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**NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE**

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**Solar - Geophysical Data**

NO. 506 OCTOBER 1986

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DATA FOR  
APRIL 1986

**Michael A. Chinnery, Director  
NATIONAL GEOPHYSICAL DATA CENTER  
BOULDER, COLORADO**

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NUMBER 506

(Issued in Two Parts)

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The entry "500A 29" under Feb 1986, for example, means that the sunspot drawings for Feb 1986 appear in SOLAR-GEO-PHYSICAL DATA No. 500, Part I, and that they begin on page 29. "A" denotes Part I and "B", Part II. Blanks indicate data not yet received and dashes mark unavailable data.

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Apr 86

CARTE SYNOPTIQUE  
ACTIVE REGIONS  
CARRINGTON ROTATION 1774

(6 APRIL to 3 MAY 1986)

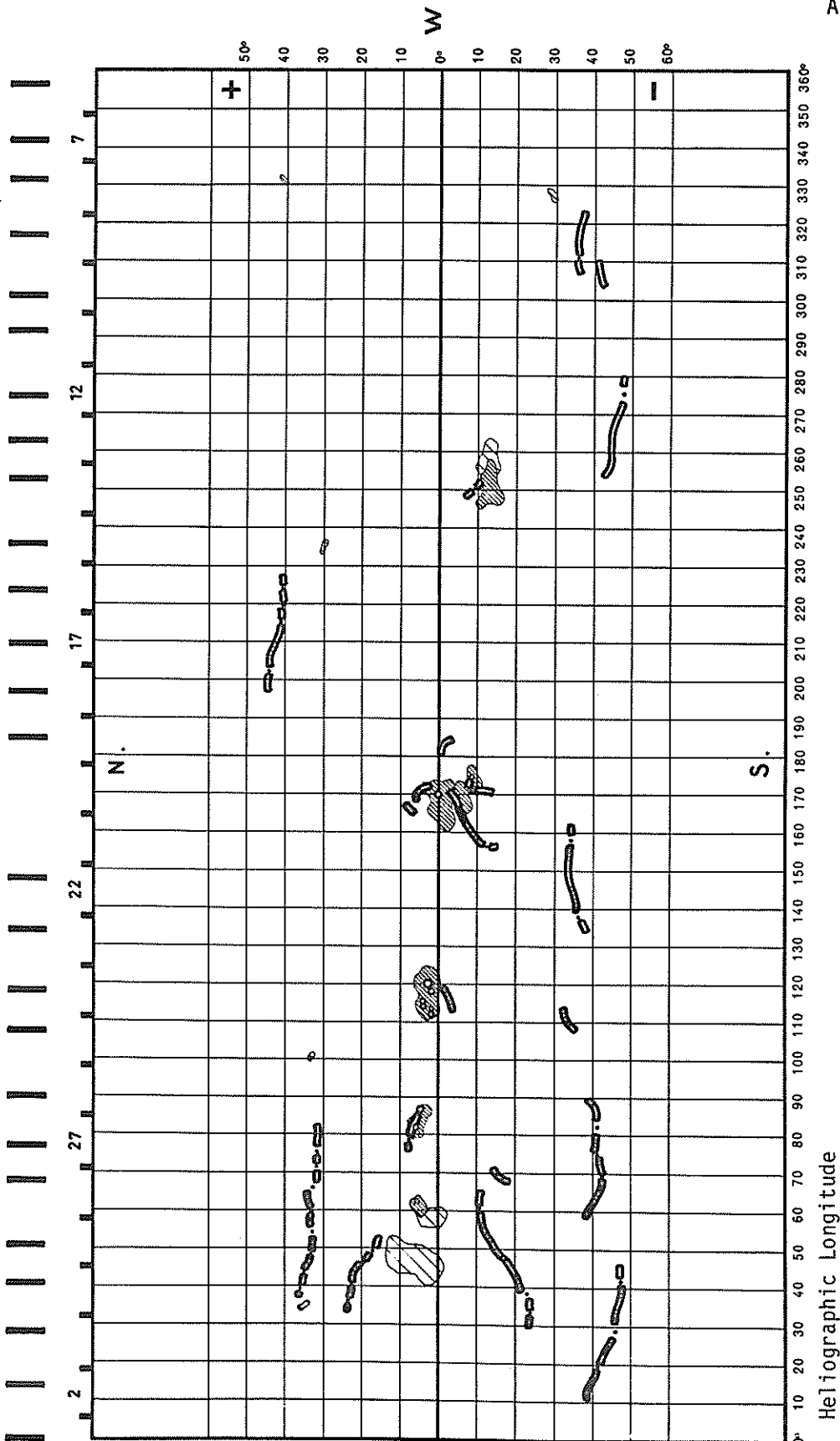
Region No.	Coordinates		Imp	Age at	Spotless Region	Region No. in Rotation 1773	Activity at West Limb
	Lat.	Long.		CMP (Days)			
1	29°S	327	1	+4	x		disappeared
2	13°S	258	1	>6	x		disappeared
3	13°S	251	1	>6	x	2	decreasing
4	9°S	174	2	>6			dispersed
5	5°S	169	1	>6	x		decreasing
6	0	167	3	>6			decreasing
7	3°N	118	4	+3			decreasing
8	6°N	83	3	+5			stable
9	6°N	61	2	-4			decreasing

CARTE SYNOPTIQUE

CARRINGTON ROTATION NUMBER 1774  
(6 April to 3 May 1986)

Meudon Observatory

April 1986





APRIL 1986

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/ USAF Region	CMP Mo	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
													Time (UT)	Apparent (10 <sup>-6</sup> Disk)	Corr (Sq Deg)	
			19 0914		0915	No Flare Patrol										
			21 1141		1142	No Flare Patrol										
			21 1152		1157	No Flare Patrol										
			21 1201		1225	No Flare Patrol										
			21 1238		1246	No Flare Patrol										
0004		21	15111	1513	1536	S00 W10 4725A	04	20.9	25	SN				54		F
	RAMY	21	1511	1513	1542	S01 W11 4725A	04	20.8	31	SN				76		F
	HOLL	21	1512	1513	1529	N00 W10 4725A	04	20.9	17	SF	3	C		32		F
		22	2254		2259	No Flare Patrol										
0005		23	00044	00151	0018	N03 E22 4726	04	24.6	14	SF				31		F
	HOLL	23	0004	0015	0019	N02 E22 4726	04	24.6	15	SF	4	C		25		F
	PALE	23	0008	0016	0018	N04 E22 4726	04	24.6	10	SF	3	C		37		F
0006		23	0151	0153	0150	N03 E21 4726	04	24.6	1439	SN				59	1.1	F
	YUNN	23	0139E		0142	N04 E21 4726	04	24.6	3D	SN		P	0139	96	1.1	F
	PALE	23	0151	0153	0157	N02 E21 4726	04	24.6	6	SF	3	C		22		F
0007	PALE	23	0357E	0358U	0406D	N03 E21 4726	04	24.7	9D	SF	1	C		20		F
0008	LEAR	23	0510	0515	0522D	N05 E17 4726	04	24.5	12D	SN	3	C		45		F
0009	RAMY	23	1248	1248	1255	N03 E15 4726	04	24.6	7	SF	3	C		24		F
0010		23	14012	14043	1416	N02 E12 4726	04	24.5	15	SN				90		EF
	HOLL	23	1401	1407	1417	N02 E13 4726	04	24.5	16	SF	3	C		89		F
	RAMY	23	1403	1404	1414	N02 E12 4726	04	24.5	11	SB	3	C		91		FE
0011		23	15213	1525	1540	N02 E12 4726	04	24.5	19	SN				41		F
	RAMY	23	1521	1525	1534	N02 E12 4726	04	24.5	13	SN	3	C		51		F
	HOLL	23	1524	1525	1547	N02 E12 4726	04	24.5	23	SF	3	C		31		F
0012		23	1711	17111	1720	N02 E12 4726	04	24.6	9	SF				41		F
	RAMY	23	1711	1711	1720	N02 E12 4726	04	24.6	9	SN	3	C		53		F
	HOLL	23	1711	1712	1717	N02 E11 4726	04	24.5	6	SF	3	C		31		F
	PALE	23	1711	1712	1722	N02 E13 4726	04	24.7	11	SF	3	C		40		F
0013	PALE	23	2030	2031	2039	N03 E10 4726	04	24.6	9	SN	3	C		21		F
0014	HOLL	23	2043	2044	2055	N02 E10 4726	04	24.6	12	SF	3	C		25		F
0015	HOLL	23	2228	2231	2249	N03 E13 4726	04	24.9	21	SF	3	C		35		F
0016		23	2302*	2305*	2344	N03 E08 4726	04	24.5	42	SF				40		FK
	HOLL	23	2302	2305	2310D	N03 E11 4726	04	24.8	8D	SF	3	C		44		F
	PALE	23	2303	2308	2345	N03 E08 4726	04	24.5	42	SF	3	C		59		K
	PALE	23	2303	2338	2345	N03 E08 4726	04	24.5	42	SN	3	C		42		F K
	LEAR	23	2336	2341	2342	N04 E09 4726	04	24.6	6	SF	1	C		35		
	PALE	23	2352	2353		N02 E07 4726	04	24.5		SN	3	C		21		
		24	1952		2158	No Flare Patrol										
		24	2213		2239	No Flare Patrol										
		25	2003		2012	No Flare Patrol										
		25	2016		2036	No Flare Patrol										
		25	2133		2143	No Flare Patrol										
		27	1101		1134	No Flare Patrol										
		30	1342		1404	No Flare Patrol										

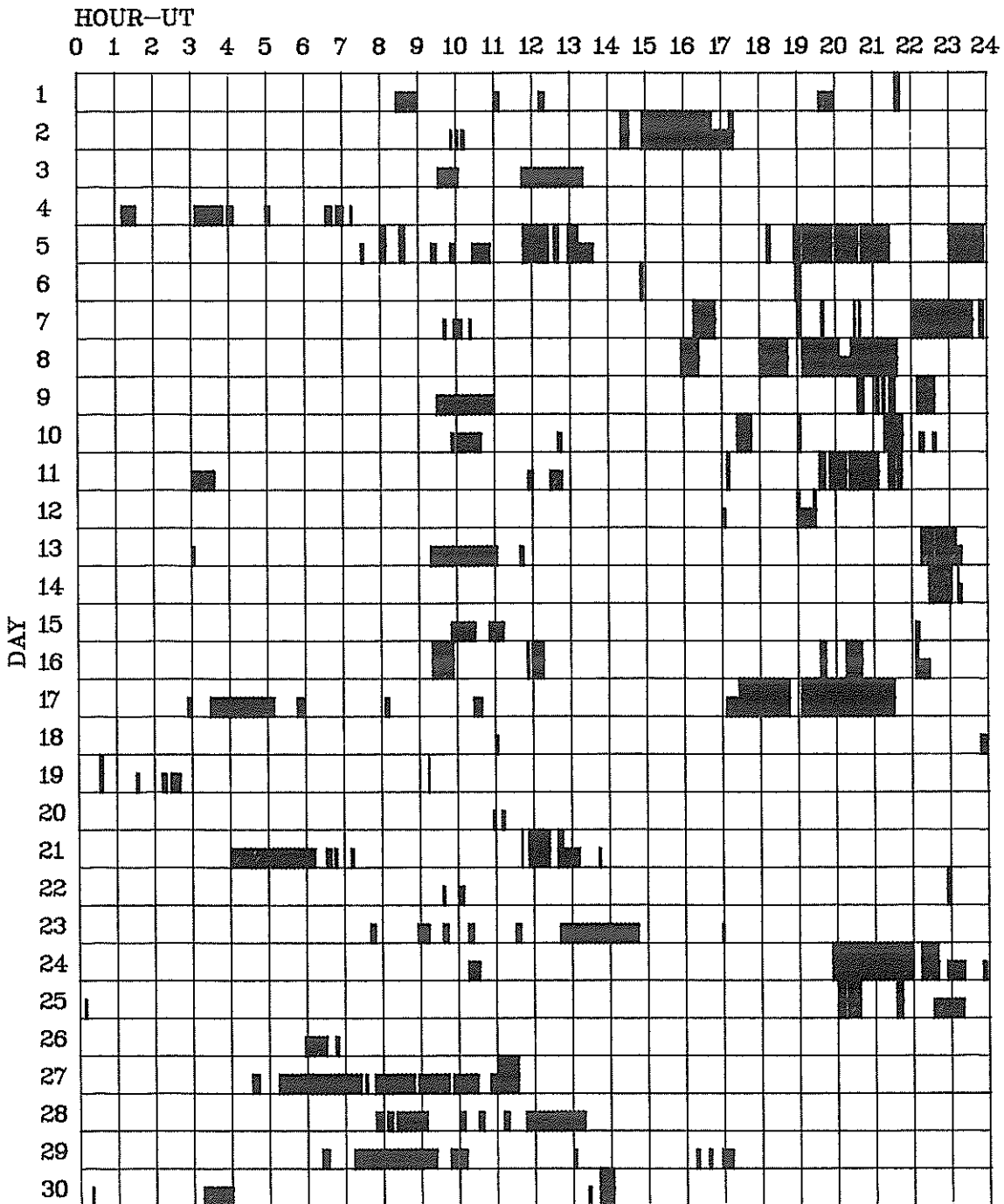
"Remarks":

- A = Eruptive prominence whose base is less than 90° 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

## APRIL 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  
Athens  
Bucharest  
Catania

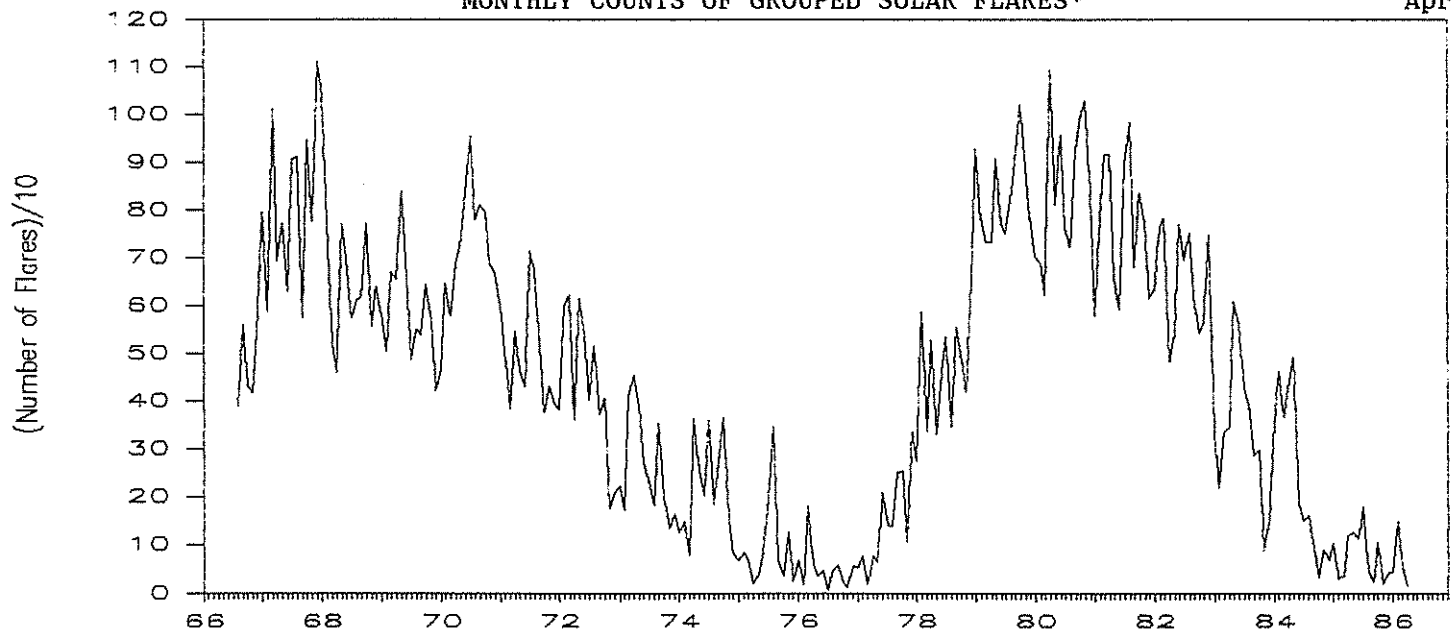
Haute Provence  
Holloman  
Hurbanovo  
Istanbul

Kanzelhoehe  
Kharkov  
Learmonth  
Lvov

Manila  
Mitaka  
Palehua  
Peking  
Purple Mt.

Ramey  
Tashkent  
Voroshilov  
Wendelstein  
Yunnan

## 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	763	783	480	540	769	696	753	616	545	565	749	7890
1983	332	220	337	346	609	561	427	395	289	298	88	152	4054
1984	353	461	366	440	492	185	151	161	95	36	92	69	2901
1985	104	29	38	118	126	113	177	48	22	106	19	45	945
1986	46	150	53	16									265

\*Flare counts are preliminary from July 1982 to present.

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Apr 86

SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

APRIL 1986

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean (2 Hz)			
01	260	ONDR	43 NS	0816.0	1111.0	293.0	40.0				
	536	ONDR	8 S	1020.5	1020.6	.3	30.0				
	808	ONDR	8 S	1020.7	1020.8	.3					
	536	ONDR	8 S	1151.8	1151.8	.1	5.0				
	536	ONDR	8 S	1307.5	1307.8	.5	16.0				
	808	ONDR	1 S	1307.5	1307.8	.5					
	33	UPIC	2 S/F	1419.1	1419.3	.3					
	29	UPIC	2 S/F	1419.2	1419.4	.6					
02	3750	TYKW	32 ABS	0030.0	0120.0	120.0	-1.0	-0.5			
	9400	TYKW	32 ABS	0050.0	0120.0	90.0	-2.0	-1.0			
	260	ONDR	8 S	0808.0	0808.0	.1	3.0				
	260	ONDR	8 S	0851.8	0851.8	.1	3.0				
	260	ONDR	4 S/F	1055.0	1055.8	1.0	1.0				
	260	ONDR	4 S/F	1102.0	1102.6	.8	2.0				
	33	UPIC	2 S/F	1241.2	1241.5	.5					
	29	UPIC	2 S/F	1241.5	1241.9	.8					
	03	3750	TYKW	20 GRF	0210.0	0325.0	200.0	1.5	0.0		
		260	ONDR	8 S	1011.0	1011.0	.2	2.0			
536		ONDR	8 S	1011.0	1011.2	.3	12.0				
536		ONDR	8 S	1026.5	1026.5	.2	4.0				
04	260	ONDR	8 S	1117.5	1117.5	.1	3.0				
05	260	ONDR	42 SER	1238.5	1246.0	15.5	4.0				
06	430	KRAK	8 S	0818.7	0818.7	.1	4.0				
	810	KRAK	8 S	0818.7	0818.7	.1	8.0				
07	536	ONDR	8 S	0933.0	0933.0	.2	9.0				
08	33	UPIC	2 S/F	1312.9	1313.1	.4					
	29	UPIC	1 S	1313.2	1313.3	.2					
09	260	ONDR	8 S	0953.5	0953.5	.1	2.0				
	260	ONDR	40 F	1014.0	1015.5	4.0	3.0				
12	260	ONDR	43 NS	0909.0	1148.5	201.00					
13	260	ONDR	43 NS	1002.0		242.00	6.0				
14	930	BORD	41 F	0708.0	0708.4	.7	56.0	3.0			
	536	ONDR	46 C	1018.8	1018.8	1.2	24.0				
	260	ONDR	46 C	1019.0	1019.0	1.2	3.0				
	808	ONDR	1 S	1019.0	1019.5	.7					
	536	ONDR	46 C	1119.2	1120.0	1.5	28.0				
	260	ONDR	46 C	1119.5	1120.0	1.5	7.0				
	808	ONDR	4 S/F	1119.8	1120.5	1.5					
	536	ONDR	46 C	1122.3	1123.0	1.0	11.0				
	260	ONDR	46 C	1122.5	1123.5	1.2	2.0				
	808	ONDR	1 S	1122.8	1122.9	.5					
	536	ONDR	46 C	1207.2	1207.2	2.5	15.0				
	260	ONDR	46 C	1207.5	1207.5	4.3	4.0				
	260	ONDR	46 C	1218.0	1218.5	2.0	4.0				
	536	ONDR	46 C	1218.0	1219.5	2.0	9.0				
	15	260	ONDR	44 NS	0545.0E		502.00	2.0			
536		ONDR	4 S/F	0702.8	0703.3	1.0	9.0				
808		ONDR	1 S	0703.0	0703.5	1.0					
536		ONDR	8 S	0708.0	0708.2	.7	23.0				
808		ONDR	1 S	0708.5	0708.8	.7					
808		ONDR	1 S	0726.0	0726.2	.5					
536		ONDR	8 S	0735.8	0736.0	.5	28.0				
808		ONDR	1 S	1031.3	1031.5	.5					
808		ONDR	1 S	1046.5	1046.8	.5					
536		ONDR	1 S	1046.5	1046.8	.8	5.0				
536		ONDR	1 S	1212.5	1213.5	1.5	5.0				
808		ONDR	4 S/F	1244.0	1244.8	1.0					
536		ONDR	46 C	1244.0	1245.0	2.0	16.0				
16	260	ONDR	40 F	0741.5	0741.5	2.2	3.0				

SOLAR RADIO EMISSION  
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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean (2 Hz)		
16	260	ONDR	40 F	0748.0	0748.5	1.0	3.0			
	810	KRAK	2 S/F	0817.5	0818.0	1.0	12.0	4.0		
	260	ONDR	40 F	0831.0	0831.5	7.5	4.0			
	260	ONDR	40 F	0938.2	0939.0	2.0	4.0			
	260	ONDR	40 F	1013.0	1013.0	2.5	7.0			
260	ONDR	40 F	1219.8		8.0	1.0				
17	9395	PEKG	3 S	0138.0	0140.2	4.0	18.3	6.1		
	204	IZMI	41 F	0627.2	0628.0	3.2	34.0			
	260	ONDR	8 S	0712.5	0712.5	.1	3.0			
	260	ONDR	8 S	0729.3	0729.3	.1	4.0			
	260	ONDR	8 S	0746.8	0746.8	.1	4.0			
	260	ONDR	8 S	0905.1	0905.1	.1	4.0			
	260	ONDR	8 S	0929.0	0929.0	.1	4.0			
	810	KRAK	8 S	1147.0	1147.3	.4	7.0			
18	260	ONDR	44 NS	0548.0E		499.0D	4.0			
	536	ONDR	40 F	0700.2	0700.6	7.0	24.0			
	808	ONDR	40 F	0735.5		34.5				
	808	ONDR	40 F	0838.0		6.5				
	808	ONDR	40 F	0907.7		76.0				
19	260	ONDR	44 NS	0705.0E	1028.0	420.0D	11.0			
	204	IZMI	1 S	0827.0	0827.1	.2	7.0	3.5		
21	430	KRAK	8 S	0742.0	0742.2	.4	15.0			
	430	KRAK	8 S	0913.0	0913.2	.5	24.0			
22	260	ONDR	44 NS	0558.0E		240.0D	4.0			
	200	HIRA	44 NS	1955.0E	2340.0	780.0D	10.0	6.0		WL
	245	LEAR	43 NS	2256.0	0254.6	652.0D	54.0			QL=6 ST=2 TYP=1
	245	PALE	43 NS	2305.0	0110.5	331.0D	38.0			QL=6 ST=2 TYP=1
23	200	GORK	44 NS	0346.0E		495.0D		10.0		
	260	ONDR	44 NS	0548.0E		510.0D	5.0			
	204	IZMI	43 NS	0600.0		360.0	15.0			
	536	ONDR	43 NS	1034.0	1116.0	51.0	32.0			
	430	KRAK	43 NS	1053.0		127.0D	40.0			
	245	PALE	43 NS	1624.0	0228.0	726.0D	130.0			QL=5 ST=2 TYP=1
	245	PALE	43 NS	1624.0	1731.3		24.0			QL=6 ST=1 TYP=1
	200	HIRA	44 NS	1955.0E	2250.0	780.0D	45.0	20.0		WL
	245	LEAR	43 NS	2256.0	0219.8	650.0D	91.0			QL=6 ST=2 TYP=1
	3750	TYKW	20 GRF	0320.0	0420.0	150.0	2.0	1.0		
	9400	TYKW	20 GRF	0330.0	0420.0	140.0	2.0	1.0		
	2000	TYKW	20 GRF	0350.0	0420.0	90.0	1.0	.5		
	650	GORK	22 GRF	1019.4	1101.2	105.0D	13.0			
	950	GORK	22 GRF	1026.2	1109.0	99.0D	10.0			
	930	BORD	8 S	1042.8	1042.9	.2	13.0	2.0		
	2800	OTTA	22 GRF	1430.0	1455.0	125.0	1.6	.8		
	2800	OTTA	20 GRF	1805.0	1845.0	90.0	1.6	1.0		
	2800	OTTA	1 S	2026.9	2027.0	1.0	.4	.3		
2700	PENT	20 GRF	2300.0	2305.0	50.0	1.0	.5			
3750	TYKW	20 GRF	2300.0	2306.0	80.0	2.0	1.0			
9400	TYKW	20 GRF	2300.0	2330.0	90.0	3.0	1.5			
24	200	GORK	44 NS	0330.0E		512.0D		10.0		
	536	ONDR	44 NS	0545.0E		498.0D	16.0			
	260	ONDR	44 NS	0545.0E	0907.5	498.0D	87.0			
	204	IZMI	44 NS	0600.0E		360.0D	30.0			
	430	KRAK	44 NS	0700.0E	1054.0U	360.0D	200.0D			
	430	KRAK	44 NS	0700.0E	1124.0U		200.0D			
	430	KRAK	44 NS	0700.0E	1223.0U		200.0D			
	245	SGMR	44 NS	1010.0E	2020.3	783.0D	830.0			QL=6 ST=3 TYP=1
	245	SGMR	44 NS	1046.0E	2020.0	794.0D	840.0			QL=5 ST=3 TYP=1
	410	SGMR	44 NS	1128.0E	2015.0	705.0D	28.0			QL=6 ST=3 TYP=1
	245	SGMR	44 NS	1554.0E	1554.0	486.0D	150.0			QL=5 ST=3 TYP=1
	245	PALE	43 NS	1623.0	1929.6	730.0D	260.0			QL=6 ST=2 TYP=1
	410	PALE	43 NS	1623.0	2014.6	730.0D	48.0			QL=6 ST=2 TYP=1
610	SGMR	44 NS	1658.0E	1658.0	375.0D	81.0			QL=6 ST=3 TYP=1	
200	HIRA	44 NS	1954.0E	0038.0	780.0D	40.0	20.0		WL	

SOLAR RADIO EMISSION  
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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Flux Density Mean (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Int	Remarks
24	245	LEAR	43 NS	2257.0	0114.6	650.0D	180.0			QL=6 ST=2 TYP=1
	3750	TYKW	5 S	0035.0	0042.3	12.0	14.0	4.0		
	2700	PENT	21 GRF	0035.0	0045.0	75.0D	2.8			
	2000	TYKW	21 GRF	0035.0	0100.0	100.0	1.5	.7		
	4995	SYDN	4 S/F	0036.0	0041.0	8.0D	24.0			QL= ST= TYP=3
	9400	TYKW	45 C	0038.0	0041.9	22.0	31.0	11.0		
	9400	TYKW		0038.0	0042.3		30.0			
	2695	SYDN	4 S/F	0038.0	0041.0	4.0D	12.0			QL= ST= TYP=3
	2000	TYKW	45 C	0041.0	0042.9	7.0	2.0	.5		
	15400	LEAR	4 S/F	0041.0E	0041.0	5.0D	19.0			QL=5 ST=2 TYP=3
	4995	LEAR	8 S	0041.0E	0042.0	1.0D	26.0			QL=5 ST=2 TYP=3
	8800	LEAR	8 S	0041.0E	0042.0	1.0D	45.0			QL=5 ST=2 TYP=3
	2700	PENT	1 S	0042.0	0042.4	2.0	3.0	1.5		
	3750	TYKW	30 PBI	0047.0		85.0	4.0	2.0		
	9400	TYKW	30 PBI	0100.0		75.0	8.0	4.0		
	1000	TYKW	45 C	0122.0	0122.6	1.5	20.0	2.0		
	3750	TYKW	20 GRF	0130.0	0148.0	40.0	1.0	.5		
	9400	TYKW	20 GRF	0140.0	0152.0	35.0	2.0	1.0		
	3750	TYKW	31 ABS	0212.0	0240.0	75.0	-2.0	-1.0		
	9400	TYKW	31 ABS	0215.0	0240.0	80.0	-2.0	-1.0		
	2000	TYKW	31 ABS	0215.0	0250.0	85.0	-1.0	-0.5		
	2000	TYKW	28 PRE	0341.0	0345.0	4.0	1.0	.5		
	2840	PEKG	3 S	0342.9	0346.9	9.0	17.5	4.4		
	3750	TYKW	45 C	0343.0	0346.8	27.0	29.0	8.0		
	3750	TYKW		0343.0	0347.3		28.0			
	9400	TYKW	45 C	0344.0	0346.8	26.0	36.0	13.0		
	2000	TYKW	45 C	0345.0	0346.8	15.0	10.0	2.0		
	2000	TYKW		0345.0	0347.3		9.0			
	4995	LEAR	4 S/F	0345.0E	0346.0	3.0D	46.0			QL=5 ST=2 TYP=3
	9395	PEKG	3 S	0345.9	0346.9	6.0	49.0	14.8		
	1000	TYKW	45 C	0346.0	0347.2	2.0	2.0	.5		
	4995	PALE	47 GB	0346.0E	0346.0	459.0D	59.0			QL=5 ST=2 TYP=5
	8800	LEAR	4 S/F	0346.0E	0346.0	12.0D	45.0			QL=5 ST=2 TYP=3
	2695	LEAR	8 S	0346.0E	0347.0	1.0D	19.0			QL=5 ST=2 TYP=3
	2950	GORK	4 S/F	0346.0	0347.1	2.7	10.5			
	9100	GORK	4 S/F	0346.3	0347.1	2.4	30.0	13.0		
	4995	PALE	47 GB	0346.6	0346.6	.2	59.0			QL=6 ST=2 TYP=5
	2840	PEKG	29 PBI	0351.9		15.0	3.9	1.9		
	9395	PEKG	29 PBI	0351.9		19.0	21.9	12.3		
	2000	TYKW	29 PBI	0400.0		30.0	1.0	.5		
	9400	TYKW	29 PBI	0410.0		30.0	8.0	4.0		
	3750	TYKW	29 PBI	0410.0		70.0	3.0	1.5		
	9400	TYKW	28 PRE	0520.0	0608.0	48.0	4.0	2.0		
	2000	TYKW	28 PRE	0525.0	0535.0	45.0	1.5	1.0		
	3750	TYKW	28 PRE	0527.0	0541.0	41.0	3.0	1.5		
	9395	PEKG	20 GRF	0600.9	0613.9	24.0	18.0	6.6		
	9300	KISV	45 C	0604.7	0614.1	80.0	32.0			
3100	CRIM	1 S	0606.0	0614.0	14.0	10.0	3.0			
9100	GORK	21 GRF	0606.0	0620.7	69.0	25.0				
5900	KISV	4 S/F	0606.5	0614.2	14.5	30.0				
2840	PEKG	21 GRF	0607.0	0616.0	33.0	4.6	1.9			
9400	TYKW		0608.0	0613.8		27.0				
3750	TYKW	45 C	0608.0	0614.2	32.0	10.0	8.0			
9400	TYKW	45 C	0608.0	0614.2	32.0	28.0	18.0			
2950	GORK	21 GRF	0608.0	0613.2	63.0	5.8				
2000	TYKW	45 C	0610.0	0614.4	50.0	7.0	2.5			
4995	LEAR	8 S	0610.0E	0612.0	2.0D	14.0			QL=5 ST=2 TYP=3	
4995	ATHN	4 S/F	0610.0E	0614.0	10.0D	14.0			QL=5 ST=2 TYP=3	
8800	ATHN	4 S/F	0610.0E	0614.0	15.0D	32.0			QL=5 ST=2 TYP=3	
2695	ATHN	4 S/F	0610.0E	0614.0	10.0D	8.0			QL=5 ST=2 TYP=3	
8800	LEAR	20 GRF	0610.0E	0619.0	15.0D	31.0			QL=5 ST=2 TYP=2	
950	GORK	4 S/F	0610.4	0613.2	5.3	17.0				
1000	TYKW	45 C	0611.0U	0613.3	4.0U	17.0	3.0U		INTERFERENCE	
15400	LEAR	8 S	0612.0E	0614.0	2.0D	28.0			QL=5 ST=2 TYP=3	
9100	GORK	1 S	0612.0	0614.1	3.0	11.0				
500	HIRA	45 C	0612.2	0614.2	2.4	40.0	15.0		NR	
650	GORK	4 S/F	0612.4	0614.3	2.3	14.0				
2840	PEKG	1 S	0613.0	0614.2	2.0	4.6	2.1			
1415	ATHN	8 S	0613.0E	0614.0	2.0D	7.0			QL=5 ST=2 TYP=3	
3000	IZMI	5 S	0613.0	0614.4	2.0	3.0	1.5			
808	ONDR	40 F	0613.5		4.5					

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

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A P R I L      1 9 8 6

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean (2 Hz)		
24	2950	GORK	1 S	0613.5	0614.1	1.0	3.2	1.5		
	2695	LEAR	4 S/F	0614.0E	0614.0	1214.0D	12.0			QL=5 ST=2 TYP=3
	610	LEAR	4 S/F	0614.0E	0614.0	62.0D	19.0			QL=5 ST=2 TYP=3
	410	LEAR	4 S/F	0614.0E	0614.0	28.0D	32.0			QL=5 ST=2 TYP=3
	650	GORK	2 S/F	0618.8	0619.7	3.7	10.5			
	500	HIRA	6 S	0619.3	0619.6	1.8	13.0	4.0		WL
	950	GORK	2 S/F	0619.3	0619.6	1.6	7.5			
	1000	TYKW	45 C	0619.5	0619.8	6.5U	7.0	1.0U		
	5900	KISV	29 PBI	0621.0	0621.0	54.0	15.0			
	3750	TYKW	30 PBI	0640.0	0640.0	60.0	7.0	3.5		
	9400	TYKW	30 PBI	0640.0	0640.0	50.0	12.0	6.0		
	2000	TYKW	29 PBI	0700.0	0700.0	50.0	1.5	.7		
	3750	TYKW	5 S	0706.0	0706.9	2.0	7.0	2.0		
	9100	GORK	1 S	0706.4	0706.7	1.1	2.3			
	2950	GORK	1 S	0706.5	0706.7	.6	1.8	.9		
	5900	KISV	8 S	0706.5	0706.8	1.0	15.0			
	9400	TYKW	5 S	0706.5	0706.9	1.5	5.0	2.0		
	808	ONDR	8 S	0721.0	0721.0	.1				
	650	GORK	22 GRF	0745.0	0909.4	242.0D	8.0			
	950	GORK	20 GRF	0840.5E	1148.0	200.0D	3.0			
	808	ONDR	40 F	0910.0	0910.0	93.0				
	1470	POTS	4 S/F	1217.5	1220.5	4.5	8.0			
	3000	POTS	2 S/F	1217.5	1220.5	4.0	5.0			
	2800	OTTA	2 S/F	1219.0	1220.5	3.0	4.2	2.1		
	9500	POTS	4 S/F	1414.5	1416.6	4.5	52.0			
	2800	OTTA	1 S	1415.0	1416.5	4.0	7.2	3.6		
	3000	POTS	3 S	1415.0	1416.9	5.0	14.0			
	4995	SGMR	47 GB	1416.6	1416.6	3.0	51.0			QL=6 ST=3 TYP=5
	8800	SGMR	47 GB	1416.6	1416.6	2.5	82.0			QL=6 ST=3 TYP=5
	2800	OTTA	29 PBI	1419.0	1419.0	140.0	5.2	2.0		
	2800	OTTA	20 GRF	1645.0	1720.0	105.0	1.8	1.5		
	2800	OTTA	20 GRF	1955.0	2045.0	75.0	1.8	.9		
	3750	TYKW	20 GRF	2144.0	2146.0	30.0	1.5	0.7		
	9400	TYKW	20 GRF	2243.0	2255.0	50.0	3.0	1.5		
3750	TYKW	21 GRF	2244.0	2246.0	60.0	1.0	.5			
2000	TYKW	45 C	2245.0	2247.7	4.0	2.0	.5			
3750	TYKW	5 S	2247.0	2247.6	3.0	1.5	.5			
2700	PENT	1 S	2247.3	2247.8	1.5	1.4	.8			
25	200	GORK	44 NS	0400.0E	0400.0	393.0D		5.0		
	221	ABST	43 NS	0500.0	0635.0	300.0				
	260	ONDR	44 NS	0534.0E	1035.0	511.0D	138.0			
	204	IZMI	44 NS	0600.0E		360.0D	90.0			
	245	SGMR	43 NS	1009.0	1748.3	785.0D	160.0			QL=6 ST=2 TYP=1
	410	PALE	44 NS	1635.0E	1731.0	445.0D	21.0			QL=5 ST=1 TYP=1
	200	HIRA	44 NS	1954.0E	2317.0	780.0D	10.0	6.0		WL
	245	LEAR	43 NS	2257.0	2311.5	649.0D	169.0			QL=6 ST=2 TYP=1
	3750	TYKW	20 GRF	0400.0	0402.0	40.0	1.0	.5		
	3750	TYKW	5 S	0522.0	0527.0	15.0	1.5	.5		
	3750	TYKW	21 GRF	0541.0	0545.0	120.0	2.0	1.0		
	3750	TYKW	20 GRF	0607.0	0613.0	35.0	3.0	1.5		
	808	ONDR	1 S	0624.2	0624.3	.3				
	930	BORD	8 S	0735.8	0736.1	.4	10.0	2.0		
	1470	POTS	27 RF	1150.0		185.0D				
	2800	OTTA	20 GRF	1330.0	1400.0	100.0	2.0	1.0		
	2800	OTTA	1 S	2115.0	2115.8	1.0	1.2	.6		
	3750	TYKW	20 GRF	2202.0	2204.0	30.0	1.5	.7		
	2800	OTTA	1 S	2202.0	2206.0	10.0	1.2	.6		
	245	LEAR	47 GB	2325.6	2325.6	.4	139.0			QL=6 ST=3 TYP=5
410	LEAR	8 S	2325.6	2325.8	.4	25.0			QL=6 ST=3 TYP=3	
26	430	KRAK	44 NS	0700.0E		360.0D	11.0			
	536	ONDR	44 NS	0708.0E	0819.0	184.0D	65.0			
	260	ONDR	44 NS	0709.0E		401.0D	96.0			
	200	GORK	44 NS	0915.0E		76.0D		5.0		
	234	POTS	43 NS	0940.0	1121.0	290.0D	55.0U			
	204	IZMI	44 NS	1000.0E		120.0D	90.0			
	245	SGMR	43 NS	1007.0	1824.1	789.0D	700.0			QL=6 ST=2 TYP=1
	245	PALE	43 NS	1638.0	0201.3	721.0D	340.0			QL=6 ST=2 TYP=1
410	PALE	43 NS	1638.0	0304.8	721.0D	49.0			QL=6 ST=2 TYP=1	

SOLAR RADIO EMISSION  
OUTSTANDING OCCURRENCES

APRIL 1986

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean		
26	200	HIRA	44 NS	1950.0E	0307.0	810.00	65.0	35.0	0	
	100	HIRA	43 NS	2200.0	2250.0	370.00	25.0	5.0		
	410	LEAR	44 NS	2258.0E	0201.3	632.00	33.0			QL=6 ST=2 TYP=1
	610	LEAR	44 NS	2258.0E	0212.8	462.00	22.0			QL=6 ST=2 TYP=1
	3750	TYKW	20 GRF	0018.0	0019.4	60.0	1.5	.7		
	2700	PENT	1 S	0018.5	0019.5	4.0	2.0	1.0		
	3750	TYKW	21 GRF	0201.0	0227.0	80.0	2.0	1.0		
	3750	TYKW	5 S	0202.0	0203.7	7.0	2.0	.7		
	410	LEAR	47 GB	0254.0E	0254.0	1.00	340.0			QL=5 ST=3 TYP=5
	410	PALE	47 GB	0254.3	0254.5	.5	300.0			QL=1 ST=2 TYP=5
	410	LEAR	47 GB	0254.3	0254.8	.8	340.0			QL=6 ST=3 TYP=5
	9400	TYKW	5 S	0254.5	0254.7	1.0	5.0	1.5		
	3750	TYKW	5 S	0254.5	0254.8	1.5	3.0	1.0		
	2000	TYKW	5 S	0254.5	0254.8	1.0	14.0	2.0		
	1000	TYKW	5 S	0254.5	0254.9	1.5	2.5	1.0		
	410	LEAR	47 GB	0254.6	0254.8	.5	139.0			QL=6 ST=2 TYP=5
	245	LEAR	47 GB	0652.5	0653.6	1.3	110.0			QL=6 ST=2 TYP=5
	610	LEAR	8 S	0652.6	0653.5	1.2	21.0			QL=6 ST=2 TYP=3
	410	LEAR	47 GB	0653.3	0653.3	1.0	70.0			QL=6 ST=2 TYP=5
	2950	GORK	1 S	0653.3	0653.5	.6	1.8	0.9		
	3100	CRIM	1 S	0653.4	0654.0	1.0	4.0	1.0		
	650	GORK	22 GRF	0844.9	0846.6	12.8	5.0			
	650	GORK	22 GRF	0943.6	1008.2	50.00	7.0			
	2800	OTTA	21 GRF	1630.0	1645.0	70.0	5.0	2.5		
	4995	SGMR	47 GB	1632.8	1638.1	33.2	50.0			QL=6 ST=2 TYP=5
	8800	SGMR	4 S/F	1635.8	1637.8	36.2	49.0			QL=6 ST=2 TYP=3
2800	OTTA	3 S	1636.5	1638.6	8.0	12.6	4.2			
4995	PALE	47 GB	1638.0E	1638.0U	1.00	71.0			QL=1 ST=2 TYP=5	
27	200	GORK	44 NS	0342.0E		406.00		25.0		
	234	POTS	44 NS	0537.0E	0538.0U	530.00	77.00			
	204	IZMI	44 NS	0600.0E		360.00	100.0			
	260	ONDR	44 NS	0656.0E	1130.0	540.00	45.0			
	536	ONDR	44 NS	0657.0E	0817.0	263.00	13.0			
	245	SGMR	43 NS	1006.0	1947.8	790.00	110.0			QL=6 ST=2 TYP=1
	245	PALE	43 NS	1621.0	0227.3	721.00	130.0			QL=6 ST=2 TYP=1
	410	PALE	43 NS	1621.0	2204.3	721.00	33.0			QL=6 ST=2 TYP=1
	200	HIRA	44 NS	1950.0E	0317.0	810.00	8.0	5.0		0
	245	LEAR	43 NS	2258.0	0227.3	646.00	380.0			QL=6 ST=2 TYP=1
	410	LEAR	8 S	0251.0E	0253.0	2.00	29.0			QL=5 ST=2 TYP=3
	610	LEAR	8 S	0251.1	0251.3	.4	23.0			QL=6 ST=2 TYP=3
	410	LEAR	8 S	0251.3	0253.1	1.8	29.0			QL=6 ST=2 TYP=3
	245	LEAR	47 GB	0252.6	0252.8	1.5	160.0			QL=6 ST=2 TYP=5
	3750	TYKW	28 PRE	0400.0	0410.0	10.0	1.0	.5		
	2000	TYKW	5 S	0410.0	0410.8	2.0	2.0	.7		
	3750	TYKW	5 S	0410.0	0410.9	2.0	5.0	2.0		
	9400	TYKW	5 S	0410.0	0411.0	10.0U	5.0	2.0U		RAIN
	2950	GORK	1 S	0410.1	0410.8	1.6	1.8	.9		
	9100	GORK	1 S	0410.2	0410.8	1.3	3.5			
	3750	TYKW	29 PBI	0412.0		30.0	2.0	1.0		
	2000	TYKW	29 PBI	0412.0		20.0	1.0	.5		
	245	PALE	8 S	0429.5	0429.6	.3	410.0			QL=6 ST=2 TYP=3
	4995	ATHN	8 S	0757.0E	0758.0	1.00	10.0			QL=5 ST=2 TYP=3
	8800	ATHN	47 GB	0757.0E	0758.0	2.00	66.0			QL=5 ST=2 TYP=5
	9300	KISV	8 S	0757.5	0757.8	1.0	54.0			
	9400	TYKW	5 S	0757.5	0757.9	1.5	48.0	12.0		
	9100	GORK	4 S/F	0757.6	0757.9	.6	53.0			
	5900	KISV	8 S	0757.7	0757.9	1.0	24.0			
	15000	KISV	1 S	0757.7	0757.9	.5	19.0			
	9100	GORK	29 PBI	0758.2	0758.3	5.6	7.0			
	5900	KISV	29 PBI	0758.6	0758.6	9.0	8.0			
9400	TYKW	29 PBI	0759.0		10.0	3.0	1.5			
5900	KISV	21 GRF	1244.7	1252.6	16.00	8.0				
9300	KISV	22 GRF	1246.0	1252.6	14.00	5.0				
2800	OTTA	240 R	1818.0	1821.0	3.0	1.2	.6			
2000	TYKW	5 S	2120.0	2120.7	1.5	5.0	2.0			
2800	OTTA	1 S	2120.2	2120.5	1.0	7.6	3.6			
2000	TYKW	32 ABS	2230.0	2300.0	85.0	-1.5	-0.7			
9400	TYKW	32 ABS	2230.0	2300.0	100.0	-2.0	-1.0		RAIN	
3750	TYKW	32 ABS	2230.0	2300.0	85.0	-2.0	-1.0			
28	200	GORK	44 NS	0325.0E		175.00		10.0		

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

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Apr 86

A P R I L      1 9 8 6

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 <sup>-22</sup> W/m <sup>2</sup> Hz)	Mean (2 Hz)		
28	260	ONDR	44 NS	0539.0E		510.0D	30.0			
	245	PALE	43 NS	1621.0	0350.1	731.0D	160.0			QL=6 ST=2 TYP=1
	200	HIRA	44 NS	1950.0E	0330.0	810.0D	15.0	10.0		0
	245	LEAR	43 NS	2259.0	0747.1	644.0D	169.0			QL=6 ST=2 TYP=1
	3750	TYKW	32 ABS	0005.0	0055.0	150.0	-2.0	-1.0		
	2000	TYKW	32 ABS	0008.0	0050.0	150.0	-1.5	-0.7		
	2000	TYKW	20 GRF	0202.0	0204.5	35.0	2.0	.7		
	2000	TYKW	32 ABS	0320.0	0430.0	130.0	-1.5	-0.7		
	3750	TYKW	32 ABS	0340.0	0430.0	110.0	-2.0	-1.0		RAIN
	200	HIRA	41 F	0444.9	0446.2	1.5	120.0			0
29	113	POTS	42 SER	0956.9	1014.5	19.0	280.0			
	204	IZMI	4 S/F	1014.2	1014.2	.4	120.0	60.0		
	260	ONDR	44 NS	0539.0E		502.0D	27.0			
	204	IZMI	44 NS	0600.0E		360.0D	40.0			
	245	PALE	43 NS	1620.0	0004.5	735.0D	75.0			QL=6 ST=2 TYP=1
	245	LEAR	43 NS	2259.0	0004.5	644.0D	76.0			QL=6 ST=2 TYP=1
	200	HIRA	44 NS	2345.0E	0015.0	560.0D	7.0	4.0		0
	260	ONDR	44 NS	0550.0E	0825.0	502.0D	23.0			
	204	IZMI	44 NS	0600.0E		360.0D	15.0			
	245	PALE	44 NS	1619.0E	1719.0	461.0D	19.0			QL=5 ST=1 TYP=1
30	200	HIRA	44 NS	1945.0E	2223.0	810.0D	7.0	4.0		0
	245	LEAR	43 NS	2332.0	2354.3	610.0D	17.0			QL=6 ST=2 TYP=1
	930	BORD	8 S	1212.8	1212.9	.2	19.0	2.0		
	15400	SGMR	47 GB	1509.0E	1510.0	531.0D	89.0			QL=5 ST=1 TYP=5

Reports are received routinely from the following observatories:

ATHN = Athens	IZMI = IZMIRAN	OTTA = Ottawa	SYDN = Sydney
BERN = Berne	KISV = Kislovodsk	PALE = Palehua	TORN = Torun
BORD = Bordeaux	KRAK = Krakow	PEKG = Peking	TYKW = Toyokawa
CRIM = Crimea	LEAR = Learmonth	PENT = Penticton	TRST = Trieste
GORK = Gorky	MANI = Manila	POTS = Potsdam	UPIC = Upice
HIRA = Hiraiso	NOBE = Nobeyama	SAOP = Sao Paulo	VORO = Voroshilov
HUAN = Huancayo	ONDR = Ondrejov	SGMR = Sagamore Hill	

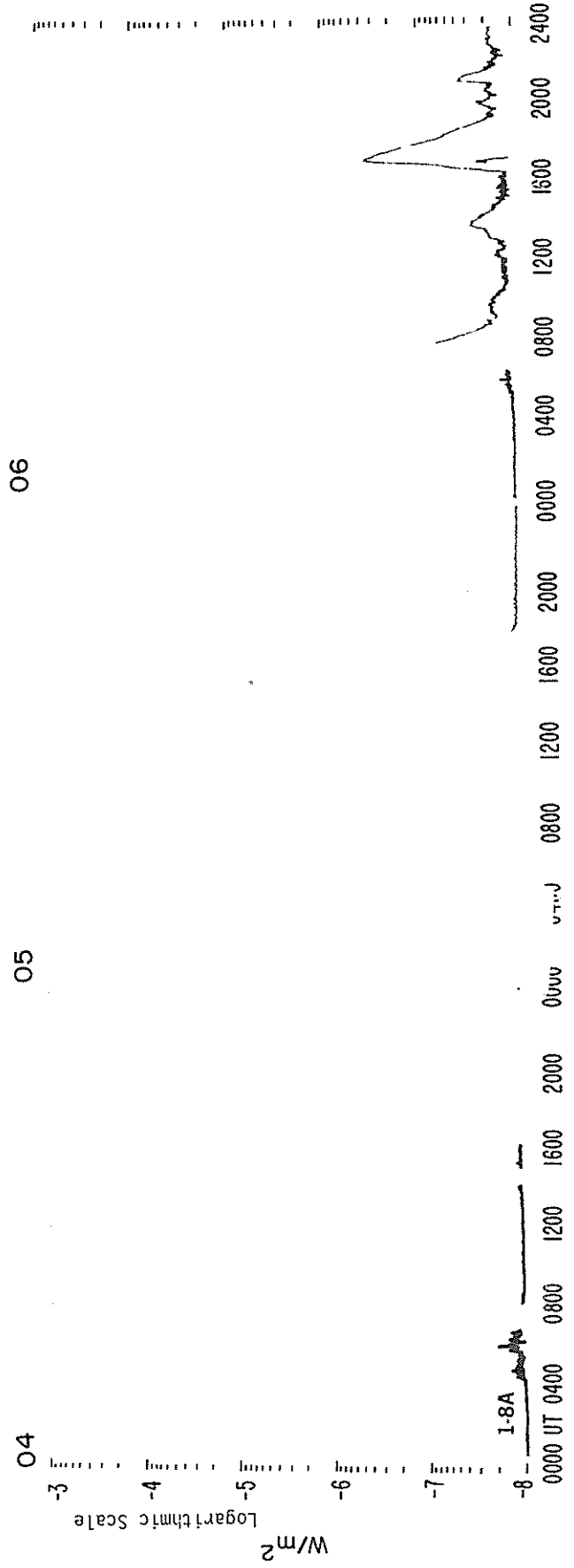
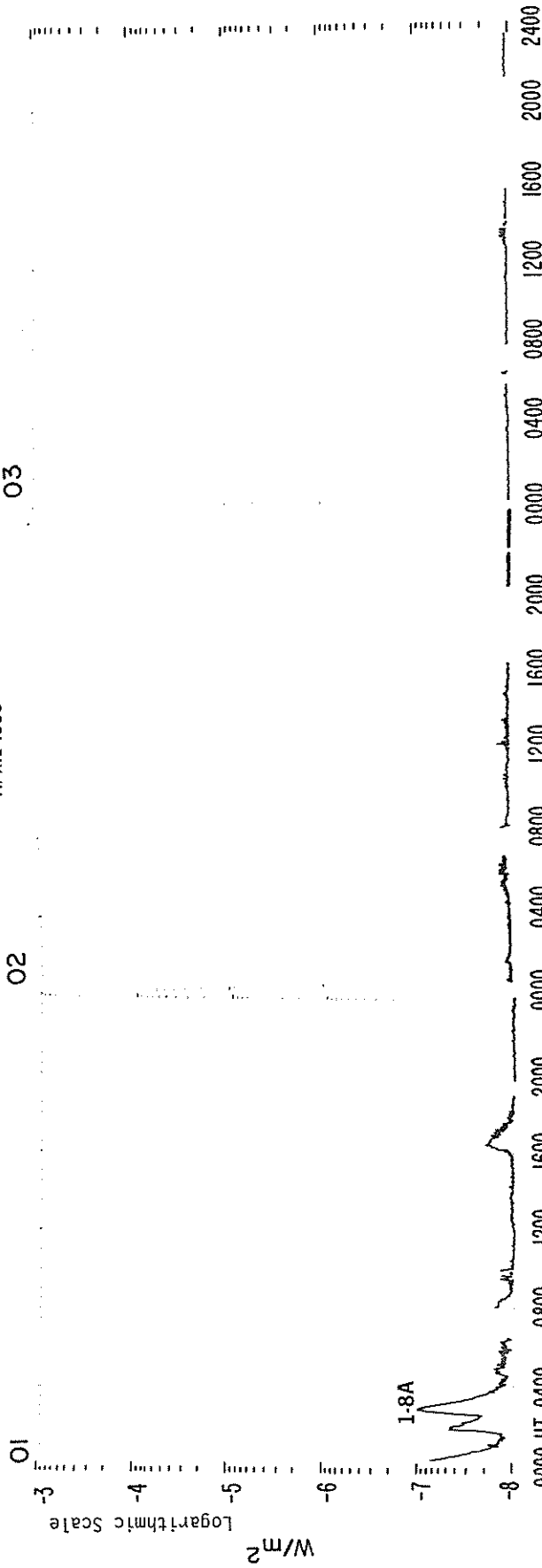
Explanation of Type Code:

1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F	
3A Simple 2A	24O Rise only	16A Fall A	27AF Rise and Fall AF	
21A Simple 3A GRF	240F Rise only F	26O Fall Only	31A Post Burst Decrease A	
2A Simple 1AF	24P Post Rise	26F Fall F	32A Absorption A	
			46F Complex F	



# GOES 6 X-RAYS

APRIL 1986



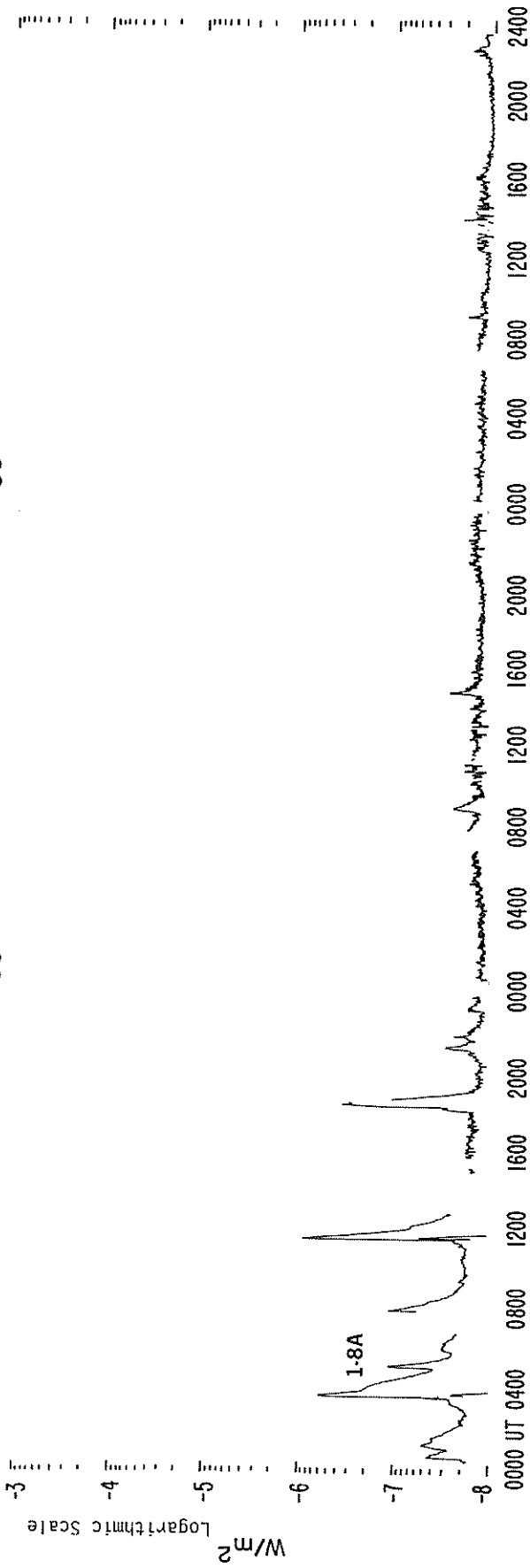
# GOES 6 X-RAYS

APRIL 1986

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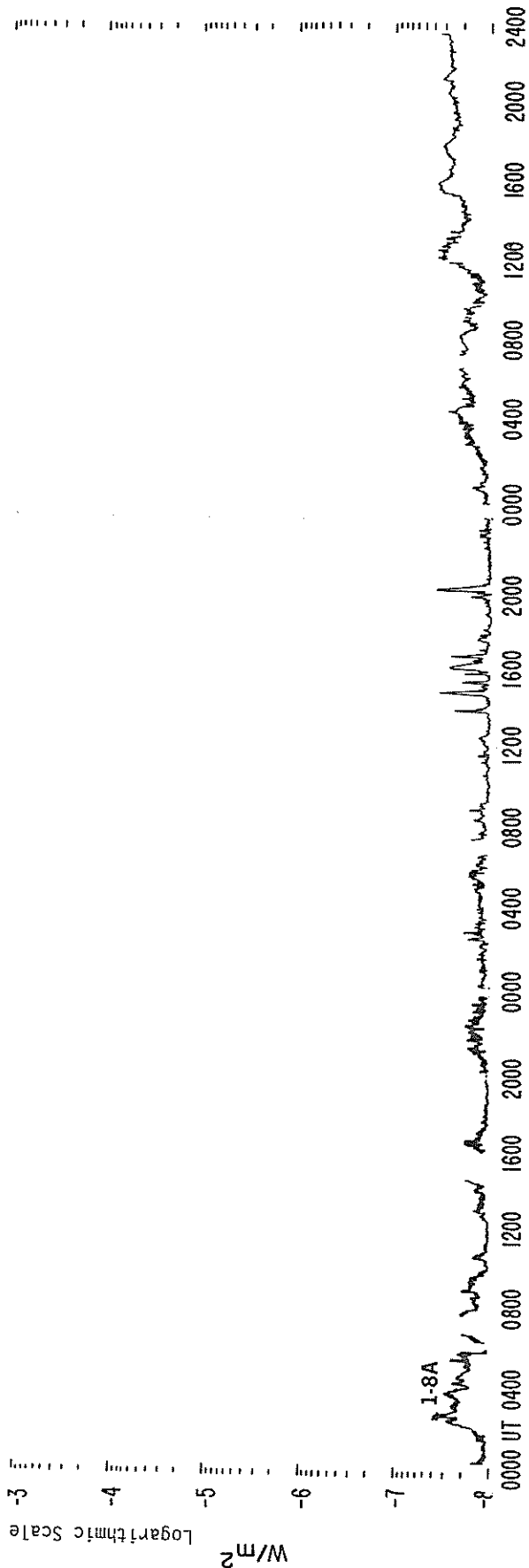
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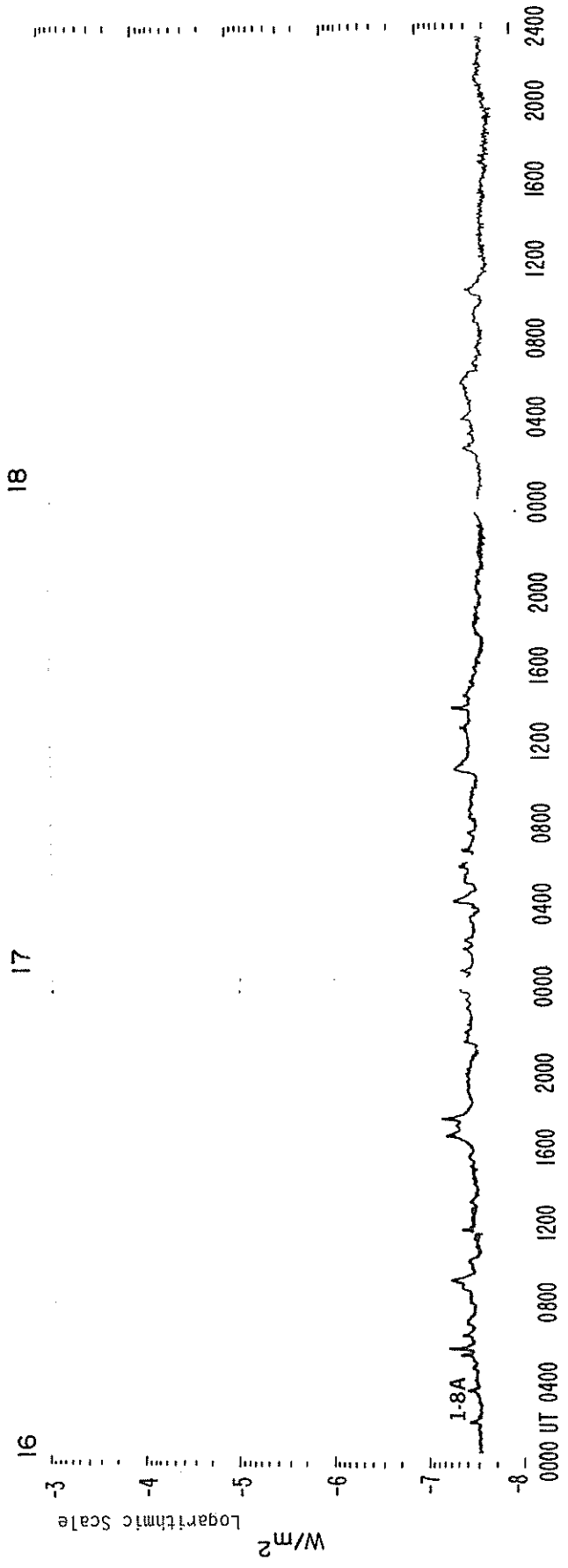
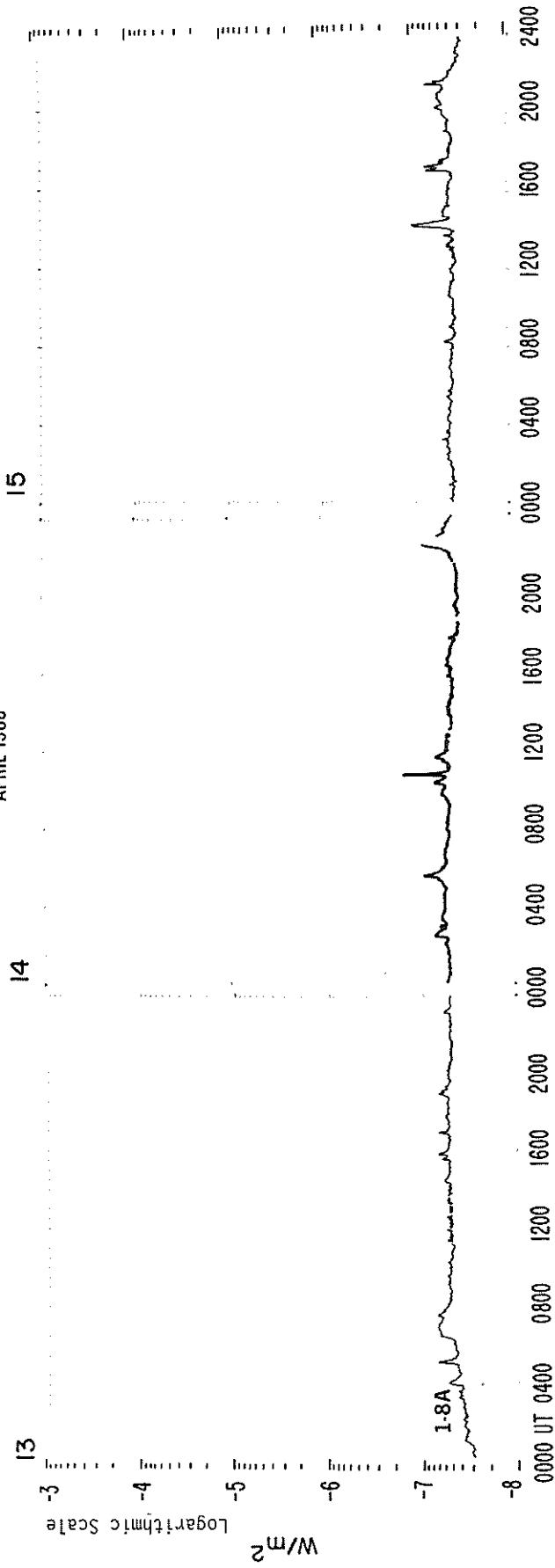
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# GOES 6 X-RAYS

APRIL 1986



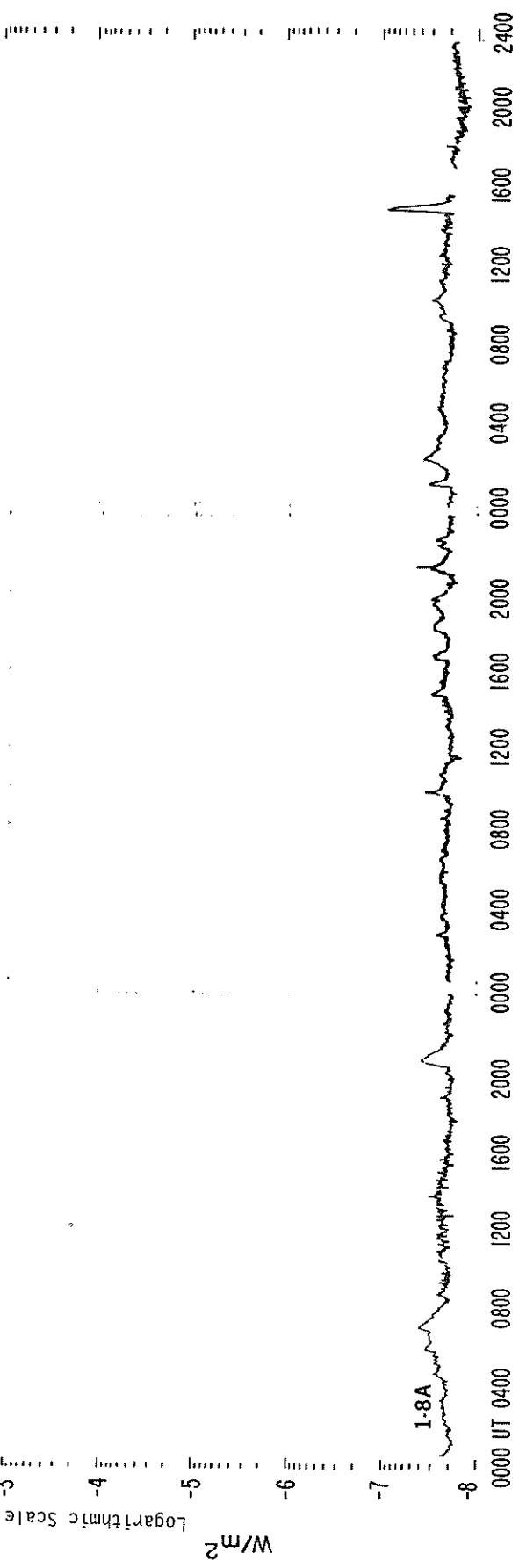
# GOES 6 X-RAYS

APRIL 1986

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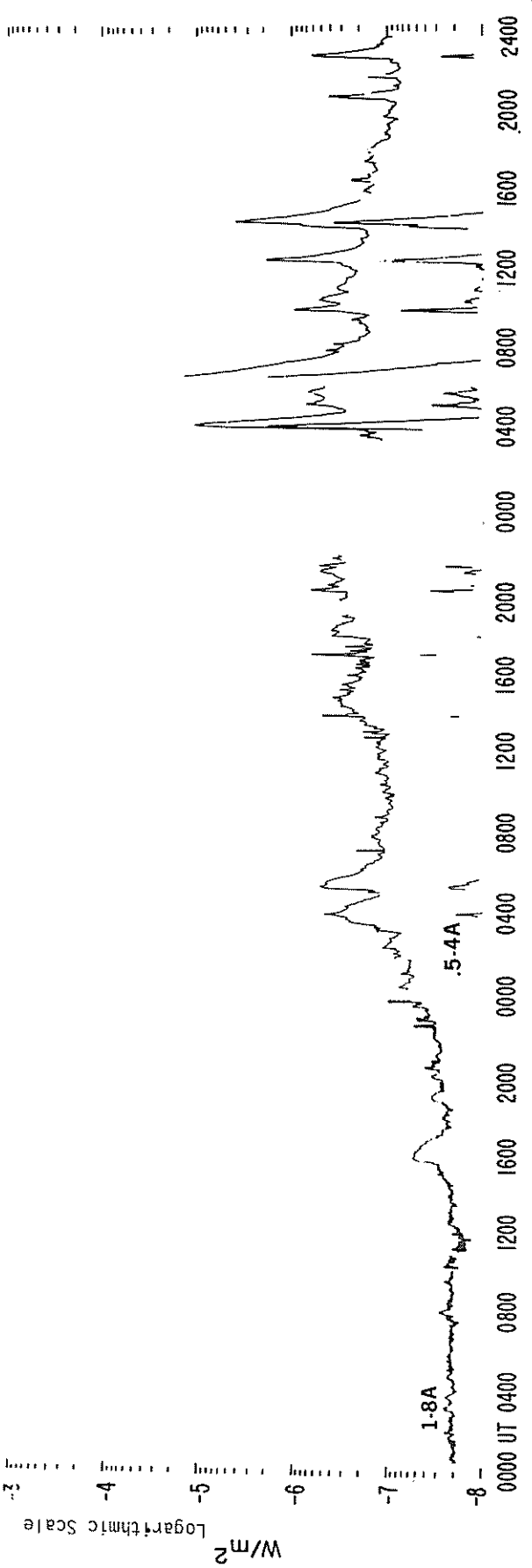
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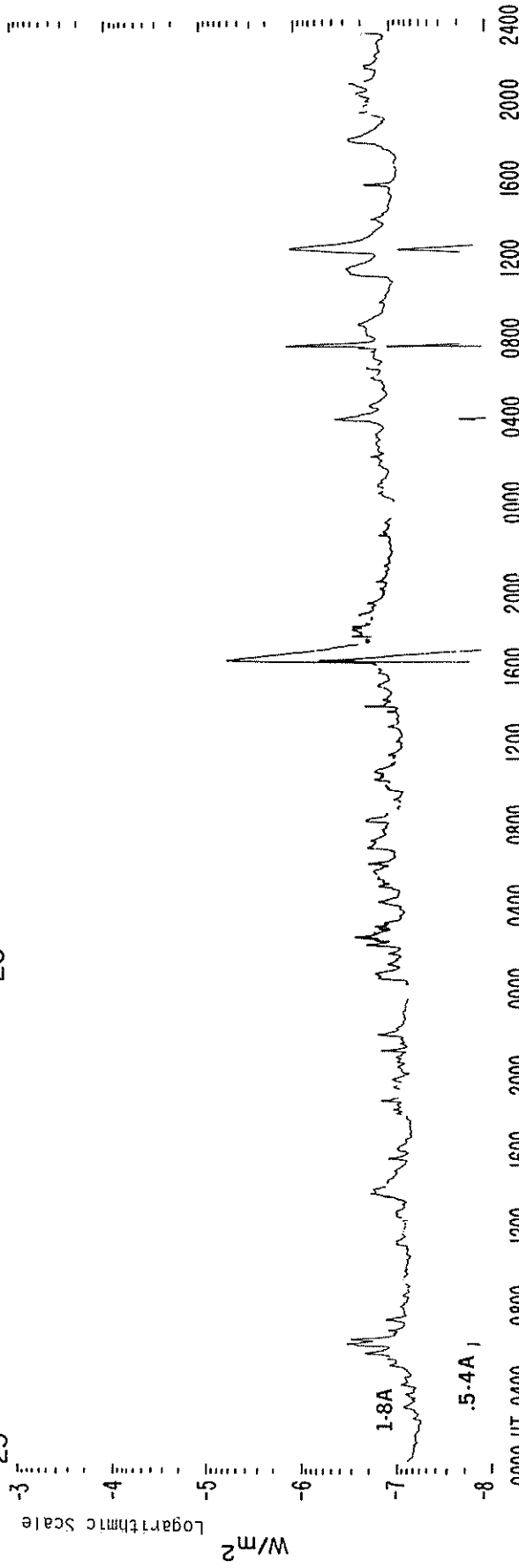
# GOES 6 X-RAYS

APRIL 1986

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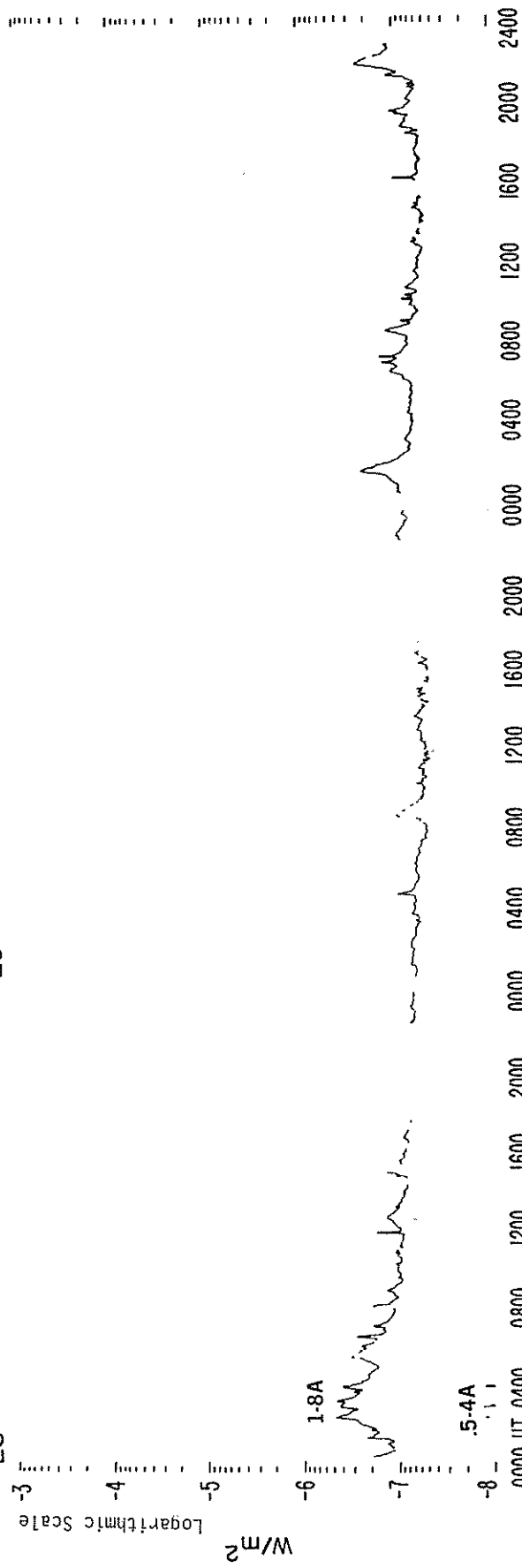
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GOES SOLAR X-RAY FLARES  
 \*\*Preliminary Listing\*\*

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 Apr 86

April 1986

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	Imp Opt	Xray
01	0231	0248	0302					B1.0
06	0623	0627	0631					B1.1
06	1640	1705	1734					B3.8
07	0320	0332	0341					B6.4
07	0452	0459	0505					B1.2
07	0748	0751	0755					B1.1
07	1124	1133	1139					B9.6
07	1802	1824	1831					B3.7
14	1037	1041	1044					B1.4
15	1408	1417	1423					B1.1
23	0259	0353	0402			4726		B5.6
23	0510	0515	0522D	N05	E17	4726	SN	B5.4
23	0706	0709	0711					B2.1
23	1401	1407	1417	N02	E13	4726	SF	B6.4
23	1520	1523	1526			4726		B3.7
23	1711	1712	1722	N02	E13	4726	SF	B8.8
23	1806	1827	1845					B4.2
23	2025	2029	2035			4726		B7.1
23	2043	2044	2055	N02	E10	4726	SF	B5.0
23	2120	2130	2135			4726		B5.5
23	2141	2145	2148					B5.7
23	2259	2306	2320					B9.1
23	2303	2338	2345	N03	E08	4726	SN	B7.3
23	2352	2353	0000	N02	E07	4726	SN	B9.0
24	0039	0042	0120	N03	E07	4726	SB	M1.1
24	0150	0150	0214	N03	E08	4726	SF	C1.5
24	0345	0347	0428	N04	E06	4726	SB	M1.2
24	0445	0500	0505					B6.0
24	0520	0530	0535					B6.0
24	0607	0613	0653	N04	E04	4726	1B	M2.4
24	0943	0949	0955					C1.1
24	1015	1020	1035			4727		B6.0
24	1217	1220	1250	N07	E35	4727	SB	C2.1
24	1405	1419	1454	N02	W01	4726	1N	C4.5
24	1626	1628	1640	N03	W00	4726	SF	B2.7
24	2036	2046	2050					B4.6
24	2143	2148	2153					B1.8
24	2248	2249	2253D	N07	E31	4727	SF	B7.0

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	Imp Opt	Xray
25	0540	0545	0548					B2.3
25	0604	0613	0618					B3.7
25	0621	0627	0629					B3.3
25	1541	1544	1549					B1.3
25	1812	1815	1818			4726		B1.3
25	2201	2206	2212					B1.6
26	0016	0037	0046					B1.6
26	0201	0205	0209					B2.1
26	0223	0229	0233					B2.7
26	0611	0614	0618					B1.9
26	0659	0703	0715					B2.0
26	0822	0830	0836					B2.0
26	1028	1032	1039					B1.6
26	1415	1420	1422					B2.1
26	1637	1638	1715	N02	W28	4726	1B	C6.2
26	1752	1755	1759					B2.8
26	1859	1902	1904	N02	W29	4726	SF	B2.4
27	0409	0411	0423	N01	W34	4726	SF	B4.3
27	0755	0758	0802			4726		C1.6
27	1130	1154	1211			4726		B3.1
27	1240	1255	1304			4726		C1.2
27	1607	1611	1614			4726		B2.0
27	1818	1830	1839					B2.9
27	2352	2359	0005					B2.5
28	0101	0104	0116					B2.3
28	0204	0208	0220	N01	W48	4726	SF	B5.0
28	0235	0258	0305					B4.9
28	0334	0343	0352					B3.8
28	0617	0617	0626	N05	W49	4726	SF	B3.0
28	0748	0752	0755					B1.9
28	1133	1136	1139					B1.7
28	1440	1443	1446					B1.4
29	0425	0428	0435	N04	W60	4726	SF	B1.0
29	0815	0830	0848					B1.5
30	0100	0109	0119			4726		B2.2
30	0612	0616	0622					B1.1
30	0639	0643	0647					B1.3
30	0657	0700	0702					B1.5
30	0815	0821	0826					B1.2
30	1550	1553	1555					B1.2
30	2117	2121	2128			4727		B1.2

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Apr 86

Preliminary GOES Satellite Data  
Daily Average X-ray Background

May 1985 - April 1986

Day	1985								1986			
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
1	B1.6	B0.1	B1.1	B0.5	B0.1	B0.0	B0.0	B0.1	B0.0	B0.2	B2.0	<B0.1
2	B1.7	B0.5	B1.0	B0.5	B0.1	B0.0	B0.0	B0.1	B0.0	B0.3	B1.5	<B0.1
3	C1.1	B0.7	B0.9	B0.4	B0.1	B0.0	B0.1	B0.0	B0.0	**	B1.9	<B0.1
4	B7.7	B0.7	B0.8	B0.4	B0.1	B0.0	B0.1	B0.0	B0.0	**	B1.4	<B0.1
5	B0.3	B1.8	B1.0	B0.4	B0.2	B0.0	B0.0	B0.0	B0.0	**	B1.6	<B0.1
6	B0.8	B2.9	B1.1	B0.4	B0.2	B0.0	B0.1	B0.1	B0.0	**	B1.5	<B0.1
7	B1.5	B1.0	B3.2	B0.6	B0.1	B0.1	B0.2	B0.2	B0.0	B7.2	B1.0	B0.2
8	B1.2	B1.0	B4.1	B0.6	B0.1	B0.0	B0.6	B0.5	B0.0	B2.5	B0.8	<B0.1
9	B1.8	B1.0	B3.1	B0.5	B0.0	B0.0	B0.5	B0.2	B0.0	B2.0	B0.9	<B0.1
10	B1.6	B1.2	B4.1	B0.3	B0.0	B0.0	B0.4	B0.5	B0.0	B2.5	B0.9	<B0.1
11	B1.9	B1.0	B3.2	B0.2	B0.0	B0.0	B0.5	B1.0	B0.0	B9.8	B0.8	<B0.1
12	B1.2	B1.0	B3.5	B0.1	B0.1	B0.0	B0.4	B1.0	B0.0	B5.7	B0.7	B0.2
13	B2.0	B0.9	B3.4	B0.0	B0.5	B0.0	B0.5	B0.6	B0.3	B6.1	B0.5	<B0.1
14	B2.0	B0.7	B1.5	B0.0	B0.2	B0.3	B0.6	B0.4	B0.4	B0.1	B0.3	<B0.1
15	B1.9	B0.7	B0.7	B0.0	B0.1	B1.2	B1.3	B0.5	B0.4	B5.7	B0.0	B0.4
16	B2.1	B0.6	B0.2	B0.0	B0.1	B0.9	B0.7	B0.6	B0.5	B2.1	B0.0	B0.3
17	B1.9	B0.5	B0.2	B0.0	B0.0	B1.0	B0.5	B0.5	B1.0	B2.3	B0.0	B0.3
18	B1.8	B0.3	B0.1	B0.0	B0.0	B0.5	B0.4	B0.5	B0.7	B0.0	B0.0	B0.2
19	B1.3	B0.2	B0.1	B0.0	B0.1	B0.6	B0.4	B0.3	B0.6	B0.0	B0.0	B0.2
20	B1.3	B0.1	B0.1	B0.0	B0.1	B0.7	B0.3	B0.3	B4.7	B0.0	B0.0	B0.2
21	B1.4	B0.1	B0.1	B0.1	B0.3	B0.9	B0.3	B0.2	B9.5	B0.0	B1.9	B0.2
22	B0.9	B0.1	B0.1	B0.1	B0.0	B2.4	B0.2	B0.3	B2.9	B0.0	B0.0	B0.2
23	B0.8	B5.5	B0.1	B0.4	B0.0	B1.8	B0.2	B0.2	B2.7	B0.0	B0.1	B1.2
24	B0.8	B1.3	B0.1	B0.1	B0.0	B3.5	B0.2	B0.2	B1.3	B0.0	B0.1	B2.8
25	B0.7	B0.1	B0.5	B0.1	B0.0	B3.4	B0.2	B0.2	B0.8	B0.1	B0.0	B0.9
26	B0.5	B0.1	B1.0	B0.1	B0.1	B2.3	B0.1	B0.2	B0.6	B0.8	B0.1	B1.1
27	B0.5	B0.2	B1.0	B0.1	B0.0	B1.4	B0.1	B0.2	B0.2	B1.0	B0.1	B1.5
28	B0.4	B0.3	B0.8	B0.1	B0.0	B0.8	B0.0	B0.2	B0.0	B1.3	B0.1	B1.0
29	B0.4	B0.9	B0.8	B0.1	B0.1	B0.7	B0.0	B0.2	B0.0		B0.1	B0.5
30	B0.3	B0.7	B0.8	B0.1	B0.0	B0.1	B0.0	B0.1	B0.0		B0.1	B0.6
31	B0.0		B0.7	B0.5		B0.0		B0.2	B0.0		<B0.1	

MASS EJECTIONS FROM THE SUN

23  
Apr 86

APRIL 1986

Sta	Day	Observed UT			Location		Freq or Wavelength	Kind of Event
		Start	Max	End	RA°	R/R <sub>0</sub>		
LEAR	Apr 07	0328.0		0335.0			Meter	II
KHAR	Apr 23	0940	E	1010	D 082	0.8	H-alpha	S
KHAR	Apr 26	0740	E	0750	D 290	0.47	H-alpha	S
KHAR	Apr 30	0745	E	0810	D 268	0.93	H-alpha	S
KHAR	Apr 30	1010	E	1030	D 277	0.97	H-alpha	S

QUALIFIERS ON START, MAX AND END TIMES

D = event ended after tabulated time  
E = event began before the tabulated time  
U = uncertain time

REPORTING STATIONS

KHAR = Kharkov  
LEAR = Learmonth

TYPE OF EVENT

A = eruptive active region prominence  
CB = coronal cloud bubble  
D = coronal depletions  
E = coronal enhancement  
EL = coronal expanding loop  
II = Type II radio burst  
IVm = moving Type IV radio burst  
Q = eruptive quiescent prominence  
R = coronal ray or streamer  
S = flare-surge if there is a known flare association  
SP = flare-spray if there is a known flare association  
\* = movement may be caused by ionospheric refraction



ACTIVE PROMINENCES AND FILAMENTS

APRIL 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	ADF	0100E	0220D	N11	W42	03 29.0	1	07	8	8	E	LEAR	4720	
01	DSD	0200E	0223D	N04	W39	03 29.3		01	9	9	E	PALE	4720	
01	SDF	0220E	0220D	N11	W42	03 29.0		05	0	0	E	LEAR	4720	
01	ADF	0220E	0729D	N14	W42	03 29.0	1	02	5	8	E	LEAR	4720	
01	AFS	0345E	0729D	N07	W42	03 29.1		02	6	4	E	LEAR	4720	
01	BSL	0650	0700	N24	W90	03 25.4	1-				C	CATA		
01	BSL	0712E	0806D	S33	W90	03 25.2	1				C	ABST		
01	SDF	0729E	2327D	N08	W55	03 28.3		04	0	0	E	LEAR	4720	
01	BSL	0945	0955	S52	E90	04 9.1	1-				C	CATA		
01	APR	0950E	0954D	S35	W90	03 25.3	2		9	9	E	ATHN		
01	BSL	1055	1100D	N47	E90	04 9.0	1-				C	CATA		
01	BSL	1100	1100D	S27	W90	03 25.5	1-				C	CATA		
01	ADF	1120E	1750D	N11	W48	03 29.0	2	11	5	8	E	RAMY	4720	
01	ADF	1120E	1750D	S40	E14	04 2.6	2	11	7	7	E	RAMY		
01	SDF	1145E	0640D	N09	W49	03 28.9	1				C	CATA		
01	SDF	1452E	2302D	N21	W21	03 31.0		03	4	4	E	HOLL		
01	SDF	1611E	1611D	N18	E18	04 3.0		08	0	0	E	HOLL		
01	SDF	1647E	2318D	N07	W67	03 27.8		03	0	0	E	PALE	4720	
01	SDF	1750E	1752D	N11	W48	03 29.2		11	0	0	E	RAMY	4720	
01	SDF	1920E	0224D	N04	W41	03 29.8	1	02	0	0	E	PALE	4720	
02	BSL	0522E	0716D	S33	W90	03 26.2	1				C	ABST		
02	AFS	0600E	0745	N07	W09	04 1.6	1	02	6	8	E	ATHN		
02	ADF	0600E	1330D	S15	E08	04 2.8	1	04	9	9	E	ATHN		
02	APR	0600E	1330D	S32	W90	03 26.2	1		8	8	E	ATHN		
02	AFS	0625E	0927D	N07	W09	04 1.6		02	6	5	E	LEAR		
02	BSL	0640E	0650	S66	E90	04 10.3	1-				C	CATA		
02	BSL	0830E	0835	N84	W90	03 25.0	1-				C	CATA		
02	BSL	1155	1200	S84	E90	04 10.9	1-				C	CATA		
02	ADF	1318E	2121D	N00	E00	04 2.5	2	02	8	7	E	RAMY	4721	
02	SDF	1646E	1650D	N18	E18	04 4.1		08	0	0	E	HOLL		
02	SDF	1647E	0239D	N29	E20	04 4.3		03	0	0	E	PALE		
02	AFS	2330E	0645D	N06	E02	04 3.1		02	9	9	E	LEAR	4721	
03	ADF	1031E	1330D	S16	W12	04 2.5	2	05	7	8	E	ATHN		
04	ADF	0515E	1300D	S17	W23	04 2.5	2	06	5	7	E	ATHN		
04	DSD	1655E	1713	S30	E53	04 8.9		02	6	4	E	HOLL		
04	SDF	2030E	2030D	N33	W40	04 1.7		08	0	0	E	HOLL		
04	SDF	2031E	2031D	N34	W06	04 4.4		08	0	0	E	HOLL		
04	SDF	2032E	0118D	N40	W04	04 4.5	1	07	6	6	E	HOLL		
04	SDF	2220E	2220D	S16	E10	04 5.7		05	0	0	E	HOLL		
05	SDF	0033E	0033D	N50	E05	04 5.4		12	0	0	E	LEAR		
05	SDF	0033E	0033D	S02	E16	04 6.2		06	0	0	E	LEAR		
05	SDF	0033E	0033D	S30	E20	04 6.6		04	0	0	E	LEAR		
05	ADF	0240E	0713D	N44	W06	04 4.6	1	05	6	6	E	LEAR		
05	BSL	0548E	0728D	S45	E90	04 12.7	1				C	ABST		
05	SDF	1540E	1540D	N45	W15	04 4.4		15	0	0	E	RAMY		
05	SDF	1749E	2357D	N39	W07	04 5.2		17	0	0	E	PALE		
05	AFS	1839E	1854D	S28	E38	04 8.7	1	01	9	7	E	PALE		
05	ADF	2207E	2355D	S01	W43	04 2.7	1	02	8	9	E	HOLL	4721	
06	BSL	0516E	0750	S16	E90	04 13.0	1				C	ABST		
06	BSL	0548E	0630	S44	E90	04 13.7	1				C	ABST		
06	BSL	0556E	0750D	N14	W90	03 30.5	1				C	ABST		
06	ADF	0612E	0930D	S38	E46	04 10.0	2	08	8	7	E	LEAR		
06	BSL	0905	0910	S54	W90	03 29.7	1-				C	CATA		
06	BSL	1035	1050	N74	E90	04 14.7	1-				C	CATA		
06	BSL	1040	1050	S86	W90	03 29.1	1-				C	CATA		
06	BSL	2308E	2330D	N30	W90	03 31.0	1				C	VORO		
07	APR	0250E	0332	S13	E90	04 13.9	3		9	9	E	LEAR		
07	ADF	0302E	0939D	S42	W68	04 1.5	2	07	8	7	E	LEAR		
07	EPL	0332	0342D	S13	E90	04 13.9	3		9	9	E	LEAR		
07	ASR	0332E	0405D	S13	E90	04 13.9			8	5	E	PALE		
07	ASR	0345E	0939D	S13	E90	04 13.9			9	9	E	LEAR		
07	ASR	0615E	1325	S14	E90	04 14.1			9	9	E	ATHN		
07	BSL	0638E	0655	S16	W90	03 31.4	1				C	ABST		
07	BSL	1015E	1020D	N43	W90	03 31.0	1-				C	CATA		
07	BSL	1120	1137	N84	W90	03 30.2	1-				C	CATA		

## ACTIVE PROMINENCES AND FILAMENTS

25  
Apr 86

APRIL 1986

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	OMP Mo	Day	Imp	Extent	Shift (.1 A)	Shift (.1 A)	Obs Type	USAF Sta	Reg#	Remarks
07	ASR	1442E	1450D	S13	E90	04	14.4			9	8	E	HOLL		
07	AFS	1527E	1553D	S09	E04	04	7.9		02	8	9	E	HOLL		
07	AFS	1541E	1541D	S09	E04	04	7.9		02	6	8	E	RAMY		
07	ASR	1547E	2349D	S13	E88	04	14.3			8	7	E	HOLL		
07	AFS	1915E	2132D	S08	E02	04	7.9		01	9	8	E	HOLL	4722	
07	AFS	1947E	0221D	S08	E02	04	8.0		01	6	6	E	PALE		
07	ADF	2239E	2355D	N02	W66	04	3.0		04	8	9	E	HOLL	4721	
08	ADF	0024E	0440D	S42	W82	04	1.3	2	08	7	7	E	LEAR		
08	AFS	0027E	0930D	S07	E00	04	8.0		02	8	9	E	LEAR	4722	
08	ADF	0029E	0440D	S35	E23	04	9.8	1	05	9	8	E	LEAR		
08	DSD	0030E	0440D	S12	E80	04	14.0		01	9	9	E	LEAR		
08	ADF	0030E	0930D	S11	E80	04	14.0	1	06	8	8	E	LEAR		
08	BSL	0500E	0638D	S10	W90	04	1.4	1				C	ABST		
08	BSL	0725E	0730	N84	E90	04	16.7	1-				C	CATA		
08	BSL	0740	0755	S73	E90	04	16.6	1-				C	CATA		
08	SDF	0930E	2330D	S35	E09	04	9.1		05	0	0	E	LEAR		
08	ADF	1015E	1025D	S11	E73	04	13.9	1	04	6	7	E	ATHN		
08	ADF	1154E	1803D	S12	E69	04	13.7	1	02	9	9	E	RAMY		
08	ADF	1455E	2200D	S13	E72	04	14.0	1	03	9	8	E	HOLL		
08	ADF	2331E	0928D	S09	E76	04	14.7	2	03	9	9	E	LEAR		
08	ADF	2331E	0928D	S11	E66	04	13.9	2	03	9	9	E	LEAR		
09	BSL	0437E	0733D	N08	W90	04	2.4	1				C	ABST		
09	BSL	0437E	0733D	N18	W90	04	2.3	1				C	ABST		
09	BSL	0733E	0757D	N35	W90	04	2.1	1				C	ABST		
09	SDF	1048E	1048D	S40	E21	04	11.2		11	0	0	E	RAMY		
09	BSL	1140	1145D	S85	W90	04	1.1	1-				C	CATA		
09	SDF	1145E	0755D	S43	E52	04	13.8	1				C	CATA		
09	ADF	1414E	1633D	S13	E57	04	13.9	2	02	4	4	E	RAMY		
10	DSD	0050E	0240D	S10	E61	04	14.6		02	9	9	E	LEAR		
10	AFS	0245E	0937D	S10	E60	04	14.6		02	9	9	E	LEAR		
10	ADF	0500E	1330D	S11	E56	04	14.4	1	05	6	7	E	ATHN		
10	SDF	0521E	0521D	S38	E42	04	13.6		13	0	0	E	LEAR		
10	BSL	1025E	1025D	S88	W90	04	2.0	1-				C	CATA		
10	SDF	1035E	1035D	S39	E70	04	16.1		38	0	0	E	RAMY		
10	ASR	1140E	1230D	S13	E90	04	17.3			9	9	E	ATHN		
10	SDF	1205E	1205D	S13	E47	04	14.0		02	0	0	E	RAMY		
10	SDF	1412E	1412D	S47	E25	04	12.7		17	0	0	E	HOLL		
10	ADF	2332E	0120D	S10	E50	04	14.7	1	05	9	9	E	LEAR	4723	
11	ADF	0005E	0935D	S14	E40	04	14.0	1	07	7	7	E	LEAR	4723	
11	AFS	0355E	0935D	S09	E47	04	14.7		03	8	8	E	LEAR	4723	
11	BSL	0710	0730	S77	W90	04	3.0	1				C	CATA		
11	BSL	0825	0835	S72	W90	04	3.1	1-				C	CATA		
11	BSL	0855	0900	S28	W90	04	4.3	1-				C	CATA		
12	ADF	0010E	0924D	S10	E36	04	14.7	1	06	9	9	E	LEAR	4723	
12	ADF	0308E	0924D	S11	E26	04	14.1	2	04	9	9	E	LEAR	4723	
12	BSL	0705E	0705D	N08	W90	04	5.5	1-				C	CATA		
12	BSL	0755E	0835D	N07	W90	04	5.6	1-				C	CATA		
12	BSL	0845E	0925D	N06	W90	04	5.6	1-				C	CATA		
12	AFS	0930E	1300D	S10	E27	04	14.4	1	02	7	7	E	ATHN	4723	
12	BSL	0945E	0945D	N32	W90	04	5.3	1-				C	CATA		
12	BSL	1000E	1010	N30	W90	04	5.3	1-				C	CATA		
12	ADF	1203E	1858D	S13	E28	04	14.6	2	03	8	8	E	RAMY	4723	
13	SDF	1836E	0117D	N41	W35	04	10.9		08	5	5	E	HOLL		
13	ASR	2236E	0117D	S01	E90	04	20.7			9	8	E	HOLL		
13	ASR	2350E	0923D	N02	E90	04	20.7			9	9	E	LEAR		
14	APR	0027E	0923D	N05	E90	04	20.7	2		9	9	E	LEAR		
14	APR	0450E	1325D	N02	E90	04	20.9	1		9	9	E	ATHN		
14	APR	0730E	1325D	N07	E90	04	21.0	1		9	9	E	ATHN		
14	SDF	1120E	1120D	N45	E16	04	15.8		12	0	0	E	RAMY		
14	ADF	1242E	2155D	S46	W22	04	12.7	1	10	9	9	E	RAMY		
14	SDF	1836E	0117D	N41	W35	04	11.9		08	5	5	E	HOLL		
14	ASR	2236E	0117D	S01	E90	04	21.7			9	8	E	HOLL		
14	ADF	2355E	0929D	S08	E86	04	21.4	2	07	9	9	E	LEAR		
15	AFS	0812E	0929D	S11	E68	04	20.4		03	9	9	E	LEAR	4724	

## ACTIVE PROMINENCES AND FILAMENTS

APRIL 1986

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
15	BSL	0845	0850	N23	E90	04	22.3	1-				C	CATA		
15	BSL	0930	0940	S22	W90	04	8.5	1-				C	CATA		
15	BSL	0930	0940	S28	W90	04	8.4	1-				C	CATA		
15	BSL	1135	1140D	S89	E90	04	23.9	1-				C	CATA		
15	SDF	1147E	1147D	S28	W42	04	12.2		02	0	0	E	RAMY		
15	ADF	1340E	1447D	S11	W14	04	14.5		03	9	9	E	HOLL	4723	
15	ADF	1728E	2240D	S02	E67	04	20.7	2	13	9	9	E	HOLL	4725	
15	ADF	1748E	2225D	N04	E64	04	20.5	1	04	9	9	E	RAMY	4725	
15	ADF	1748E	2225D	S02	E64	04	20.5	2	15	9	9	E	RAMY	4725	
15	ADF	1809E	2240D	N04	E67	04	20.8	1	05	9	9	E	HOLL	4725	
15	ADF	2330E	0914D	S11	E78	04	21.8	1	10	9	8	E	LEAR	4724	
16	ADF	0012E	0914D	N01	E63	04	20.7	1	08	7	8	E	LEAR	4725	
16	ADF	0444E	0446D	S05	W21	04	14.6	1	04	9	9	E	LEAR	4723	
16	BSL	0635	0645	N12	E90	04	23.0	1-				C	CATA		
16	BSL	1050	1055	S27	E90	04	23.5	1-				C	CATA		
16	ADF	1239E	2205D	S04	E54	04	20.6	2	07	9	9	E	RAMY	4725	
16	AFS	1356E	1653D	S12	W09	04	15.9		02	9	9	E	RAMY		
16	ADF	1450E	1856D	S03	E56	04	20.8	1	19	9	9	E	HOLL	4725	
16	SDF	1630E	1630D	S07	E62	04	21.3		12	0	0	E	HOLL	4725	
16	ADF	1720E	0252D	S05	E58	04	21.1	1	08	9	9	E	PALE	4725	
16	AFS	1740E	1833D	S12	W34	04	14.2		01	9	9	E	PALE	4723	
16	AFS	1830E	0252D	S01	E51	04	20.6	1	04	9	9	E	PALE	4725	
16	ADF	1853E	0046D	S03	E56	04	21.0	2	07	9	9	E	HOLL	4725	
17	ADF	0045E	0328D	N42	E14	04	18.2	1	15	9	9	E	LEAR		
17	ADF	0045E	0328D	S08	E55	04	21.1	2	10	8	9	E	LEAR	4725	
17	ADF	0805	1005	S05	E47	04	20.8	1				V	KHAR		
17	APR	1000E	1010D	S32	E90	04	24.5			8	8	E	ATHN		
17	ADF	1000E	1115D	S03	E42	04	20.5		07	8	8	E	ATHN	4725	
17	BSL	1015	1025D	S28	W90	04	10.4	1-				C	CATA		
17	BSL	1040E	1150D	S26	W90	04	10.4	1-				C	CATA		
17	ADF	1045	1120	S05	E47	04	21.0	1				V	KHAR		
17	BSL	1105	1120	S53	E90	04	25.2	1-				C	CATA		
17	ADF	1141E	1904D	S03	E39	04	20.4	2	11	9	9	E	RAMY	4725	
17	ADF	1530E	1705D	S03	E40	04	20.6	1	13	8	9	E	HOLL	4725	
17	ADF	1648E	1705D	N02	E37	04	20.5	2	03	9	9	E	HOLL	4725	
17	ADF	1853E	0046D	S03	E56	04	22.0	2	07	9	9	E	HOLL	4725	
18	APR	0524E	0800D	S32	E90	04	25.3	1				C	ABST		
18	ADF	0555E	0755D	S07	E39	04	21.2	1	10	9	9	E	LEAR	4725	
18	ADF	0600E	0755D	N43	W07	04	17.7	2	22	9	8	E	LEAR		
18	APR	0605E	0755D	S33	E90	04	25.4	1		8	6	E	LEAR		
18	ADF	0730E	1200D	S02	E31	04	20.6	1	13	9	9	E	ATHN	4725	
18	APR	0730E	1200D	S30	E90	04	25.4	1		9	9	E	ATHN		
18	ADF	1155E	1206D	S03	E28	04	20.6	2	15	9	9	E	RAMY	4725	
18	ADF	1426E	0032D	S11	E40	04	21.6	1	14	8	9	E	HOLL	4725	
18	ADF	1639E	0428D	S11	E39	04	21.6	1	13	8	8	E	PALE	4725	
19	ADF	0245E	0913D	S09	E32	04	21.5	2	10	8	8	E	LEAR	4725	
19	BSL	0603E	0649D	N30	W90	04	12.2	1				C	ABST		
19	BSL	0603E	0649D	S38	E90	04	26.5	1				C	ABST		
19	ADF	1206E	2052D	S05	E21	04	21.1	1	09	9	9	E	RAMY	4725	
19	ADF	1325E	1525D	S01	E18	04	20.9	1	10	8	8	E	HOLL	4725	
19	SDF	1525E	1845D	S05	E17	04	20.9		09	6	6	E	HOLL	4725	
19	SDF	1649	2145D	S05	E17	04	21.0		12	5	5	E	PALE	4725	
19	DSD	1700E	1830D	N02	E08	04	20.3		04	9	9	E	PALE	4725	
19	DSD	1910E	2156D	S01	E08	04	20.4		02	9	9	E	HOLL	4725	
19	ADF	2340E	0921D	S04	E15	04	21.1	1	06	9	7	E	LEAR	4725	
20	BSL	0535E	0800D	N24	W90	04	13.3	1				C	ABST		
20	AFS	0600E	0921D	N02	W14	04	19.2		01	9	9	E	LEAR		
20	ADF	0605E	0921D	N05	E04	04	20.5	1	03	5	6	E	LEAR	4725	
20	DSD	0615E	0705D	S07	W06	04	19.8	1-				C	CATA		
20	BSL	0625	0635	S25	W90	04	13.3	1-				C	CATA		
20	BSL	0635	0640D	N84	E90	04	28.7	1-				C	CATA		
20	ASR	0708	0921D	N02	W90	04	13.6			9	9	E	LEAR	4723	
20	ADF	0710E	1130D	N04	E03	04	20.5	2	04	5	7	E	ATHN	4725	
20	ADF	0710E	1130D	S08	E13	04	21.3	1	08	6	8	E	ATHN	4725	
20	APR	0710E	1130D	S46	E90	04	27.8	2		9	9	E	ATHN		
20	AFS	0825E	1130D	N01	W17	04	19.1		01	9	9	E	ATHN		

## ACTIVE PROMINENCES AND FILAMENTS

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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
20	BSL	0840E	0850	N08	E90	04	27.1	1-				C	CATA		
20	DSD	0915E	1020D	S06	W07	04	19.9		03	9	9	E	ATHN	4724	
20	BSL	0930	1025	N08	E90	04	27.1	1				C	CATA		
20	ASR	0936E	0936D	N04	E90	04	27.1			9	9	E	ATHN		
20	BSL	1020	1030	N86	W90	04	12.0	1-				C	CATA		
20	BSL	1115E	1125	S60	W90	04	12.6	1-				C	CATA		
20	ADF	1132E	1816D	N40	W41	04	17.1	1	14	4	7	E	RAMY		
20	ADF	1132E	1821D	S11	E11	04	21.3	2	10	9	9	E	RAMY	4725	
20	AFS	1320E	1343D	S07	E05	04	20.9		02	9	9	E	HOLL	4725	
20	ADF	1320E	2244D	N02	E00	04	20.5	1	04	9	9	E	HOLL	4725	
20	AFS	1556E	1821D	S01	W21	04	19.1		02	9	9	E	RAMY		
20	ADF	2244E	0119D	N03	W06	04	20.5	1	06	8	9	E	HOLL	4725	
20	ADF	2329E	0927D	N05	W04	04	20.7	2	04	9	9	E	LEAR	4725	
21	AFS	0600E	1130D	N01	E57	04	25.5	1	02	8	8	E	ATHN		
21	AFS	0600E	1130D	N01	W09	04	20.6	1	02	7	7	E	ATHN	4725	
21	ADF	0600E	1130D	N03	W10	04	20.5	1	04	7	7	E	ATHN	4725	
21	ADF	0600E	1130D	S04	W07	04	20.7	1	09	9	9	E	ATHN	4725	
21	ADF	0830E	0927D	S07	W10	04	20.6	1	05	9	9	E	LEAR	4724	
21	BSL	0850	0850D	N02	E90	04	28.1	1-				C	CATA		
21	BSL	0850	0850D	N52	E90	04	29.0	1-				C	CATA		
21	ASR	0905	1007	N02	E90	04	28.1	2		9	9	E	ATHN		
21	BSL	0915E	1000D	N08	E90	04	28.1	1				C	CATA		
21	BSL	1055	1115	N88	W90	04	13.0	1-				C	CATA		
21	ADF	1424E	1729D	S02	W12	04	20.7	1	04	9	9	E	HOLL	4725	
21	ADF	1457E	2107D	N03	W13	04	20.6	1	03	8	8	E	RAMY	4725	
21	AFS	1830E	0411D	S02	W17	04	20.5	1	01	7	9	E	PALE	4725	
21	ADF	1955E	0411D	S02	W15	04	20.7	1	03	5	9	E	PALE	4725	
21	ADF	2335E	0923D	N06	W17	04	20.7	1	05	6	7	E	LEAR	4725	
21	ADF	2335E	0923D	S01	W15	04	20.9	1	03	9	9	E	LEAR	4725	
22	AFS	0332E	0923D	N01	E34	04	24.7	1	02	9	9	E	LEAR		
22	AFS	0630E	1130D	N01	W23	04	20.5	1	01	9	9	E	ATHN	4725	
22	ADF	0630E	1130D	N02	W22	04	20.6	1	04	9	9	E	ATHN	4725	
22	AFS	0700E	0923D	N01	W23	04	20.6		01	9	9	E	LEAR	4725	
22	AFS	0820E	1130D	N01	E33	04	24.8	1	01	9	9	E	ATHN		
22	BSL	0945	1000D	N86	W90	04	14.0	1-				C	CATA		
22	BSL	1100	1125	S07	W90	04	15.7	1-				C	CATA		
22	BSL	1130	1140	N77	W90	04	14.2	1-				C	CATA		
22	AFS	1218E	2101D	N03	E26	04	24.4		02	9	9	E	RAMY	4726	
22	ADF	1304E	2101D	N00	W28	04	20.4	1	03	8	9	E	RAMY	4725	
22	AFS	1335E	0122D	N02	E29	04	24.7		02	9	9	E	HOLL	4726	
22	AFS	1710E	0246D	N02	E27	04	24.7	1	02	9	9	E	PALE	4726	
22	DSD	2001E	2210D	N02	E23	04	24.5	2	05	9	9	E	HOLL	4726	
22	DSD	2003E	2101D	N03	E23	04	24.5	2	03	9	9	E	RAMY	4726	
22	DSD	2005E	2205D	N04	E22	04	24.5		03	9	9	E	PALE	4726	
22	DSD	2240E	2331D	N00	E27	04	25.0	2	03	9	9	E	HOLL	4726	
22	AFS	2326E	0935D	N03	E24	04	24.8		02	9	9	E	LEAR	4726	
22	AFS	2326E	0935D	N04	E23	04	24.7		02	9	9	E	LEAR	4726	
22	AFS	2326E	0935D	N05	E23	04	24.7		02	9	9	E	LEAR	4726	
22	DSD	2327E	2336D	N03	E22	04	24.6		04	8	8	E	LEAR	4726	
22	DSD	2345E	0246D	N05	E21	04	24.6		02	9	9	E	PALE	4726	
23	AFS	0001E	0325D	N07	E59	04	27.4		02	9	9	E	LEAR		
23	AFS	0132E	0935D	N00	W35	04	20.4		01	9	9	E	LEAR	4725	
23	DSD	0146E	0345D	N06	E21	04	24.6		05	9	9	E	LEAR	4726	
23	ADF	0410E	0935D	S09	W34	04	20.6	1	04	7	8	E	LEAR	4724	
23	AFS	0423E	0935D	N07	E54	04	27.2		02	9	9	E	LEAR		
23	AFS	0620E	1145D	N03	E16	04	24.4		02	9	9	E	ATHN	4726	
23	BSL	0700	0710	N47	E90	04	30.8	1-				C	CATA		
23	BSL	0725	0735	S47	W90	04	15.8	1-				C	CATA		
23	BSL	0730	0735	S51	W90	04	15.6	1-				C	CATA		
23	ADF	0755E	1145D	N05	E18	04	24.7		04	9	9	E	ATHN	4726	
23	ADF	0816	0824	N03	E16	04	24.5	1				V	KHAR		
23	DSD	0820	0840	N04	W14	04	22.3	1-				C	CATA		
23	ADF	0830	0905	N04	E13	04	24.3	1				V	KHAR		
23	DSD	0845	0855D	N04	W13	04	22.4	1-				C	CATA		
23	ADF	0847	0905	N03	E16	04	24.6	1				V	KHAR		
23	BSL	0915E	0935D	N48	E90	04	30.9	1-				C	CATA		
23	ADF	0917	0958	N04	E13	04	24.3	1				V	KHAR		
23	DSD	0940	1010	N05	E51	04	27.2	1				V	KHAR		

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	OMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
23	BSL	0945E	1015D	N48	E90	05	1.0	1-				C	CATA		
23	DSD	0955	1015D	N04	W15	04	22.3	1-				C	CATA		
23	DSD	1025E	1040	N04	W15	04	22.3	1				C	CATA		
23	ADF	1040	1100	N04	E13	04	24.4	1				V	KHAR		
23	DSD	1050E	1130D	N04	W15	04	22.3	1-				C	CATA		
23	BSL	1120	1145	N27	E90	04	30.5	1-				C	CATA		
23	SDF	1240E	0635D	N19	E17	04	24.8	1				C	CATA		
23	AFS	1313E	0105D	N02	E14	04	24.6		04	9	9	E	HOLL	4726	
23	DSD	1335E	1525D	N04	E15	04	24.7	2	02	9	9	E	RAMY	4726	
23	DSD	1347E	1419D	N03	E15	04	24.7	2	02	9	9	E	HOLL	4726	
23	AFS	1640E	0425D	N03	E12	04	24.6	1	03	9	9	E	PALE	4726	
23	AFS	1642E	1813D	N05	E47	04	27.2		03	8	7	E	HOLL		
23	AFS	1715E	0425D	N06	E45	04	27.1		01	8	8	E	PALE		
23	DSD	2100E	0425D	N02	E08	04	24.5		02	9	9	E	PALE	4726	
23	AFS	2152E	2310D	N05	E44	04	27.2		02	8	9	E	HOLL	4727	
24	AFS	0012E	0924D	N05	E09	04	24.7		03	9	9	E	LEAR	4726	
24	ADF	0013E	0924D	N04	W38	04	21.2	1	12	7	8	E	LEAR	4725	
24	AFS	0014E	0924D	N07	E43	04	27.2		02	9	9	E	LEAR	4727	
24	ADF	0333E	0924D	N04	E05	04	24.5	1	04	9	9	E	LEAR	4726	
24	AFS	0820E	1230D	N02	E04	04	24.6		03	9	9	E	ATHN	4726	
24	BSL	0915E	0925	N80	W90	04	16.0	1-				C	CATA		
24	ADF	0930E	1230D	N05	E41	04	27.5		09	7	7	E	ATHN	4727	
24	ADF	0930E	1230D	S01	E06	04	24.8		06	7	7	E	ATHN	4726	
24	BSL	0935	1000	N22	W90	04	17.5	1-				C	CATA		
24	AFS	1040E	1744D	N03	E02	04	24.6		03	7	6	E	RAMY	4726	
24	ADF	1040E	1744D	N08	E38	04	27.3	1	07	7	9	E	RAMY	4727	
24	ADF	1343E	2205D	N04	E00	04	24.6	1	03	9	9	E	HOLL	4726	
24	DSD	1423E	1449D	N02	W02	04	24.4	2	03	9	9	E	HOLL	4726	Flare Associated
24	AFS	1445E	0030D	N03	E00	04	24.6		01	9	9	E	HOLL	4726	
24	AFS	1708E	0307D	N02	W02	04	24.6		01	8	8	E	PALE	4726	
24	AFS	1708E	0307D	N02	W03	04	24.5		02	8	8	E	PALE	4726	
24	AFS	1708E	1715D	N03	W02	04	24.6		02	9	9	E	PALE	4726	
24	AFS	2152E	0102D	N05	E44	04	28.2		02	8	9	E	HOLL	4727	
25	ADF	0220E	0905D	N03	W05	04	24.7	1	03	9	9	E	LEAR	4726	
25	AFS	0220E	0905D	N05	W06	04	24.6		03	9	9	E	LEAR	4726	
25	ADF	0430E	1050D	N07	E23	04	26.9	1	04	9	9	E	ATHN	4727	
25	AFS	0430E	1230D	N02	W07	04	24.7	1	03	9	9	E	ATHN	4726	
25	AFS	0430E	1230D	N06	E26	04	27.1	1	02	9	9	E	ATHN	4727	
25	SDF	0527E	0527D	N09	E28	04	27.3		06	0	0	E	LEAR	4727	
25	BSL	0600	0605	N84	E90	05	3.6	1-				C	CATA		
25	DSD	0630E	0715	N03	W06	04	24.8	1	03	9	9	E	ATHN	4726	
25	BSL	0730E	0735D	S13	E90	05	2.1	1-				C	CATA		
25	BSL	0810	0815	S04	E90	05	2.1	1-				C	CATA		
25	DSD	0835E	0855	N08	W38	04	22.5	1	03	9	9	E	ATHN		
25	AFS	0855	1230D	N08	W38	04	22.5	1	03	6	9	E	ATHN		
25	BSL	0925	0945	N55	E90	05	3.2	1-				C	CATA		
25	SDF	1050E	1050D	N07	E23	04	27.2	1	04	0	0	E	ATHN	4727	
25	BSL	1120	1135	S55	W90	04	17.7	1-				C	CATA		
25	AFS	1134E	2132D	N02	W12	04	24.6		02	9	9	E	RAMY	4726	
25	AFS	1134E	2132D	N05	E20	04	27.0		03	9	9	E	RAMY	4727	
25	ADF	1134E	2132D	S39	E29	04	27.8	1	09	8	7	E	RAMY		
25	AFS	1555E	0037D	N03	W14	04	24.6		03	9	9	E	HOLL	4726	
25	AFS	1643E	0052D	N04	E19	04	27.1		02	9	9	E	HOLL	4727	
25	ADF	1747E	2132D	N07	E18	04	27.1	1	02	8	8	E	RAMY	4727	
25	ADF	1907E	0052D	N07	E18	04	27.1	1	03	9	9	E	HOLL	4727	
25	SDF	2325	1845	S19	E27	04	28.0		08	0	0	E	PALE		
25	SDF	2325	1845	S34	W12	04	25.0		05	0	0	E	PALE		
26	AFS	0015E	0919D	N05	W18	04	24.7		03	9	9	E	LEAR	4726	
26	DSD	0130E	0919D	N06	W22	04	24.4		03	9	9	E	LEAR	4726	
26	ASR	0710E	0712D	S02	W90	04	19.6			9	9	E	ATHN	4725	
26	DSD	0710E	0823D	N07	W27	04	24.3		03	9	9	E	LEAR	4726	
26	ADF	0740E	1130D	N05	W23	04	24.6		04	9	9	E	ATHN	4726	
26	DSD	0740	0750	N06	W26	04	24.4	1				V	KHAR		
26	ADF	0755E	1130D	N04	E11	04	27.1	1	05	9	9	E	ATHN	4727	
26	BSL	1010	1025	S38	E90	05	3.7	1-				C	CATA		
26	BSL	1010	1040D	S17	E90	05	3.3	1-				C	CATA		
26	AFS	1015E	1130D	N03	E07	04	26.9		02	9	9	E	ATHN	4727	
26	AFS	1207E	2029D	N02	W25	04	24.6		03	9	9	E	RAMY	4726	

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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
26	ADF	1207E	2029D	N06	E09	04	27.2	1	04	9	9	E	RAMY	4727	
26	ADF	1207E	2029D	S20	E52	04	30.5	1	14	9	9	E	RAMY		
26	ADF	1542E	2153D	N07	E06	04	27.1	1	05	8	8	E	HOLL	4727	
26	AFS	1542E	2328D	N03	W27	04	24.6		02	8	9	E	HOLL	4726	
26	ADF	1720E	0430D	N01	W28	04	24.6	1	04	8	8	E	PALE	4726	
26	ADF	1720E	0430D	N06	E05	04	27.1	1	08	8	8	E	PALE	4727	
26	AFS	1725E	0430D	N03	W28	04	24.6	1	02	9	9	E	PALE	4726	
26	APR	1905E	0430D	N02	W90	04	20.1	1		6	5	E	PALE	4725	
26	DSD	2306E	0020D	N04	W39	04	24.0		03	9	9	E	PALE	4726	
26	ADF	2330E	0904D	N07	W30	04	24.7	2	04	9	9	E	LEAR	4726	
27	DSD	0148E	0430D	N04	W38	04	24.2		03	9	9	E	PALE	4726	
27	AFS	0530E	1100D					1	02	7	7	E	ATHN	4726	
27	ADF	0530E	1100D	N01	W34	04	24.7		04	8	8	E	ATHN	4726	
27	APR	0530E	1100D	N09	W90	04	20.5	1		9	9	E	ATHN		
27	AFS	0621E	0904D	N05	W35	04	24.6		02	9	9	E	LEAR	4726	
27	APR	0630E	0904D	N09	W90	04	20.5	1		9	9	E	LEAR	4725	
27	ASR	0658	0700D	S12	W90	04	20.5	1		9	9	E	ATHN		
27	DSD	0920E	1100D	N08	W41	04	24.3	1	03	5	8	E	ATHN	4726	
27	ADF	1336E	0136D	N04	W39	04	24.6	1	05	9	9	E	HOLL	4726	
27	ADF	1400E	1746D	N04	W42	04	24.4	2	03	8	7	E	RAMY	4726	
27	ADF	1730E	2217D	N04	W09	04	27.0	1	04	8	9	E	HOLL	4727	
27	SDF	1828E	2136D	S33	W34	04	25.1	1	04	5	3	E	HOLL		
27	ADF	1940E	0215D	N04	W11	04	27.0	1	04	9	9	E	PALE	4727	
27	AFS	1940E	0350D	N02	W44	04	24.5	1	02	8	8	E	PALE	4726	
27	ADF	1940E	0350D	S01	W43	04	24.6	1	05	9	9	E	PALE	4726	
27	DSD	2136E	2211D	N06	W47	04	24.4	2	07	9	9	E	HOLL	4726	
27	AFS	2259E	0003D	N04	W44	04	24.7		01	9	9	E	HOLL	4726	
27	DSD	2330E	0527D	N08	W36	04	25.3		03	9	9	E	LEAR	4726	
28	SDF	0215E	0220D	N04	W15	04	27.0		04	0	0	E	PALE	4727	
28	ADF	0419E	0916D	N02	W47	04	24.7	2	05	9	9	E	LEAR	4726	
28	AFS	0500E	0916D	N05	W46	04	24.8		03	8	9	E	LEAR	4726	
28	AFS	0640E	1130D	N02	W47	04	24.8		02	8	8	E	ATHN	4726	
28	ADF	0640E	1130D	S03	W44	04	25.0		08	7	8	E	ATHN	4726	
28	BSL	0930	0940	N68	E90	05	6.5	1-				C	CATA		
28	BSL	1020	1025	N30	E90	05	5.5	1-				C	CATA		
28	BSL	1020	1025	S85	W90	04	20.0	1-				C	CATA		
28	BSL	1025	1030	S80	E90	05	6.8	1-				C	CATA		
28	BSL	1110	1110D	S68	E90	05	6.6	1-				C	CATA		
28	BSL	1135	1145	N88	E90	05	6.9	1-				C	CATA		
28	ADF	1334E	1714D	N01	W52	04	24.7	1	04	6	9	E	HOLL	4726	
28	ADF	1335E	1619D	N05	W22	04	26.9		03	8	8	E	HOLL	4727	
28	AFS	1650E	0137D	N07	W19	04	27.3		03	9	9	E	HOLL	4727	
28	AFS	1650E	1714D	N07	W19	04	27.3		03	9	9	E	HOLL	4727	
28	DSD	1650E	1820D	N03	W59	04	24.3	2	03	9	9	E	RAMY	4726	
28	ADF	1656E	1820D	N04	W24	04	26.9	2	03	7	9	E	RAMY	4727	
28	AFS	1656E	1820D	N07	W20	04	27.2		02	9	9	E	RAMY	4727	
28	ADF	1737E	0317D	N00	W56	04	24.5		04	7	8	E	PALE	4726	
28	AFS	1737E	0317D	N04	W24	04	26.9		01	8	8	E	PALE	4727	
28	AFS	1737E	0317D	N07	W21	04	27.2		01	8	9	E	PALE	4727	
29	APR	0558E	0908D	S34	W90	04	22.1	1		9	9	E	LEAR		
29	SDF	0600E	0631D	S14	E02	04	29.4		14	5	5	E	LEAR		
29	ADF	0700E	1130D	N01	W65	04	24.4	1	05	7	6	E	ATHN	4726	
29	APR	0700E	1130D	S33	W90	04	22.1	2		9	9	E	ATHN		
29	SDF	0718E	0719D	N20	E22	05	1.0		10	4	4	E	LEAR		
29	ADF	0732E	0908D	N09	W27	04	27.3	2	04	9	9	E	LEAR	4727	
29	AFS	0945E	1130D	N05	W32	04	27.0		02	8	9	E	ATHN	4727	
29	SDF	0945E	0635D	S16	E15	04	30.5	1				C	CATA		
29	SDF	1135E	1135D	S22	E13	04	30.5		30	0	0	E	RAMY		
29	SDF	1416E	1416D	S10	W15	04	28.5		30	0	0	E	HOLL		
29	ADF	1454E	2009D	N02	W63	04	24.9	2	06	9	9	E	RAMY	4726	
29	ADF	1518E	0042D	S01	W64	04	24.8	1	06	9	7	E	HOLL	4726	
29	SSB	1521		214	W65	04	30.9			0	0	E	HOLL		
29	ADF	1914E	0100D	S02	W70	04	24.6	2	08	9	9	E	PALE	4726	
29	SDF	1950	1648	S10	E15	04	30.9		12	0	0	E	PALE		
29	AFS	2000E	0305D	N06	W36	04	27.1		02	8	9	E	PALE	4727	
30	ADF	0000E	0128D	N02	W71	04	24.7	2	07	7	7	E	LEAR	4726	
30	AFS	0000E	0128D	N09	W36	04	27.3		02	9	9	E	LEAR	4727	

ACTIVE PROMINENCES AND FILAMENTS

APRIL 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
30	ADF	0020E	0128D	S47	W15	04	28.7	2	16	7	7	E	LEAR		
30	ADF	0600E	1005D	N04	W73	04	24.8		06	7	7	E	ATHN	4726	
30	ADF	0600E	1005D	N07	W41	04	27.2		04	7	7	E	ATHN	4727	
30	ADF	0700	0920	N03	W70	04	25.1	1				V	KHAR		
30	DSD	0745	0810	S03	W68	04	25.2	1				V	KHAR		
30	ADF	0902	0907	N09	W39	04	27.4	1				V	KHAR		
30	BSL	0930	0940	N28	E90	05	7.4	1-				C	CATA		
30	ADF	0958	1030	N02	W70	04	25.2	1				V	KHAR		
30	BSL	1000E	1000D	N82	W90	04	22.0	1-				C	CATA		
30	BSL	1010E	1020	N83	W90	04	22.0	1-				C	CATA		
30	DSD	1010	1030	N07	W78	04	24.6	1				V	KHAR		
30	SDF	1032E	1032D	N07	W61	04	25.9		04	0	0	E	RAMY		
30	SSB	1124		215	W76	05	1.8			0	0	E	RAMY		
30	ADF	1124E	1126D	S01	W76	04	24.8	2	05	9	9	E	RAMY	4726	
30	AFS	1445E	1457D	N06	W47	04	27.1		02	9	9	E	RAMY	4727	
30	AFS	1506E	2225D	N08	W44	04	27.3		02	9	9	E	HOLL	4727	
30	ADF	1511E	2225D	S01	W79	04	24.7	2	04	6	8	E	HOLL	4726	
30	SSB	1515		214	W78	05	1.9			0	0	E	HOLL		
30	ASR	1531E	1550D	N01	W83	04	24.4	1		8	7	E	HOLL	4726	
30	ASR	1649E	1659	N01	W83	04	24.5	1		9	9	E	HOLL	4726	
30	ASR	1726E	0129D	N01	W85	04	24.4	1		9	9	E	HOLL	4726	
30	ASR	1735E	0354D	S01	W88	04	24.2			8	8	E	PALE	4726	
30	ADF	1935E	0129D	N08	W48	04	27.2	1	03	9	9	E	HOLL	4727	
30	SDF	1943E	0104D	S02	W70	04	25.6		08	0	0	E	PALE	4726	

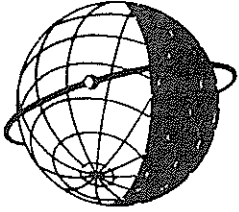
ADF = Active Dark Filament      BSL = Bright Surge on Limb      LPS = Loops  
 AFS = Arch Filament System      CAP = CAP Prominence (Tandberg-Hanssen)      MDP = Mound Prominence  
 APR = Active Prominence      CRN = Coronal Rain      SDF = Sudden Disappearing Filament  
 ASR = Active Surge Region      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.

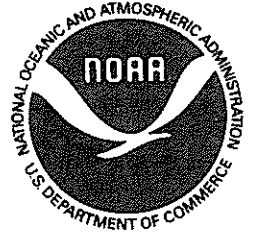
The EXTENT field for limb events is the radial extent above the limb in hundredths of solar radius. For disk events this field contains the heliographic extent in whole degrees.

The remark "Bright Emission 1/3" indicates that bright emission was observed 1/3 of time. The remark "Normal Emission 1/3" indicates that normal emission was observed 1/3 of time.

Observation Type: C= Cinematographic, E= Electronic, P= Photographic, V= Visual.



**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."