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Data for July 1996

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Number 629

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NEW DATA

Solar Ultraviolet Spectral Irradiance Monitor (SUSIM) on board UARS
Mg II Index Oct 91-Jan 97

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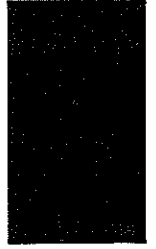
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H α SOLAR FLARES

JULY 1996

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	Area Measurement			Remarks	
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
			01 2159		2212			No Flare Patrol												
			02 0252		0359			No Flare Patrol												
			02 2002		2007			No Flare Patrol												
			03 0937		0955			No Flare Patrol												
			03 1003		1043			No Flare Patrol												
0001	HOLL	04	2126	2127	2131	S11	E40	7978	07	7.9	5	SF		3	E			17		
			04 2236		2307			No Flare Patrol												
			05 2109		2120			No Flare Patrol												
0002	HOLL	07	1334	1348	1358	S10	W06	7978	07	7.1	24	SF		3	E			13		
0003	SVTO	07	1450	1451	1505	S11	W07	7978	07	7.1	15	SF B	2.0	3	E			16		F
			07 2055		2058			No Flare Patrol												
			07 2107		2116			No Flare Patrol												
			07 2127		2155			No Flare Patrol												
0004	PALE	07	2221	2224	2233	S09	W11	7978	07	7.1	12	1F C	1.7	3	E			131		F
			07 2329		2339			No Flare Patrol												
0005		08	0020*	00366	0045	S10	W13	7978	07	7.0	25	SF						18		F
	HOLL	08	0020	0036	0044	S09	W12	7978	07	7.1	24	SF		3	E			18		F
	PALE	08	0042	0042	0046	S11	W14	7978	07	7.0	4	SF		3	E			19		F
0006	PALE	08	0043	0043	0046	S10	W02	7978	07	7.9	3	SF		3	E			14		U
0007		08	0101*	01039	0111	S10	W13	7978	07	7.1	10	SF						51		F
	HOLL	08	0101	0103	0106	S10	W13	7978	07	7.1	5	SF		3	E			83		
	PALE	08	0111	0112	0116	S10	W13	7978	07	7.1	5	SF		3	E			19		F
			08 0309		0339			No Flare Patrol												
			08 0355		0416			No Flare Patrol												
0008	SVTO	08	0609	0616	0625	S10	W15	7978	07	7.1	16	SF C	1.6	3	E			35		
0009	SVTO	08	0858	0900	0909	S10	W17	7978	07	7.1	11	SF C	1.8	3	E			20		EF
			08 1033		1054			No Flare Patrol												
0010	SVTO	08	1405E	1405U	1411	S10	W22	7978	07	6.9	60	SF B	5.0	3	E			17		
0011	HOLL	08	1519	1519	1526	S10	W22	7978	07	7.0	7	SF		3	E			20		FH
0012	SVTO	08	1620	1622	1625	S11	W23	7978	07	6.9	5	SF		3	E			10		H
0013	PALE	08	1741	1822	1845	S09	W22	7978	07	7.1	64	SF		3	E			48		
0014	HOLL	08	1744	1747	1750	S09	W21	7978	07	7.2	6	SF		3	E			19		
0015	HOLL	08	1806	1806	1813	S11	W22	7978	07	7.1	7	SF B	8.9	3	E			14		FH
0016	PALE	08	2030	2031	2037	S09	W23	7978	07	7.1	7	SF		3	E			17		
			09 0103		0201			No Flare Patrol												
0017	PALE	09	0149	0204	0221	S10	W28	7978	07	7.0	32	SF M	1.4	3	E			50		F
0018	SVTO	09	0503	0513	0553	S11	W30	7978	07	6.9	50	SF C	3.8	3	E			90		F
0019	KANZ	09	0607	0612U	0612D	S11	W31	7978	07	6.9	50	SF		2	C					
0020		09	0751	07581	0854	S11	W23	7978	07	7.6	63	SF C	2.6					49		F
	SVTO	09	0751	0758	0853	S10	W24	7978	07	7.5	62	SF C	2.6	3	E			49		F
	KANZ	09	0751	0759	0855	S12	W22	7978	07	7.7	64	SF		2	C					
0021	LEAR	09	0809	0816	0833	S11	W23	7978	07	7.6	24	SF		3	E			12		

H α SOLAR FLARES

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
								USAF Region							Mo	Day	Time (UT)	
0022	KHAR	09	0830	0835	0907	S12	W22	7978	07	7.7	37	1N	2	V				BE
0023		09	09016	09114	0941	S11	W30	7978	07	7.1	40	1B X	2.6			158		MQU
	SVTO	09	0901	0912	0949	S10	W30	7978	07	7.1	48	1B X	2.6	3	E	158		
	KANZ	09	0903	0915	0940	S11	W30	7978	07	7.1	37	1N		2	C			
	KHAR	09	0907	0911	0935	S12	W30	7978	07	7.1	28	1B		2	V			UMQ
0024	HOLL	09	1849	1901	1935	S11	W37	7978	07	7.0	46	SF C	1.7	3	E		57	F
		09	2219		2304	No Flare Patrol												
0025	PALE	10	0010	0027	0032	S13	W40	7978	07	7.0	22	SF B	9.4	3	E		12	
0026		10	0253*	0340	0412D	S12	W40	7978	07	7.1	79D	1F M	1.0				96	U
	PALE	10	0253	0331U	0412D	S14	W42	7978	07	6.9	79D	1F		3	E		169	U
	LEAR	10	0330	0340	0340U	S11	W39	7978	07	7.2	10U	SF M	1.0	3	E		24	U
0027	SVTO	10	0544	0547	0604	S10	W42	7978	07	7.1	20	SF C	2.7	3	E		14	
0028		10	10299	1030	1046	S11	W48	7978	07	6.8	17	SF B	9.8				19	D
	SVTO	10	1029	1030	1042	S11	W48	7978	07	6.8	13	SF B	9.8	3	E		19	
	KHAR	10	1038		1049	S11	W48	7978	07	6.8	11	SF		2	V			D
0029	SVTO	10	1057	1058	1114	S11	W47	7978	07	6.9	17	SF C	1.2	3	E		35	F
0030	SVTO	10	1330	1332	1340	S11	W48	7978	07	6.9	10	SF		3	E		11	
0031	SVTO	10	1428	1430	1510	S12	W49	7978	07	6.9	42	SF B	7.2	3	E		15	
0032	HOLL	10	1638	1641	1644	S11	W50	7978	07	6.9	6	SF B	6.6	3	E		13	F
0033		10	18044	18079	1828	S12	W49	7978	07	7.1	24	SF C	3.1				49	
	PALE	10	1804	1816	1826	S14	W49	7978	07	7.0	22	SF C	3.1	3	E		50	
	RAMY	10	1806	1807	1827	S12	W50	7978	07	7.0	21	SF		3	E		27	
	HOLL	10	1808	1815	1831	S09	W48	7978	07	7.1	23	SF		3	E		69	
0034		10	18486	18561	1859	S13	W50	7978	07	7.0	11	SF C	2.2				26	H
	HOLL	10	1848	1856	1905D	S12	W51	7978	07	6.9	17D	SF C	2.2	3	E		52	H
	RAMY	10	1854E	1855U	1900D	S13	W50	7978	07	7.0	6D	SF		3	E		15	
	PALE	10	1854	1857	1859	S14	W50	7978	07	7.0	5	SF		3	E		11	
0035	HOLL	10	1951	2002	2006	S09	W49	7978	07	7.1	15	SF		3	E		15	
0036	PALE	10	2243	2247	2258	S13	W46	7978	07	7.5	15	SF C	1.5	3	E		18	
0037	PALE	11	0236	0237	0240	S13	W51	7978	07	7.3	4	SF B	3.4	3	E		18	
0038	PALE	11	0317	0317	0324	S09	W53	7978	07	7.1	7	SF B	6.2	3	E		29	
0039	KANZ	11	0657	0705	0718	S10	W58	7978	07	6.9	21	SF		2	C			
0040	SVTO	11	0808	0826U	0840	S09	W55	7978	07	7.2	32	SF C	2.6	3	E		33	
0041	RAMY	11	1052E	1054U	1107	S12	W57	7978	07	7.1	15D	SF B	7.4	3	E		11	
0042	RAMY	11	1231	1231	1243	S13	W59	7978	07	7.1	12	SF		4	E		12	
0043	KANZ	11	1543E		1603D	S12	W66	7978	07	6.7	20D	1F		2	C			
0044		11	16542	16572	1710	S10	W64	7978	07	6.9	16	SF C	2.8				26	FH
	SVTO	11	1654	1657	1711	S10	W64	7978	07	6.9	17	SF		3	E		28	F
	RAMY	11	1656	1659	1710	S11	W63	7978	07	7.0	14	SF C	2.8	4	E		23	FH
		11	2049		2057	No Flare Patrol												
		11	2232		2237	No Flare Patrol												
		11	2310		2321	No Flare Patrol												
0045	SVTO	12	0657	0702	0716	S10	W60	7978	07	7.8	19	SF		3	E		15	S

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H α SOLAR FLARES

JULY 1996

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/		Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
								USAF Region	CMP Mo Day						Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0046		12	1502	1502	1516	S12	W66	7978	07	7.6	14	SF				39		FS
	SVTO	12	1502	1502	1511	S10	W67	7978	07	7.6	9	SF	2	E		19		FS
	RAMY	12	1510E	1513U	1522	S13	W64	7978	07	7.8	12D	SF	3	E		59		
0047		12	1515	1528	1548	S14	W68	7978	07	7.5	33	SF				68		FS
	HOLL	12	1515	1528	1550	S10	W68	7978	07	7.5	35	SF	3	E		91		SF
	RAMY	12	1530E	1530U	1547	S17	W69	7978	07	7.4	17D	SF	3	E		46		FS
0048	SVTO	12	1513	1530	1631	S11	W72	7978	07	7.2	78	1F C 4.9	2	E		122		S
		12	1806		1849													No Flare Patrol
		12	1935		1959													No Flare Patrol
		12	2015		2113													No Flare Patrol
		12	2119		2257													No Flare Patrol
		12	2320		2326													No Flare Patrol
		13	2241		2250													No Flare Patrol
		14	1904		1916													No Flare Patrol
		14	2141		2151													No Flare Patrol
		14	2256		2318													No Flare Patrol
		15	1810		1816													No Flare Patrol
		15	2111		2139													No Flare Patrol
		15	2206		2212													No Flare Patrol
		16	2115		2219													No Flare Patrol
		16	2223		2334													No Flare Patrol
		18	1753		1842													No Flare Patrol
		19	0529		0535													No Flare Patrol
		19	1908		1909													No Flare Patrol
		19	2121		2326													No Flare Patrol
		20	1051		1100													No Flare Patrol
		20	1127		1131													No Flare Patrol
		20	1508		1521													No Flare Patrol
		21	2119		2213													No Flare Patrol
		21	2240		2245													No Flare Patrol
		21	2251		2256													No Flare Patrol
		21	2313		2321													No Flare Patrol
		22	0027		0046													No Flare Patrol
		22	0109		0119													No Flare Patrol
		22	2050		2130													No Flare Patrol
		22	2224		2323													No Flare Patrol
		23	0000		0025													No Flare Patrol
		23	0030		0213													No Flare Patrol
		23	2224		2400													No Flare Patrol
		24	0000		0023													No Flare Patrol
		24	0210		0228													No Flare Patrol
		24	2220		2257													No Flare Patrol
		28	2125		2146													No Flare Patrol
		28	2151		2223													No Flare Patrol
		29	0923		0939													No Flare Patrol
0049	PALE	29	2241	2244	2257	S06	E56	7981	08	3.1	16	SF B 2.8	3	E		19		
		30	0335		0429													No Flare Patrol
0050		30	1401	14013	1410	S10	E39	7981	08	2.5	9	SF B 2.2				22		
	HOLL	30	1401	1401	1410	S10	E40	7981	08	2.6	9	SF	3	E		25		
	SVTO	30	1401	1404	1409	S09	E38	7981	08	2.4	8	SF B 2.2	3	E		19		
0051		30	1603	1603	1610	S10	E38	7981	08	2.5	7	SF				16		
	HOLL	30	1603	1603	1608	S10	E37	7981	08	2.4	5	SF	3	E		13		
	RAMY	30	1603	1603	1611	S09	E38	7981	08	2.5	8	SF	2	E		20		
		30	2255		2312													No Flare Patrol
		30	2317		2343													No Flare Patrol
		30	2353		2400													No Flare Patrol
		31	0723		0727													No Flare Patrol
		31	0729		0743													No Flare Patrol
		31	0757		0811													No Flare Patrol

H α SOLAR FLARES

7
Jul 96

JULY 1996

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	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0052		31	08315	0835	0900D	S10	E34	7981	08	2.9	29D	SF	B	2.0				17	
	KANZ	31	0831	0835	0900D	S11	E35	7981	08	3.0	29D	SF			2	C			
	SVTO	31	0836	0836U	0857D	S10	E34	7981	08	2.9	21D	SF	B	2.0	3	E		17	
0053	RAMY	31	1612	1613	1618	S11	E25	7981	08	2.5	6	SF	B	1.7	3	E		17	
0054		31	1915	1915	1924	S10	E23	7981	08	2.5	9	SF	B	3.9				18	
	HOLL	31	1915	1915	1923	S10	E23	7981	08	2.5	8	SF			3	E		21	
	RAMY	31	1915	1915	1924	S10	E23	7981	08	2.5	9	SF	B	3.9	3	E		15	
		31	2150		2159	No Flare Patrol													
		31	2217		2318	No Flare Patrol													

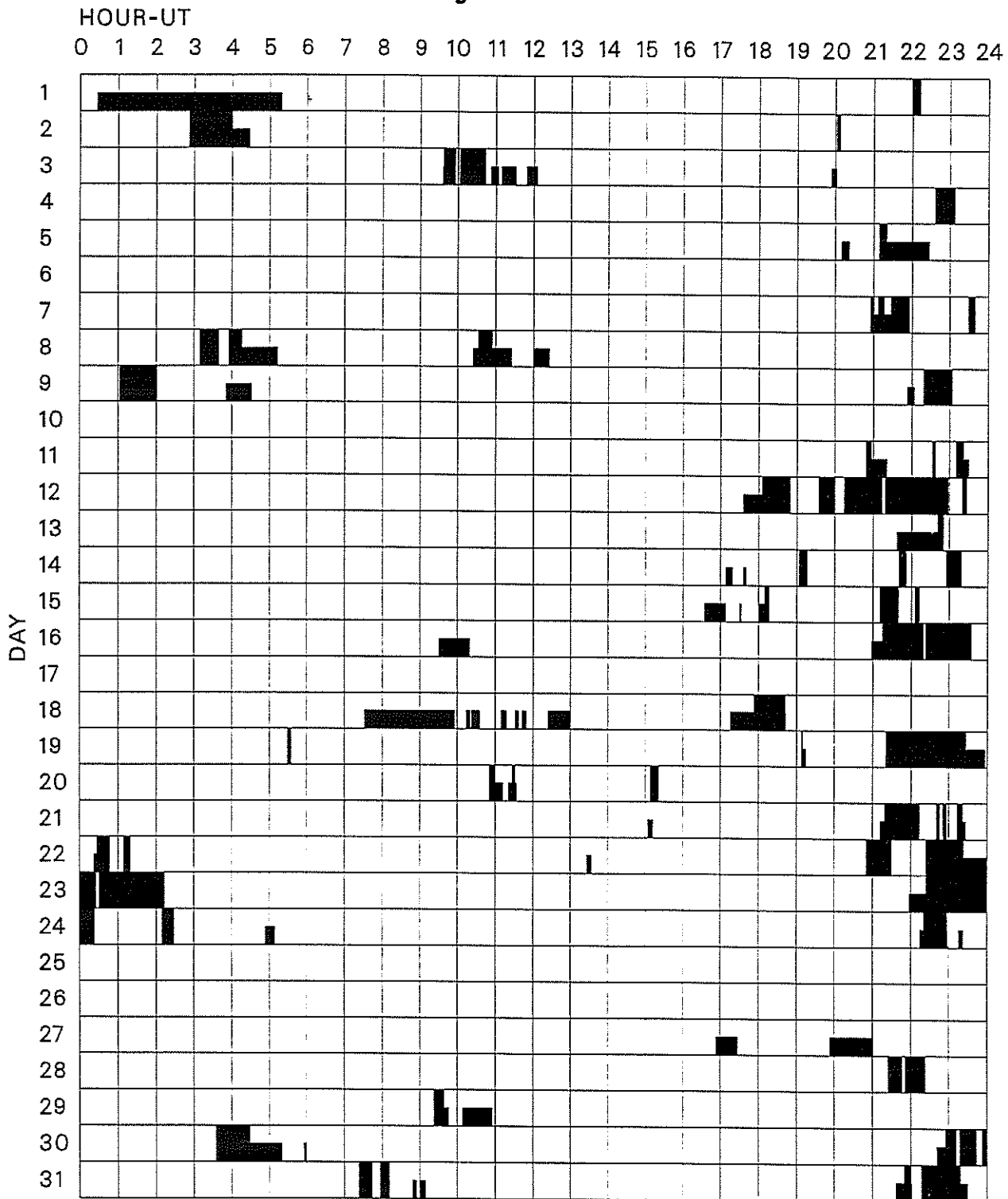
"Remarks"

- | | |
|---|---|
| <p>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.</p> | <p>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.</p> |
|---|---|

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

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

JULY 1996

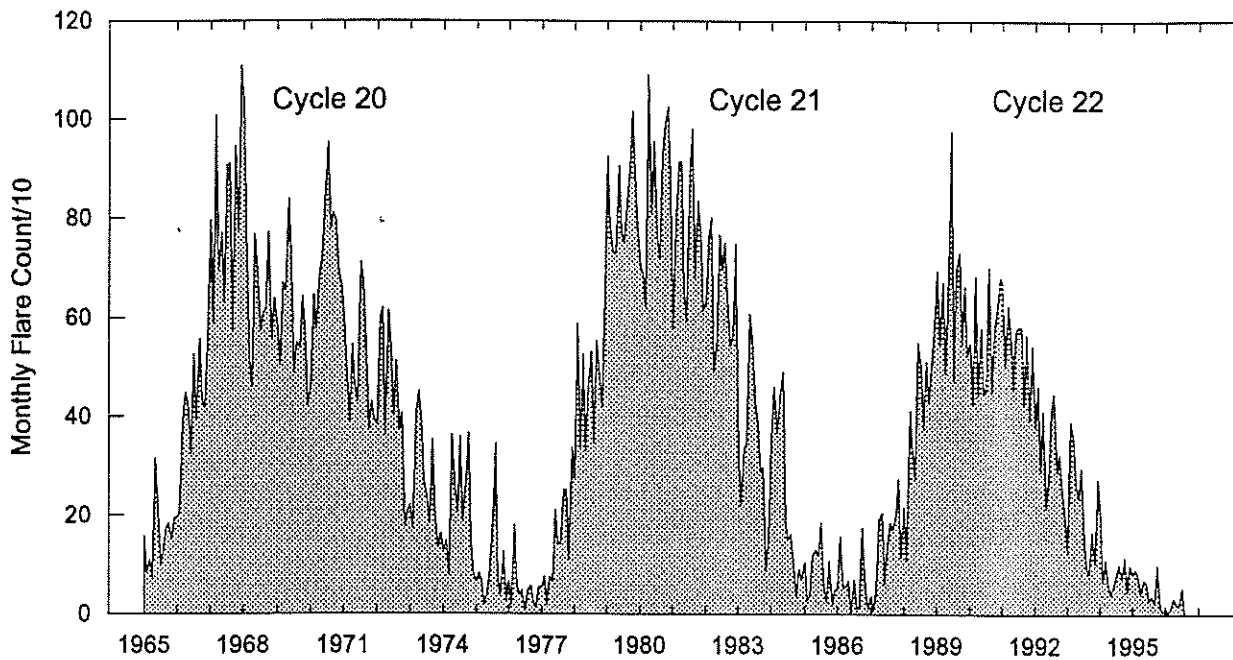


Times of no flare patrol, shown here as shaded areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual nor cinematographic); portions of a panel with only the bottom half shaded mark times of only visual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

Holloman	Kharkov	Mitaka	Ramey
Hurbanovo	Learmonth	Palehua	San Vito
Kanzelhoehe			

Monthly Counts of Grouped Solar Flares

Jan 1965 - Jul 1996



Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1965	158	85	110	74	315	231	99	127	173	184	150	193	1899
1966	194	205	390	449	429	323	528	391	558	432	417	543	4859
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	71	12	14	174	56	13	730
1987	36	7	52	192	205	61	132	185	172	198	273	114	1627
1988	217	109	413	328	274	551	502	375	513	429	518	587	4816
1989	695	544	672	488	691	977	474	699	733	547	665	526	7711
1990	550	424	684	442	580	445	454	703	449	574	623	682	6610
1991	672	503	625	570	458	574	582	581	425	565	396	544	6495
1992	380	462	287	412	214	271	413	447	287	325	248	206	3952
1993	123	392	357	262	237	296	154	92	82	167	104	275	2541
1994	217	67	111	60	40	56	81	101	72	117	45	99	1066
1995	82	95	77	42	69	66	29	37	23	99	14	6	639
1996	14	3	15	34	21	16	54						157

The term 'grouped' means observations of the same event by different sites were lumped together and counted as one.

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

JULY 1996

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
08	127	TORN	43 NS	0813.0		407.0		1.0		V=1	
	280	CUBA	44 NS	1900.0E		240.0D	19.0				
	235	CUBA	44 NS	1900.0E		240.0D	16.0				
	245	SGMR	43 NS	1921.0	1938.0	108.0	160.0			QL=4 ST=2 TYP=1	
	245	PALE	43 NS	2029.0	2110.0	41.0	67.0			QL=2 ST=2 TYP=1	
	245	SVTO	8 S	0431.0	0432.0	2.0	72.0			QL=4 ST=3 TYP=3	
	245	LEAR	8 S	0432.0	0432.0		51.0		U	QL=4 ST=2 TYP=3	
	245	PALE	8 S	0432.0	0432.0		49.0		U	QL=4 ST=2 TYP=3	
	245	SVTO	8 S	0432.0	0432.0		53.0		U	QL=4 ST=2 TYP=3	
	500	HIRA	8 S	0608.2	0608.5	0.5	11.0			0	
	200	HIRA	8 S	0608.3	0608.5	0.7	46.0			0	
	2840	PEKG	45 C	0857.0	0857.9	2.0	10.5				
	245	SVTO	8 S	0928.0	0928.0	1.0	140.0			QL=4 ST=3 TYP=3	
	245	SVTO	8 S	1434.0	1434.0	1.0	64.0			QL=4 ST=3 TYP=3	
	245	SVTO	4 S/F	1600.0	1605.0	5.0	9.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	1611.0	1611.0		54.0		U	QL=4 ST=2 TYP=3	
	245	PALE	8 S	1808.0	1808.0		81.0		U	QL=4 ST=2 TYP=3	
	245	SGMR	8 S	1808.0	1808.0		89.0		U	QL=4 ST=2 TYP=3	
245	SGMR	8 S	2121.0	2121.0		110.0		U	QL=4 ST=3 TYP=3		
09	245	LEAR	43 NS	0155.0	0643.0	460.0	160.0			QL=4 ST=2 TYP=1	
	245	SVTO	43 NS	0624.0	0648.0	321.0	360.0			QL=4 ST=3 TYP=1	
	245	SVTO	43 NS	0624.0	0643.0	1056.0	170.0			QL=4 ST=3 TYP=1	
	245	SVTO	43 NS	0624.0	0648.0	1056.0	360.0			QL=4 ST=3 TYP=1	
	127	TORN	43 NS	0640.0		500.0D		70.0		V=2	
	235	CUBA	44 NS	1305.0E		515.0D	11.0				
	280	CUBA	44 NS	1305.0E		515.0D	13.0				
	245	SGMR	43 NS	2312.0	2313.0	48.0	170.0			QL=4 ST=3 TYP=1	
	245	SGMR	43 NS	2312.0	2331.0	48.0	240.0			QL=4 ST=3 TYP=1	
	245	SGMR	43 NS	2312.0	0000.0	48.0	240.0			QL=4 ST=3 TYP=1	
	245	PALE	4 S/F	0053.0	0054.0	8.0	88.0			QL=2 ST=2 TYP=3	
	245	LEAR	8 S	0054.0	0054.0		84.0		U	QL=4 ST=2 TYP=3	
	245	PALE	8 S	0155.0	0155.0	1.0	52.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	0600.0	0600.0	1.0	66.0			QL=4 ST=2 TYP=3	
	500	HIRA	41 F	0749.5	0755.0	17.0	78.0			WR	
	410	LEAR	4 S/F	0751.0	0755.0	7.0	340.0			QL=4 ST=2 TYP=5	
	410	SVTO	4 S/F	0751.0	0755.0	7.0	370.0			QL=4 ST=2 TYP=3	
	610	SVTO	49 GB	0904.0	0911.0	35.0	1600.0			QL=4 ST=2 TYP=6	
	4995	SVTO	49 GB	0908.0	0909.0	12.0	2500.0			QL=4 ST=2 TYP=6	
	15400	SVTO	49 GB	0908.0	0909.0	19.0	2300.0			QL=4 ST=2 TYP=6	
	8800	SVTO	49 GB	0908.0	0909.0	19.0	2700.0			QL=4 ST=2 TYP=6	
	4995	SVTO	49 GB	0908.0	0909.0	20.0	2500.0			QL=4 ST=2 TYP=6	
	2840	PEKG	47 GB	0908.0	0910.0	35.0	953.2				
	2800	HIRA	46 C	0909.0	0910.0	7.0	782.0		52.0		0
	2695	SVTO	49 GB	0909.0	0910.0	18.0	1100.0				QL=4 ST=2 TYP=6
	15400	LEAR	49 GB	0909.0	0910.0	26.0	2000.0				QL=4 ST=3 TYP=7
	8800	LEAR	49 GB	0909.0	0909.0	26.0	2900.0				QL=4 ST=3 TYP=7
	2695	LEAR	49 GB	0909.0	0920.0	26.0	1300.0				QL=4 ST=3 TYP=7
	1415	LEAR	49 GB	0909.0	0920.0	26.0	1600.0				QL=4 ST=3 TYP=7
	1415	SVTO	49 GB	0909.0	0920.0	30.0	1800.0				QL=4 ST=2 TYP=7
	410	LEAR	49 GB	0910.0	0911.0	25.0	1000.0				QL=4 ST=3 TYP=7
	610	LEAR	49 GB	0910.0	0920.0	25.0	820.0				QL=4 ST=3 TYP=7
	410	SVTO	49 GB	0910.0	0911.0	21.0	2000.0				QL=4 ST=2 TYP=6
	245	SVTO	49 GB	0910.0	0912.0	23.0	14000.0				QL=4 ST=2 TYP=6
	127	TORN	4 S/F	0910.6	0912.3	2.0	1800.0		900.0		
	500	HIRA	46 C	0910.7	0911.0	1.2D	1027.0				0
	245	LEAR	49 GB	0911.0	0912.0	24.0	13000.0				QL=4 ST=3 TYP=7
	200	HIRA	46 C	0911.8	0912.2	1.2D	1352.0				0
	500	HIRA	45 C	0912.0E	0913.5	5.0D	156.0		21.0		WR
	200	HIRA	41 F	0914.1E	0932.2	30.0D	134.0				WR
	500	HIRA	46 C	0917.0E	0922.2	7.8D	506.0		43.0		WR
	2800	HIRA	46 C	0919.1	0920.5	4.7	227.0		37.0		MR
	2800	HIRA	45 C	0924.7	0925.2	1.6	217.0		28.0		MR
	500	HIRA	46 C	0925.1	0925.5	6.8	452.0		32.0		WR
	500	HIRA	46 C	0934.6	0937.2	3.5	223.0		28.0		WR
	245	SVTO	49 GB	1002.0	1007.0	18.0	510.0				QL=4 ST=2 TYP=6
	245	SGMR	4 S/F	1004.0	1007.0	9.0	400.0				QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1004.0	1007.0	836.0	400.0				QL=4 ST=2 TYP=3
410	SGMR	4 S/F	1005.0	1007.0	6.0	110.0				QL=4 ST=2 TYP=3	

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

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Jul 96

JULY 1996

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
09	410	SVTO	4 S/F	1005.0	1007.0	4.0	190.0			QL=4 ST=2 TYP=3
		SGMR	4 S/F	1005.0	1007.0	835.0	110.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1032.0	1033.0	2.0	67.0			QL=4 ST=2 TYP=3
	127	TORN	4 S/F	1239.2	1239.9	1.0	200.0	100.0		
	127	TORN	4 S/F	1342.4	1342.9	1.0	90.0	40.0		
	127	TORN	4 S/F	1456.7	1457.2	2.0U	100.00	20.00		
	245	SVTO	8 S	1555.0	1555.0	1.0	63.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1637.0	1637.0	U	75.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1648.0	1650.0	2.0	220.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1649.0	1650.0	1.0	130.0			QL=4 ST=3 TYP=3
	245	SVTO	8 S	1715.0	1717.0	2.0	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1717.0	1717.0	U	76.0			QL=4 ST=3 TYP=3
10	127	TORN	44 NS	0620.0E		540.0D		6.0		V=1
	235	CUBA	44 NS	1425.0E		445.0D	10.0			
	280	CUBA	44 NS	1425.0E		445.0D	13.0			
	200	HIRA	8 S	0031.8	0031.8	1.2	248.0			0
	2800	HIRA	20 GRF	0253.0	0339.4	95.0	8.0	3.0		0
	500	HIRA	46 C	0336.7	0342.3	7.5	29.0	3.0		WR
	410	PALE	4 S/F	0337.0	0341.0	7.0	54.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	0338.0	0339.0	1.0	41.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	0342.0	0342.0	U	37.0			QL=4 ST=2 TYP=3
	410	PALE	4 S/F	0345.0	0349.0	5.0	150.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0348.0	0349.0	1.0	61.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0348.0	0349.0	1.0	53.0			QL=2 ST=2 TYP=3
	500	HIRA	45 C	0348.2	0348.7	1.2	9.0	2.0		WR
	245	LEAR	4 S/F	0541.0	0546.0	7.0	44.0			QL=4 ST=2 TYP=3
	200	HIRA	42 SER	0545.6	0546.6	1.6	34.0			0
	245	SVTO	8 S	0546.0	0546.0U	1.0	42.0			QL=4 ST=3 TYP=3
	245	SVTO	8 S	1355.0	1355.0	1.0	78.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1355.0	1355.0	60.0	55.0			QL=4 ST=2 TYP=3
	127	TORN	4 S/F	1422.1	1423.3	3.0	60.0	10.0		
	245	SGMR	8 S	1605.0	1605.0	U	61.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1605.0	1605.0	1.0	81.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2214.0	2215.0	1.0	8.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2214.0	2215.0	1.0	78.0			QL=4 ST=2 TYP=3
	2800	HIRA	1 S	2237.8	2238.1	1.0	2.0	1.0		0
245	PALE	8 S	2238.0	2239.0	1.0	14.0			QL=2 ST=2 TYP=3	
410	PALE	8 S	2238.0	2239.0	2.0	6.0			QL=4 ST=2 TYP=3	
610	PALE	8 S	2238.0	2239.0	1.0	3.0			QL=4 ST=2 TYP=3	
245	SGMR	8 S	2238.0	2239.0	1.0	11.0			QL=4 ST=2 TYP=3	
410	SGMR	8 S	2238.0	2239.0	1.0	4.0			QL=4 ST=2 TYP=3	
610	SGMR	8 S	2238.0	2239.0	1.0	1.0			QL=4 ST=2 TYP=3	
500	HIRA	42 SER	2238.5	2239.2	2.2	58.0			WR	
11	245	LEAR	43 NS	0035.0	0646.0	412.0	110.0			QL=4 ST=2 TYP=1
	245	SVTO	43 NS	0646.0	0646.0	149.0	120.0			QL=4 ST=3 TYP=1
	245	SVTO	43 NS	0646.0	0646.0	1034.0	120.0			QL=4 ST=3 TYP=1
	245	SVTO	43 NS	0646.0	0646.0	1034.0	130.0			QL=4 ST=3 TYP=1
	127	TORN	43 NS	0733.0		305.0		2.0		V=1
	235	CUBA	44 NS	1725.0E		245.0D	6.0			
	280	CUBA	44 NS	1725.0E		245.0D	11.0			
	245	PALE	8 S	0037.0	0037.0	1.0	68.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	0132.0	0133.0	2.0	88.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	0157.0	0157.0	U	100.0			QL=2 ST=2 TYP=3
	2840	PEKG	1 S	0434.0	0436.0	4.0	8.3			
	2800	HIRA	1 S	0436.3	0436.8	1.0	5.0	2.0		0
	500	HIRA	46 C	0436.6	0437.1	1.7	4.0	2.0		0
	127	TORN	4 S/F	1107.6	1108.6	1.7	160.0	50.0		
245	SGMR	8 S	1612.0	1612.0	U	60.0			QL=4 ST=2 TYP=3	
12	127	TORN	43 NS	0652.0		354.0		2.0		V=1
	245	SGMR	8 S	1527.0	1527.0	1.0	23.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1527.0	1528.0	2.0	5.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1527.0	1528.0	1.0	3.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1527.0	1528.0	1.0	4.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1527.0	1528.0	2.0	5.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	1527.0	1528.0	2.0	3.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1527.0	1527.0	1.0	3.0			QL=4 ST=2 TYP=3

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Jul 96

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

JULY 1996

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks	
							Peak (10 -22 W/m 2 Hz)	Mean			
12	245	SVTO	8 S	1527.0	1527.0	1.0	29.0			QL=4 ST=2 TYP=3	
	4995	SGMR	8 S	1528.0	1528.0	U	3.0			QL=4 ST=2 TYP=3	
14	2840	PEKG	46 C	0242.0	0255.0	38.0	107.4				
	127	TORN	46 C	1443.8	1447.0	7.7	120.0D	20.0D			
	245	SGMR	8 S	1447.0	1447.0	2.0	8.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	1447.0	1448.0	2.0	5.0			QL=4 ST=2 TYP=3	
16	127	TORN	7 C	1107.3	1109.6	2.3	30.0	10.0			
21	33	UPIC	2 S/F	0715.1	0715.4	0.5					
	33	UPIC	2 S/F	1129.0	1129.1	0.6					
23	33	UPIC	2 S/F	1338.7	1338.9	0.6					
	33	UPIC	4 S/F	1621.5	1621.6	0.6					
26	33	UPIC	2 S/F	1736.5	1736.7	0.5					
27	410	PALE	8 S	2111.0	2112.0	1.0	7.0			QL=4 ST=2 TYP=3	
	410	SGMR	4 S/F	2112.0	2113.0	3.0	6.0			QL=4 ST=2 TYP=3	
28	235	CUBA	44 NS	1300.0E		530.0D	7.0				
	280	CUBA	44 NS	1300.0E		530.0D	13.0				
	33	UPIC	2 S/F	1445.6	1446.0	0.9					
	610	SGMR	20 GRF	1535.0	1541.0	99.0	1.0			QL=4 ST=3 TYP=2	
	245	SVTO	20 GRF	1535.0	1545.0	130.0	2.0			QL=4 ST=3 TYP=2	
	610	SVTO	20 GRF	1535.0	1554.0	130.0	4.0			QL=4 ST=3 TYP=2	
	410	SVTO	20 GRF	1535.0	1600.0	130.0	5.0			QL=4 ST=3 TYP=2	
	610	SVTO	20 GRF	1535.0	1554.0U	505.0	4.0			QL=4 ST=3 TYP=2	
	410	SVTO	20 GRF	1535.0	1600.0U	505.0	5.0			QL=4 ST=3 TYP=2	
	245	SVTO	20 GRF	1535.0	1545.0U	505.0	2.0			QL=4 ST=3 TYP=2	
	410	SGMR	20 GRF	1540.0	1600.0	94.0	2.0			QL=4 ST=3 TYP=2	
	245	SGMR	20 GRF	1540.0	1540.0	94.0	1.0			QL=4 ST=3 TYP=2	
	1415	LEAR	4 S/F	2332.0	2332.0	7.0	9.0			QL=4 ST=2 TYP=3	
	1415	PALE	8 S	2332.0	2332.0	U	10.0			QL=4 ST=2 TYP=3	
29	245	LEAR	43 NS	2345.0	0127.0	444.0	8.0			QL=4 ST=2 TYP=1	
	33	UPIC	45 C	1659.0	1659.2	0.6					
30	235	CUBA	44 NS	1300.0E		520.0D	7.0				
	280	CUBA	44 NS	1300.0E		520.0D	14.0				
	245	SVTO	43 NS	1715.0	1720.0	29.0	7.0			QL=4 ST=3 TYP=1	
	245	SVTO	43 NS	1715.0	1720.0	405.0	7.0			QL=4 ST=2 TYP=1	
	245	SGMR	43 NS	1718.0	1726.0	45.0	7.0			QL=4 ST=2 TYP=1	
	245	PALE	43 NS	1718.0	1718.0	402.0	8.0			QL=4 ST=3 TYP=1	
	245	PALE	8 S	0120.0	0120.0	U	6.0			QL=4 ST=2 TYP=3	
	245	PALE	8 S	0126.0	0127.0	1.0	6.0			QL=4 ST=3 TYP=3	
	245	PALE	8 S	0211.0	0211.0	U	6.0			QL=4 ST=2 TYP=3	
	245	PALE	8 S	0238.0	0239.0	1.0	8.0			QL=4 ST=2 TYP=3	
31	245	LEAR	43 NS	0312.0	0432.0	393.0	14.0			QL=4 ST=2 TYP=1	
	245	PALE	43 NS	0316.0	0316.0	30.0	9.0			QL=4 ST=2 TYP=1	
	245	SVTO	43 NS	0457.0	0457.0	U	14.0			QL=4 ST=2 TYP=1	
	245	SVTO	43 NS	0627.0	0648.0	34.0	9.0			QL=4 ST=2 TYP=1	
	245	SVTO	43 NS	0924.0	1047.0	499.0	18.0			QL=4 ST=3 TYP=1	
	245	SGMR	43 NS	1024.0	1221.0	288.0	14.0			QL=4 ST=3 TYP=1	
	245	SGMR	43 NS	1024.0	1044.0	816.0	11.0			QL=4 ST=3 TYP=1	
	245	SGMR	43 NS	1024.0	1221.0	816.0	14.0			QL=4 ST=3 TYP=1	
	127	TORN	43 NS	1100.0	1100.0	240.0D		6.0		V=2	
	235	CUBA	44 NS	1300.0E		530.0D	23.0				
	280	CUBA	44 NS	1300.0E		530.0D	33.0				
	245	SGMR	43 NS	1645.0	1650.0	13.0	6.0			QL=4 ST=3 TYP=1	
	245	SGMR	43 NS	1654.0	1650.0	4.0	6.0			QL=4 ST=3 TYP=1	
	245	PALE	43 NS	1658.0	1658.0	U	6.0			QL=4 ST=3 TYP=1	
	245	PALE	8 S	0432.0	0432.0	1.0	14.0			QL=4 ST=2 TYP=3	
	245	SVTO	8 S	0432.0	0432.0	1.0	15.0			QL=4 ST=2 TYP=3	
	410	PALE	8 S	0450.0	0451.0	1.0	6.0			QL=4 ST=2 TYP=3	
	33	UPIC	1 S	0826.0	0826.1	0.4					
	410	LEAR	8 S	0907.0	0907.0	1.0	2.0				QL=4 ST=2 TYP=3

S O L A R R A D I O E M I S S I O N
Outstanding Occurrences

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Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m ² Hz)	Mean		
31	245	LEAR	8 S	0907.0	0908.0	1.0	13.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0907.0	0908.0	1.0	13.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0907.0	0907.0	1.0	5.0			QL=4 ST=2 TYP=3
	200	HIRA	8 S	0907.7	0908.0	0.7	181.0			0
	245	SGMR	8 S	1155.0	1156.0	1.0	36.0			QL=4 ST=3 TYP=3
	245	SVTO	8 S	1156.0	1156.0	U	40.0			QL=4 ST=2 TYP=3
	33	UPIC	1 S	1242.5	1242.7	0.5				
	33	UPIC	1 S	1246.5	1246.8	0.5				
	33	UPIC	1 S	1308.9	1309.2	0.6				
	245	SGMR	8 S	1847.0	1848.0	1.0	6.0			QL=4 ST=2 TYP=3
	410	SGMR	4 S/F	1913.0	1914.0	3.0	9.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	1914.0	1914.0	1.0	18.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2001.0	2001.0	U	5.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2319.0	2320.0	1.0	3.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	2321.0	2321.0	U	40.0			QL=2 ST=3 TYP=3
245	PALE	4 S/F	2323.0	2325.0	3.0	39.0			QL=2 ST=3 TYP=3	

Reports are received routinely from the following observatories:

BERN = Berne	HUMN = Humain	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	IZMI = IZMIRAN	PEKG = Peking	TORN = Torun
CUBA = Havana	KISV = Kislovodsk	PALE = Palehua	TRST = Trieste
GORK = Gorky	KRAK = Krakow	PENT = Penticton	TYKW = Toyokawa
HIRA = Hiraiso	LEAR = Learmonth	POTS = Potsdam	UPIC = Upice
HUAN = Huancayo	NOBE = Nobeyama	SGMR = Sagamore Hill	

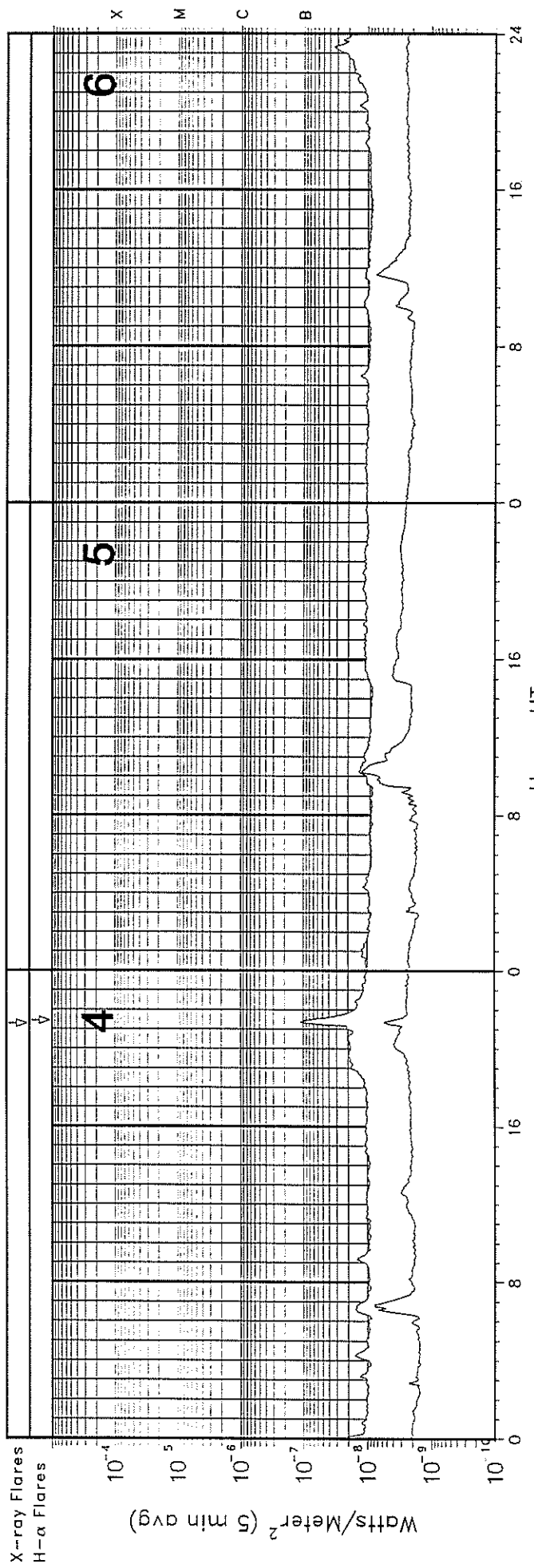
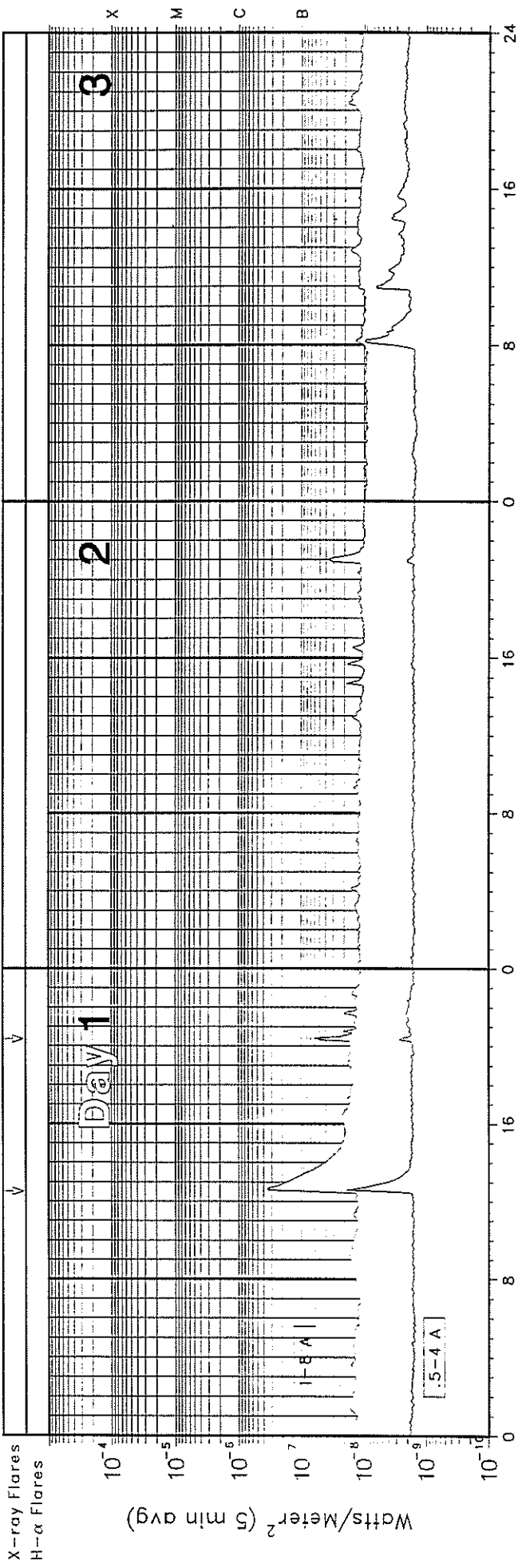
Explanation of Type Code:

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	40 Rise Only	16A Fall A	27AF Rise and Fall AF	
21A Simple 3A GRF	40F Rise Only F	260 Fall Only	31A Post Burst Decrease A	
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A	

RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; Hiraiso, Japan 500 and 200 MHz; and Toyokawa, Japan 9400, 3750, 2000 and 1000 MHz.

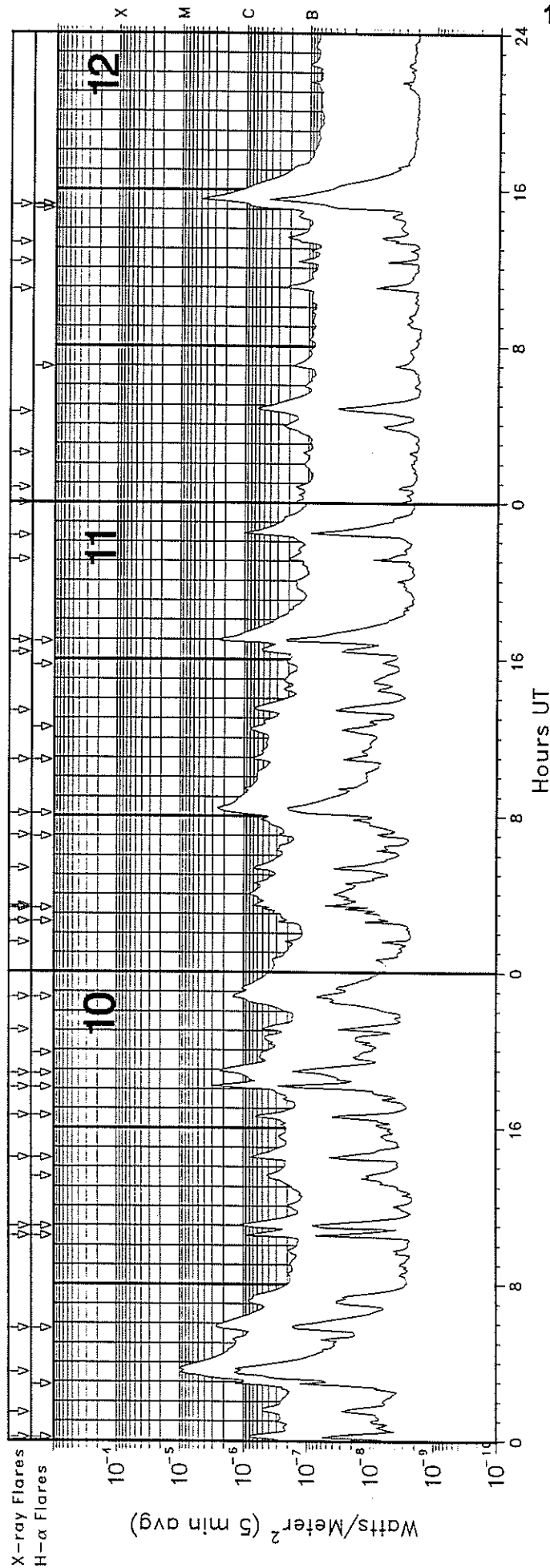
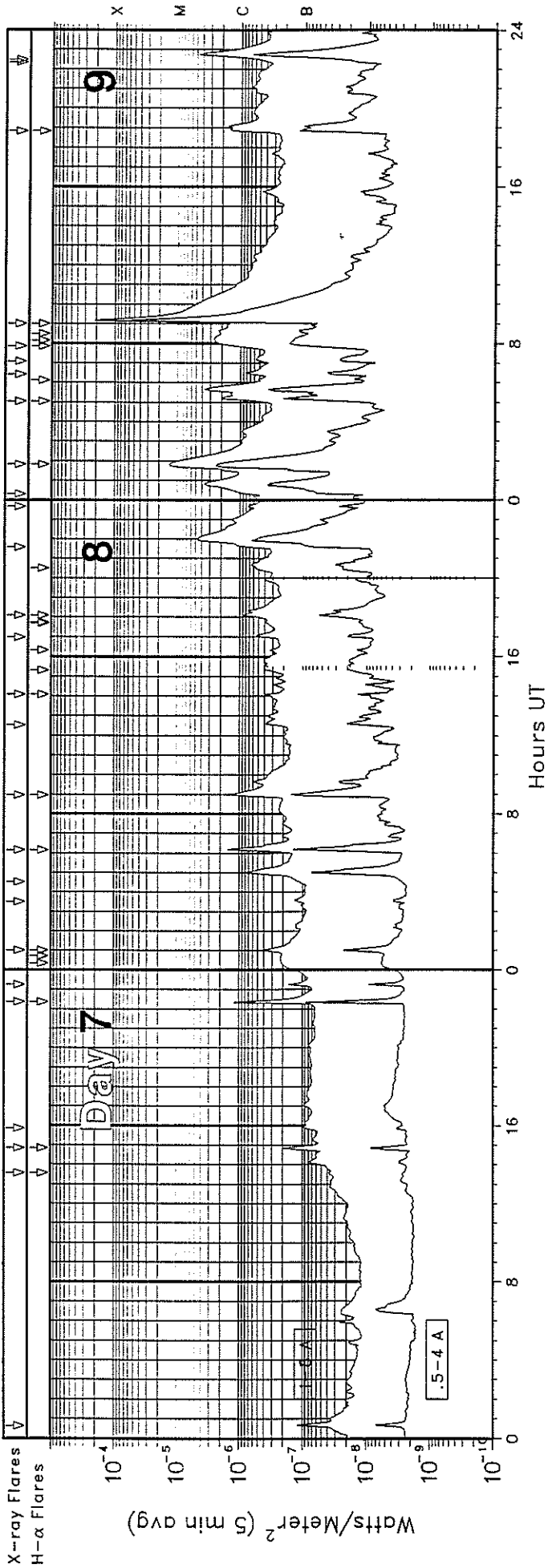
GOES-7 X-RAY DETECTOR

July 1996



GOES-7 X-RAY DETECTOR

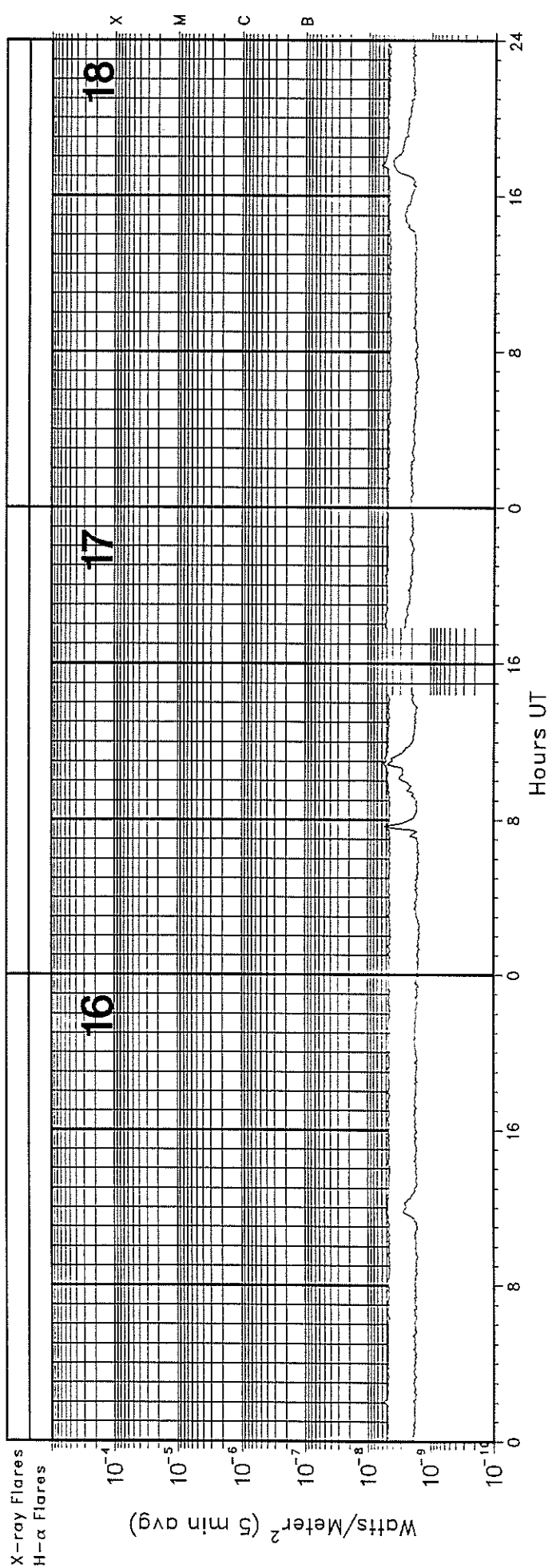
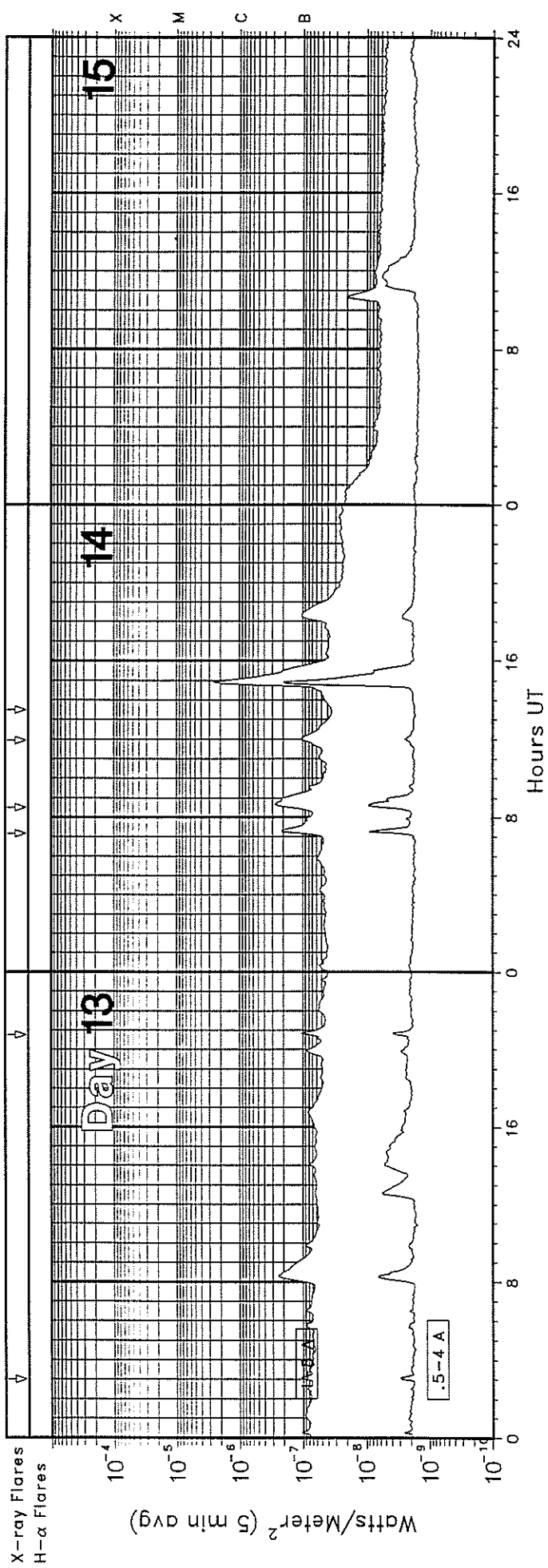
July 1996



GOES-7 X-RAY DETECTOR

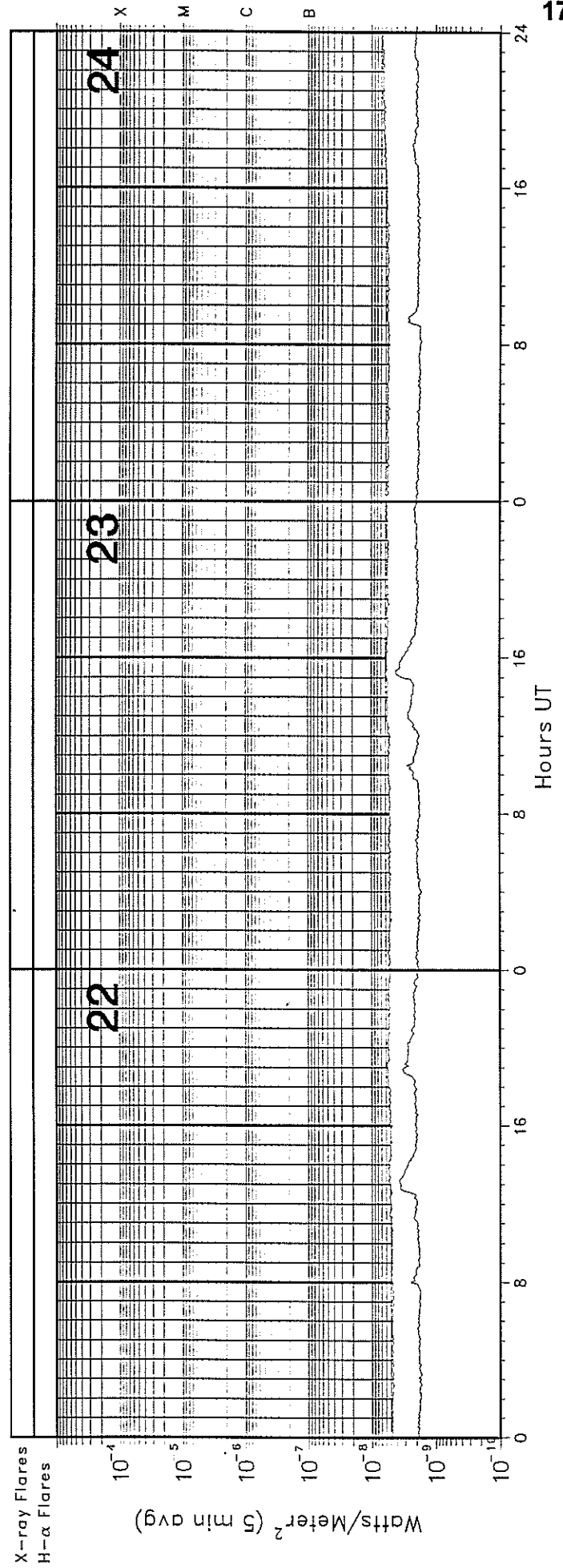
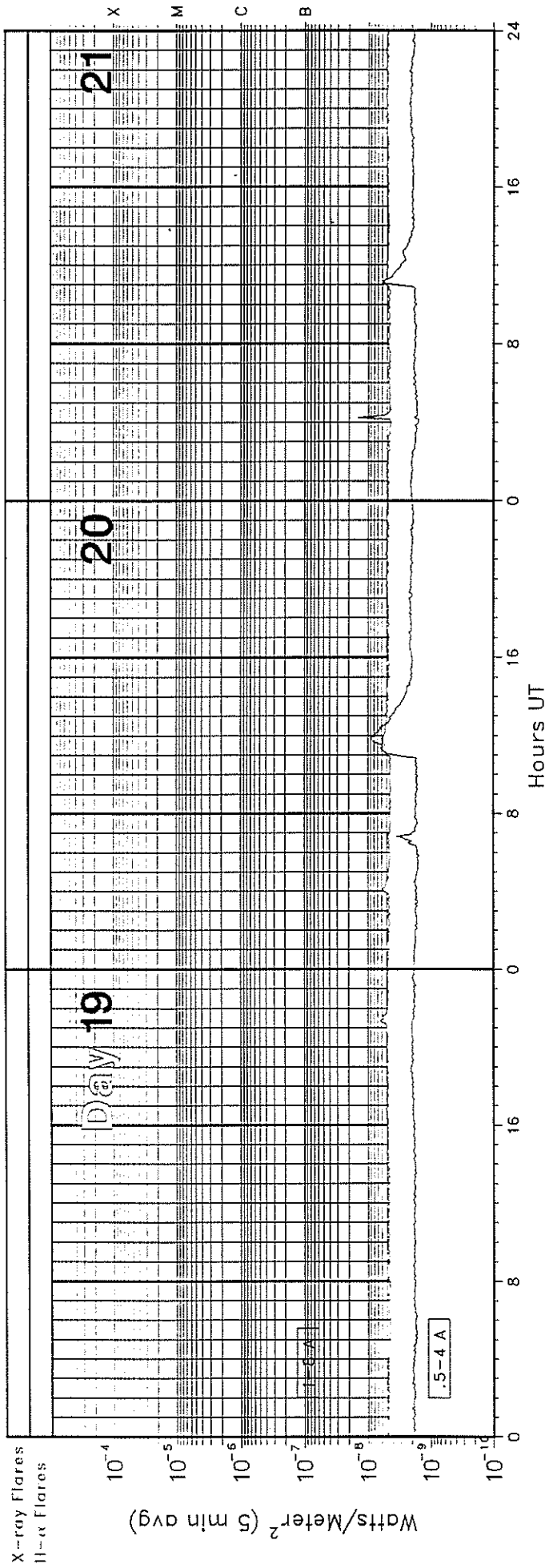
July 1996

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Jul 96



GOES-7 X-RAY DETECTOR

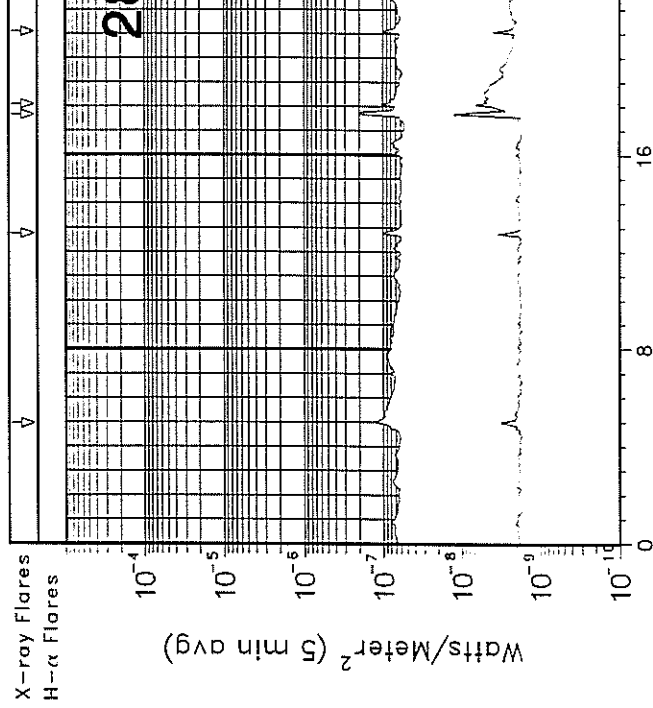
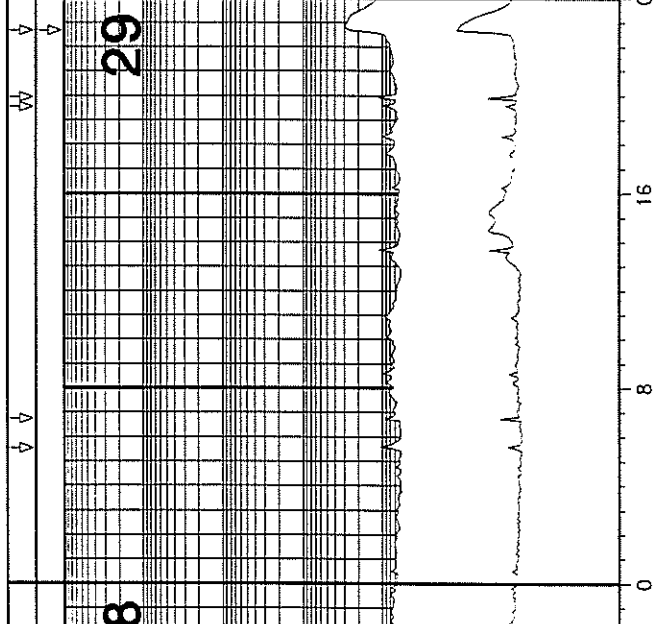
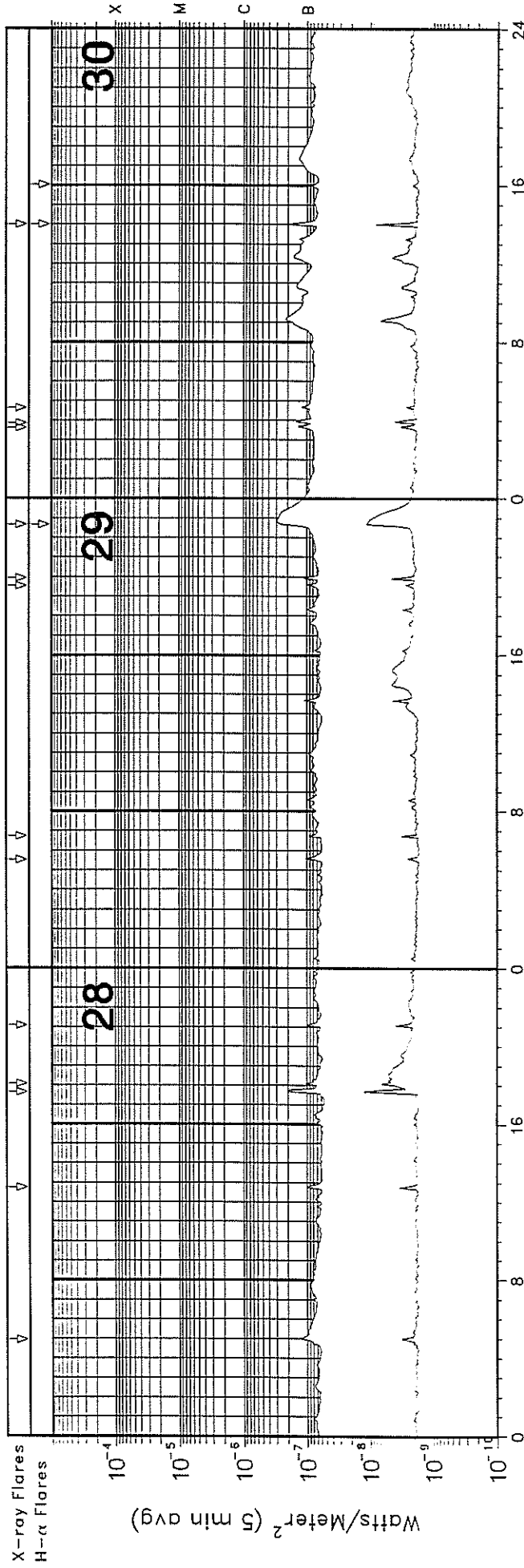
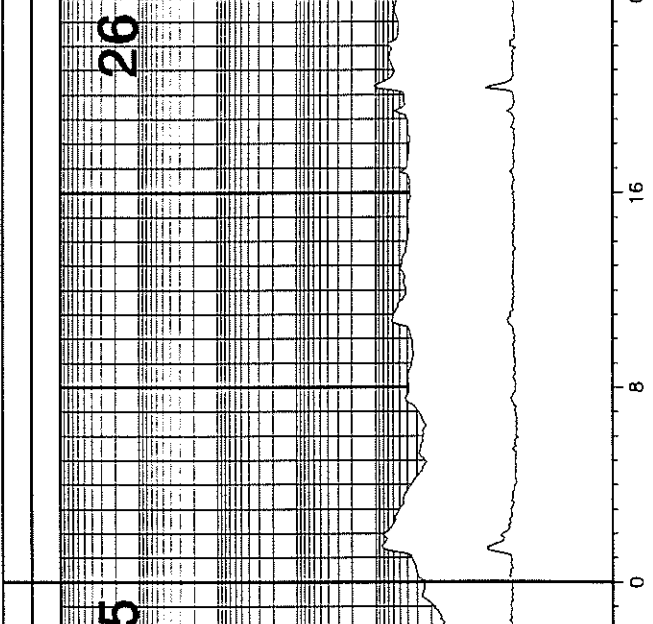
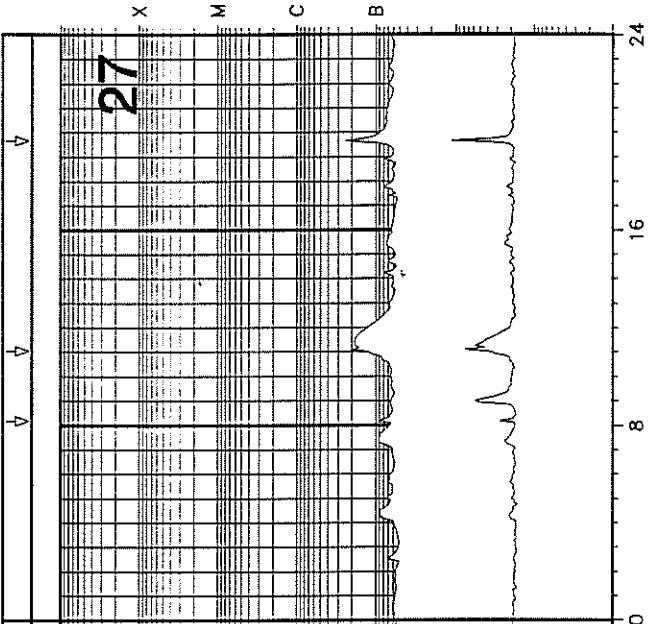
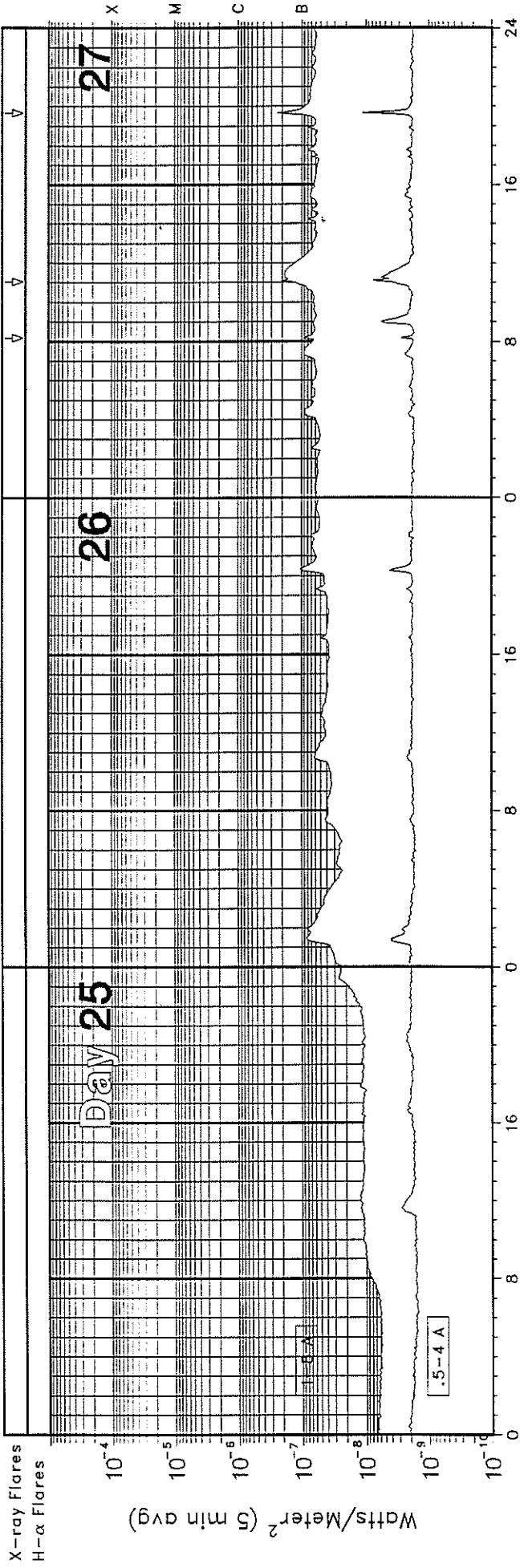
July 1996



GOES-7 X-RAY DETECTOR

July 1996

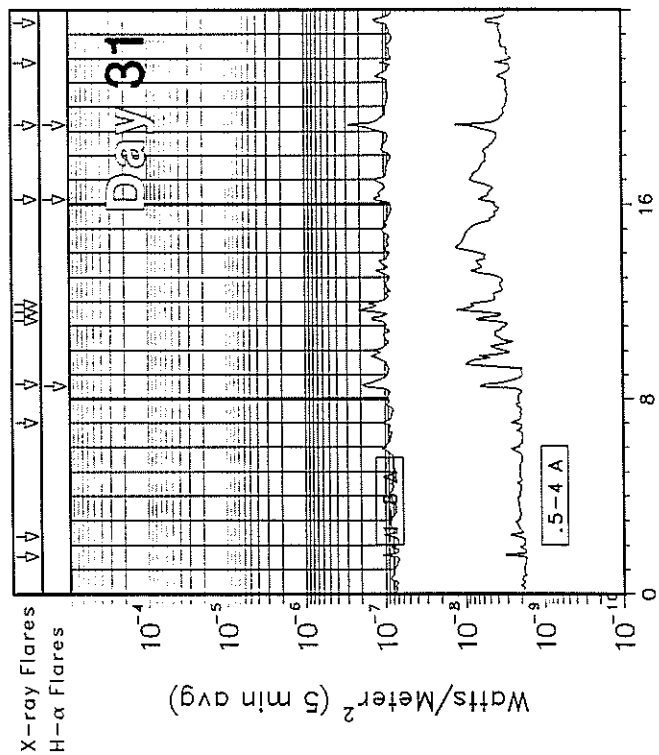
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Jul 96



GOES-7 X-RAY DETECTOR

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GOES SOLAR X-RAY FLARES
Preliminary Listing

July 1996

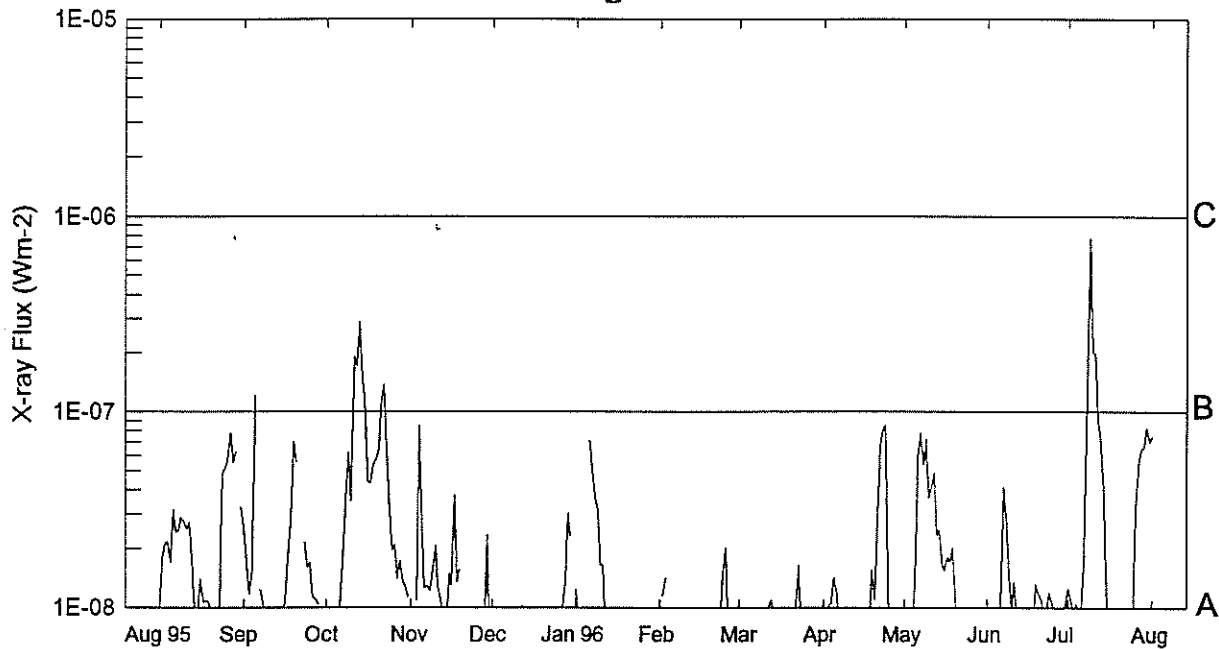
Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
01	1231	1239				B4.0	
01	2021	2024				B1.0	
04	2116	2120				B1.1	
07	0037	0040				B1.5	
07	1450	1451	S11	W07	SF	B2.0	7978
07	1551	1554				B1.0	
07	2221	2224	S09	W11	1F	C1.7	7978
07	2314	2318				B2.8	
08	0101	0103	S10	W13	SF	B5.1	7978
08	0330	0338				B1.3	
08	0431	0502				C1.0	
08	0609	0616	S10	W15	SF	C1.6	7978
08	0858	0900	S10	W17	SF	C1.8	7978
08	1231	1237				B3.9	
08	1405U	1405	S10	W22	SF	B5.0	7978
08	1658	1704				B5.8	
08	1806	1806	S11	W22	SF	B8.9	7978
08	2134	2159				C4.8	
08	2339	2342				B7.9	
09	0018	0051				C3.7	
09	0149	0204	S10	W28	SF	M1.4	7978
09	0503	0513	S11	W30	SF	C3.8	7978
09	0624	0632				B8.2	
09	0705	0709				B5.8	
09	0751	0758	S10	W24	SF	C2.6	7978
09	0901	0912	S10	W30	1B	X2.6	7978
09	1849	1901	S11	W37	SF	C1.7	7978
09	2221	2225				B6.2	
09	2229	2246				C5.0	
10	0010	0027	S13	W40	SF	B9.4	7978
10	0126	0131				B4.7	
10	0330	0331	S11	W39	SF	M1.0	7978
10	0544	0547	S10	W42	SF	C2.7	7978
10	1029	1030	S11	W48	SF	B9.8	7978
10	1057	1058	S11	W47	SF	C1.2	7978
10	1428	1430	S12	W49	SF	B7.2	7978
10	1638	1641	S11	W50	SF	B6.6	7978
10	1804	1816	S14	W49	SF	C3.1	7978
10	1848	1856	S12	W51	SF	C2.2	7978
10	2102	2107				B5.4	
10	2243	2247	S13	W46	SF	C1.5	7978
11	2359	2404				B1.7	
11	0132	0135				B2.5	
11	0236	0237	S13	W51	SF	B3.4	7978
11	0317	0317	S09	W53	SF	B6.2	7978
11	0324	0327				B9.0	
11	0519	0523				B8.7	
11	0700	0704				B2.9	
11	0808U	0826	S09	W55	SF	C2.6	7978

Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt	Xray	NOAA/USAF Region
11	1052U	1054				B7.4	7978
11	1321	1332				B7.1	
11	1619	1630				B5.4	
11	1656	1659	S11	W63	SF	C2.8	7978
11	2104	2108				B2.5	
11	2218	2228				C1.2	
12	0046	0049				B1.9	
12	0231	0235				B1.5	
12	0437	0450				B7.1	
12	1055	1104				B2.5	
12	1218	1222				B1.7	
12	1317	1335				B2.2	
12	1513	1530	S11	W72	1F	C4.9	7978
13	0301	0305				B1.4	
13	2045	2049				B1.1	
14	0710	0719				B2.3	
14	0831	0842				B2.5	
14	1156	1159				B1.0	
14	1330	1500				C1.6	
27	0810	0813				B1.2	
27	1103	1107				B2.3	
27	1939	1942				B2.9	
28	0456	0501				B1.3	
28	1245	1248				B1.1	
28	1739	1744				B3.1	
28	1805	1808				B1.6	
28	2104	2108				B1.3	
29	0532	0536				B1.1	
29	0644	0648				B1.2	
29	1932	1935				B1.0	
29	1956	1959				B1.7	
29	2241	2244	S06	E56	SF	B2.8	7981
30	0338	0341				B1.6	
30	0352	0400				B1.4	
30	0439	0442				B1.2	
30	1401	1404	S09	E38	SF	B2.2	7981
31	0132	0136				B1.3	
31	0222	0225				B1.2	
31	0700	0703				B1.2	
31	0836	0836U	S10	E34	SF	B2.0	7981
31	1114	1117				B1.4	
31	1135	1144				B2.1	
31	1154	1157				B1.8	
31	1612	1613	S11	E25	SF	B1.7	7981
31	1915	1915	S10	E23	SF	B3.9	7981
31	2150	2154				B1.5	
31	2329	2335				B1.1	

EDITOR'S NOTE: Please note that whenever optical flares are given, the times given are times of the optical flares and not the times of the X-ray flares. These data are taken directly from the NOAA SEC "Preliminary Report and Forecast of Solar Geophysical Data" weekly report.

Preliminary GOES Satellite Daily X-Ray Background Aug 95 - Jul 96

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Jul 96



Day	Aug 95	Sep	Oct	Nov	Dec	Jan 96	Feb	Mar	Apr	May	Jun	Jul
1	A1.5	A2.4	---	---	<A1.0	A1.0	---	<A1.0	<A1.0	<A1.0	<A1.0	A1.2
2	A2.9	A1.6	<A1.0	---	---	<A1.0	A1.1	<A1.0	<A1.0	<A1.0	<A1.0	A1.1
3	A2.7	A1.1	<A1.0	A.0	---	<A1.0	A1.4	<A1.0	A1.0	<A1.0	<A1.0	<A1.0
4	A2.4	A1.5	<A1.0	A8.5	<A1.0	---	---	<A1.0	A1.0	<A1.0	<A1.0	A1.0
5	A3.4	B1.2	<A1.0	A2.6	<A1.0	---	---	<A1.0	A1.4	A1.3	<A1.0	<A1.0
6	A3.4	--	<A1.0	A1.2	<A1.0	A7.1	---	<A1.0	A1.1	A5.9	A1.0	A1.0
7	A1.9	A1.2	A1.8	A1.2	<A1.0	A5.0	<A1.0	---	<A1.0	A7.8	A4.1	A1.8
8	A1.8	A1.0	A3.6	A1.2	<A1.0	A3.6	<A1.0	<A1.0	<A1.0	A5.3	A2.6	B1.2
9	A2.2	<A1.0	A6.2	A1.5	<A1.0	A3.1	<A1.0	<A1.0	<A1.0	A7.2	A1.4	B7.7
10	A3.7	--	A3.5	A2.0	<A1.0	A1.6	<A1.0	<A1.0	<A1.0	A3.6	<A1.0	B2.0
11	A3.0	--	B1.9	A1.2	<A1.0	A1.6	<A1.0	<A1.0	<A1.0	A4.0	A1.3	B1.9
12	A6.9	<A1.0	B1.7	A1.0	A1.0	<A1.0	<A1.0	A1.0	<A1.0	A4.9	<A1.0	A9.0
13	B1.3	<A1.0	B2.9	<A1.0	<A1.0	<A1.0	<A1.0	A1.0	<A1.0	A2.3	<A1.0	A7.4
14	A8.6	<A1.0	B1.5	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A2.4	<A1.0	A3.9
15	A7.1	<A1.0	B1.1	A1.4	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.6	<A1.0	A1.5
16	A4.8	A1.0	A4.3	A1.2	<A1.0	---	<A1.0	<A1.0	<A1.0	A1.5	<A1.0	<A1.0
17	A4.0	A1.7	A4.3	A3.7	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.8	<A1.0	<A1.0
18	A4.9	A2.9	A5.3	A1.3	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A1.7	<A1.0	<A1.0
19	A5.6	A7.0	A5.7	A1.5	---	<A1.0	<A1.0	<A1.0	A1.5	A2.0	A1.3	<A1.0
20	A3.0	A5.4	A6.4	---	<A1.0	<A1.0	---	<A1.0	A1.1	A1.0	A1.1	<A1.0
21	A2.0	--	B1.1	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A3.0	<A1.0	A1.1	<A1.0
22	A1.0	--	B1.3	<A1.0	<A1.0	<A1.0	<A1.0	A1.0	A6.8	<A1.0	<A1.0	<A1.0
23	<A1.0	A2.1	A6.4	<A1.0	---	<A1.0	<A1.0	A1.6	A8.3	<A1.0	<A1.0	<A1.0
24	A1.1	A1.5	A3.1	<A1.0	<A1.0	<A1.0	A1.3	<A1.0	A8.5	<A1.0	A1.2	<A1.0
25	<A1.0	A1.6	A1.9	<A1.0	<A1.0	<A1.0	A2.0	<A1.0	A1.0	<A1.0	A1.0	<A1.0
26	<A1.0	A1.1	A2.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A3.1
27	<A1.0	A1.1	A1.4	<A1.0	<A1.0	<A1.0	---	<A1.0	<A1.0	<A1.0	<A1.0	A5.5
28	A1.2	A1.0	A1.7	<A1.0	A1.3	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A6.4
29	B1.7	--	A1.3	A2.3	A3.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	<A1.0	A6.5
30	B4.3	--	A1.2	<A1.0	A2.2	<A1.0	---	<A1.0	<A1.0	<A1.0	A1.0	A8.3
31	B1.9		A1.1		---	---		<A1.0		<A1.0		A7.0

NOTE: Background levels below B1.0 are unreliable.

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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
01	ADF	1000E	1200D	N29	E28	07	3.6	1	05	9	9	E	SVTO		
01	ASR	1240E	1330D	N08	W88	06	25.0			6	9	E	HOLL	7973	
01	ASR	1248E	1339D	N09	W88	06	25.0			6	8	E	RAMY	7973	
01	ASR	1250E	1300D	N06	W90	06	24.9			9	9	E	SVTO	7973	
01	ADF	1334E	2021	N30	E28	07	3.8	1	06	8	9	E	RAMY		
02	AFS	0540E	1742	N05	E26	07	4.2		02	9	9	E	SVTO	7977	
02	AFS	1138E	2142	N05	E22	07	4.1		02	7	9	E	RAMY	7977	
02	ASR	1326	0024	N90	W06	07	2.0			9	9	E	HOLL	7973	
02	ADF	1327E	2142	N22	E15	07	3.7	1	07	7	9	E	RAMY		
02	ASR	1345E	1742	N06	W90	06	25.9			9	9	E	SVTO		
02	ASR	1354E	1410D	N09	W90	06	25.9			9	9	E	RAMY	7973	
02	ADF	1430E	1742	N22	E14	07	3.7	1	12	9	9	E	SVTO		
02	ASR	1857E	2349D	N07	W90	06	26.1			9	9	E	PALE	7973	
02	DSD	1905E	2130D	N08	W50	06	29.1		03	0	0	E	HOLL	7976	
03	AFS	1111E	2141	N05	E08	07	4.1		01	5	8	E	RAMY	7977	
03	ADF	1306E	2141	N23	E02	07	3.7	1	06	9	9	E	RAMY		
03	DSD	1315E	1430D	S13	E67	07	8.6		01	5	9	E	RAMY		
03	ADF	1533E	2141	N03	E03	07	3.9	1	04	7	7	E	RAMY	7977	
03	ADF	1620E	2030D	N07	E03	07	3.9	1	05	9	8	E	HOLL	7977	
03	DSF	1855U	1100U	S12	W07	07	3.3	2	07	0	0	E	RAMY		
03	ADF	2042E	0145	S01	W06	07	3.4	1	14	0	0	E	HOLL		
03	ADF	2325E	0332	S03	W06	07	3.5	1	11	9	9	E	PALE		
04	ADF	0400E	0936	S07	E50	07	7.9	1	07	8	9	E	LEAR		
04	ADF	0528E	1746	S06	E48	07	7.8	2	10	9	9	E	SVTO		
04	ADF	0620E	0936	N23	W06	07	3.8	1	10	7	8	E	LEAR		
04	DSF	0915U	1030U	N02	W10	07	3.6	2	06	0	0	E	SVTO		
04	ADF	1250E	0126	S01	W14	07	3.5	1	17	3	5	E	HOLL		
04	DSF	1305U	1505U	N27	W09	07	3.8	2	06	0	0	E	SVTO		
04	AFS	1520E	0126	S10	E32	07	7.0		01	8	6	E	HOLL	7978	
04	AFS	1530E	1746	S10	W32	07	2.2		01	9	9	E	SVTO		
04	AFS	1602E	2213	S09	E33	07	7.1		01	9	9	E	RAMY		
04	ADF	1623E	2044D	N01	W15	07	3.6	1	08	5	7	E	RAMY		
04	ADF	1800E	0143	S03	W17	07	3.5	1	10	6	6	E	PALE		
04	AFS	1800E	0143	S09	E31	07	7.1		01	9	9	E	PALE		
05	ADF	0900E	0940D	N03	W18	07	4.0	1	01	7	6	E	SVTO	7977	
05	ADF	1251E	2249	S10	W30	07	3.3	1	05	5	6	E	RAMY		
05	AFS	1651E	2249D	N06	W01	07	5.6		01	9	9	E	RAMY		
05	DSF	2249U	1035U	S09	W31	07	3.6	2	03	0	0	E	RAMY		
05	DSF	2249U	1035U	S16	E40	07	9.0	2	03	0	0	E	RAMY		
06	ADF	1110E	2251	N12	W08	07	5.9	1	08	7	8	E	RAMY		
06	ADF	1110E	2251	N34	W44	07	2.9	1	07	6	6	E	RAMY		
06	ADF	1400E	0055	N30	W41	07	3.3	1	12	9	9	E	HOLL		
06	ADF	1405E	0055	N06	W10	07	5.8	1	06	9	9	E	HOLL		
06	ADF	1500E	1800	N06	W09	07	5.9	1	06	9	9	E	SVTO		
06	ADF	1530E	1800	N36	W45	07	3.0	1	08	7	6	E	SVTO		
06	ADF	1743E	2343	N11	W12	07	5.8	1	06	9	9	E	PALE		
06	ADF	1743E	2343	N31	W42	07	3.4	1	11	9	9	E	PALE		
06	DSD	1838E	2217D	S11	E06	07	7.2		01	9	9	E	RAMY	7978	
06	AFS	1859	2343	S09	E05	07	7.2		02	5	6	E	PALE	7978	
06	AFS	1920E	0055	S10	E05	07	7.2		01	9	9	E	HOLL	7978	
06	DSD	1920E	0055	S12	E04	07	7.1		04	9	9	E	HOLL	7978	
06	AFS	2123E	2251	S10	E04	07	7.2		01	9	9	E	RAMY	7978	
06	DSF	2251U	1044U	N18	W39	07	4.0	2	03	0	0	E	RAMY		
06	DSF	2251U	1044U	N32	W44	07	3.5	2	04	0	0	E	RAMY		
06	DSF	2251U	1044U	S13	W01	07	6.9	2	03	0	0	E	RAMY	7978	
06	AFS	2335E	0934	S10	E03	07	7.2		02	9	6	E	LEAR	7978	
07	DSD	0045E	0445D	S10	E01	07	7.1		02	9	9	E	LEAR	7978	
07	AFS	0448E	1800	S09	E00	07	7.2		02	9	9	E	SVTO	7978	
07	ADF	0456E	0730D	S09	W01	07	7.1	1	07	7	6	E	SVTO	7978	
07	DSD	0503E	0550D	S10	W04	07	6.9		02	9	9	E	SVTO	7978	
07	DSF	0930U	0955U	S09	W04	07	7.1	2	07	0	0	E	SVTO	7978	
07	AFS	0945E	1414D	S10	W05	07	7.0		01	9	9	E	SVTO	7978	
07	ADF	1000E	1800	S15	E00	07	7.4	1	04	9	9	E	SVTO	7978	
07	ADF	1045E	1800	S07	E05	07	7.8	1	06	9	9	E	SVTO		

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Day	Event Type	Start (UT)	End (UT)	CMP			Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
				Lat	CMD	Mo Day								
07	AFS	1110E	2208	S10	W01	07 7.4		02	9	9	E	RAMY	7978	
07	AFS	1221E	0106	S10	W05	07 7.1		03	9	9	E	HOLL	7978	
07	AFS	1221E	0106	S10	W08	07 6.9		02	9	9	E	HOLL	7978	
07	ADF	1242E	2208	N11	W20	07 6.0	1	05	7	7	E	RAMY		
07	ADF	1242E	2208	N41	W49	07 3.5	1	06	6	5	E	RAMY		
07	DSD	1254E	0106	S10	W07	07 7.0		03	9	9	E	HOLL	7978	
07	DSD	1322E	2208	S10	W05	07 7.2		03	9	9	E	RAMY	7978	
07	DSD	1334	0106	S10	W09	07 6.9		07	9	9	E	HOLL	7978	Flare Associated
07	DSD	1335E	1518D	S10	W07	07 7.0		04	9	9	E	SVTO	7978	
07	ADF	1430E	1800	S09	W07	07 7.1	1	03	9	9	E	SVTO	7978	
07	ADF	1506E	0106	S06	E03	07 7.8	1	08	9	9	E	HOLL		
07	ADF	1650E	0354	N36	W54	07 3.4	1	07	9	9	E	PALE		
07	AFS	1650E	0354	S10	W05	07 7.3		02	9	9	E	PALE	7978	
07	DSD	1735E	0354	S11	W10	07 7.0		04	9	9	E	PALE	7978	
08	AFS	0420E	1005D	S12	W07	07 7.6		03	9	9	E	SVTO	7978	
08	ADF	0500E	1135D	S12	W01	07 8.1	1	03	9	9	E	SVTO	7978	
08	AFS	0530E	1745	S11	W15	07 7.1		04	9	9	E	SVTO	7978	
08	DSD	0642E	0912	S09	W15	07 7.1		03	9	9	E	LEAR	7978	
08	AFS	0642E	0936	S10	W16	07 7.1		02	9	9	E	LEAR	7978	
08	DSD	1116E	1150	S10	W18	07 7.1		01	9	9	E	RAMY	7978	
08	AFS	1116E	1150	S11	W14	07 7.4		02	9	9	E	RAMY	7978	
08	ADF	1135E	1745	N34	W09	07 7.8	1	05	9	9	E	SVTO		
08	DSD	1135E	1745	S11	W21	07 6.9		04	9	9	E	SVTO	7978	
08	AFS	1135E	1745	S12	W08	07 7.9		03	9	9	E	SVTO	7978	
08	AFS	1431E	2120	S10	W19	07 7.2		02	9	9	E	HOLL	7978	
08	AFS	1431E	2120	S11	W22	07 6.9		01	7	4	E	HOLL	7978	
08	DSD	1519	2120	S10	W21	07 7.1		03	9	9	E	HOLL	7978	Flare Associated
08	DSD	1519	2120	S10	W23	07 6.9		06	7	5	E	HOLL	7978	Flare Associated
08	DSD	1621	1745	S10	W24	07 6.9		04	9	9	E	SVTO	7978	Flare Associated
08	AFS	1630E	0350	S10	W20	07 7.2		06	9	9	E	PALE	7978	
08	ADF	1820E	0350	S11	W26	07 6.8	1	07	9	9	E	PALE	7978	
08	ADF	1900E	0350	S09	W17	07 7.5	1	05	9	9	E	PALE		
08	DSD	1900E	0350	S10	W23	07 7.1		03	9	9	E	PALE	7978	
08	AFS	2325E	0858	S09	W23	07 7.2		03	9	9	E	LEAR	7978	
09	AFS	0447E	1759	S10	W25	07 7.3		03	9	9	E	SVTO	7978	
09	AFS	0448E	1759	S11	W28	07 7.1		02	9	9	E	SVTO	7978	
09	ADF	0801E	1030D	S07	W23	07 7.6	1	03	9	9	E	SVTO	7978	
09	ADF	0801E	1030D	S07	W23	07 7.6	1	03	9	9	E	SVTO	7978	
09	DSD	0944E	1101D	S10	W33	07 6.9		03	9	9	E	SVTO	7978	
09	DSD	0946	1005	S11	W31	07 7.1	1			9	V	KHAR		
09	ADF	1016E	1759	S09	W27	07 7.4	1	07	7	8	E	SVTO	7978	
09	DSD	1021E	1759	S11	W28	07 7.3		04	9	9	E	SVTO	7978	
09	ADF	1024	1035	S13	W24	07 7.6	1		9		V	KHAR		
09	ADF	1220E	1759	N08	W49	07 5.8	1	09	7	7	E	SVTO		
09	ADF	1325E	1759	S07	W23	07 7.8	1	05	9	9	E	SVTO		
09	AFS	1540E	2152	S10	W33	07 7.2		02	9	9	E	HOLL	7978	
09	AFS	1938E	0412	S14	W35	07 7.2		02	9	9	E	PALE	7978	
09	ADF	2311E	0412	S09	W36	07 7.3	1	06	9	9	E	PALE		
10	ADF	0125E	0920	S04	W35	07 7.4	1	10	9	9	E	LEAR	7978	
10	ADF	0348E	1800	S04	W36	07 7.5	1	12	9	9	E	SVTO	7978	
10	AFS	0456E	1049D	S10	W43	07 7.0		02	7	8	E	SVTO	7978	
10	ADF	0630E	1800	S09	W41	07 7.2	1	12	9	9	E	SVTO	7978	
10	DSD	0715E	0924D	S11	W43	07 7.1		03	9	9	E	SVTO	7978	
10	AFS	0721E	1800	S12	W41	07 7.2		02	9	9	E	SVTO	7978	
10	ADF	0932E	1800	N15	W78	07 4.5	1	16	7	6	E	SVTO		
10	ADF	1010E	1100U	S09	W49	07 6.7	1		9	9	V	KHAR		
10	DSD	1054E	2212	S13	W42	07 7.3		02	9	9	E	RAMY	7978	
10	AFS	1130E	2212	S12	W42	07 7.3		02	7	6	E	RAMY	7978	
10	ADF	1725E	2212	S11	W47	07 7.2	1	05	9	9	E	RAMY	7978	
11	ASR	0137	0358D	S05	E90	07 17.8			5	4	E	PALE		
11	ADF	0500E	0856	S06	W57	07 6.9	2	06	9	6	E	LEAR	7978	
11	ADF	0500E	0856	S12	W56	07 7.0	1	15	7	6	E	LEAR	7978	
11	ADF	0501E	1738	S08	W49	07 7.5	1	04	9	9	E	SVTO	7978	
11	ADF	0503E	1738	S10	W61	07 6.6	1	11	9	9	E	SVTO	7978	
11	AFS	0505E	1022D	S10	W57	07 6.9		01	7	8	E	SVTO	7978	
11	AFS	0506E	1738	S12	W53	07 7.2		01	9	9	E	SVTO	7978	

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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
11	AFS	0620E	0856	S10	W54	07	7.2		03	5	4	E	LEAR	7978	
11	ADF	0910E	0920	S16	W62	07	6.7	1		9	9	V	KHAR		
11	ADF	0942	0950U	S16	W62	07	6.7	1		9	9	V	KHAR		
11	DSD	1028E	1449D	S12	W54	07	7.4		05	9	9	E	RAMY	7978	
11	ADF	1030E	2212	S07	W50	07	7.7	1	05	9	9	E	RAMY	7978	
11	AFS	1030E	2212	S11	W56	07	7.2		02	9	9	E	RAMY	7978	
11	DSD	1705	2136D	S12	W63	07	7.0		03	9	9	E	RAMY	7978	Flare Associated
11	AFS	1740E	0009	S15	W69	07	6.5		02	5	6	E	PALE	7978	
11	AFS	1944E	2212	S26	E06	07	12.3		01	9	9	E	RAMY		
11	DSF	2101U	1339U	S08	W52	07	8.0	2	04	0	0	E	RAMY	7978	
11	AFS	2140E	0022	S14	W62	07	7.2		01	7	9	E	HOLL	7978	
11	AFS	2345E	0905	S08	W65	07	7.1		02	9	9	E	LEAR	7978	
12	DSF	0013U	1234U	S10	W55	07	7.9	2	04	0	0	E	HOLL	7978	
12	AFS	0530E	0905	S11	W69	07	7.0		02	9	9	E	LEAR	7978	
12	AFS	0558E	1610D	S10	W70	07	7.0		01	9	9	E	SVTO	7978	
12	AFS	0559E	1610D	S12	W68	07	7.1		01	9	9	E	SVTO	7978	
12	ADF	0645E	0657D	S07	W60	07	7.8	1	04	9	9	E	SVTO	7978	
12	DSF	0657U	0658U	S10	W63	07	7.5	2	04	0	0	E	LEAR	7978	
12	DSF	0657U	0658U	S07	W60	07	7.8	2	04	0	0	E	SVTO	7978	Flare Associated
12	ADF	0811E	1502	S06	W66	07	7.4	1	08	9	9	E	SVTO	7978	
12	ADF	1107	1152	S06	W65	07	7.5	1			9	V	KHAR		
12	DSD	1308	1317	S06	W66	07	7.6		02	0	0	E	HOLL	7978	
12	ADF	1356E	1631	S07	W66	07	7.6	1	06	9	9	E	RAMY	7978	
12	DSD	1431E	1631	S06	W66	07	7.7		02	9	9	E	RAMY	7978	
12	DSF	1456	1507	S05	W66	07	7.7	3	07	0	0	E	HOLL	7978	
12	DSF	1502	1505	S06	W67	07	7.6	3	08	9	9	E	SVTO	7978	Flare Associated
12	DSF	1510U	1548U	S09	W66	07	7.7	2	06	0	0	E	RAMY	7978	Flare Associated
12	ASR	1913	2118	S13	W88	07	6.2			6	7	E	PALE	7978	
12	ASR	2010E	2310D	S11	W90	07	6.1			9	9	E	HOLL	7978	
13	ASR	0507E	1800	S14	W90	07	6.4			9	9	E	SVTO	7978	
13	ASR	0508E	1007D	S10	W90	07	6.4			9	9	E	SVTO	7978	
13	BSL	0910E	0940U	S11	W90	07	6.6	1		9	9	V	KHAR		
13	ASR	0951E	1800	S12	W90	07	6.6			9	9	E	SVTO	7978	
13	ASR	1003E	1800	S13	W84	07	7.1			9	9	E	SVTO	7978	
13	BSL	1125E	1146	S13	W90	07	6.7	1		9	9	V	KHAR		
13	ASR	1129E	2240	S12	W90	07	6.7			9	9	E	RAMY	7978	
13	ASR	1500E	2020	S10	W90	07	6.9			9	9	E	HOLL	7978	
13	ASR	1500E	2020	S15	W90	07	6.8			9	9	E	HOLL	7978	
13	ASR	2007E	0514	S11	W90	07	7.1			9	9	E	PALE	7978	
13	ASR	2007E	0514	S14	W90	07	7.0			9	9	E	PALE	7978	
14	BSL	1007	1035	S13	W90	07	7.6	1		9	9	V	KHAR		
14	BSL	1051	1056	N23	W90	07	7.6	1			9	V	KHAR		
14	BSL	1102	1140	S06	W90	07	7.6	1		9	9	V	KHAR		
14	ASR	1449E	1611	S13	W90	07	7.8			9	9	E	RAMY	7978	
14	BSL	1452	1610	S13	W90	07	7.8			9	9	E	SVTO	7978	
14	BSL	1456E	1602D	S13	W90	07	7.8			9	9	E	RAMY	7978	
15	ASR	1720E	0316	S17	W90	07	8.9			5	6	E	PALE	7978	
16	DSF	1454U	1226U	S22	W17	07	15.3	2	05	0	0	E	RAMY		
16	AFS	1546E	1730	S07	E09	07	17.3		01	7	7	E	SVTO		
17	ADF	1605E	1715	N24	W29	07	15.4	1	03	7	6	E	SVTO		
19	ADF	0748E	1729	N15	E39	07	22.3	2	08	9	8	E	SVTO		
19	ADF	1244E	1750D	N16	E38	07	22.4	1	03	7	8	E	RAMY		
19	DSD	1408E	1528D	S37	E45	07	23.2		02	9	9	E	RAMY	7979	
19	ADF	2355E	0655D	N11	E37	07	22.8	1	06	7	8	E	LEAR		
20	ADF	0001E	0248	N15	E33	07	22.5	1	05	5	6	E	PALE		
20	ADF	1700E	0434	N16	E22	07	22.4	1	05	5	7	E	PALE		
21	ADF	1812E	2118	N19	E04	07	22.1	1	11	4	4	E	RAMY		
21	DSF	1837U	1135U	N39	E15	07	23.0	2	14	0	0	E	RAMY		
22	ADF	1235E	1742	N19	W06	07	22.1	2	11	7	7	E	SVTO		

ACTIVE PROMINENCES AND FILAMENTS

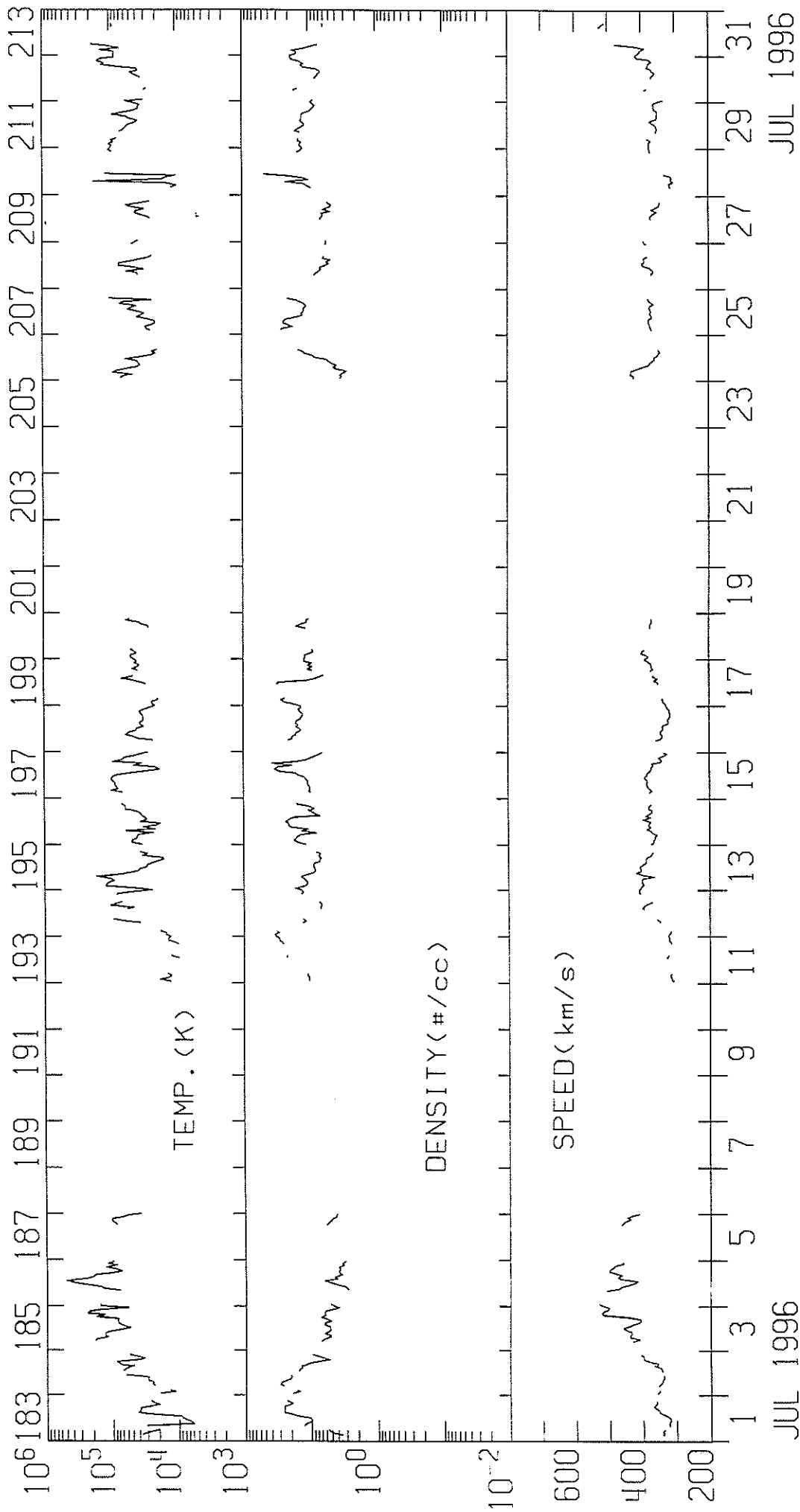
25
Jul 96

JULY 1996

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	ADF	0218E	0830D	N20	W12	07 22.2	1	08	5	5	E	LEAR		
23	DSF	2107U	1154U	N24	W27	07 21.8	2	02	0	0	E	RAMY		
24	AFS	1203E	2219	N11	E31	07 26.8		01	9	9	E	RAMY		
24	AFS	1228E	1730	N10	E31	07 26.8		02	7	7	E	SVTO		
25	AFS	0708E	1037D	N01	W22	07 23.6		01	9	9	E	SVTO		
25	AFS	1057E	2232	N02	W24	07 23.7		01	5	6	E	RAMY		
25	AFS	1106E	1723	N01	W24	07 23.7		01	7	7	E	SVTO		
25	AFS	1106E	1723	N09	E18	07 26.8		02	7	7	E	SVTO		
25	AFS	1208E	2232	N19	E17	07 26.8		01	9	9	E	RAMY		
25	DSD	1541	1718	N01	W26	07 23.7		02	9	9	E	RAMY		
26	AFS	0530E	0943	N10	E09	07 26.9		03	5	8	E	LEAR		
26	AFS	0608E	1715	N10	E07	07 26.8		01	9	9	E	SVTO		
26	AFS	0708E	1037D	N01	W22	07 24.6		01	9	9	E	SVTO		
26	AFS	1057E	2233	N10	E05	07 26.8		02	3	3	E	RAMY 7980		
26	AFS	1106E	1723	N01	W24	07 24.7		01	7	7	E	SVTO		
26	AFS	1251E	1742	N10	E03	07 26.8		01	5	5	E	HOLL 7980		
26	APR	1857E	2233	S04	E90	08 2.5	1		9	9	E	RAMY		
26	ASR	2210E	2233	S09	E90	08 2.7			9	9	E	RAMY		
27	ASR	0622E	1720	S11	E90	08 3.0			9	9	E	SVTO 7981		
27	APR	0929E	1720	S18	E90	08 3.2	1		9	9	E	SVTO 7981		
27	ASR	1050E	1902D	S08	E90	08 3.2			9	9	E	RAMY 7981		
27	ASR	1050E	1720	S08	E90	08 3.2			9	9	E	SVTO 7981		
27	AFS	1125E	1411D	N11	W08	07 26.9		01	5	5	E	RAMY 7980		
27	APR	1236E	1825D	S17	E90	08 3.4	1		9	9	E	RAMY 7981		
27	ADF	1535E	1720	S10	E70	08 1.9	1	03	9	9	E	SVTO 7981		
27	DSF	1632U	2215U	N35	W10	07 26.9	2	06	0	0	E	RAMY		
27	ADF	1826E	2235	S08	E76	08 2.5	1	05	9	9	E	RAMY 7981		
27	BSD	1902E	1923D	S11	E76	08 2.5		07	0	0	E	RAMY 7981		
27	DSD	2026E	2235	S09	E71	08 2.2		02	4	5	E	RAMY 7981		
28	DSD	1138E	1332D	S11	E63	08 2.2		03	9	7	E	RAMY 7981		
28	DSD	1240E	1346D	S10	E61	08 2.1		02	7	9	E	SVTO 7981		
28	DSD	1250E	1346D	S08	E70	08 2.8		01	9	9	E	SVTO 7981		
29	AFS	0623E	1725	S08	E54	08 2.3		02	9	9	E	SVTO 7981		
29	AFS	0709E	1725	S08	E63	08 3.0		02	9	9	E	SVTO 7981		
29	ADF	0738E	1725	S09	E59	08 2.7	2	24	9	9	E	SVTO 7981		
29	APR	0750E	0940	S16	E90	08 5.1	1		9	9	E	LEAR		
29	DSD	1128E	1925D	S08	E63	08 3.2		05	9	6	E	RAMY 7981		
29	DSD	1145E	1933	S10	E50	08 2.2		04	6	6	E	RAMY 7981		
29	ADF	1425E	0000	S10	E51	08 2.4	1	05	8	8	E	HOLL 7981		
29	ADF	1703E	1933	S05	E51	08 2.5	1	06	7	9	E	RAMY 7981		
30	AFS	0754E	1725	S09	E41	08 2.4		02	9	9	E	SVTO 7981		
30	DSD	1230E	1725	S09	E48	08 3.1		05	7	7	E	SVTO 7981		
30	ADF	1243E	2254	S10	E43	08 2.8	1	03	9	9	E	RAMY 7981		
30	DSD	1321E	1642D	S04	E44	08 2.8		03	9	9	E	RAMY 7981		
30	ADF	1328E	1725	S06	E36	08 2.2	1	05	9	9	E	SVTO 7981		
30	ADF	1338E	0007	S07	E36	08 2.3	1	06	9	9	E	HOLL 7981		
30	ADF	1505E	1725	S12	E42	08 2.8	1	06	9	9	E	SVTO 7981		
30	DSF	1955U	1112U	S36	W09	07 30.1	2	03	0	0	E	RAMY		
30	DSD	2030E	2254	S11	E31	08 2.2		03	9	9	E	RAMY 7981		
31	ADF	0657E	1720	S07	E31	08 2.6	1	11	9	9	E	SVTO 7981		
31	DSD	1010E	1025D	S10	E29	08 2.6		04	9	9	E	SVTO 7981		
31	DSD	1111E	1307D	S06	E28	08 2.6		01	5	8	E	RAMY 7981		
31	DSD	1111E	1423D	S08	E28	08 2.6		02	9	9	E	RAMY 7981		
31	DSD	1115E	1509D	S10	E29	08 2.6		01	9	9	E	RAMY 7981		
31	BSD	1156E	1217D	S10	E28	08 2.6		02	9	9	E	RAMY 7981		
31	BSD	1159E	1635D	S10	E28	08 2.6		04	9	9	E	SVTO 7981		
31	DSD	1240E	1652D	S12	E22	08 2.2		03	9	9	E	SVTO 7981		
31	BSD	1356E	1412D	S10	E27	08 2.6		02	9	9	E	RAMY 7981		
31	DSD	1358E	2209	S10	E27	08 2.6		01	9	9	E	RAMY 7981		
31	DSD	2015E	2209	S14	E20	08 2.3		06	9	9	E	RAMY 7981		

IMP 8 SOLAR WIND PLASMA
JULY 1996

MIT/CSR IMP 8 PLASMA PARAMETERS



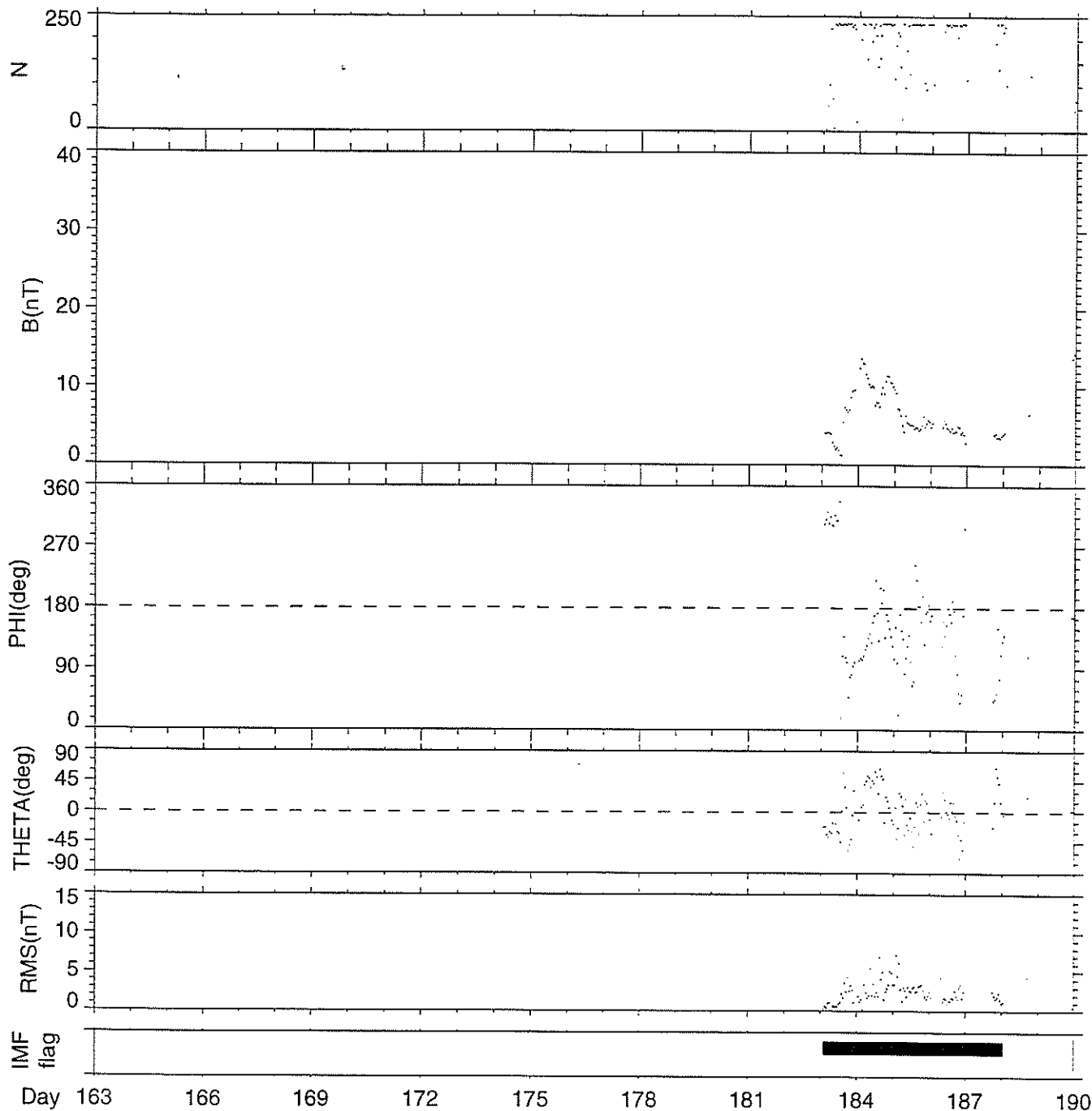
IMP 8 MIT ONE-HOUR AVERAGES

JUL 1996

JUL 1996

IMP-8 Magnetic Field Data in GSE Coordinates

1 Hour Averages (c) DOY 183 - 190 July 1 1996 - July 8 1996



Generation Date : Thu Jan 16 08:11:01 1997

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

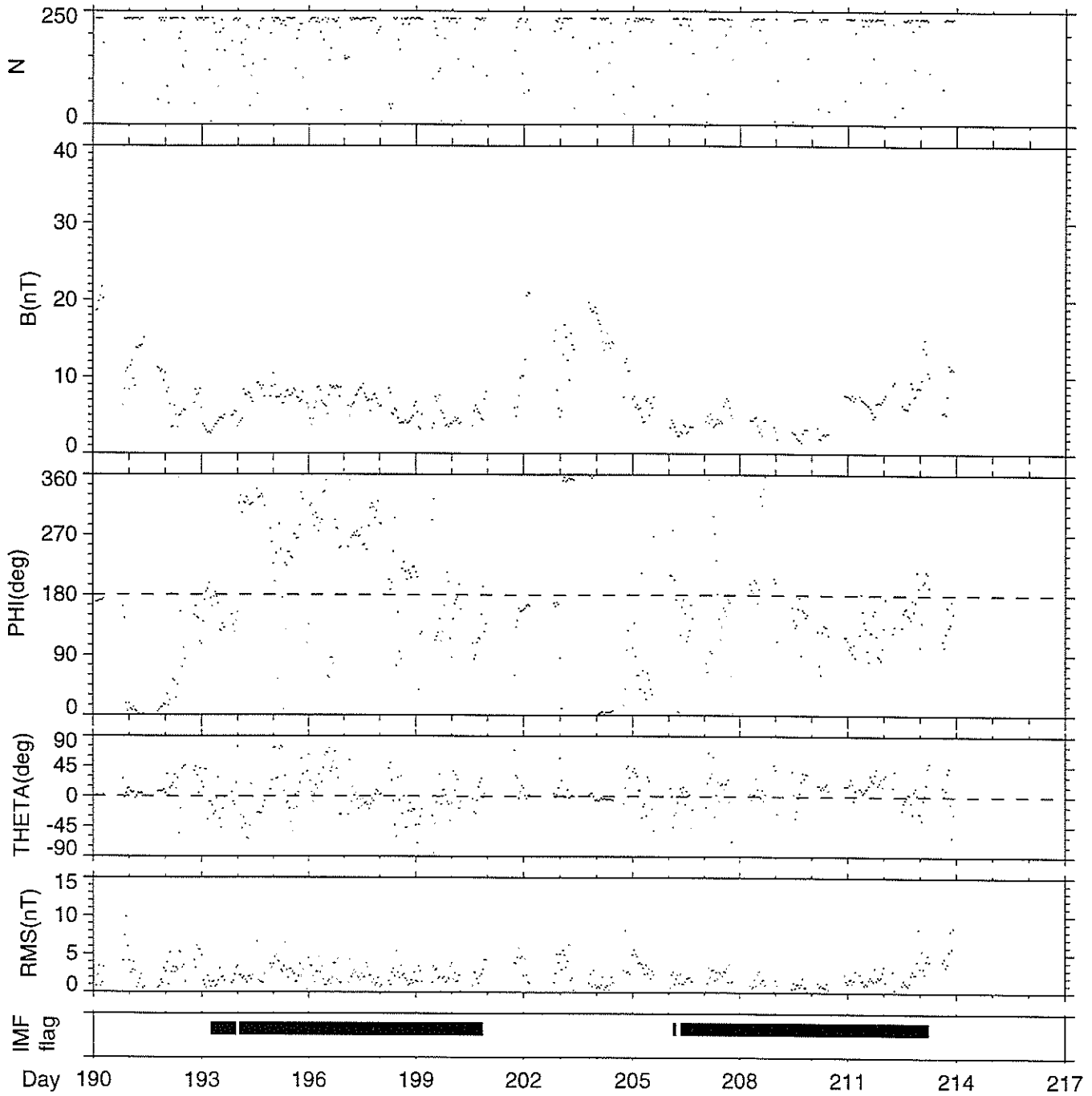
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1 Hour Averages

(c) DOY 190 - 213

July 8 1996 -

July 31 1996



Generation Date : Thu Jan 16 08:11:03 1997

NOTE: The IMF "flag" (black boxes at the bottom of the plots) indicates where the interplanetary magnetic field regions are according to a dynamic model of the location of the bow shock. At all other times IMP-8 is in the magnetosphere.

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SOLAR ULTRAVIOLET SPECTRAL IRRADIANCE MONITOR (SUSIM)

The Solar Ultraviolet Spectral Irradiance Monitor (SUSIM) on the Upper Atmospheric Research Satellite (UARS) has been measuring the solar spectral irradiance from 115 nm to 410 nm since 12-October-1991 (UARS mission day 31). Once per day, spacecraft power permitting, SUSIM obtains one complete solar UV spectrum at each of two spectral resolutions - 5 nm and 1.1 nm (FWHM) - and five intervals of a few nanometers each, over strong solar emission or absorption lines, at 0.15 nm (FWHM) resolution. Once per week SUSIM also obtains one complete UV spectrum at 0.15 nm (FWHM) resolution, and observes four sequential sunrises (UARS flying forward) or sunsets (UARS flying backward) at a wavelength absorbed by molecular oxygen or ozone.

From the daily mid-resolution (1.1nm) spectrum in the vicinity of 279.9 nm, a Mg II index is computed. At this spectral resolution, the Mg II absorption doublet and the chromospheric emissions within the core are blended, so that the feature appears to be a single absorption "line". The SUSIM Mg II index is defined to be the ratio of the integral of the observed irradiance in a 0.5 nm interval, centered on the minimum of the "line", to the integral of the local continuum over the same wavelength interval. (For a more detailed definition, see SUSIM's WWW page (URL given below).)

On the NGDC ftp anonymous site, the ASCII files MgIIYYYY.v18, where YYYY = year, contain data version V18 of the SUSIM Mg II index. The three columns in each file are: (1) calendar date (year/month/day-19910101); (2) UARS mission day-number (1= 12-SEPT-1991); and (3) Mg II index for that day (dimensionless). The spectra from which the V18 index is derived are calibrated through 8-JAN-1996 (UARS mission day 1580). For V18 data later than 8-JAN-1996, a preliminary calibration has been applied. Future data versions will use more recent inflight calibrations, but the values of the Mg II index should not change significantly.

A detailed description of the SUSIM/UARS experiment and a discussion of measurement errors can be found in References 1 and 2, below. A reference for the SUSIM Mg II index is Reference 3. SUSIM also maintains several pages on the World Wide Web which show plots of all the measurements from the most recent three days and the complete time series of the Mg II index (updated daily), and provide information about data versions and how to obtain other SUSIM data products from the NASA/GSFC DAAC or from SUSIM's own anonymous ftp site (susim.nrl.navy.mil). The URL of SUSIM's home page is:

<http://wwwsolar.nrl.navy.mil/susim.html>

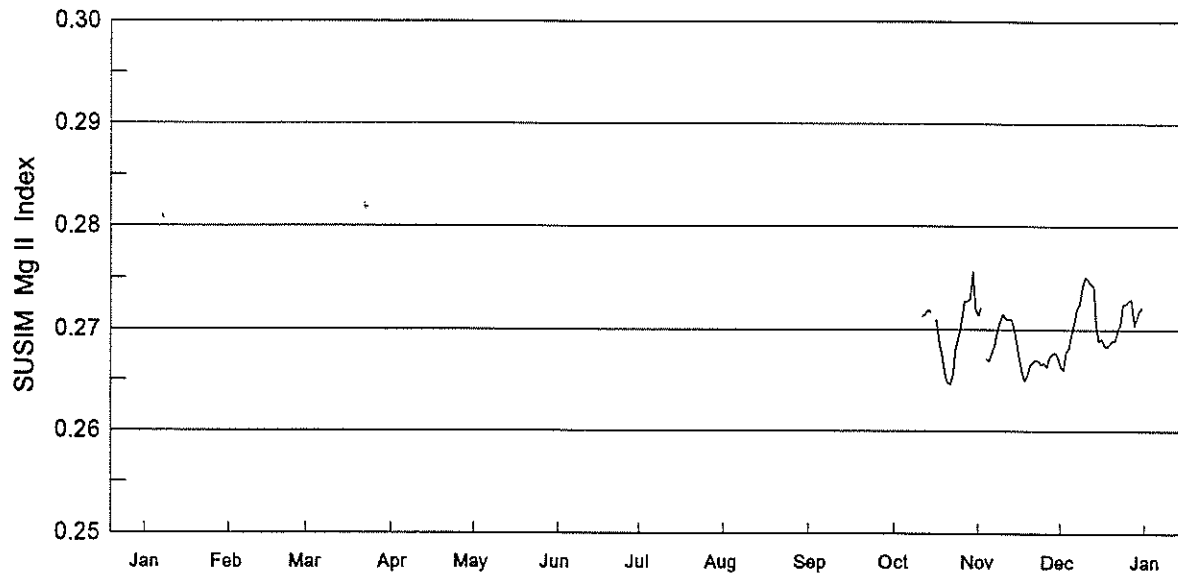
The SUSIM experiment team is located at the Naval Research Laboratory, Washington DC 20375-5352. The SUSIM Principal Investigator is Guenter E. Brueckner (brueckner@susim.nrl.navy.mil); questions or comments about the SUSIM data should be directed to either Linton Floyd (floyd@susim.nrl.navy.mil (202)767-2258) or Dianne Prinz ((202)767-2481; prinz@susim.nrl.navy.mil).

If the SUSIM data are used in a publication, please reference the data version number used, e.g. V18.

REFERENCES:

1. Brueckner, G. E., K. L. Edlow, L. E. Floyd IV, J. L. Lean, and M. E. VanHoosier, "The Solar Ultraviolet Spectral Irradiance Monitor (SUSIM) experiment on board the Upper Atmosphere Research Satellite (UARS)", **J. Geophys. Res.**, **98**, 10695-10711, 1993.
2. Woods, T.N., D.K. Prinz, J. London, G.J. Rottman, P.C. Crane, R.P. Cebula, E. Hilsenrath, G.E. Brueckner, M.D. Andrews, O.R. White, M.E. VanHoosier, L.E. Floyd, L.C. Herring, B.G. Knapp, C.K. Pankratz, and P.A. Reiser, "Validation of the UARS solar ultraviolet irradiances: Comparison with the ATLAS 1 and 2 measurements", **J. Geophys. Res.**, **Vol. 101**, No. D6, pp. 9541-9569, 1996.
3. Floyd, L.E., P.A. Reiser, P.C. Crane, L.C. Herring, D.K. Prinz, and G.E. Brueckner, "Solar Cycle 22 UV Spectral Irradiance Variability: Current Measurements by SUSIM UARS", submitted to **SOLAR PHYSICS**, Jan. 1997.

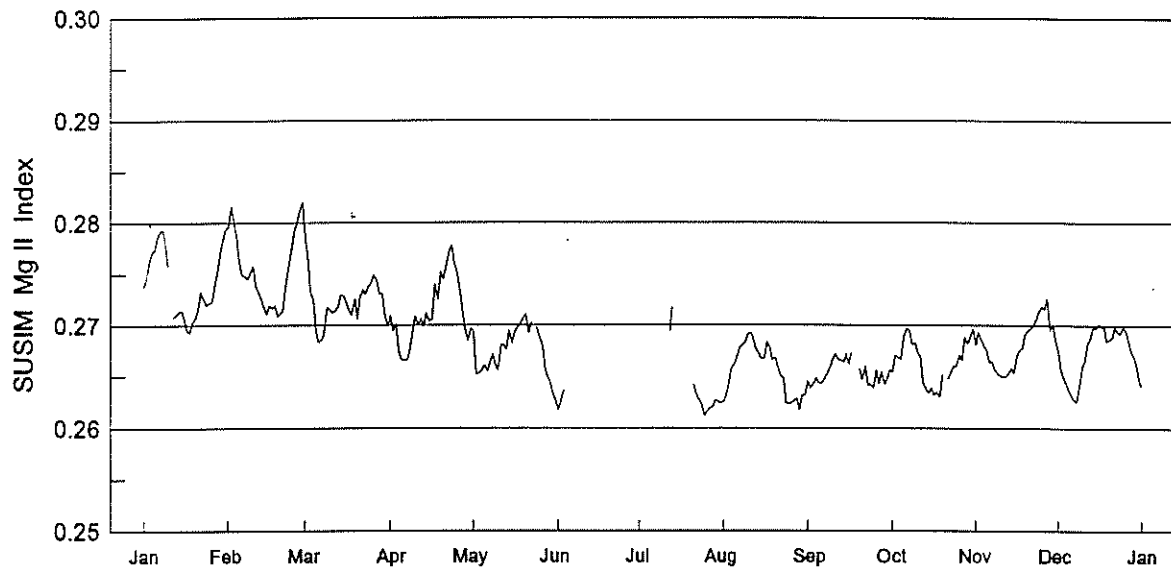
SUSIM Mg II Index Version 18 1991



Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	-	-	-	-	-	-	-	-	-	-	0.27135	0.26627
2	-	-	-	-	-	-	-	-	-	-	0.27210	0.26596
3	-	-	-	-	-	-	-	-	-	-	-	0.26780
4	-	-	-	-	-	-	-	-	-	-	0.26711	0.26807
5	-	-	-	-	-	-	-	-	-	-	0.26689	0.26938
6	-	-	-	-	-	-	-	-	-	-	0.26776	0.27080
7	-	-	-	-	-	-	-	-	-	-	0.26852	0.27213
8	-	-	-	-	-	-	-	-	-	-	0.26992	0.27247
9	-	-	-	-	-	-	-	-	-	-	0.27078	0.27409
10	-	-	-	-	-	-	-	-	-	-	0.27157	0.27518
11	-	-	-	-	-	-	-	-	-	-	0.27107	0.27484
12	-	-	-	-	-	-	-	-	-	0.27129	0.27103	0.27444
13	-	-	-	-	-	-	-	-	-	0.27146	0.27100	0.27431
14	-	-	-	-	-	-	-	-	-	0.27193	0.27005	0.27029
15	-	-	-	-	-	-	-	-	-	0.27161	0.26874	0.26892
16	-	-	-	-	-	-	-	-	-	-	0.26685	0.26908
17	-	-	-	-	-	-	-	-	-	0.27093	0.26565	0.26848
18	-	-	-	-	-	-	-	-	-	0.26900	0.26494	0.26827
19	-	-	-	-	-	-	-	-	-	0.26743	0.26556	0.26860
20	-	-	-	-	-	-	-	-	-	0.26571	0.26648	0.26891
21	-	-	-	-	-	-	-	-	-	0.26480	0.26683	0.26893
22	-	-	-	-	-	-	-	-	-	0.26454	0.26702	0.26998
23	-	-	-	-	-	-	-	-	-	0.26560	0.26691	0.27058
24	-	-	-	-	-	-	-	-	-	0.26818	0.26657	0.27247
25	-	-	-	-	-	-	-	-	-	0.26921	0.26670	0.27254
26	-	-	-	-	-	-	-	-	-	0.27085	0.26630	0.27285
27	-	-	-	-	-	-	-	-	-	0.27278	0.26725	0.27296
28	-	-	-	-	-	-	-	-	-	0.27267	0.26763	0.27036
29	-	-	-	-	-	-	-	-	-	0.27300	0.26768	0.27111
30	-	-	-	-	-	-	-	-	-	0.27565	0.26733	0.27185
31	-	-	-	-	-	-	-	-	-	0.27201	-	0.27224

NOTE: -- indicates data not available.

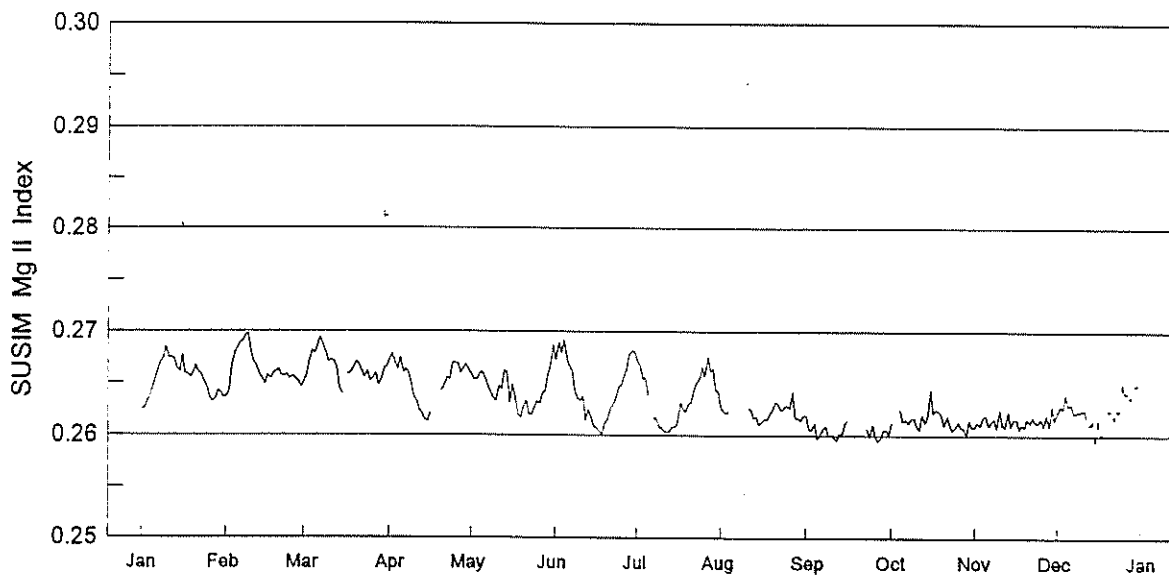
SUSIM Mg II Index Version 18 1992



Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.27377	0.27961	0.27677	0.26949	0.26526	0.26284	--	0.26314	0.26386	0.26540	0.26931	0.26566
2	0.27455	0.28167	0.27331	0.27004	0.26529	0.26374	--	0.26422	0.26423	0.26704	0.26861	0.26490
3	0.27610	0.28003	0.27238	0.26731	0.26560	--	--	0.26582	0.26486	0.26682	0.26810	0.26433
4	0.27719	0.27876	0.26926	0.26664	0.26607	--	--	0.26619	0.26437	0.26666	0.26758	0.26380
5	0.27737	0.27633	0.26832	0.26654	0.26546	--	--	0.26692	0.26430	0.26880	0.26637	0.26307
6	0.27852	0.27500	0.26851	0.26661	0.26644	--	--	0.26776	0.26470	0.26974	0.26645	0.26279
7	0.27916	0.27478	0.26905	0.26764	0.26710	--	--	0.26804	0.26529	0.26944	0.26568	0.26253
8	0.27942	0.27453	0.27168	0.26935	0.26604	--	--	0.26831	0.26575	0.26813	0.26537	0.26398
9	0.27800	0.27504	0.27158	0.27083	0.26563	--	--	0.26906	0.26672	0.26819	0.26501	0.26604
10	0.27574	0.27581	0.27117	0.26995	0.26806	--	--	0.26920	0.26721	0.26724	0.26499	0.26661
11	--	0.27384	0.27141	0.27060	0.26807	--	0.26940	0.26854	0.26662	0.26690	0.26493	0.26830
12	0.27079	0.27334	0.27182	0.26986	0.26756	--	0.27184	0.26755	0.26662	0.26441	0.26535	0.26890
13	0.27099	0.27246	0.27294	0.27109	0.26943	--	--	0.26724	0.26638	0.26374	0.26578	0.26985
14	0.27135	0.27166	0.27281	0.27044	0.26828	--	--	0.26673	0.26722	0.26338	0.26533	0.26975
15	0.27140	0.27104	0.27211	0.27057	0.26933	--	--	0.26673	0.26620	0.26389	0.26712	0.27013
16	0.27056	0.27185	0.27143	0.27394	0.26970	--	--	0.26833	0.26735	0.26320	0.26759	0.26987
17	0.26940	0.27164	0.27099	0.27252	0.27017	--	--	0.26788	--	0.26348	0.26775	0.26985
18	0.26927	0.27195	0.27257	0.27516	0.27068	--	--	0.26664	--	0.26301	0.26906	0.26849
19	0.27033	0.27087	0.27061	0.27455	0.27102	--	--	0.26681	0.26566	0.26519	0.26946	0.26858
20	0.27064	0.27113	0.27280	0.27592	0.26922	--	0.26414	0.26591	0.26474	--	0.26970	0.26882
21	0.27141	0.27134	0.27349	0.27716	0.27028	--	0.26325	0.26510	0.26599	0.26481	0.27005	0.26986
22	0.27325	0.27409	0.27303	0.27779	--	--	0.26278	0.26477	0.26415	0.26548	0.27051	0.26942
23	0.27248	0.27565	0.27378	0.27604	0.26974	--	0.26217	0.26247	0.26421	0.26596	0.27129	0.26917
24	0.27196	0.27713	0.27406	0.27523	0.26877	--	0.26118	0.26235	0.26385	0.26597	0.27182	0.26983
25	0.27212	0.27925	0.27490	0.27335	0.26817	--	0.26165	0.26242	0.26561	0.26704	0.27157	0.26952
26	0.27232	0.27998	0.27434	0.27130	0.26599	--	0.26194	0.26267	0.26426	0.26655	0.27264	0.26873
27	0.27387	0.28112	0.27305	0.26961	0.26495	--	0.26204	0.26285	0.26544	0.26878	0.26952	0.26745
28	0.27516	0.28208	0.27314	0.26850	0.26449	--	0.26269	0.26176	0.26423	0.26823	0.27014	0.26699
29	0.27727	0.27873	0.27075	0.26964	0.26323	--	0.26249	0.26318	0.26476	0.26887	0.26872	0.26616
30	0.27845		0.26988	0.26932	0.26265	--	0.26246	0.26321	0.26561	0.26962	0.26746	0.26456
31	0.27937		0.27093		0.26176		0.26249	0.26446		0.26807		0.26404

NOTE: -- indicates data not available.

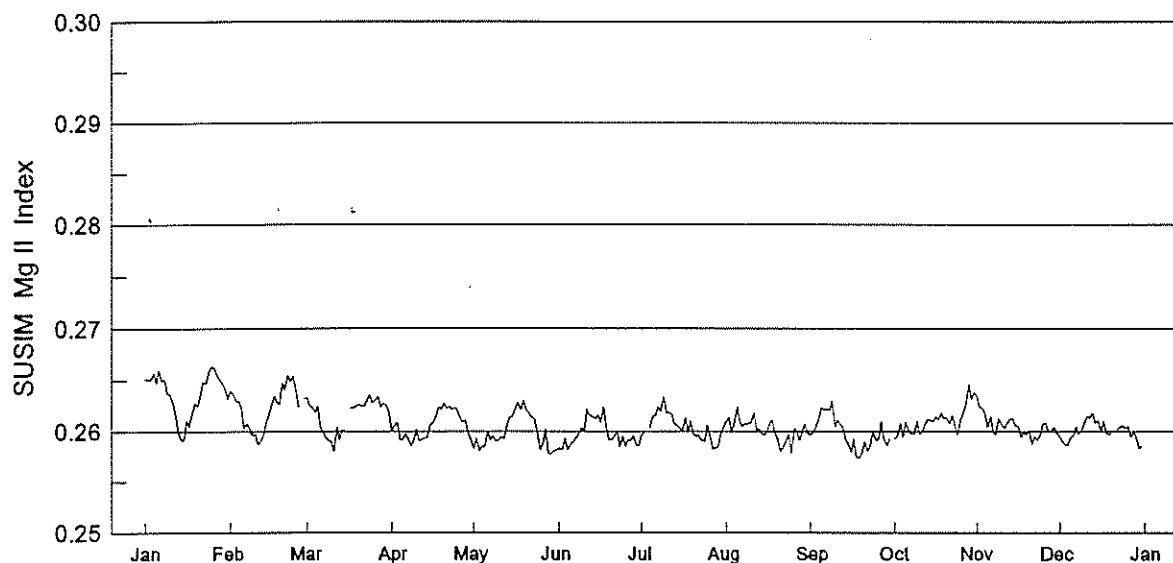
SUSIM Mg II Index Version 18 1993



Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.26245	0.26364	0.26513	0.26733	0.26584	0.26725	0.26724	0.26264	0.26192	0.26003	0.26090	0.26232
2	0.26248	0.26430	0.26570	0.26784	0.26537	0.26887	0.26670	0.26232	0.26064	0.26123	0.26132	0.26286
3	0.26300	0.26667	0.26697	0.26695	0.26540	0.26798	0.26551	0.26214	0.26047	--	0.26097	0.26258
4	0.26374	0.26779	0.26814	0.26634	0.26597	0.26914	0.26558	0.26237	0.26119	--	0.26175	0.26396
5	0.26451	0.26834	0.26782	0.26753	0.26606	0.26729	0.26371	--	0.25968	0.26248	0.26192	0.26284
6	0.26538	0.26886	0.26855	0.26596	0.26534	0.26661	--	--	0.26010	0.26135	0.26091	0.26299
7	0.26621	0.26902	0.26944	0.26634	0.26463	0.26616	0.26163	--	0.26061	0.26156	0.26139	0.26213
8	0.26706	0.26963	0.26878	0.26601	0.26412	0.26426	0.26167	--	0.26092	0.26117	0.26159	0.26228
9	0.26732	0.26972	0.26794	0.26496	0.26359	0.26352	0.26089	--	0.26003	0.26171	0.26076	0.26234
10	0.26854	0.26775	0.26705	0.26364	0.26324	0.26332	0.26070	--	0.26002	0.26170	0.26251	0.26239
11	0.26747	0.26699	0.26727	0.26328	0.26470	0.26376	0.26036	0.26265	0.25985	0.26087	0.26098	0.26242
12	0.26742	0.26665	0.26709	0.26235	0.26441	0.26140	0.26029	0.26247	0.25955	0.26058	0.26083	0.26163
13	0.26734	0.26581	0.26650	0.26213	0.26620	0.26252	0.26033	0.26172	0.26019	0.26198	0.26233	0.26091
14	0.26640	0.26545	0.26454	0.26150	0.26614	0.26166	0.26078	0.26179	0.26015	0.26124	0.26088	0.26154
15	0.26603	0.26488	0.26391	0.26131	0.26309	0.26078	0.26078	0.26106	0.26122	0.26200	0.26157	0.25925
16	0.26776	0.26573	--	0.26220	0.26493	0.26072	0.26114	0.26136	0.26147	0.26448	0.26158	0.26168
17	0.26591	0.26541	0.26583	--	0.26372	0.26037	0.26319	0.26159	--	0.26223	0.26062	0.25991
18	0.26585	0.26592	0.26597	--	0.26192	0.26004	0.26254	0.26154	--	0.26251	0.26108	0.26019
19	0.26552	0.26613	0.26656	--	0.26168	0.26117	0.26227	0.26216	--	0.26233	0.26082	0.26116
20	0.26600	0.26631	0.26708	0.26431	0.26264	0.26158	0.26293	0.26260	--	0.26202	0.26160	0.26252
21	0.26669	0.26575	0.26682	0.26485	0.26335	0.26266	0.26322	0.26325	--	0.26096	0.26126	0.26230
22	0.26608	0.26566	0.26603	0.26556	0.26205	0.26288	0.26443	0.26293	--	0.26189	0.26180	0.26158
23	0.26582	0.26581	0.26556	0.26535	0.26195	0.26345	0.26507	0.26246	0.26060	0.26104	0.26131	0.26259
24	0.26509	0.26540	0.26614	0.26694	0.26256	0.26469	0.26549	0.26269	0.25990	0.26046	0.26125	0.26217
25	0.26464	0.26564	0.26525	0.26695	0.26327	0.26476	0.26662	0.26290	0.26107	0.26083	0.26163	0.26516
26	0.26353	0.26545	0.26545	0.26689	0.26300	0.26569	0.26566	0.26263	0.25986	0.26129	0.26090	0.26403
27	0.26323	0.26519	0.26591	0.26602	0.26401	0.26627	0.26761	0.26431	0.25945	0.26078	0.26203	0.26416
28	0.26342	0.26460	0.26480	0.26643	0.26414	0.26776	0.26620	0.26176	0.25970	0.26069	0.26084	0.26354
29	0.26424		0.26520	0.26683	0.26570	0.26815	0.26641	0.26167	0.26057	0.26003	0.26284	0.26418
30	0.26404		0.26641	0.26626	0.26680	0.26804	0.26432	0.26151	0.26047	0.26153	0.26151	0.26493
31	0.26367		0.26659		0.26872		0.26427	0.26192		0.26081		0.26483

NOTE: -- indicates data not available.

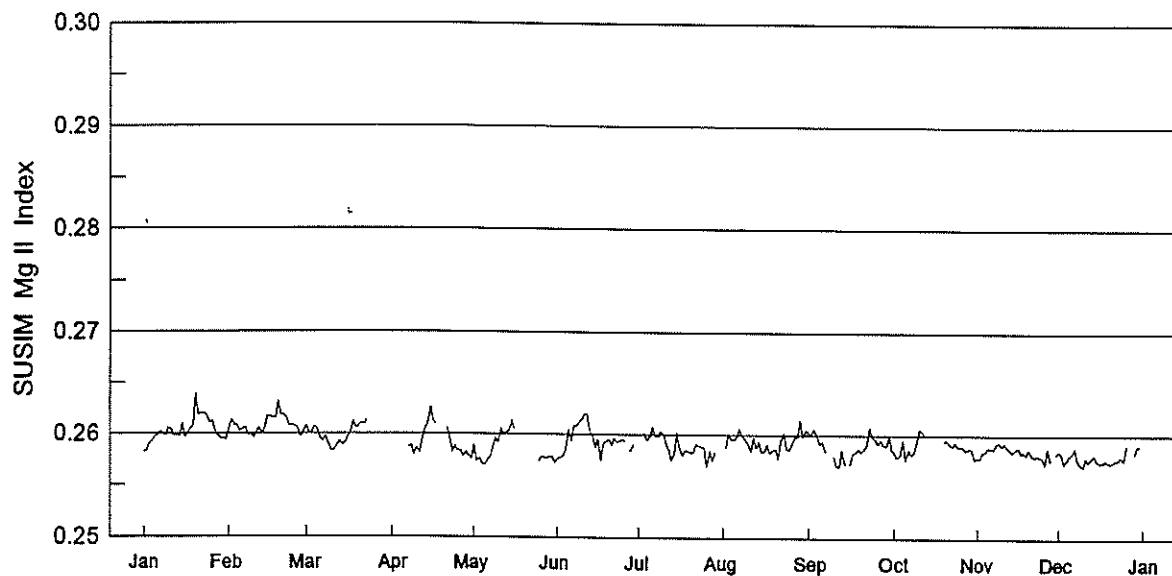
SUSIM Mg II Index Version 18 1994



Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.26510	0.26398	0.26334	0.26004	0.25829	0.25827	0.25961	0.26102	0.25957	--	0.26338	0.25942
2	0.26502	0.26356	0.26254	0.26051	0.25930	0.25817	0.25989	0.26140	0.25983	0.25924	0.26245	0.25898
3	0.26507	0.26293	0.26238	0.26090	0.25803	0.25926	--	0.25986	0.26038	0.25950	0.26226	0.25864
4	0.26567	0.26293	0.26186	0.25918	0.25844	0.25811	0.26039	0.26074	0.26115	0.26083	0.26182	0.25862
5	0.26472	0.26244	0.26252	0.25910	0.25837	0.25868	0.26141	0.26247	0.26230	0.25943	0.26042	0.25931
6	0.26599	0.26032	0.26034	0.25979	0.25996	0.25889	0.26154	0.26095	0.26216	0.26089	0.26142	0.25961
7	0.26499	0.26071	0.26007	0.25908	0.25910	0.25930	0.26239	0.26045	0.26222	0.26001	0.25983	0.26040
8	0.26507	0.26028	0.25944	0.25851	0.25956	0.25980	0.26192	0.26073	0.26209	0.25973	0.25969	0.25975
9	0.26373	0.25966	0.25902	0.25905	0.25896	0.26027	0.26341	0.26071	0.26302	0.25972	0.26126	0.26002
10	0.26363	0.25970	0.25887	0.26020	0.25905	0.26011	0.26182	0.26080	0.26041	0.26101	0.26067	0.26083
11	0.26277	0.25866	0.25795	0.25898	0.25941	0.26212	0.26185	0.26185	0.26110	0.25970	0.26029	0.26143
12	0.26162	0.25893	0.26045	0.25918	0.25923	0.26160	0.26163	0.26019	0.26067	0.25991	0.26077	0.26134
13	0.25989	0.25968	0.25911	0.25929	0.26044	0.26145	0.26073	0.26022	0.26040	0.26065	0.26120	0.26180
14	0.25908	0.26090	0.26009	0.25931	0.26126	0.26127	0.26056	0.25977	0.25904	0.26115	0.26126	0.26082
15	0.25908	0.26157	0.26004	0.26065	0.26147	0.26164	0.26027	0.25961	0.25864	0.26107	0.26055	0.26105
16	0.26104	0.26251	--	0.26074	0.26216	0.26086	0.26004	0.25999	0.25792	0.26093	0.26046	0.26002
17	0.26046	0.26346	0.26232	0.26128	0.26280	0.26244	0.26134	0.26083	0.25923	0.26144	0.25944	0.26102
18	0.26165	0.26282	0.26230	0.26235	0.26210	0.26044	0.25990	0.26113	0.25744	0.26114	0.25990	0.25986
19	0.26279	0.26262	0.26242	0.26221	0.26301	0.25918	0.26099	0.25988	0.25738	0.26181	0.25965	0.25966
20	0.26254	0.26470	0.26265	0.26279	0.26212	0.25917	0.25972	0.25911	0.25786	0.26129	0.26008	0.25988
21	0.26355	0.26409	0.26244	0.26225	0.26176	0.25952	0.25948	0.25796	0.25893	0.26136	0.25874	--
22	0.26479	0.26551	0.26254	0.26245	0.26133	0.26003	0.25952	0.25835	0.25804	0.26073	0.25940	0.26018
23	0.26466	0.26484	0.26295	0.26214	0.26122	0.25848	0.25905	0.25904	0.25858	0.26157	0.25909	0.26035
24	0.26571	0.26541	0.26355	0.26233	0.26003	0.25945	0.25896	0.25971	0.26005	0.26059	0.25956	0.26052
25	0.26633	0.26389	0.26273	0.26211	0.25814	0.25845	0.26060	0.25768	0.25901	0.25958	0.26077	0.26024
26	0.26618	0.26235	0.26300	0.26124	0.25873	0.25907	0.25956	0.26027	0.25922	0.26112	0.26081	0.26048
27	0.26545	--	0.26337	0.26087	0.26023	0.25905	0.25820	0.25999	0.26096	0.26181	0.26000	0.25938
28	0.26510	0.26313	0.26240	0.26109	0.25781	0.25954	0.25836	0.25902	0.25920	0.26256	0.25997	0.25999
29	0.26463		0.26275	0.25979	0.25769	0.25858	0.25841	0.26007	0.25853	0.26461	0.26044	0.25924
30	0.26413		0.26251	0.25901	0.25804	0.25855	0.25970	0.26066	0.25919	0.26312	0.25986	0.25824
31	0.26315		0.26183		0.25805		0.26041	0.25977		0.26379		0.25862

NOTE: -- indicates data not available.

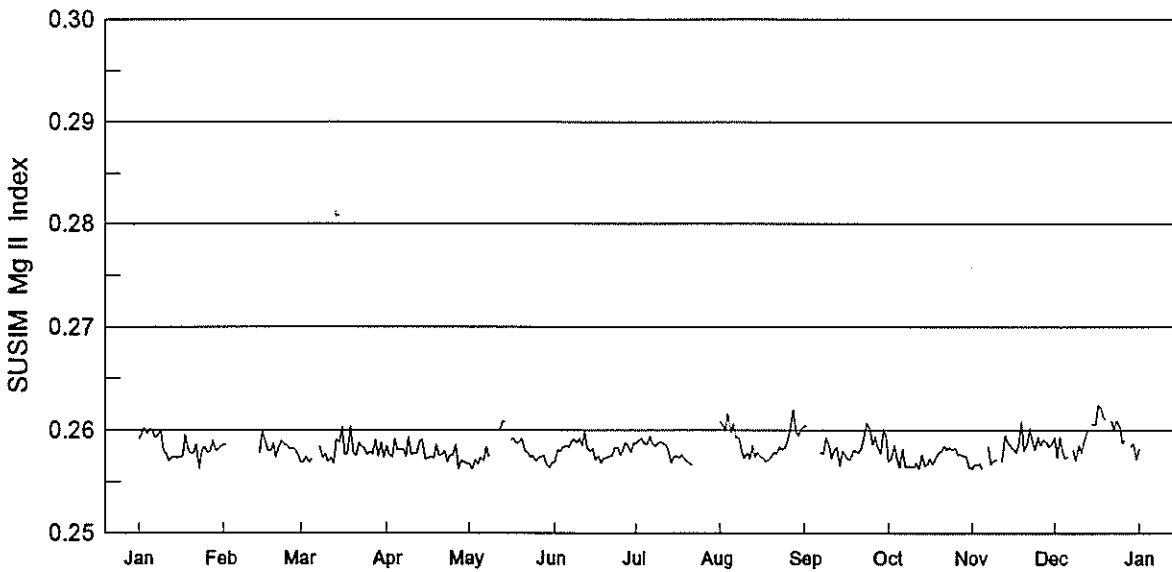
SUSIM Mg II Index Version 18 1995



Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.25823	0.26042	0.26074	-	0.25898	0.25766	-	-	0.26025	0.25855	0.25781	0.25847
2	0.25829	0.26136	0.26008	-	0.25731	0.25768	-	0.25872	0.26006	0.25826	0.25775	0.25818
3	0.25899	0.26082	0.26008	-	0.25767	0.25790	0.26009	0.26009	0.26064	0.25785	0.25834	0.25727
4	0.25929	0.26089	0.26068	-	0.25700	0.25847	0.25944	0.25951	0.25992	0.25805	0.25839	0.25765
5	0.25966	0.26023	0.26043	-	0.25697	0.26051	0.25980	0.25950	0.25907	0.25947	0.25875	0.25800
6	0.25988	0.26043	0.25956	-	0.25752	0.25926	0.26073	0.25982	0.25931	0.25761	0.25874	0.25830
7	0.26020	0.26060	0.25920	0.25865	0.25779	0.26082	0.25982	0.26059	0.25836	0.25852	0.25864	0.25878
8	0.26001	0.25988	0.25972	0.25885	0.25871	0.26080	0.25977	0.25985	-	0.25809	0.25910	0.25756
9	0.25978	0.26000	0.25898	0.25787	0.25958	0.26117	0.26031	0.25950	-	0.25824	0.25936	0.25717
10	0.26055	0.25954	0.25832	0.25861	0.25912	0.26143	0.26012	0.25917	0.25791	0.25948	0.25892	0.25693
11	0.26034	0.26012	0.25832	0.25815	0.26057	0.26203	0.25909	0.25838	0.25696	0.26060	0.25923	0.25782
12	0.25980	0.26053	0.25885	0.25948	0.25992	0.26199	0.25837	0.25975	0.25690	0.26036	0.25883	0.25747
13	0.25984	0.26006	0.25919	0.26045	0.26017	0.26050	0.25751	0.25870	0.25851	0.26003	0.25858	0.25783
14	0.25975	0.26049	0.25890	0.26084	0.26025	0.25983	0.25811	0.25931	0.25711	-	0.25834	0.25807
15	0.26096	0.26172	0.25905	0.26265	0.26131	0.25868	0.26022	0.25836	-	-	0.25856	0.25765
16	0.25957	0.26160	0.25970	0.26119	0.26041	0.25950	0.25879	0.25838	0.25712	-	0.25883	0.25733
17	0.25997	0.26154	0.26011	0.26093	-	0.25748	0.25795	0.25905	0.25820	-	0.25829	0.25734
18	0.26041	0.26150	0.26121	-	-	0.25912	0.25842	0.25820	0.25825	-	0.25835	0.25756
19	0.26079	0.26323	0.26045	-	-	0.25929	0.25840	0.25843	0.25867	-	0.25809	0.25744
20	0.26391	0.26182	0.26081	-	-	0.25949	0.25819	0.25856	0.25836	0.25942	0.25864	0.25725
21	0.26184	0.26189	0.26096	0.26053	-	0.25893	0.25822	0.25771	0.25862	0.25947	0.25811	0.25748
22	0.26198	0.26149	0.26092	0.25940	-	0.25961	0.25905	0.25935	0.25902	0.25912	0.25791	0.25758
23	0.26191	0.26077	0.26138	0.25823	-	0.25923	0.25890	0.26017	0.26074	0.25891	0.25801	0.25767
24	0.26184	0.26079	-	0.25886	-	0.25936	0.25877	0.25858	0.25983	0.25927	0.25796	0.25795
25	0.26114	0.26075	-	0.25831	0.25738	0.25943	0.25871	0.25853	0.25952	0.25887	0.25783	0.25760
26	0.26116	0.26050	0.26360	0.25836	0.25782	0.25933	0.25683	0.25923	0.25912	0.25890	0.25713	0.25900
27	0.26026	0.25968	-	0.25785	0.25769	-	0.25846	0.25980	0.25947	0.25876	0.25880	-
28	0.25977	0.26032	-	0.25819	0.25771	0.25834	0.25747	0.25981	0.25901	0.25852	0.25751	-
29	0.25946	-	0.26070	0.25791	0.25777	0.25903	0.25833	0.26144	0.25891	0.25872	-	0.25821
30	0.25946	-	-	0.25759	0.25774	-	-	0.25981	0.25993	0.25859	0.25818	0.25898
31	0.25934	-	-	-	0.25722	-	-	0.26050	-	0.25770	-	0.25890

NOTE: - indicates data not available.

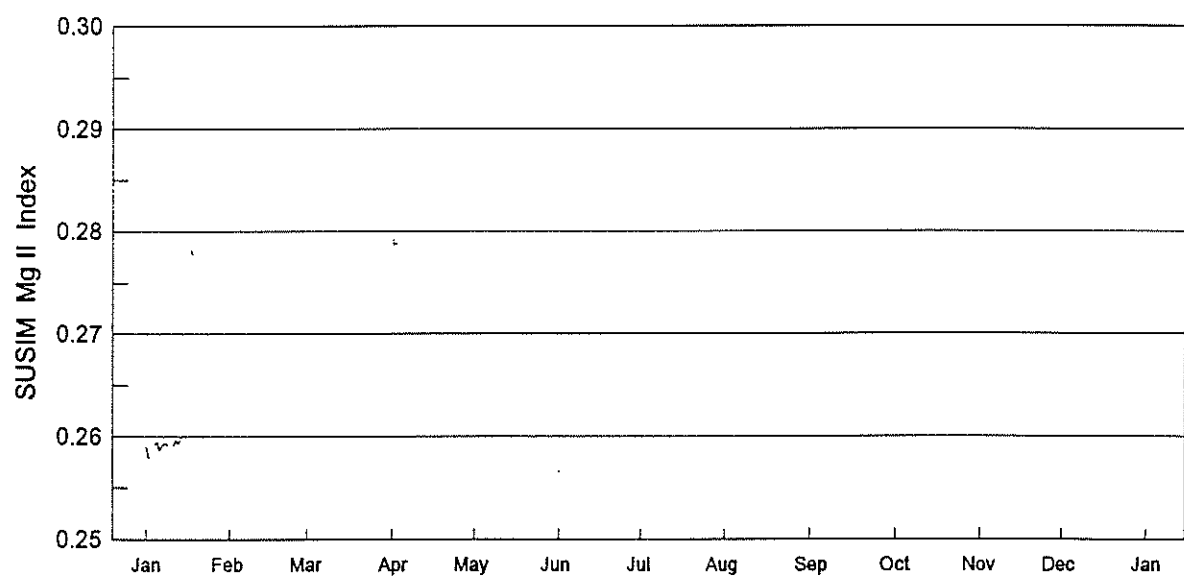
SUSIM Mg II Index Version 18 1996



Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.25914	0.25859	0.25690	0.25763	0.25619	0.25805	0.25901	0.26050	0.26041	0.25697	0.25663	0.25735
2	0.25967	0.25865	0.25742	0.25736	0.25716	0.25793	0.25924	0.25990	--	0.25717	0.25661	0.25942
3	0.26022	--	0.25687	0.25916	0.25672	0.25834	0.25869	0.26168	--	0.25852	0.25674	0.25800
4	0.25965	--	0.25724	0.25806	0.25731	0.25844	0.25864	0.25973	--	0.25734	0.25626	0.25726
5	0.26019	--	--	0.25813	0.25699	0.25834	0.25946	0.26068	--	0.25638	--	0.25739
6	0.25996	--	--	0.25815	0.25841	0.25887	0.25874	0.25927	0.25784	0.25820	0.25837	--
7	0.25926	--	0.25838	0.25743	0.25739	0.25915	0.25840	0.25923	0.25772	0.25644	0.25670	0.25806
8	0.25955	--	0.25734	0.25933	--	0.25879	0.25876	0.25797	0.25931	0.25651	0.25704	0.25708
9	0.26012	--	0.25770	0.25766	--	0.25922	0.25885	0.25726	0.25853	0.25651	0.25715	0.25852
10	0.25808	--	0.25696	0.25776	--	0.25854	0.25873	0.25784	0.25725	0.25640	--	0.25781
11	0.25762	--	0.25730	0.25776	0.26002	0.25987	0.25850	0.25721	0.25807	0.25683	0.25702	0.25893
12	0.25701	--	0.25678	0.25893	0.26080	0.25824	0.25810	0.25862	0.25835	0.25622	0.25945	0.25995
13	0.25739	--	0.25907	0.25909	0.26073	0.25796	0.25679	0.25741	0.25652	0.25761	0.25886	--
14	0.25741	0.25776	0.25886	0.25719	--	0.25821	0.25739	0.25792	0.25794	0.25656	0.25845	0.26055
15	0.25731	0.26001	0.26039	0.25725	0.25907	0.25711	0.25753	0.25739	0.25765	0.25663	0.25814	0.26050
16	0.25748	0.25900	0.25767	0.25736	0.25918	0.25752	0.25732	0.25734	0.25717	0.25726	0.25781	0.26243
17	0.25745	0.25802	0.25769	0.25732	0.25872	0.25683	0.25762	0.25696	0.25716	0.25669	0.25865	0.26222
18	0.25962	0.25795	0.26037	0.25862	0.25883	0.25723	0.25722	0.25708	0.25802	0.25725	0.26081	0.26130
19	0.25804	0.25873	0.25777	0.25760	0.25923	0.25730	0.25693	0.25744	0.25799	0.25781	0.25801	0.26096
20	0.25778	0.25739	0.25753	0.25761	0.25798	0.25746	0.25674	0.25786	0.25776	0.25788	0.25873	--
21	0.25774	0.25830	0.25875	0.25795	0.25783	0.25749	0.25659	0.25768	0.25835	0.25843	0.26024	0.26087
22	0.25866	0.25901	0.25848	0.25697	0.25739	0.25824	--	0.25841	0.25949	0.25808	0.25890	0.26000
23	0.25626	0.25865	0.25820	0.25758	0.25752	0.25831	--	0.25809	0.26070	0.25832	0.25811	0.26092
24	0.25804	0.25854	0.25767	0.25760	0.25701	0.25759	--	0.25827	0.26017	0.25805	0.25933	0.26036
25	0.25840	0.25814	0.25790	0.25857	0.25734	0.25805	--	0.25912	0.25861	0.25826	0.25855	0.25868
26	0.25783	0.25829	0.25770	0.25625	0.25737	0.25881	--	0.26040	0.25937	0.25765	0.25908	0.25907
27	0.25793	0.25806	0.25907	0.25699	0.25760	0.25850	--	0.26208	0.25841	0.25764	0.25883	--
28	0.25905	0.25758	0.25750	0.25696	0.25678	0.25783	--	0.25985	0.25777	0.25751	0.25839	0.25838
29	0.25802	0.25688	0.25879	0.25673	0.25641	0.25873	--	0.25949	0.26013	0.25749	0.25860	0.25873
30	0.25820	--	0.25734	0.25675	0.25687	0.25871	--	0.26020	0.25943	0.25642	0.25937	0.25712
31	0.25848	--	0.25846	--	0.25687	--	0.26081	0.26033	--	0.25623	--	0.25819

NOTE: -- indicates data not available.

SUSIM Mg II Index Version 18 1997

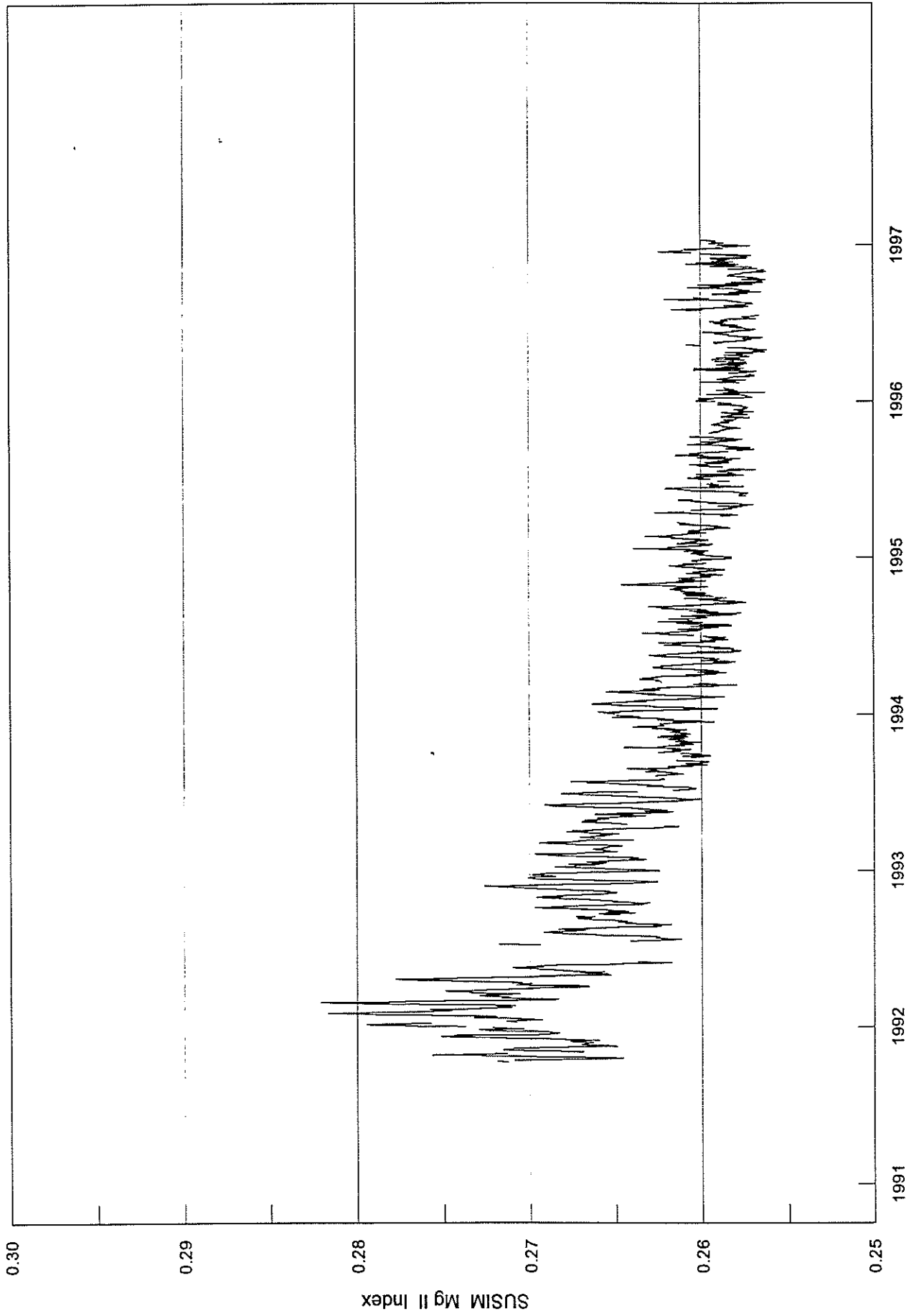


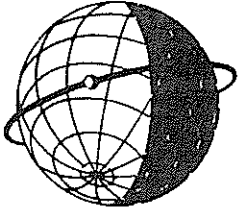
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.25902	-	-	-	-	-	-	-	-	-	-	-
2	0.25780	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-
4	0.25919	-	-	-	-	-	-	-	-	-	-	-
5	0.25949	-	-	-	-	-	-	-	-	-	-	-
6	0.25865	-	-	-	-	-	-	-	-	-	-	-
7	0.25913	-	-	-	-	-	-	-	-	-	-	-
8	0.25936	-	-	-	-	-	-	-	-	-	-	-
9	0.25906	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-
11	0.25910	-	-	-	-	-	-	-	-	-	-	-
12	0.25966	-	-	-	-	-	-	-	-	-	-	-
13	0.25930	-	-	-	-	-	-	-	-	-	-	-
14	0.26002	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-
16	-	-	-	-	-	-	-	-	-	-	-	-
17	-	-	-	-	-	-	-	-	-	-	-	-
18	-	-	-	-	-	-	-	-	-	-	-	-
19	-	-	-	-	-	-	-	-	-	-	-	-
20	-	-	-	-	-	-	-	-	-	-	-	-
21	-	-	-	-	-	-	-	-	-	-	-	-
22	-	-	-	-	-	-	-	-	-	-	-	-
23	-	-	-	-	-	-	-	-	-	-	-	-
24	-	-	-	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	-	-	-	-	-	-	-
26	-	-	-	-	-	-	-	-	-	-	-	-
27	-	-	-	-	-	-	-	-	-	-	-	-
28	-	-	-	-	-	-	-	-	-	-	-	-
29	-	-	-	-	-	-	-	-	-	-	-	-
30	-	-	-	-	-	-	-	-	-	-	-	-
31	-	-	-	-	-	-	-	-	-	-	-	-

NOTE: - indicates data not available.

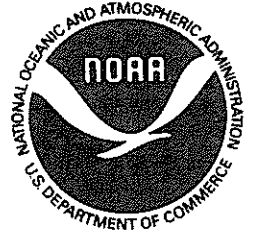
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The ICSU Panel on WDCs has recommended that it would be appropriate courtesy to acknowledge in publications that data were obtained from the originating station or investigator through the intermediary of the WDCs. The following statement is suggested:

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