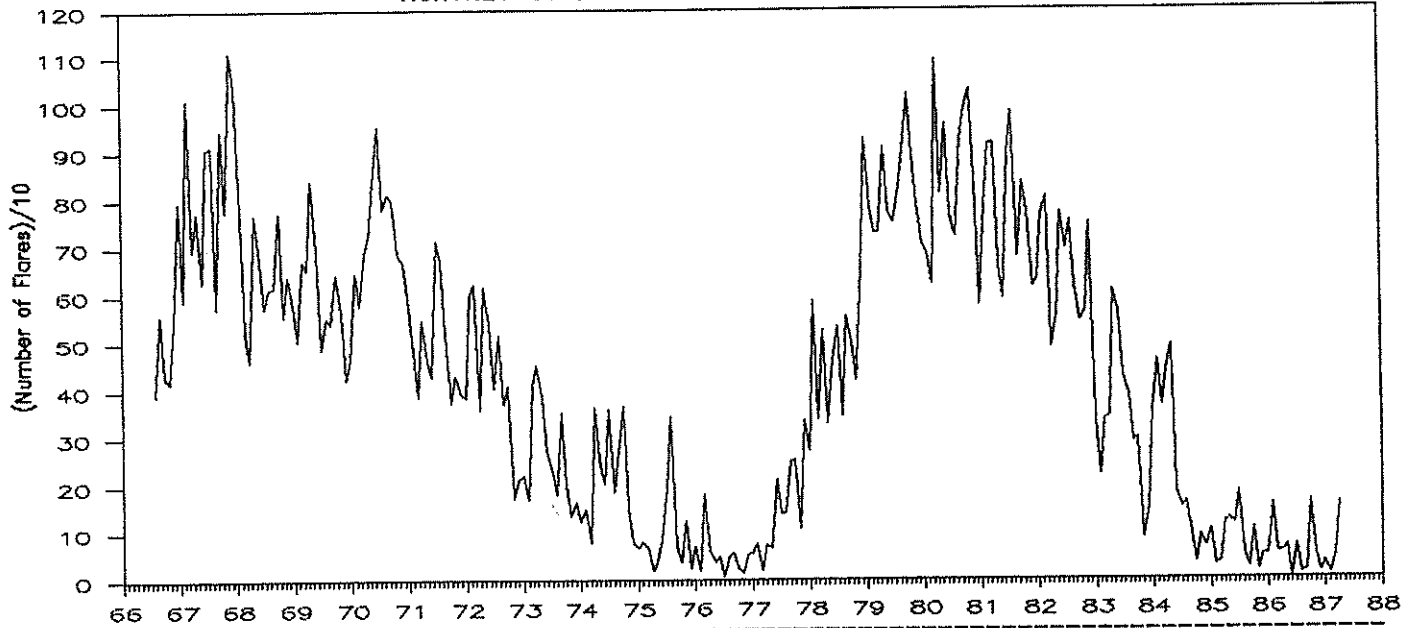
Haute-Provence
Istanbul
Kanzelhoehe
Kharkov

Learmonth
Lvov
Manila
Mitaka

Palehua
Purple Mt.
Ramey
San Vito

Tashkent
Urumqi
Voroshilov
Wendelstein

MONTHLY COUNTS OF GROUPED SOLAR FLARES*



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1966								391	558	432	417	543	2341
1967	796	589	1009	694	771	629	907	911	573	946	775	1109	9709
1968	1037	773	519	460	768	697	573	611	616	772	556	640	8022
1969	581	504	669	655	839	694	489	551	540	643	566	422	7153
1970	466	646	578	688	722	836	954	780	811	797	687	667	8632
1971	598	505	387	546	461	430	713	673	518	375	431	394	6031
1972	384	599	621	361	614	541	404	515	371	408	175	210	5203
1973	221	171	410	453	388	270	232	182	353	201	136	163	3180
1974	127	148	79	364	255	204	360	187	270	366	153	81	2594
1975	68	82	69	19	42	85	196	346	68	38	127	25	1165
1976	69	18	180	60	38	48	6	47	57	23	13	55	614
1977	54	77	18	76	64	210	140	140	250	252	107	336	1724
1978	274	588	338	526	330	460	533	346	554	499	418	648	5514
1979	926	781	731	731	907	772	750	821	901	1018	888	786	10012
1980	703	689	621	1092	811	956	763	720	924	988	1027	838	10132
1981	578	782	914	915	658	592	893	982	680	836	773	615	9218
1982	631	766	803	490	553	769	696	753	615	544	564	748	7932
1983	332	220	337	346	609	561	427	389	289	298	88	152	4048
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	119	129	116	185	53	25	108	19	50	975
1986	51	158	54	56	68	3	70	10	14	164	51	12	711
1987	35	8	49	160									252

*Flare counts are preliminary from July 1982 to present. In particular, the monthly totals for the last 6 months may change significantly, as more sites submit their reports. The term "grouped" means that observations of the same event by different stations have been lumped together and counted as one.

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1986

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
01	204	IZMI	43 NS	0700.0		300.0	3.0				
	260	ONDR	44 NS	0819.0E	1151.5	371.0D					
	536	ONDR	43 NS	1120.0	1144.5	35.0	20.0				
	245	SGMR	44 NS	1139.0E	1142.0	207.0D	22.0			QL=5 ST=2 TYP=1	
	200	H IRA	44 NS	2100.0E	0030.0	660.0D	40.0	25.0			
	245	LEAR	43 NS	2156.0	0203.0	742.0D	120.0				QL=5 ST=2 TYP=1
	245	SVTO	4 S/F	0010.0E	0810.0		21.0				QL=1 ST=2 TYP=3
	245	LEAR	47 GB	0025.0E	0025.0	4.0D	100.0				QL=5 ST=2 TYP=5
	2000	TYKW	32 ABS	0045.0	0120.0	120.0	-1.5	-0.7			
	3750	TYKW	32 ABS	0045.0	0130.0	120.0	-1.5	-0.7			
	9400	TYKW	32 ABS	0050.0	0120.0	110.0	-2.0	-1.0			
	2000	TYKW	32 ABS	0320.0	0400.0	150.0	-2.0	-1.0			
	3750	TYKW	32 ABS	0330.0	0405.0	140.0	-2.0	-1.0			
	9400	TYKW	32 ABS	0355.0U	0435.0U	110.0U	-3.0	-1.5U			RAIN
	650	GORK	21 GRF	0551.0	0907.0	196.0D	17.0	.8			
	3100	CRIM	21 GRF	0600.0	0905.0	185.0	8.0	.3			
	650	GORK	41 F	0738.0	0738.4	2.1	5.0				
	950	GORK	4 S/F	0738.0	0738.5	4.4	11.0				
	650	GORK		0740.5	0740.9	2.1	1.5				
	9300	KISV	20 GRF	0755.0	0913.7	240.0	1.3				
	2950	GORK	20 GRF	0756.9	0830.0	180.0	5.9				
	5900	KISV	21 GRF	0759.0	0905.0	240.0	1.3				
	9100	GORK	20 GRF	0759.8	0909.0	150.6	11.5				
	3100	CRIM	4 S/F	0800.0	0905.0	120.0D	8.0				QL= ST= TYP=3
	3100	CRIM	1 S	0807.0	0807.5	20.0	3.0	.1			
	2950	GORK	2 S/F	0818.0	0818.0	1.5	2.3				
	3000	POTS	40 F	0912.9	0914.5	33.0	2.5				
	430	KRAK	2 S/F	0913.0U	0913.3U	10.0U	2.9	1.2			
	810	KRAK	2 S/F	0913.0U	0913.3U	10.0U	2.4	1.3			
	410	LEAR	8 S	0913.0E	0913.0	1.0D	27.0				QL=5 ST=2 TYP=3
	610	LEAR	47 GB	0913.0E	0913.0	1.0D	91.0				QL=5 ST=2 TYP=5
	610	LEAR	47 GB	0913.0E	0913.0	1.0D	91.0				QL=3 ST=2 TYP=5
	536	ONDR	46 C	0913.0	0913.5	2.2	15.0				
	1470	POTS	40 F	0913.0	0913.5	3.5	2.3				
	950	GORK	4 S/F	0913.2	0913.6	2.0	12.4				
	930	BORD	46 C	0913.2	0913.6	2.0	11.0	4.0			
	5900	KISV		0913.2	0913.7	3.5	.2				
	650	GORK	46 C	0913.2	0913.8U	3.2	80.0				
	650	GORK		0913.2	0914.3		13.0				
	33	UPIC	2 S/F	0913.8	0914.5	1.3					
	808	ONDR	4 S/F	0914.0	0914.5	1.0					
	29	UPIC	4 S/F	0914.1	0915.0	1.3					
	245	SVTO	47 GB	1149.0E	1151.0	5.0D	53.0				QL=1 ST=2 TYP=5
	2800	OTTA	20 GRF	1250.0E		400.0D	5.9				
	245	SVTO	47 GB	1259.0E	1300.0	2.0D	34.0				QL=1 ST=2 TYP=5
33	UPIC	4 S/F	1330.6	1330.8	9.0						
29	UPIC	4 S/F	1330.6	1330.8	1						
245	PALE	47 GB	2052.0E	2052.0	887.0D	280.0				QL=5 ST=2 TYP=5	
02	245	SVTO	44 NS	0000.0E	0943.0	670.0D	38.0			QL=1 ST=2 TYP=1	
	204	IZMI	44 NS	0700.0E		300.0D	3.0				
	260	ONDR	43 NS	0827.0		335.0D	7.0				
	245	PALE	43 NS	1734.0	0205.0	583.0D	91.0			QL=5 ST=2 TYP=1	
	200	H IRA	44 NS	2100.0E	2236.0	300.0D	7.0	4.0			
	245	LEAR	43 NS	2156.0	2312.0	743.0D	14.0			QL=5 ST=2 TYP=1	
	3750	TYKW	20 GRF	0115.0	0125.0	70.0	1.0	.5			
	245	LEAR	47 GB	0121.0E	0121.0	124.0D	85.0			QL=5 ST=2 TYP=5	
	245	PALE	49 GB	0125.0E	0127.0	3.0D	330.0			QL=5 ST=2 TYP=6	
	245	LEAR	49 GB	0152.0E	0154.0	3.0D	63.0			QL=5 ST=2 TYP=6	
	245	PALE	47 GB	0222.0E	0222.0	1.0D	120.0			QL=5 ST=2 TYP=5	
	245	LEAR	47 GB	0222.0E	0222.0	1.0D	130.0			QL=5 ST=2 TYP=5	
	245	LEAR	49 GB	0247.0E	0248.0	1.0D	110.0			QL=5 ST=2 TYP=6	
	245	LEAR	47 GB	0254.0E	0254.0	1.0D	110.0			QL=5 ST=2 TYP=5	
	245	LEAR	47 GB	0303.0E	0303.0	4.0D	180.0			QL=5 ST=2 TYP=5	
	245	PALE	47 GB	0303.0E	0303.0	1.0D	130.0			QL=5 ST=2 TYP=5	
	245	LEAR	47 GB	0418.0E	0418.0	4.0D	140.0			QL=5 ST=2 TYP=5	
	245	LEAR	47 GB	0505.0E	0505.0	2.0D	220.0			QL=5 ST=2 TYP=5	
	3750	TYKW	20 GRF	0550.0	0620.0	80.0	2.0	1.0			
	2000	TYKW	20 GRF	0550.0	0630.0	80.0D	3.0	2.0D			
	245	LEAR	47 GB	0644.0E	0644.0		170.0				QL=5 ST=2 TYP=5
	245	LEAR	47 GB	0714.0E	0714.0	1.0D	130.0				QL=5 ST=2 TYP=5

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1986

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
02	245	LEAR	47 GB	0731.0E	0731.0		180.0			QL=5 ST=2 TYP=5
	9300	KISV	20 GRF	0733.0	0738.5	25.0	3.0			
	5900	KISV	20 GRF	0733.4	0735.5	26.0	2.0			
	245	LEAR	47 GB	0756.0E	0756.0	1.0D	78.0			QL=5 ST=2 TYP=5
	930	BORD	8 S	0920.0	0920.1	.2	14.0	2.0		
	810	KRAK	8 S	1005.2	1005.4	.6	8.0			
	430	KRAK	1 S	1028.8	1029.0	.6	3.0	1.0		
	810	KRAK	8 S	1227.9	1228.0	.3	8.0			
	2800	OTTA	20 GRF	1250.0E	1419.0	136.0D	1.7			
	245	PALE	47 GB	1725.0E	1727.0	8.0D	290.0			QL=3 ST=2 TYP=5
	410	PALE	47 GB	1725.0E	1727.0	8.0D	52.0			QL=3 ST=2 TYP=5
	245	SGMR	47 GB	1727.0E	1727.0	1.0D	270.0			QL=5 ST=2 TYP=5
410	SGMR	47 GB	1727.0E	1727.0	1.0D	58.0			QL=5 ST=2 TYP=5	
2800	OTTA	3 S	1727.2	1727.7	1.0	17.6	3.5			
03	3750	TYKW	20 GRF	0130.0	0215.0	110.0	1.0	.5		
	2000	TYKW	20 GRF	0150.0	0215.0	60.0	1.0	.5		
	9400	TYKW	5 S	0324.5	0325.0	1.5	7.0	2.0		
	245	LEAR	8 S	0443.0E	0443.0	1.0D	41.0			QL=5 ST=2 TYP=3
	204	IZMI	4 S/F	1112.8	1112.9	1.4	140.0	70.0		
04	260	ONDR	44 NS	0730.0E	1107.0	390.0D	5.0			
	245	LEAR	47 GB	0701.0E	0701.0	2.0D	73.0			QL=5 ST=2 TYP=5
	204	IZMI	7 C	0701.3	0701.6	4.6	.8			
	810	KRAK	8 S	1124.0	1124.0	.3	6.0			
	2800	OTTA	20 GRF	1250.0	1400.0	250.0D	3.4	2.1		
	2800	OTTA	22 GRF	1718.0	1833.0	152.0	3.8	1.9		
05	430	KRAK	4 S/F	0906.3	0907.4	2.0	24.0			
	430	KRAK	41 F	1006.2	1011.5	11.0	15.0	4.0		
	430	KRAK	41 F	1042.5	1044.0	2.5	15.0	4.0		
	430	KRAK	42 SER	1048.2	1048.4	2.2	40.0			
	430	KRAK		1048.2	1050.2		36.0			
	245	SVTO	47 GB	1136.0E	1136.0		180.0			QL=1 ST=2 TYP=5
	245	SVTO	47 GB	1213.0E	1213.0	1.0D	310.0			QL=1 ST=2 TYP=5
	33	UPIC	45 C	1256.7	1258.3	2.3				
	29	UPIC	45 C	1257.0	1257.5	2.3				
	930	BORD	41 F	1404.3	1405.7	1.6	13.0	2.0		
2000	TYKW	20 GRF	2345.0	2350.0	45.0	1.0	.5			
3750	TYKW	20 GRF	2346.0	2350.0	40.0	1.5	.7			
06	200	HIRA	43 NS	0240.0	0546.0	280.0D	10.0	5.0		
	245	LEAR	44 NS	0542.0E	0807.0	180.0D	55.0			QL=5 ST=2 TYP=1
	204	IZMI	43 NS	0700.0		120.0	8.0			
	245	LEAR	43 NS	2154.0	0331.0	747.0D	17.0			QL=5 ST=2 TYP=1
	3750	TYKW	21 GRF	0210.0	0235.0	130.0	1.5	.7		
	200	HIRA	46 C	0220.1	0221.1	2.0	1700.0	230.0		
	100	HIRA	46 C	0220.5	0221.1	1.3	1000.0D	430.0D		
	500	HIRA	45 C	0220.7	0220.7	1.5	3.0	1.0		
	2000	TYKW	5 S	0221.0	0221.7	3.0	5.0	1.5		
	3750	TYKW	5 S	0221.0	0221.7	1.5	3.0	1.5		
	1000	TYKW	45 C	0221.0	0222.1	4.0	16.0	1.0		
	245	LEAR	47 GB	0221.0E	0221.0	1.0D	380.0			QL=5 ST=2 TYP=5
	2840	PEKG	1 S	0221.0	0221.6	2.0	6.4	2.2		
	3750	TYKW	29 FBI	0222.5		4.0	1.0	.5		
	2840	PEKG	1 S	0228.0	0229.0	2.0	2.6	1.6		
	1000	TYKW	45 C	0235.0	0236.5	2.0	9.0	1.0		
	3750	TYKW	20 GRF	0255.0	0305.0	75.0	1.0	.5		
	3750	TYKW	20 GRF	0525.0	0541.0	45.0	2.0	1.0		
	2000	TYKW	20 GRF	0530.0	0540.0	40.0	1.0	.5		
	9400	TYKW	20 GRF	0530.0	0543.0	40.0	3.0	1.5		
	204	IZMI	2 S/F	0706.4	0706.5	.6	80.0	40.0		
	204	IZMI	21 GRF	0817.4	0817.8	1.0	250.0	120.0		
	33	UPIC	45 C	0817.5	0818.0	3.1				
29	UPIC	46 C	0817.6	0818.0	2.5U					
650	GORK	46 C	0817.8	0818.8		8.9				
950	GORK	46 C	0818.0	0819.6	5.4	11.6				
950	GORK		0818.0	0820.3		9.0				
1470	POTS	40 F	0818.0U	0823.1	6.2U	.4				
3000	POTS	20 GRF	0818.0U	0823.5	5.5U	.3				
2950	GORK	20 GRF	0818.2	0822.4	7.0	4.2				

SOLAR RADIO EMISSION
OUTSTANDING OCCURRENCES

NOVEMBER 1986

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
06	430	KRAK	2 S/F	0910.0	0910.2	3.0	19.0	3.0		
	810	KRAK	2 S/F	0931.0	0931.5	1.7	19.0	4.0		
	810	KRAK	8 S	1005.6	1005.7	.2	.6			
	810	KRAK	8 S	1008.6	1008.6	.3	.6			
	2800	OTTA	22 GRF	1720.0	1820.0	125.0	2.1	.8		
	100	HIRA	46 C	2158.7	2201.5	5.2	670.0	120.0		
	2800	OTTA	1 S	2159.0	2201.8	55.0	4.3	1.7		
	2700	PENT	1 S	2159.0	2201.8	5.5	4.3	1.7		
	200	HIRA	41 F	2200.0	2200.7	4.8	570.0			
	245	PALE	47 GB	2201.0E	2203.0	2.00	48.0			QL=5 ST=2 TYP=5
500	HIRA	45 C	2202.5	2203.0	1.5	18.0	4.0			
07	245	SGMR	44 NS	1147.0E	1504.0	549.00	220.0			QL=5 ST=1 TYP=1
	9400	TYKW	20 GRF	0135.0	0205.0	70.0	2.0	1.0		
	3750	TYKW	20 GRF	0135.0	0205.0	70.0	1.0	.5		
	3750	TYKW	21 GRF	0542.0	0549.0	70.0	1.5	.7		
	2000	TYKW	21 GRF	0545.0	0615.0	90.0	1.5	.7		
	3750	TYKW	20 GRF	0620.0	0624.0	30.0	1.0	.5		
	200	HIRA	42 SER	0622.4	0623.4	4.0	74.0			
	100	HIRA	45 C	0622.5	0623.6	2.0	820.0	390.0		
	2950	GORK	1 S	0622.9	0623.4	1.7	11.0			
	2000	TYKW	5 S	0623.0	0623.4	1.0	4.0	1.5		
	1000	TYKW	45 C	0623.0	0623.5	2.0	3.0	1.0		
	950	GORK	1 S	0623.1	0623.5	.9	5.0			
	2000	TYKW	29 PBI	0624.0		5.0	1.0	.5		
	245	SVTO	47 GB	1502.0E	1504.0	2.00	39.0			QL=1 ST=2 TYP=5
	245	SGMR	47 GB	1503.0E	1504.0	2.00	220.0			QL=5 ST=2 TYP=5
08	5900	KISV	2 S/F	0624.6	0627.8	4.5	4.0			
	245	LEAR	8 S	0626.0E	0626.0	2.00	20.0			QL=5 ST=2 TYP=3
	2000	TYKW	45 C	0627.0	0627.8	2.0	4.0	1.5		
	3750	TYKW	45 C	0627.0	0627.9	3.0	2.0	.5		
	610	LEAR	4 S/F	0627.0E	0627.0		15.0			QL=5 ST=2 TYP=3
	410	LEAR	8 S	0627.0E	0627.0	1.00	14.0			QL=5 ST=2 TYP=3
	9300	KISV	2 S/F	0627.0	0627.7	4.0	3.0			
	500	HIRA	8 S	0627.1	0627.6	.6	18.0			
	650	GORK	4 S/F	0627.1	0627.6	.8	25.0			
	1000	TYKW	45 C	0627.4	0627.6	1.0	15.0	2.0		
	2950	GORK	1 S	0627.4	0627.8	2.3	1.6	.8		
	950	GORK	2 S/F	0627.5	0627.7	.4	19.7			
	2000	TYKW	29 PBI	0629.0		8.0	1.0	.5		
09	9400	TYKW	20 GRF	0300.0	0320.0	60.0	2.0	1.0		
	3750	TYKW	45 C	0305.0	0306.5	4.0	2.0	1.0		
	500	HIRA	8 S	0305.1	0305.1	9.0	6.0			
	3750	TYKW	29 PBI	0309.0		15.0	1.0	.5		
	430	KRAK	2 S/F	0950.5	0951.0	1.0	7.0	2.0		
	33	UPIC	2 S/F	1403.0	1403.5	1.0				
29	UPIC	2 S/F	1403.0	1403.6	1.0					
12	810	KRAK	8 S	0824.3	0824.4	.2	6.0			
	9300	KISV	1 S	0934.7	0934.9	.5	3.0			
13	410	SVTO	4 S/F	1348.0E	1348.0		36.0	2.5		QL=1 ST=1 TYP=3
	1415	SVTO	47 GB	1348.0E	1348.0		100.0			QL=1 ST=1 TYP=5
	245	SVTO	47 GB	1348.0E	1348.0		180.0			QL=1 ST=2 TYP=5
	2800	OTTA	21 GRF	1416.0	1725.0	500.0	4.9	2.5		
	2800	OTTA	20 GRF	1815.0	1843.0	88.0	2.2	1.1		
15	2950	GORK	1 S	1031.7	1032.3	2.0	7.7	3.6		
	9100	GORK	1 S	1032.1	1032.5	2.8	7.0	3.0		
16	9100	GORK	1 S	0615.7	0616.3	1.0	4.5	2.0		
	2950	GORK	1 S	0615.8	0616.3	1.3	7.4	3.5		
	33	UPIC	1 S	0731.3	0731.5	.7				
	29	UPIC	1 S	0731.3	0731.6	.3				
	33	UPIC	1 S	0735.6	0735.8	.5				
	29	UPIC	1 S	0735.7	0735.9	.6				
	245	SVTO	47 GB	1309.0E	1309.0	1.00	64.0			QL=1 ST=3 TYP=5
17	810	KRAK	42 SER	1321.0	1321.7	5.0	40.0			

S O L A R R A D I O E M I S S I O N
O U T S T A N D I N G O C C U R R E N C E S

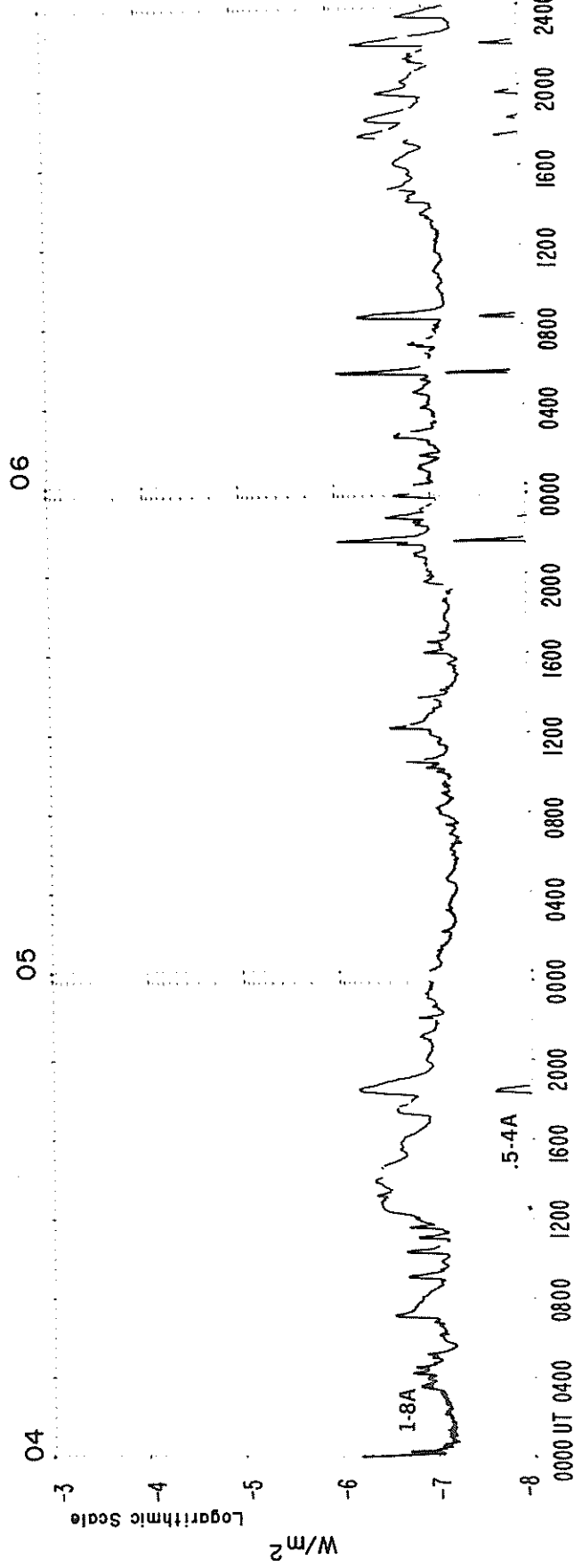
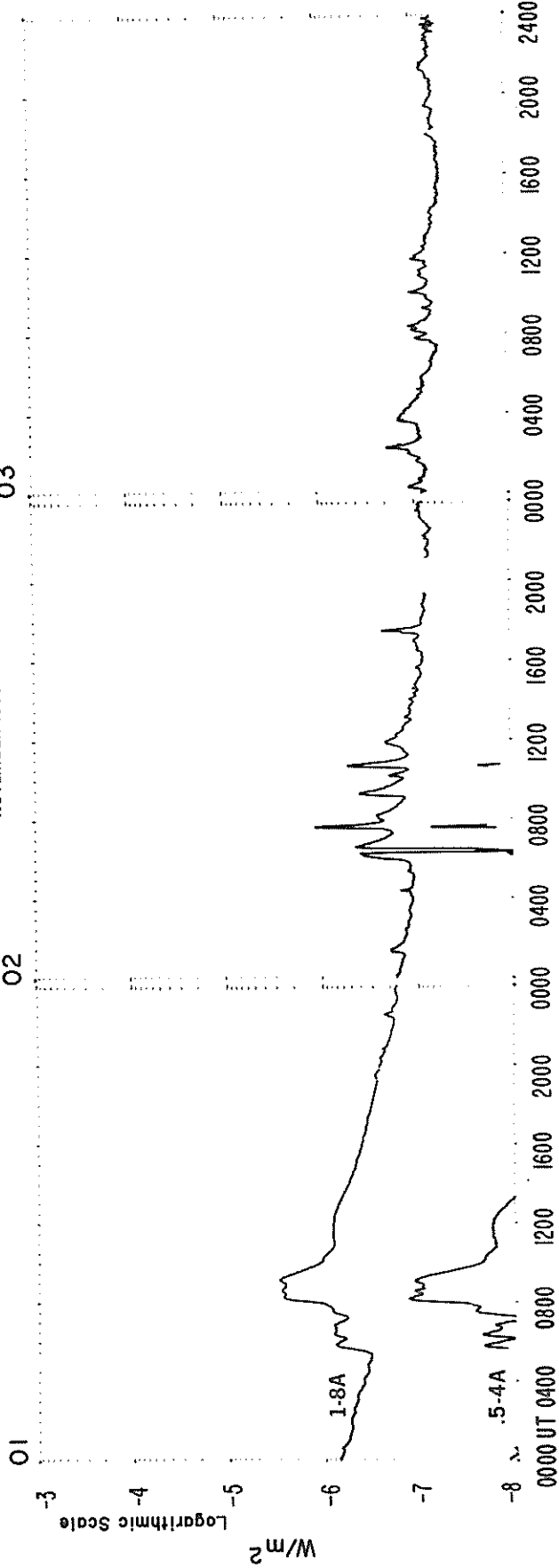
15
Nov 86

NOVEMBER 1986

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 ⁻²² W/m ² Hz)	Mean (W/m ² Hz)		
17	L	810	KRAK	1321.0	1325.2		57.0			
18		810	KRAK	8 S	0838.0	0838.0	.8	9.0		
		810	KRAK	8 S	0949.0	0949.2	.5	11.0		
		810	KRAK	41 F	1023.2	1023.2	2.7	9.0	2.0	
		810	KRAK	8 S	1046.0	1046.0	.5	12.0		
		810	KRAK	41 F	1217.7	1217.8	1.5	9.0	4.0	
		810	KRAK	42 SER	1257.7	1257.8	13.0	8.0		
		430	KRAK	1 S	1259.3	1259.3	5.0	6.0		
		430	KRAK	42 SER	1331.5	1334.2	19.5	170.0		
	810	KRAK	42 SER	1344.0	1345.4	11.5	70.0			
19		2000	TYKW	20 GRF	0145.0	0225.0	120.0	1.5	.7	
		3750	TYKW	20 GRF	0150.0	0226.0	110.0	1.5	.7	
		536	ONDR	46 C	0830.0U	0855.0U	30.0U	108.0		
		810	KRAK	2 S/F	0910.0	0911.5	2.5	27.0	20.0	
		930	BORD	45 C	0910.0	0911.7	3.5	380.0	7.0	
		260	ONDR	45 C	0910.0	0912.0	3.5			
	810	KRAK	8 S	0930.5	0930.5	.5	14.0			
20		650	GORK	21 GRF	0833.4	0853.7	41.1	3.5	1.6	
		5900	KISV	20 GRF	0845.0	0923.5	84.0			
		3100	CRIM	20 GRF	0846.7	0916.4	84.0	7.0	2.0	
		930	BORD	8 S	0848.4	0848.7	.3	2.4	2.0	
		2950	GORK	20 GRF	0849.0	0924.0	107.0	6.6		
		9300	KISV	20 GRF	0856.0	0923.5	69.0	9.0		
		9100	GORK	20 GRF	0856.6	0913.5	72.0	7.0	3.0	
		2950	GORK	22 GRF	0902.3	0905.5	13.3	.8		
		650	GORK	46 C	0902.6	0904.0	7.1	9.9		
		650	GORK		0902.6	0907.7		1.6		
		930	BORD	8 S	0957.4	0957.6	.4	20.0	2.0	
		9400	TYKW	20 GRF	2205.0	2215.0	60.0	6.0	3.0	
		3750	TYKW	20 GRF	2205.0	2215.0	100.0	2.0	1.0	
21		610	LEAR	47 GB	0056.0E	0056.0		56.0		QL=3 ST=2 TYP=5
		245	LEAR	49 GB	0839.0E	0840.0	2.0D	70.0		QL=5 ST=2 TYP=6
		2800	OTTA	1 S	1515.0	1515.2	1.0	6.1	3.7	
22		260	ONDR	46 C	1027.0	1030.1	8.0	54.0		
		536	ONDR	8 S	1031.0	1031.0	.3	10.0		
		810	KRAK	8 S	1212.0	1212.0	.2	27.0		
23		245	LEAR	43 NS	2149.0	2325.0	762.0D	12.0		QL=5 ST=2 TYP=1
		810	KRAK	42 SER	1345.2U	1346.0U	4.3U	29.0		
		810	KRAK		1345.2U	1349.2U		24.0		
24		260	ONDR	44 NS	0810.0E	1046.5	324.0D	30.0		
		245	LEAR	43 NS	2149.0	0732.0	763.0D	10.0		QL=5 ST=2 TYP=1
		810	KRAK	8 S	0808.6	0808.7	.8	82.0		
		810	KRAK	8 S	0829.5	0829.6	.5	14.0		
		810	KRAK	8 S	0838.3	0838.4	.5	19.0		
		810	KRAK	8 S	0842.4	0842.5	.5	17.0		
		536	ONDR	8 S	1046.0	1046.2	.5	39.0		
		808	ONDR	8 S	1046.5	1046.8	.5			
25		260	ONDR	44 NS	0757.0E		338.0D	3.0		
		200	HIRA	44 NS	2136.0E	2346.0	580.0D	12.0	8.0	
		430	KRAK	42 SER	1338.5	1350.2U	21.0D	190.0D		
		930	BORD	8 S	1410.2	1410.2	.2	20.0	2.0	
26		430	KRAK	42 SER	0951.5	0955.0	10.5	140.0		
28		930	BORD	8 S	1103.0	1103.1	.2	14.0	2.0	
		930	BORD	8 S	1141.0	1141.2	.3	45.0	2.0	
		930	BORD	46 C	1249.0	1249.2	.4	170.0	2.0	
30		536	ONDR	40 F	0925.2	0925.5	3.0	22.0		

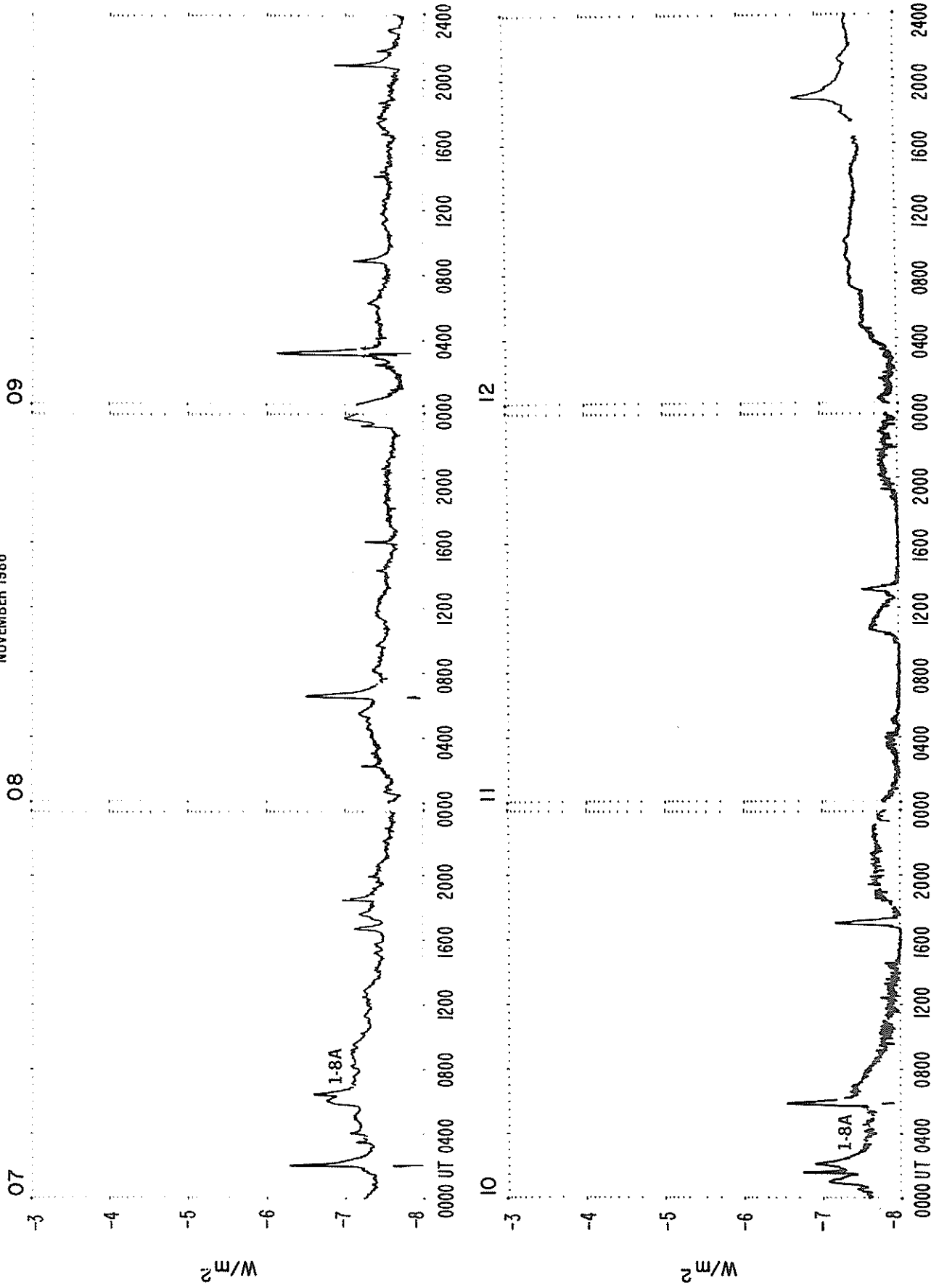
GOES 6 X-RAYS

NOVEMBER 1986



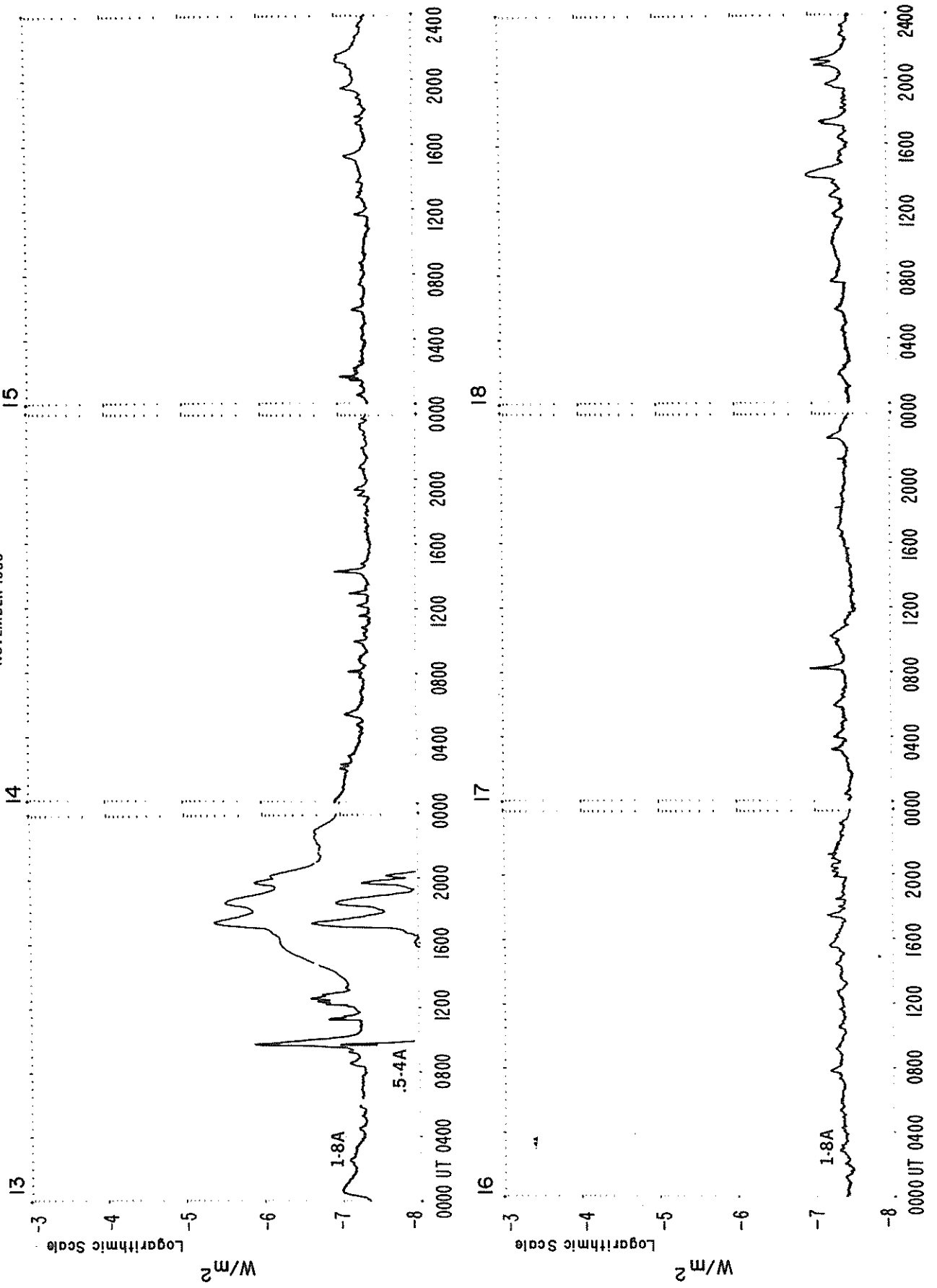
GOES 6 X-RAYS

NOVEMBER 1986



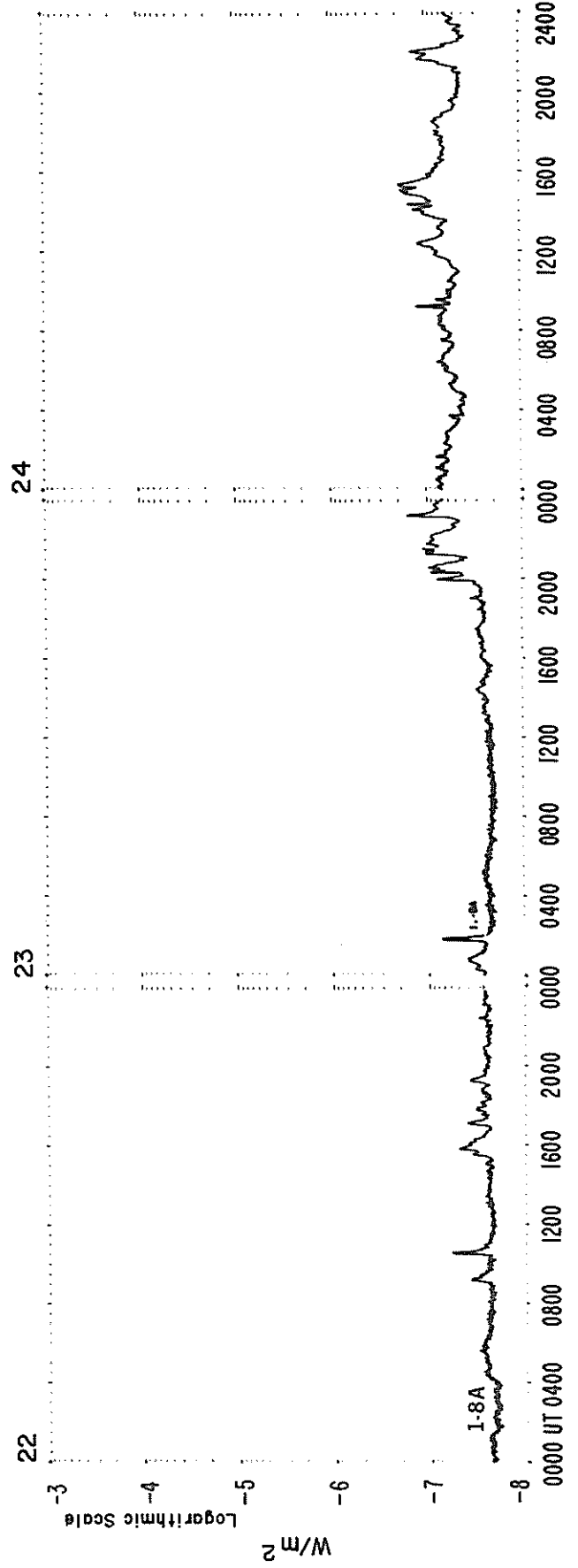
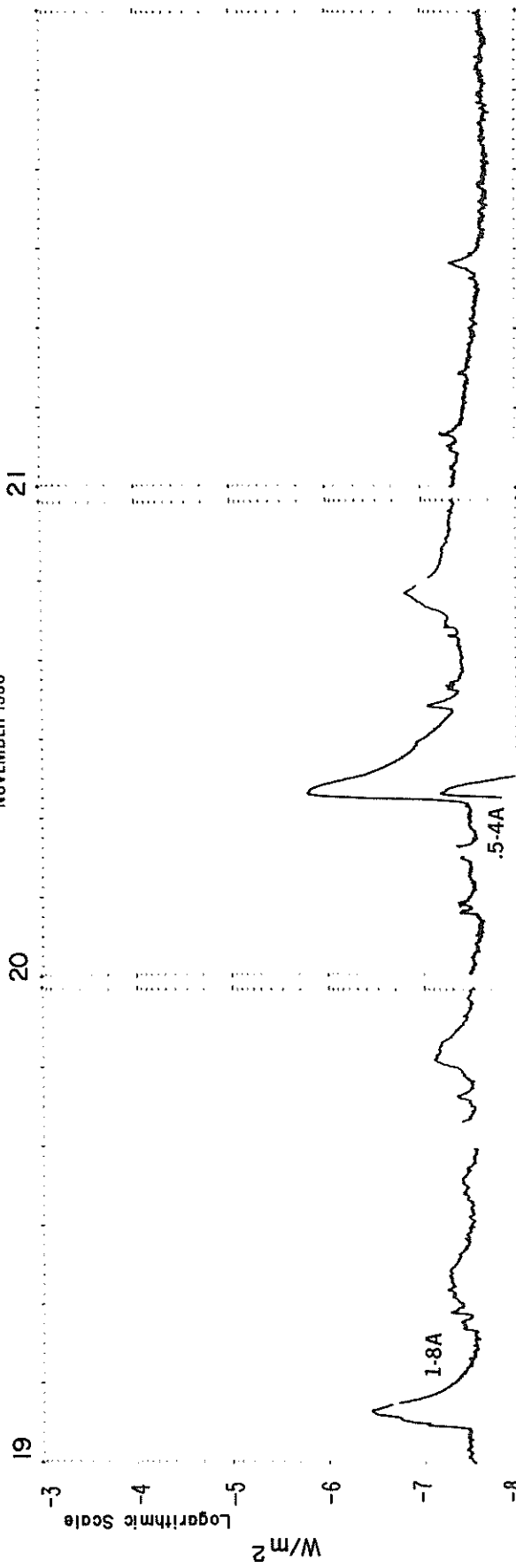
GOES 6 X-RAYS

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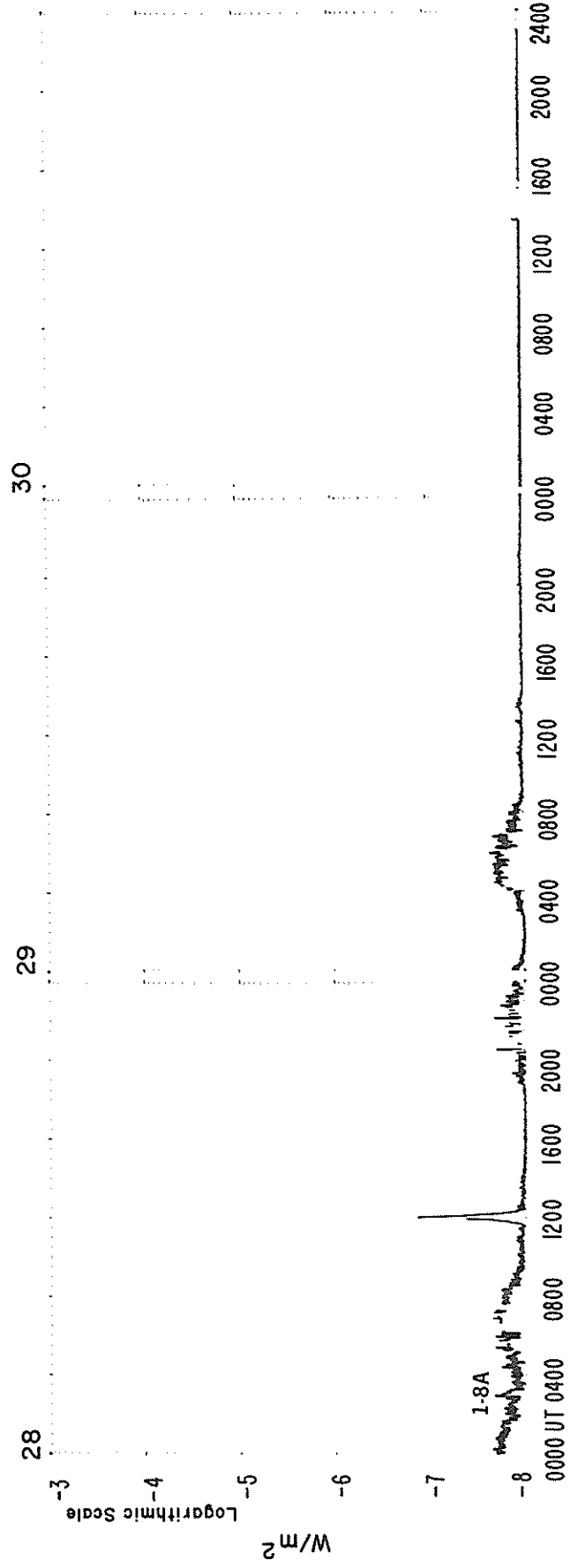
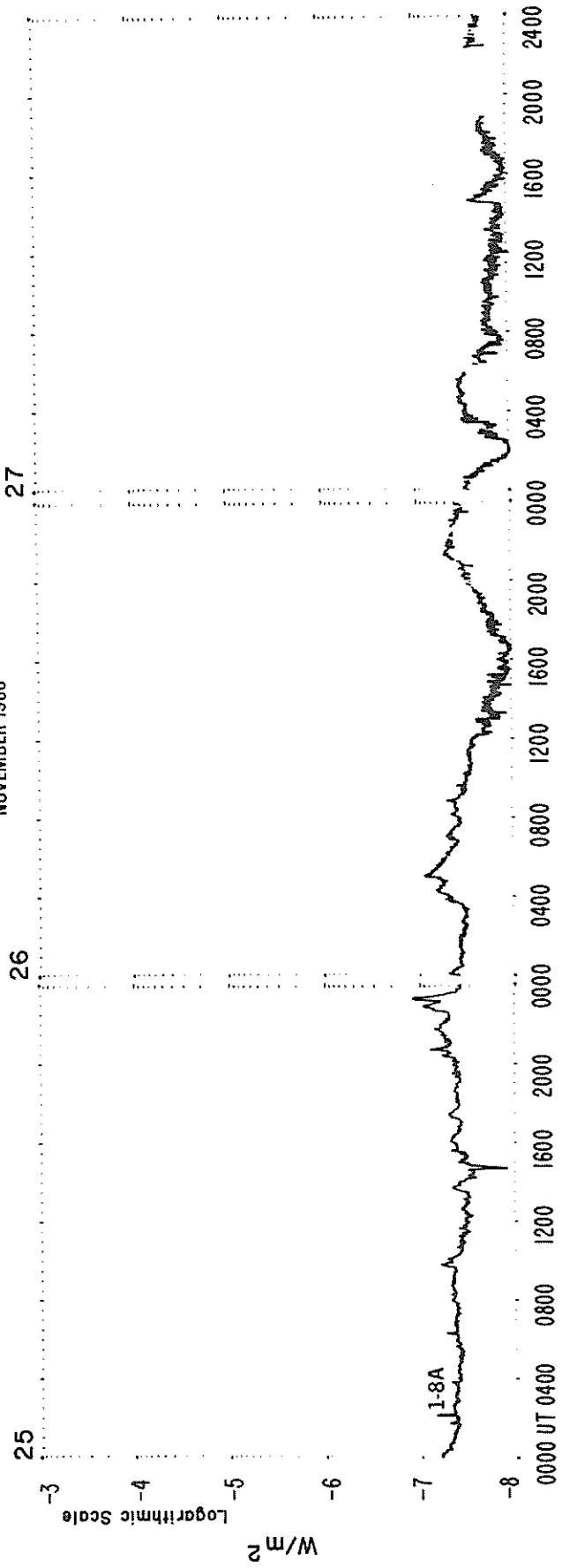
GOES 6 X-RAYS

NOVEMBER 1986



GOES 6 X-RAYS

NOVEMBER 1986



GOES SOLAR X-RAY FLARES
 Preliminary Listing

21
 Nov 86

November 1986

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	Imp Opt	Xray
01	0544	0545	0559	N02	E21	4754	SF	B7.9
01	0758	0905	0929D	S00	E12	4754	1F	C3.1
02	0420	0423	0426					B1.6
02	0520	0626	0653					B5.1
02	0630	0635	0700					B4.3
02	0730	0736	0741	N04	E15	4755	SN	C1.1
02	0908	0917	0929					B3.9
02	1039	1040	1051	S03	E05	4754	SF	B5.3
02	1720	1729	1735					B2.2
03	0215	0217	0219					B1.8
04	0015	0017	0018					B1.9
04	0410	0412	0422	N02	W10	4755	SF	B1.8
04	0702	0703	0709	N03	W11	4755	SF	B2.8
04	0901	0906	0911					B2.0
04	1017	1023	1026					B2.1
04	1101	1106	1108					B1.6
04	1819	1833	1844					B6.4
04	2208	2209	2210					B1.6
05	1015	1017	1018					B1.2
05	1032	1036	1038					B1.9
05	1215	1215	1220	N03	W27	4755	SF	B2.8
05	1343	1345	1346					B1.4
05	2128	2136	2219	N01	W32	4755	SN	B2.3
05	2245	2248	2303	N02	W35	4755	SF	B2.8
05	2350	2355	0004	N02	W33	4755	SF	B2.3
06	0221	0237	0246	N02	W34	4755	SF	B2.2
06	0532	0538	0551	N01	W36	4755	SF	C1.0
06	0658	0659	0700					B1.1
06	0818	0820	0841	N02	W37	4755	SF	B5.3
06	1423	1424	1440	N04	W36	4755	SF	B1.5
06	1456E	1457	1507	N01	W40	4755	SF	B2.4
06	1704	1733	1756	N02	W47	4755	SN	B4.8
06	1813	1815	1821	S00	W55	4754	SF	B4.0
06	1933	1939	1944	N02	W48	4755	SF	B3.1
06	2200	2203	2220	N01	W45	4755	SN	B5.6
06	2324	2330	2335					B1.8
07	0200	0202	0213	N01	W58	4754	SF	B5.3
07	0624	0625	0632	N03	W49	4755	SF	B1.7
07	0625	0628	0629					B2.6
07	1823	1827	1836					B1.1
08	0628	0634	0639	N03	W63		SF	B3.2
08	2331	2340	2351					B1.0
09	0303	0310	0316					B7.5
09	2047	2052	2056					B1.4
10	0130	0137	0140					B1.8
10	0543	0553	0600					B2.8
12	1841	1849	1859					B2.0
13	0932	0944	0951				4757	C1.3
13	1112	1117	1124				4757	B1.4
13	1209	1235	1245				4757	B2.5
13	1656	1719	1734				4757	C4.1
14	1413	1417	1422					B1.1
17	0812	0812	0819	N26	E49	4757	SF	B1.1
19	0226	0226	0227	N24	E20	4757	SF	B3.8
20	0858	0916	0944	N25	E09	4757	SF	C1.6
25	2313	2318	2320					B1.2
28	1154	1200	1211	S03	E22		SF	B1.4

Please note that this table and the Grouped H-alpha Solar Flare table have not been totally integrated. All of these X-ray flares do not appear in the Grouped H-alpha Solar Flare table. And all matches of these X-ray flares with the H-alpha flares are not indicated here.

22
Nov 86

Preliminary GOES Satellite Data
Daily Average X-ray Background

December 1985 - November 1986

Day	1985 Dec	1986 Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
1	B0.1	B0.0	B0.2	B2.0	<B0.1	B0.5	B0.2	<B0.1	<B0.1	<B0.1	<A1.0	B2.7
2	B0.1	B0.0	B0.3	B1.5	<B0.1	B1.0	<B0.1	<B0.1	<B0.1	<B0.1	<A1.0	A9.0
3	B0.0	B0.0	**	B1.9	<B0.1	B1.4	<B0.1	<B0.1	B0.3	<B0.1	<A1.0	A5.1
4	B0.0	B0.0	**	B1.4	<B0.1	B0.5	<B0.1	<B0.1	B0.2	<B0.1	<A1.0	A8.6
5	B0.0	B0.0	**	B1.6	<B0.1	B0.2	<B0.1	B0.2	<B0.1	<B0.1	<A1.0	A6.1
6	B0.1	B0.0	**	B1.5	<B0.1	<B0.1	<B0.1	B0.4	<B0.1	<B0.1	A1.5	A7.0
7	B0.2	B0.0	B7.2	B1.0	B0.2	<B0.1	<B0.1	B0.6	<B0.1	<B0.1	A2.2	A3.6
8	B0.5	B0.0	B2.5	B0.8	<B0.1	<B0.1	<B0.1	<B0.1	B0.4	<B0.1	A2.0	A2.5
9	B0.2	B0.0	B2.0	B0.9	<B0.1	<B0.1	<B0.1	B0.2	B0.4	<B0.1	A2.4	A2.1
10	B0.5	B0.0	B2.5	B0.9	<B0.1	<B0.1	<B0.1	B0.9	<B0.1	<B0.1	A2.2	<A1.0
11	B1.0	B0.0	B9.8	B0.8	<B0.1	<B0.1	<B0.1	B0.5	<B0.1	<B0.1	A1.8	<A1.0
12	B1.0	B0.0	B5.7	B0.7	B0.2	<B0.1	<B0.1	B0.4	<B0.1	<B0.1	A4.3	A2.3
13	B0.6	B0.3	B6.1	B0.5	<B0.1	<B0.1	<B0.1	B0.7	<B0.1	<B0.1	B1.6	A6.2
14	B0.4	B0.4	B0.1	B0.3	<B0.1	<B0.1	<B0.1	B1.0	<B0.1	<B0.1	B2.5	A4.0
15	B0.5	B0.4	B5.7	B0.0	B0.4	<B0.1	<B0.1	B0.5	<B0.1	B0.3	B1.5	A4.1
16	B0.6	B0.5	B2.1	B0.0	B0.3	B0.2	<B0.1	B0.3	<B0.1	B0.5	B4.0	A3.9
17	B0.5	B1.0	B2.3	B0.0	B0.3	B0.3	<B0.1	B0.3	<B0.1	<B0.1	B3.7	A3.2
18	B0.5	B0.7	B0.0	B0.0	B0.2	B0.8	<B0.1	B0.3	<B0.1	<B0.1	B2.5	A3.4
19	B0.3	B0.6	B0.0	B0.0	B0.2	B0.6	<B0.1	B0.2	<B0.1	<B0.1	B3.8	A3.0
20	B0.3	B4.7	B0.0	B0.0	B0.2	B0.6	<B0.1	B0.2	<B0.1	<B0.1	B2.2	A3.3
21	B0.2	B9.5	B0.0	B1.9	B0.2	B0.6	<B0.1	B0.1	<B0.1	<B0.1	B1.5	A2.1
22	B0.3	B2.9	B0.0	B0.0	B0.2	B0.5	<B0.1	B0.1	<B0.1	<A1.0	B1.6	A2.3
23	B0.2	B2.7	B0.0	B0.1	B1.2	B0.4	<B0.1	B0.1	<B0.1	<A1.0	B2.1	A2.1
24	B0.2	B1.3	B0.0	B0.1	B2.8	B0.5	<B0.1	B0.1	<B0.1	<A1.0	B2.1	A4.4
25	B0.2	B0.8	B0.1	B0.0	B0.9	B0.8	<B0.1	B0.2	<B0.1	<A1.0	B1.7	A2.9
26	B0.2	B0.6	B0.8	B0.1	B1.1	B0.5	<B0.1	B0.2	<B0.1	<A1.0	B1.9	A1.3
27	B0.2	B0.2	B1.0	B0.1	B1.5	B0.3	<B0.1	B0.1	<B0.1	<A1.0	B1.9	A1.2
28	B0.2	B0.0	B1.3	B0.1	B1.0	B0.3	<B0.1	B0.2	<B0.1	<A1.0	B1.8	<A1.0
29	B0.2	B0.0		B0.1	B0.5	B0.2	<B0.1	B0.3	<B0.1	<A1.0	B1.6	<A1.0
30	B0.1	B0.0		B0.1	B0.6	B0.2	B0.7	<B0.1	<B0.1	<A1.0	B1.8	<A1.0
31	B0.2	B0.0		<B0.1		B0.2		<B0.1	<B0.1		B2.1	

ACTIVE PROMINENCES AND FILAMENTS

23
Nov 86

NOVEMBER 1986

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
01	AFS	0000E	0755D	S21	W15	10	30.9		01	9	9	E	LEAR	4753	
01	DSD	0057	0122	N05	E17	11	2.3	1				C	VORO		
01	AFS	0330E	0929D	N02	E29	11	3.3		01	9	9	E	LEAR	4755	
01	ADF	1040E	1511D	S01	E25	11	3.3		03	7	9	E	SVTO	4755	
01	ADF	1124E	1511D	S21	W20	10	31.0		02	9	9	E	SVTO	4753	
01	ADF	1212E	2119D	N01	E30	11	3.7	1	06	8	9	E	RAMY	4755	
01	AFS	1212E	2119D	N02	E24	11	3.3		02	9	9	E	RAMY	4755	
01	ADF	1212E	2119D	S02	E17	11	2.8	1	13	8	8	E	RAMY	4754	
01	ADF	1517E	2119D	N29	W04	11	1.3	2	11	8	7	E	RAMY		
01	ADF	1555E	1835D	S01	E27	11	3.7		05	7	7	E	HOLL	4755	
01	ADF	1557E	1835D	N04	E24	11	3.4		02	9	9	E	HOLL	4755	
01	DSD	1558E	1835D	N01	E08	11	2.3		03	9	9	E	HOLL	4754	
01	ADF	2230E	0230D	N31	W15	10	31.7	1				C	VORO		
02	AFS	0045E	0445D	N01	E15	11	3.1		02	9	9	E	LEAR	4755	
02	ADF	0045E	0930D	N01	E24	11	3.8	1	07	8	8	E	LEAR	4755	
02	ADF	0045E	0930D	S03	E10	11	2.8	1	13	9	9	E	LEAR	4754	
02	BSL	0120	0230	S21	W90	10	26.2	1				C	VORO		
02	APR	0445E	0930D	S90	W21	10	31.2	1		9	9	E	LEAR	4752	
02	ADF	0459E	0930D	S21	W30	10	31.0	1	03	9	9	E	LEAR	4753	
02	AFS	0500E	0930D	S23	W32	10	30.8		03	9	9	E	LEAR	4753	
02	APR	0706E	1455D	S22	W90	10	26.5	1		6	8	E	SVTO	4752	
02	DSD	0733E	0824D	N02	E14	11	3.4		04	9	9	E	LEAR	4755	
02	DSD	0736	0818D	N02	E18	11	3.7		03	9	9	E	SVTO	4755	
02	ADF	0813E	1455D	S23	W32	10	31.0		03	7	8	E	SVTO	4753	
02	ADF	0816E	1455D	N02	E05	11	2.7		07	7	9	E	SVTO	4754	
02	AFS	0820E	0951D	N03	E16	11	3.5		02	7	8	E	SVTO	4755	
02	ADF	0820E	1455D	N00	E14	11	3.4	2	04	9	9	E	SVTO	4755	
02	ADF	0836E	1455D	N00	E22	11	4.0		12	6	9	E	SVTO	4755	
02	ADF	1308E	2124D	N01	E07	11	3.1	1	06	8	8	E	RAMY	4755	
02	AFS	1308E	2124D	N01	E11	11	3.4		02	9	9	E	RAMY	4755	
02	ADF	1335E	2124D	N01	E04	11	2.9	1	07	7	8	E	RAMY	4754	
02	ADF	1335E	2124D	S02	E00	11	2.6	1	04	7	8	E	RAMY	4754	
02	APR	1335E	2124D	S21	W90	10	26.8	1		9	9	E	RAMY	4752	
02	ADF	1758E	0325D	S02	E09	11	3.4	1	04	9	9	E	PALE	4755	
02	AFS	1805E	0117D	N00	E08	11	3.3		01	9	9	E	PALE	4755	
02	APR	2251E	0325D	S21	W90	10	27.1	1		9	9	E	PALE	4752	
02	DSD	2300E	0517D	N02	E06	11	3.4		04	9	9	E	LEAR	4755	
02	ADF	2300E	0940D	N04	W03	11	2.7	2	14	9	7	E	LEAR	4754	
02	ADF	2300E	0940D	S02	E08	11	3.5	2	07	9	7	E	LEAR	4755	
02	APR	2300E	0940D	S21	W90	10	27.1	2		9	9	E	LEAR		
03	ADF	0121E	0325D	N03	W04	11	2.7	1	03	9	9	E	PALE	4754	
03	ADF	0121E	0325D	S01	W07	11	2.5	1	06	9	9	E	PALE	4754	
03	AFS	0640E	0940D	S23	W40	10	31.2		02	9	9	E	LEAR	4753	
03	DSD	0817E	0940D	N01	E01	11	3.4		03	9	9	E	LEAR	4755	
03	DSD	0817E	0940D	S01	W01	11	3.3		04	9	9	E	LEAR	4755	
03	AFS	0851E	0940D	S26	E31	11	5.8		02	9	9	E	LEAR		
03	DSD	0952E	1037D	N00	W02	11	3.3		03	9	9	E	SVTO	4755	
03	APR	1000E	1154D	S20	W90	10	27.6	1		6	9	E	SVTO	4751	
03	AFS	1029E	1154D	N00	W01	11	3.4		02	9	9	E	SVTO	4755	
03	ADF	1030E	1154D	N04	W08	11	2.8		05	9	9	E	SVTO	4755	
03	ADF	1030E	1154D	S02	W01	11	3.4		06	9	9	E	SVTO	4755	
03	AFS	1034E	1154D	S23	W41	10	31.3		01	9	9	E	SVTO	4753	
03	AFS	1140E	2055D	N01	W03	11	3.3		03	9	9	E	RAMY	4755	
03	ADF	1140E	2055D	N01	W06	11	3.0	2	06	9	9	E	RAMY	4755	
03	ADF	1140E	2055D	S03	W17	11	2.2	2	04	9	9	E	RAMY	4754	
03	AFS	1743E	0338D	N02	W03	11	3.5		01	9	9	E	PALE	4755	
03	ADF	1743E	0338D	S01	W07	11	3.2	1	03	9	9	E	PALE	4755	
03	AFS	1958E	2334D	S01	W19	11	2.4		02	9	9	E	PALE	4754	
03	ADF	2230E	0953D	S01	W12	11	3.0	1	10	9	9	E	LEAR	4755	
03	AFS	2230E	0953D	S02	W06	11	3.5		02	9	9	E	LEAR	4755	
03	ADF	2240E	0953D	N05	W17	11	2.7	1	05	9	9	E	LEAR	4755	
03	ADF	2342E	2343D	N06	W18	11	2.6	2	05	9	9	E	PALE	4755	
03	ADF	2357E	0000D	N07	W08	11	3.4	1	02	9	9	E	PALE	4754	
04	BSL	0001	0150	N47	W90	10	27.6	1				C	VORO		
04	SDF	0026E	0026D	S06	W18	11	2.7		05	0	0	E	PALE	4755	
04	DSD	0231E	0232D	N01	W24	11	2.3		02	9	9	E	PALE	4754	
04	AFS	0311E	0953D	N00	W22	11	2.5		02	9	9	E	LEAR	4754	
04	AFS	0348E	0420D	S20	W61	10	30.6		02	9	9	E	LEAR	4753	

ACTIVE PROMINENCES AND FILAMENTS

NOVEMBER 1986

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
04	DSD	1450E	1450D	N03	W16	11	3.4	2	03	9	9	E	RAMY 4755	Flare Associated	
04	AFS	1708E	0000D	N01	W17	11	3.4		02	9	9	E	HOLL 4755		
04	DSD	1758E	1838D	N01	W31	11	2.4		02	9	9	E	PALE 4754		
04	AFS	1828E	0234D	N01	W18	11	3.4	1	02	9	9	E	PALE 4755		
04	DSD	2020E	2050D	N02	W19	11	3.4		02	9	9	E	PALE 4755		
04	AFS	2300E	0954D	N02	W19	11	3.5		02	9	9	E	LEAR 4755		
04	AFS	2300E	0954D	S18	W68	10	30.9		03	9	9	E	LEAR 4753		
05	BSL	0126	0140	S45	W90	10	28.7	1				C	VORO		
05	DSD	1150E	1255D	S02	W38	11	2.6		03	9	9	E	RAMY 4754		
05	ADF	1320E	2107D	N01	W31	11	3.2	2	08	9	9	E	RAMY 4755		
05	ADF	1320E	2107D	N03	W29	11	3.4	2	06	9	9	E	RAMY 4755		
05	ADF	1320E	2107D	N03	W35	11	2.9	2	05	8	9	E	RAMY 4754		
05	ADF	1320E	2107D	N30	W58	11	1.0	2	08	7	7	E	RAMY		
05	SSB	1418		192	W33	11	12.9			0	0	E	HOLL		
05	AFS	1422E	0000D	N01	W28	11	3.5		03	9	9	E	HOLL 4755		
05	ADF	1424E	1930D	N03	W31	11	3.3	1	06	9	9	E	HOLL 4755		
05	AFS	1713E	2107D	N01	W30	11	3.5		02	9	9	E	RAMY 4755		
05	ADF	1824E	2222D	S02	W43	11	2.5	1	03	8	8	E	HOLL 4754		
05	DSD	1930E	2221D	N04	W33	11	3.3		04	8	8	E	HOLL 4755		
05	ADF	2124E	0000D	N02	W32	11	3.5	1	07	9	9	E	HOLL 4755		
05	AFS	2135E	0309D	N01	W35	11	3.3	1	02	7	7	E	PALE 4755		
05	AFS	2245E	0951D	N01	E34	11	8.5		02	9	9	E	LEAR 4755		
05	DSD	2351E	0309D	N01	W36	11	3.3		02	9	9	E	PALE 4755	Flare Associated	
06	APR	0026E	0321D	N23	W90	10	30.2			9	9	E	LEAR		
06	ADF	1247E	1433D	N03	W42	11	3.4	1	08	9	9	E	SVTO 4755		
06	ADF	1408E	1427D	N00	W45	11	3.2	2	11	8	8	E	RAMY 4755		
06	ADF	1408E	1427D	N03	W43	11	3.4	2	08	8	9	E	RAMY 4755		
06	SDF	1507	1514	N00	W42	11	3.5		03	0	0	E	HOLL 4755		
06	ASR	1517E	1710D	S23	W90	10	30.8			9	9	E	HOLL 4753		
06	ADF	1727E	0055D	N02	W43	11	3.5	1	01	9	9	E	PALE 4755		
06	DSD	1758	1817	N03	W46	11	3.3		03	9	9	E	HOLL 4755		
06	ADF	1858	2054D	N00	W56	11	2.6		03	9	9	E	HOLL 4754		
06	AFS	1952E	2203D	N03	W47	11	3.3	1	01	9	9	E	PALE 4755		
07	DSD	0204E	0430D	N00	W61	11	2.5		04	9	9	E	LEAR 4754	Flare Associated	
07	ADF	0302E	0954D	N01	W49	11	3.5	1	08	9	3	E	LEAR 4755		
07	APR	0634E	0654D	S26	W90	10	31.3	1		9	8	E	SVTO 4753		
07	ADF	0646E	1134D	S05	W66	11	2.3	1	04	9	9	E	SVTO 4754		
07	ADF	0646E	1517D	N01	W54	11	3.2	1	13	9	9	E	SVTO 4755		
07	AFS	0717E	1517D	N01	W51	11	3.5		02	9	7	E	SVTO 4755		
07	SSB	1129		192	W57	11	15.5			0	0	E	SVTO		
07	ADF	1151E	1613D	S05	W68	11	2.4	1	02	8	9	E	RAMY 4754		
07	ADF	1156E	1613D	S02	W58	11	3.2	1	05	9	9	E	RAMY 4755		
07	SSB	1229		192	W58	11	15.5			0	0	E	RAMY		
07	APR	1422E	1517D	N29	W90	10	31.5			9	9	E	SVTO		
07	ADF	2352E	0957D	N02	W62	11	3.4	1	07	9	9	E	LEAR 4755		
08	DSD	0221E	0242D	N00	W62	11	3.5		07	9	9	E	LEAR 4755		
08	SSB	0648		192	W68	11	16.6			0	0	E	SVI		
08	BSD	0652	0710D	N00	W77	11	2.5		03	9	9	E	SVTO 4754		
08	ASR	0658E	0957D	S01	W77	11	2.5	1		9	9	E	LEAR 4754		
08	ADF	0701E	1516D	N02	W66	11	3.4		11	9	9	E	SVTO 4755		
08	SSB	1449		191	W72	11	16.9			0	0	E	HOLL		
08	ASR	1502E	1640D	N02	W82	11	2.5	1		8	7	E	HOLL 4754		
08	ASR	1943E	2035D	S01	W84	11	2.5	1		8	8	E	HOLL 4754		
08	DSD	2337E	0122D	N02	W72	11	3.6		06	9	9	E	LEAR 4755		
09	ASR	0135	0335D	N04	W90	11	2.3	2		9	9	E	PALE 4755		
09	ADF	0655E	1512D	S03	W78	11	3.4		09	9	9	E	SVTO 4755		
09	SSB	0711		110	W82	11	10.2			0	0	E	SVTO		
09	ASR	1104E	1512D	N00	W90	11	2.7			7	9	E	SVTO 4755		
09	ASR	1141E	1512D	N03	W90	11	2.8			9	9	E	SVTO 4755		
09	ASR	1520E	1548D	N01	W83	11	3.4			9	9	E	HOLL 4755		
09	ASR	2049E	0335D	N01	W90	11	3.1			9	9	E	PALE 4755		
09	DSD	2300E	0005D	S03	W47	11	6.4		01	9	9	E	PALE		
10	ASR	0055E	0416D	N05	W90	11	3.3			7	8	E	LEAR 4755		
10	APR	0055E	0100D	N04	W90	11	3.3	2		9	9	E	PALE 4755		
10	APR	0055E	0135	N04	W90	11	3.3	2		9	9	E	PALE 4755		

ACTIVE PROMINENCES AND FILAMENTS

25
Nov 86

NOVEMBER 1986

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
10	SSB	0711		110	W82	11	11.2			0	0	E	SVTO		
10	AFS	1204E	1304	S27	W10	11	9.7		02	9	9	E	SVTO		
10	AFS	1446E	2045D	S27	W11	11	9.7		02	6	9	E	RAMY		
10	ASR	1450E	2045D	N05	W83	11	4.4	2		6	8	E	RAMY	4755	
10	EPL	1707E	1713	N09	W90	11	3.9			9	9	E	HOLL	4755	
11	APR	0055E	0300D	N33	W90	11	3.9	1				C	VORO		
11	APR	1941	2118D	N15	E90	11	18.6	1		9	9	E	HOLL		
12	APR	0120	0253D	N46	W90	11	4.5	1				C	VORO		
13	APR	0709E	0955D	S44	E90	11	20.7	1		7	9	E	LEAR		
13	APR	0857E	0858D	S45	E90	11	20.8			6	9	E	SVTO		
13	ASR	0924E	0955D	N23	E90	11	20.3			7	7	E	LEAR		
13	ASR	1458E	1729D	N23	E90	11	20.5			9	9	E	RAMY	4757	
13	ASR	1757E	2102D	N28	E90	11	20.8			9	9	E	PALE		
13	LPS	1940E	2102D	N28	E90	11	20.8			9	9	E	PALE	4757	
13	ASR	2236E	0959D	N23	E90	11	20.9			9	9	E	LEAR	4757	
14	APR	0828E	0953D	N32	E90	11	21.5	3		8	9	E	SVTO	4757	
14	ASR	0844E	1402D	N26	E90	11	21.3			5	8	E	SVTO	4757	
14	AFS	1034E	1402D	N25	E46	11	18.0		02	8	7	E	SVTO		
14	ADF	1215E	1354D	N22	E80	11	20.6	1		07	9	E	RAMY	4757	
14	ADF	2100E	0251D	N22	E72	11	20.4	1		03	9	E	PALE	4757	
14	ADF	2255E	0926D	N27	E74	11	20.7	2		17	9	E	LEAR	4757	
15	SDF	0251E	1902D	N28	E66	11	20.3		06	0	0	E	PALE	4757	
15	AFS	0948E	1338D	N22	E70	11	20.8		01	9	7	E	SVTO	4757	
15	AFS	1230E	1850D	N23	E65	11	20.5		05	9	9	E	RAMY	4757	
15	ADF	1902E	0333D	N28	E66	11	20.9	1		14	9	E	PALE	4757	
15	ADF	2204E	1001D	N22	E61	11	20.6	1		06	9	E	LEAR	4757	
16	ADF	0752E	1001D	N17	E48	11	20.0	1		13	9	E	LEAR	4757	
16	ADF	0755E	1001D	N42	E80	11	22.9	1		21	9	E	LEAR	4757	
16	ADF	0836E	1500D	N19	E50	11	20.2	2		05	9	E	SVTO	4757	
16	ADF	1120E	1725D	N23	E52	11	20.5	2		08	9	E	RAMY	4757	
16	ADF	1738E	1847D	N30	E54	11	21.0	1		16	9	E	HOLL	4757	
16	ADF	2223E	1004D	N12	E25	11	18.8	1		09	8	E	LEAR		
16	ADF	2223E	1004D	N22	E44	11	20.3	2		06	9	E	LEAR	4757	
16	ADF	2223E	1004D	N22	E50	11	20.8	2		11	9	E	LEAR	4757	
16	ADF	2223E	1004D	N32	E52	11	21.0	1		25	8	E	LEAR		
16	ADF	2223E	1004D	S36	W22	11	15.2	2		20	9	E	LEAR		
16	ADF	2223E	1004D	S46	E20	11	18.6	1		44	9	E	LEAR		
16	APR	2343	0156D	S12	W90	11	10.2	1				C	VORO		
17	BSL	0706	0902	N37	E90	11	24.5	1				C	ABST		
17	BSL	0706	0902	S11	E90	11	24.1	1				C	ABST		
17	ADF	0750E	1004D	N28	E10	11	18.1	1		05	9	E	LEAR		
17	ADF	0835E	1020D	N26	E08	11	18.0	2		04	9	E	SVTO		
17	ADF	0835E	1224D	N22	E39	11	20.3	2		07	9	E	SVTO	4757	
17	ADF	0835E	1224D	N25	E43	11	20.7	1		08	9	E	SVTO	4757	
17	ADF	1430E	2306D	N30	E42	11	20.9			08	9	E	HOLL	4757	
17	ADF	1725E	0318D	N30	E38	11	20.7	1		18	9	E	PALE	4757	
17	SDF	2303	0127	S39	W44	11	14.4	1				C	VORO		
17	ADF	2357E	0948D	N33	E37	11	20.9	2		29	9	E	LEAR		
17	ADF	2357E	0948D	S51	E28	11	20.4	2		38	7	E	LEAR		
18	ADF	0053E	0948D	N23	E36	11	20.8	2		12	9	E	LEAR	4757	
18	ADF	0735E	1350D	N22	E25	11	20.2	1		05	9	E	SVTO	4757	
18	ADF	0735E	1350D	N25	E35	11	21.0	1		08	9	E	SVTO	4757	
18	ADF	1440E	1640D	N25	W09	11	17.9	2		03	5	E	RAMY		
18	ADF	1527E	2009D	N30	E29	11	20.9	2		04	9	E	RAMY	4757	
18	ADF	1651E	2009D	N46	E45	11	22.4	2		19	9	E	RAMY		
18	ADF	1713E	1741D	N24	E19	11	20.2	2		05	9	E	PALE	4757	
18	DSD	1730E	1914D	N26	E08	11	19.3			01	8	E	PALE	4757	
18	ADF	1741E	0332D	N33	E27	11	20.9	2		12	9	E	PALE	4757	
18	SDF	1930E	1940	N23	E25	11	20.7	2		02	0	E	PALE	4757	
18	ADF	2009E	2105D	N34	E24	11	20.7	2		06	9	E	RAMY	4757	
18	AFS	2104E	2220D	N24	E24	11	20.7	1		02	7	E	PALE	4757	
18	AFS	2236	2306	N24	E16	11	20.2	1		01	9	E	PALE	4757	
19	ADF	0002E	0922D	N34	E25	11	21.0	1		21	9	E	LEAR	4757	

ACTIVE PROMINENCES AND FILAMENTS

NOVEMBER 1986

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
19	AFS	0202E	0247D	N24	E13	11	20.1	1	02	9	9	E	PALE	4757	
19	SDF	0219	0239D	N24	E19	11	20.6	2	02	9	9	E	PALE	4757	
19	BSL	0612	0854	S22	W90	11	12.3	1				C	ABST		
19	BSL	0615	0854	N14	E90	11	26.1	1				C	ABST		
19	ADF	0730E	1318D	N27	E21	11	20.9	1	07	9	9	E	SVTO	4757	
19	ADF	1145E	2012D	N33	E16	11	20.8	2	07	9	9	E	RAMY	4757	
19	ADF	1145E	2012D	N46	E43	11	23.1	2	26	8	7	E	RAMY		
19	DSD	1444E	1632D	N25	E02	11	19.8		02	9	9	E	HOLL	4757	
19	DSD	1458E	1609D	N26	W02	11	19.5		02	9	9	E	RAMY	4757	
19	ADF	1500E	2350D	N39	E27	11	21.8	2	12	9	9	E	HOLL		
19	ADF	1603E	1952D	N26	E18	11	21.1	1	04	9	9	E	HOLL	4757	
19	ADF	2130E	0336D	N24	E12	11	20.8	1	03	9	9	E	PALE	4757	
19	ADF	2305E	1008D	N15	W06	11	19.5	1	10	7	7	E	LEAR		
19	ADF	2305E	1008D	N30	E12	11	20.9	1	12	7	9	E	LEAR	4757	
19	ADF	2305E	1008D	N40	E45	11	23.6	1	33	8	4	E	LEAR		
20	AFS	0650E	0820D	N25	W11	11	19.4		02	9	9	E	LEAR		
20	ADF	0730E	1318D	N27	E21	11	21.9	1	07	9	9	E	SVTO	4757	
20	ADF	0732E	0841	N25	E09	11	21.0	1	05	8	9	E	SVTO	4757	
20	SDF	0830E	0841	N25	E08	11	21.0	3	05	9	9	E	SVTO	4757	
20	ADF	1218E	2057D	N22	E02	11	20.7	2	06	8	8	E	RAMY	4757	
20	ADF	1218E	2057D	N22	W06	11	20.0	2	03	8	9	E	RAMY	4757	
20	ADF	1445E	2349D	N22	E00	11	20.6		08	9	8	E	HOLL	4757	
20	AFS	1810E	2020D	N17	W26	11	18.8		01	7	7	E	HOLL	4758	
20	ADF	1815E	0334D	N28	E00	11	20.8	1	10	6	8	E	PALE	4757	
20	DSD	2111E	2113D	N27	W02	11	20.7		03	9	9	E	PALE	4757	
20	ADF	2250E	0735D	N14	W21	11	19.4	1	08	9	9	E	LEAR		
20	ADF	2250E	0916D	N28	W01	11	20.9	1	16	9	9	E	LEAR	4757	
21	AFS	0055E	0334D	N26	W22	11	19.3		02	9	9	E	PALE	4758	
21	AFS	0142E	0358D	N26	W21	11	19.4		01	6	8	E	LEAR	4758	
21	AFS	0142E	0358D	N26	W21	11	19.4		01	6	8	E	LEAR	4758	
21	ADF	1130E	2109D	N22	W11	11	20.6	2	10	9	9	E	RAMY	4757	
21	ADF	1430E	2109D	N29	W10	11	20.8	2	08	9	9	E	RAMY	4757	
21	ADF	1445E	2349D	N22	W17	11	20.3		07	8	8	E	HOLL	4757	
21	AFS	1535E	2109D	N26	W29	11	19.4		02	9	9	E	RAMY	4758	
21	ADF	1825E	2349D	N29	W11	11	20.9	1	08	9	9	E	HOLL	4757	
21	ADF	1840E	0340D	N29	W11	11	20.9	1	13	9	9	E	PALE	4757	
21	ADF	2300E	0954D	N22	W18	11	20.6	1	08	6	5	E	LEAR	4757	
21	ADF	2300E	0954D	N28	W14	11	20.9	1	06	6	5	E	LEAR	4757	
21	AFS	2325E	2349D	N26	W33	11	19.4		01	7	8	E	HOLL	4758	
22	SDF	0340E	2122D	N39	W04	11	21.8		23	0	0	E	PALE		
22	ADF	1245E	2050D	N21	W26	11	20.5	2	08	9	9	E	RAMY	4757	
22	ADF	1245E	2050D	N30	W20	11	20.9	2	05	9	9	E	RAMY	4757	
22	ADF	1253E	2050D	N30	W23	11	20.7	2	04	9	9	E	RAMY	4757	
22	AFS	1429E	1638D	N25	W41	11	19.4		02	7	8	E	HOLL	4758	
22	ADF	1450E	1841D	N19	W35	11	19.9	2	05	9	9	E	HOLL	4757	
22	ADF	1608E	1840D	N29	W22	11	20.9	2	02	9	9	E	HOLL	4757	
22	ADF	1833E	2339D	N26	W43	11	19.4	2	04	9	9	E	HOLL	4758	
22	ADF	1840E	2339D	N22	W32	11	20.3	2	10	9	9	E	HOLL	4757	
22	ADF	1900E	2050D	N25	W44	11	19.4	2	04	9	9	E	RAMY	4758	
22	ADF	2120E	2205D	N22	W32	11	20.4	2	11	9	9	E	PALE	4757	
22	ADF	2120E	2205D	N30	W25	11	20.9	1	08	9	9	E	PALE	4757	
22	DSD	2220E	2335D	S28	W57	11	18.5		01	9	9	E	HOLL		
22	ADF	2220E	0928D	N22	W37	11	20.1	1	05	9	7	E	LEAR	4757	
23	AFS	0105E	0928D	N28	W45	11	19.5		03	7	9	E	LEAR	4758	
23	ADF	0715E	1238D	N21	W45	11	19.8	2	10	9	9	E	SVTO	4757	
23	ADF	0715E	1238D	N25	W29	11	21.0	2	10	9	9	E	SVTO	4757	
23	DSD	1151E	1238D	N26	W24	11	21.6		03	9	9	E	SVTO		
23	ADF	1157E	1238D	S27	W66	11	18.3	2	03	9	9	E	SVTO		
23	ADF	1230E	2113D	N30	W33	11	20.9	2	28	9	9	E	RAMY	4757	
23	AFS	1616E	2113D	S28	W66	11	18.5		02	9	9	E	RAMY		
23	DSD	1619E	1637D	S28	W65	11	18.6		04	9	9	E	HOLL		
23	ADF	1623E	2343D	N25	W35	11	21.0	2	07	9	9	E	HOLL	4757	
23	ADF	1624E	2343D	N19	W51	11	19.8	2	06	9	9	E	HOLL	4757	
23	SDF	1635E	2254D	N00	W17	11	22.4		09	0	0	E	HOLL		
23	AFS	1636E	2343D	S28	W66	11	18.5		01	9	9	E	HOLL	4759	
23	AFS	1718E	0325D	S28	W64	11	18.7		01	9	9	E	PALE		
23	ADF	1743E	0325D	N31	W37	11	20.8	1	25	9	9	E	PALE	4757	

ACTIVE PROMINENCES AND FILAMENTS

NOVEMBER 1986

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
23	SDF	1925E	2359D	N00	W19	11	22.4		08	0	0	E	PALE		
23	ADF	2229E	1006D	N30	W39	11	20.9	1	19	6	7	E	LEAR	4757	
23	AFS	2229E	1006D	S28	W71	11	18.4	1	03	9	9	E	LEAR	4759	
24	DSD	0150E	0325D	S28	W80	11	17.8		01	9	9	E	PALE	4759	
24	AFS	1205E	1922D	S28	W75	11	18.6		01	8	8	E	RAMY	4759	
24	ADF	1205E	2119D	N21	W53	11	20.4	2	09	9	9	E	RAMY	4757	
24	ADF	1205E	2119D	N23	W46	11	20.9	2	04	9	9	E	RAMY	4757	
24	ASR	1650E	2349D	S29	W79	11	18.5			9	9	E	HOLL	4759	
24	ASR	1732E	2119D	S29	W78	11	18.6			8	8	E	RAMY	4759	
24	ADF	2035E	2349D	N24	W52	11	20.8	1	07	9	9	E	HOLL	4757	
24	ASR	2121E	0331D	S28	W88	11	18.0			8	7	E	PALE	4759	
24	ASR	2217E	0915D	S28	W90	11	17.9			9	9	E	LEAR	4759	
24	ADF	2238E	2239D	N22	W60	11	20.3	1	09	9	9	E	PALE	4757	
25	DSD	0529E	0657D	N22	W66	11	20.1		01	8	7	E	LEAR	4757	
25	ASR	1147E	1448D	S28	W90	11	18.4			9	9	E	SVTO	4759	
25	ASR	1158E	1451D	S28	W90	11	18.5			8	9	E	RAMY	4759	
25	ADF	1159E	1448D	N22	W61	11	20.8	2	21	9	9	E	SVTO	4757	
25	AFS	1226E	1340D	S24	E33	11	28.1		01	9	9	E	SVTO		
26	ASR	0740E	0957D	N26	W90	11	19.3			9	9	E	LEAR	4758	
26	ASR	0853E	0957D	N20	W90	11	19.5			9	9	E	LEAR	4757	
26	ASR	1245E	1245D	N21	W90	11	19.6			8	7	E	RAMY	4757	
26	AFS	2140E	2349D	N05	E21	11	28.5		03	8	6	E	HOLL		
26	AFS	2210E	0010D	N04	E21	11	28.5		03	9	8	E	LEAR		
26	ASR	2210E	0949D	N22	W90	11	20.0			9	9	E	LEAR	4757	
27	APR	0001	0250D	S38	E90	12	4.3	1				C	VORO		
27	APR	0030	0250D	N47	E90	12	4.5	1				C	VORO		
27	AFS	0542E	0949D	N04	E17	11	28.5		01	7	8	E	LEAR		
27	DSD	0600E	0655D	S02	E40	11	30.2		01	9	8	E	LEAR		
27	AFS	0655E	0949D	S02	E39	11	30.2		01	9	9	E	LEAR		
27	ASR	0759E	0948D	N24	W90	11	20.4			9	9	E	SVTO	4757	
28	AFS	0014E	0214D	S01	E29	11	30.2		02	9	9	E	LEAR		
28	AFS	0845E	1456D	N25	E32	11	30.8	1	02	6	9	E	SVTO		
28	ADF	1016E	1407D	S02	E24	11	30.2	2	05	9	9	E	SVTO		
28	DSD	1154	1217	S03	E24	11	30.3		03	9	9	E	SVTO		
28	ADF	1200E	2106D	S01	E22	11	30.1	2	05	9	9	E	RAMY		
29	APR	0000	0310	N50	E90	12	6.6	1				C	VORO		
29	ADF	1023E	1131D	S02	E10	11	30.2	1	03	9	9	E	SVTO		
29	ADF	1440E	2109D	S01	E08	11	30.2	2	06	8	6	E	RAMY		
29	ADF	1440E	2109D	S08	W04	11	29.3	2	03	6	6	E	RAMY		
29	AFS	1810E	2003D	N06	W22	11	28.1	1	01	9	9	E	PALE		
30	AFS	1348E	1459D	S35	W33	11	27.9		01	9	9	E	SVTO		

ADF = Active Dark Filament BSL = Bright Surge on Limb LPS = Loops
 AFS = Arch Filament System CAP = CAP Prominence (Tandberg-Hanssen) MDP = Mound Prominence
 APR = Active Prominence CRN = Coronal Rain SDF = Sudden Disappearing Filament
 ASR = Active Surge Region DSD = Dark Surge on Disk SPY = Spray
 BSD = Bright Surge on Disk EPL = Eruptive Prominence on Limb SSB = Solar Sector Boundary

For SOLAR SECTOR BOUNDARY REPORTS, the latitude field contains the Carrington longitude of the point where a neutral line crosses the solar equator. The comments field may contain the Carrington longitude and central meridian distance of two more intersection points.

The EXTENT field for limb events is the radial extent above the limb in hundredths of solar radius. For disk events this field contains the heliographic extent in whole degrees.



WORLD DATA CENTER A
FOR
SOLAR-TERRESTRIAL PHYSICS



The ICSU Panel on WDCs has recommended that it would be appropriate courtesy to acknowledge in publications that data were obtained from the originating station or investigator through the intermediary of the WDCs. The following statement is suggested:

"Data used in this study were provided by WDC-A for Solar-Terrestrial Physics, NOAA E/GC2, 325 Broadway, Boulder Colorado 80303, USA."