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NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
Robert S. Winokur, Assistant Administrator

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Data for April 1994

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SOLAR-GEOPHYSICAL DATA

Number 602

(Issued in Two Parts)

Editor: Helen E. Coffey

Acting Chief: Herbert W. Kroehl
Solar-Terrestrial Physics Division

Staff: Christine D. Hanchett
Edward H. Erwin

Computer Consultant:
Daniel C. Wilkinson

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Hα SOLAR FLARES

APRIL 1994

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
		01	0000		0009	No Flare Patrol													
		01	1840		1845	No Flare Patrol													
		01	2016		2027	No Flare Patrol													
		01	2051		2056	No Flare Patrol													
		01	2130		2155	No Flare Patrol													
		02	0137		0138	No Flare Patrol													
		02	1046		1052	No Flare Patrol													
		03	2247		2300	No Flare Patrol													
		04	0915		0937	No Flare Patrol													
		04	0946		1039	No Flare Patrol													
		04	1356		1425	No Flare Patrol													
		04	1921		2109	No Flare Patrol													
		05	2211		2231	No Flare Patrol													
		06	0915		0924	No Flare Patrol													
		06	0946		1015	No Flare Patrol													
		06	1023		1037	No Flare Patrol													
		06	1959		2006	No Flare Patrol													
		07	0304		0309	No Flare Patrol													
		07	1043		1046	No Flare Patrol													
		07	1056		1101	No Flare Patrol													
		07	1932		1942	No Flare Patrol													
		07	1948		2033	No Flare Patrol													
		07	2148		2323	No Flare Patrol													
		08	0032		0049	No Flare Patrol													
		08	0326		0331	No Flare Patrol													
		08	1101		1131	No Flare Patrol													
		08	2227		2313	No Flare Patrol													
		09	0949		0958	No Flare Patrol													
		09	1004		1043	No Flare Patrol													
		09	2218		2238	No Flare Patrol													
		10	1101		1112	No Flare Patrol													
0001	RAMY	10	1120	1124	1131	N10	E55	7700	04	14.6	11	SF		3	E		27		
0002		10	15148	15261	1534	N10	E52	7700	04	14.5	20	SF	B 5.8				34		F
	RAMY	10	1514	1526	1534	N11	E52	7700	04	14.5	20	SF	B 5.8	3	E		29		F
	HOLL	10	1522	1527	1533	N10	E53	7700	04	14.6	11	SF		3	E		39		
0003	RAMY	10	1541	1543	1548	N10	E52	7700	04	14.6	7	SF		4	E		15		
0004	HOLL	10	1939	1944	1954	N11	E51	7700	04	14.6	15	SF	B 2.2	3	E		10		
0005	HOLL	10	2108	2109	2122	N10	E50	7700	04	14.6	14	SF	B 1.0	3	E		14		
		11	1134		1202	No Flare Patrol													
		12	0601		0636	No Flare Patrol													
		12	0639		0704	No Flare Patrol													
		12	1101		1108	No Flare Patrol													
		12	1138		1231	No Flare Patrol													
0006	PALE	12	2136E	2136U	2145D	N08	E20	7700	04	14.4	9D	SF		3	E		30		
0007	PALE	13	1740E	1741U	1800D	N08	E09	7700	04	14.4	20D	SF	B 1.1	3	E		31		E
		13	2215		2254	No Flare Patrol													
0008		14	08325	08375	0847	N09	E02	7700	04	14.5	15	SF					16	0.2	
	HTPR	14	0832	0837	0845	N12	E02	7700	04	14.5	13	SF			C	0837	20	0.2	
	KANZ	14	0833	0837	0841D	N09	E01	7700	04	14.4	8D	SF		2	C				
	SVTO	14	0837	0842	0849	N07	E03	7700	04	14.6	12	SF		3	E		11		
		14	1458		1554	No Flare Patrol													
		14	1723		1800	No Flare Patrol													
		14	2121		2230	No Flare Patrol													
		15	1232		1241	No Flare Patrol													
0009		15	1800	18001	1806	N06	E72	7701	04	21.1	6	SF	B 3.7				28		F
	RAMY	15	1800	1800	1806	N06	E73	7701	04	21.2	6	SF		3	E		33		
	HOLL	15	1800	1801	1805	N05	E72	7701	04	21.1	5	SF	B 3.7	3	E		23		F

APRIL 1994

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Obs See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0010	ISTA	16	0734E		0743	N08	E68	7701	04	21.4	9D	1N			P				F
0011	RAMY	16	1336	1338	1344	N07	E62	7701	04	21.2	8	SF	B 2.3	3	E		16		F
0012	RAMY	17	1133	1133	1144	N09	E49	7701	04	21.1	11	SF	B 1.0	3	E		12		
		18	2013		2024	No Flare Patrol													
		18	2039		2141	No Flare Patrol													
		18	2212		2216	No Flare Patrol													
		18	2227		2311	No Flare Patrol													
0013	SVTO	19	1145	1153	1156	S14	E27	7702	04	21.5	11	SF		3	E		10		F
0014		19	1244	12451	1306	N08	E20	7701	04	21.0	22	SF	B 1.6				18		FH
	RAMY	19	1244	1245	1309	N08	E21	7701	04	21.1	25	SF	B 1.6	4	E		14		F
	SVTO	19	1244	1246	1302	N08	E20	7701	04	21.0	18	SF		3	E		22		FH
0015		19	16442	1647	1704	N08	E82	7704	04	25.8	20	1N	C 2.1				178		EHY
	RAMY	19	1644	1647	1705	N08	E85	7704	04	26.1	21	2N	C 2.1	3	E		257		YE
	HOLL	19	1646	1647	1704	N07	E78	7704	04	25.5	18	SF		3	E		99		H
0016	RAMY	19	1650E	1659U	1705	S13	E25	7702	04	21.6	15D	SF		3	E		15		F
0017	RAMY	19	1718	1724	1731	N08	E19	7701	04	21.1	13	SF		3	E		13		
		19	2127		2235	No Flare Patrol													
0018	RAMY	20	1430	1433	1438	N07	E07	7701	04	21.1	8	SF		3	E		10		
0019	RAMY	20	1838E	1846	1852	N09	E05	7701	04	21.1	14D	SF	B 6.1	3	E		14		F
		20	2215		2258	No Flare Patrol													
0020	ISTA	21	0841E		0910	S14	E12		04	22.3	29D	1N			P				F
0021		21	11342	11381	1144	N06	E20	7705	04	23.0	10	SF					20		
	KANZ	21	1134	1138	1146	N06	E20	7705	04	23.0	12	SF		2	C				
	RAMY	21	1136	1139	1143	N05	E21	7705	04	23.0	7	SF		3	E		20		
0022		21	13582	14062	1451	N07	E62	7704	04	26.2	53	SF	C 1.1				44		FH
	KANZ	21	1358	1406	1451	N07	E62	7704	04	26.2	53	SF		2	C				
	RAMY	21	1359	1408	1454	N07	E61	7704	04	26.1	55	SF		3	E		38		F
	HOLL	21	1400	1408	1447	N06	E62	7704	04	26.2	47	SF	C 1.1	3	E		49		FH
0023		21	14073	14172	1424	N04	E18	7705	04	22.9	17	SF					26		
	RAMY	21	1407	1417	1425	N05	E18	7705	04	22.9	18	SF		3	E		26		
	KANZ	21	1410	1419	1423	N04	E18	7705	04	22.9	13	SF		2	C				
0024		21	14332	14341	1439	N04	E18	7705	04	22.9	6	SF					14		
	HOLL	21	1433	1434	1439	N04	E18	7705	04	22.9	6	SF		3	E		14		
	KANZ	21	1435	1435	1439	N05	E17	7705	04	22.9	4	SF		2	C				
0025		21	14541	14563	1502	N04	E18	7705	04	23.0	8	SF					17		
	HOLL	21	1454	1456	1502	N03	E18	7705	04	23.0	8	SF		3	E		17		
	KANZ	21	1455	1459	1503	N04	E17	7705	04	22.9	8	SF		2	C				
0026	KANZ	21	1543	1546	1605	N05	E19	7705	04	23.1	22	SF		2	C				
0027		21	1546*	16012	1616	N04	E18	7705	04	23.0	30	SF					39		H
	HOLL	21	1546	1601	1622	N04	E19	7705	04	23.1	36	SF		3	E		39		H
	KANZ	21	1603	1603	1611	N04	E17	7705	04	22.9	8	SF		2	C				
0028	HOLL	21	1636	1637	1642	N05	E17	7705	04	23.0	6	SF	B 2.6	3	E		11		FH
0029		21	1914	1914	1917	N04	E16	7705	04	23.0	3	SF	B 4.1				24		F
	HOLL	21	1914	1914	1917	N03	E15	7705	04	22.9	3	SF	B 4.1	3	E		14		
	PALE	21	1914E	1919U	1922D	N05	E17	7705	04	23.1	8D	SF	B 5.7	1	E		35		F
0030	PALE	21	2010E	2022U	2026D	N06	E19	7705	04	23.3	16D	SF		1	E		26		F

Hα S O L A R F L A R E S

APRIL 1994

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	Imp See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0031		22	0018	0019	0025	N04	E14	7705	04	23.0	7	SB	C 5.2				137		DEF
	MITK	22	0018	0019	0021	N03	E13	7705	04	23.0	3	SB			C	0019	193		D
	LEAR	22	0018	0019	0029	N06	E14	7705	04	23.1	11	SN	C 5.2	3	E		81		FE
0032	URUM	22	0220E	0223U	0251D	N06	E12	7705	04	23.0	31D	SF			C		64	0.7	E
0033	LEAR	22	0545	0547	0551	S13	W05	7705	04	21.9	6	SF		3	E		14		
0034		22	06245	06282	0645	N04	E09	7705	04	22.9	21	SF	B 4.1				86	1.6	
	KANZ	22	0624	0628	0636	N04	E09	7705	04	22.9	12	SF		2	C				
	HTPR	22	0625E	0628	0705	N05	E10	7705	04	23.0	40D	SN			C	0628	150	1.6	
	LEAR	22	0629	0630	0633	N04	E09	7705	04	22.9	4	SF	B 4.1	3	E		21		
0035		22	07002	07041	0722	N08	W17	7701	04	21.0	22	SF					28		F
	KANZ	22	0700	0704	0724	N07	W17	7701	04	21.0	24	SF		2	C				
	SVTO	22	0702	0705	0721	N09	W17	7701	04	21.0	19	SF		2	E		28		F
0036	HTPR	22	0728E	0816	0905	N05	E10	7705	04	23.0	97D	SF			C	0816	50	0.5	T
0037	HTPR	22	0831	0914	1000	N09	E50	7704	04	26.1	89	SF			C	0914	100	1.0	ET
0038	HTPR	22	0834	0837	0840	S12	E44		04	25.7	6	SF			C	0837	20	0.3	E
0039	HTPR	22	0910	1015	1143	N05	E10	7705	04	23.1	153	SF			C	1015	50	0.5	T
0040	HTPR	22	1152	1154	1225	N05	E10	7705	04	23.2	33	SF			C	1154	100	1.0	T
		22	1842		1844	No Flare Patrol													
		22	1902		1916	No Flare Patrol													
		22	1941		2219	No Flare Patrol													
0041	SVTO	23	0641	0642	0648	N04	W01	7705	04	23.2	7	SF		3	E		11		F
		23	1743		1748	No Flare Patrol													
		23	2038		2118	No Flare Patrol													
		23	2248		2259	No Flare Patrol													
0042	SVTO	24	1212	1213	1219	N07	W67	7706	04	19.5	7	SF	B 1.3	3	E		15		F
0043		24	2146	2147	2150	N07	W71	7706	04	19.6	4	SF	B 1.6				18		F
	HOLL	24	2146	2147	2150	N08	W72	7706	04	19.5	4	SF	B 1.6	3	E		11		
	PALE	24	2147E	2147U	2156D	N06	W70	7706	04	19.7	9D	SF		1	E		26		F
0044	SVTO	25	1031	1032	1041	N06	W80	7706	04	19.4	10	SF		3	E		16		
		25	2223		2257	No Flare Patrol													
		26	1901		2102	No Flare Patrol													
		27	0129		0229	No Flare Patrol													
0045		27	1614	1616	1618	N05	W64	7705	04	22.9	4	SF					20		
	RAMY	27	1614	1616	1618	N06	W63	7705	04	23.0	4	SF		3	E		13		
	SVTO	27	1614	1616	1619	N04	W64	7705	04	22.9	5	SF		2	E		26		
		27	1824		2104	No Flare Patrol													
		28	0103		0229	No Flare Patrol													
		28	0511		0533	No Flare Patrol													
0046	HTPR	28	0817	0825	0829	N00	W60	7707	04	23.9	12	SF			C	0825	20	0.2	ET
0047	KHAR	28	0926U		0940U	N07	W90	7708	04	21.6	14U	SF		2	V				H
0048	KHAR	28	0945U		0950D	N07	W90	7708	04	21.7	5U	SF		1	V				H
0049	HTPR	28	1332E	1334	1340	N00	W60	7707	04	24.1	8D	SF			C	1334	30	0.3	ET
0050	HTPR	28	1438E	1442	1448	N00	W60	7707	04	24.1	10D	SF			C	1442	30	0.3	ET
0051	HTPR	28	1600	1611	1617	N00	W60	7707	04	24.2	17	SF			C	1611	20	0.2	ET

Hα SOLAR FLARES

APRIL 1994

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	CMP Day	Dur (Min)	Imp Opt	Imp Xray	See	Obs Type	Area Measurement Time (UT)	Area Measurement Apparent (10-6 Disk)	Area Measurement Corr (Sq Deg)	Remarks
0052	HOLL	28	2046	2049	2058	N01	W67	7707	04	23.9	12	SF		3	E		16		
0053	HOLL	28	2152	2154	2158	N01	W67	7705	04	23.9	6	SF		3	E		26		
0054	HOLL	28	2229	2231	2234	N02	W69	7707	04	23.8	5	SF	B 5.9	3	E		14		
0055	HOLL	28	2229	2231	2234	N04	W80	7705	04	22.9	5	SF		3	E		14		
0056	HTPR	29	0615	0623	0705	N00	W72	7707	04	23.9	50	SF			C	0623	30	0.3	E
0057	RAMY	29	1254	1254	1300	N00	W74	7707	04	24.0	6	SF		3	E		10		
		30	0118		0133	No Flare Patrol													
0058	KHAR	30	0942U		1015	S01	W90	7707	04	23.7	33U	SF		2	V				D
0059	KANZ	30	1143	1151	1159	N01	W80	7707	04	24.5	16	SF		2	C				
0060	KANZ	30	1243	1243	1247	N01	W80	7707	04	24.5	4	SF		2	C				

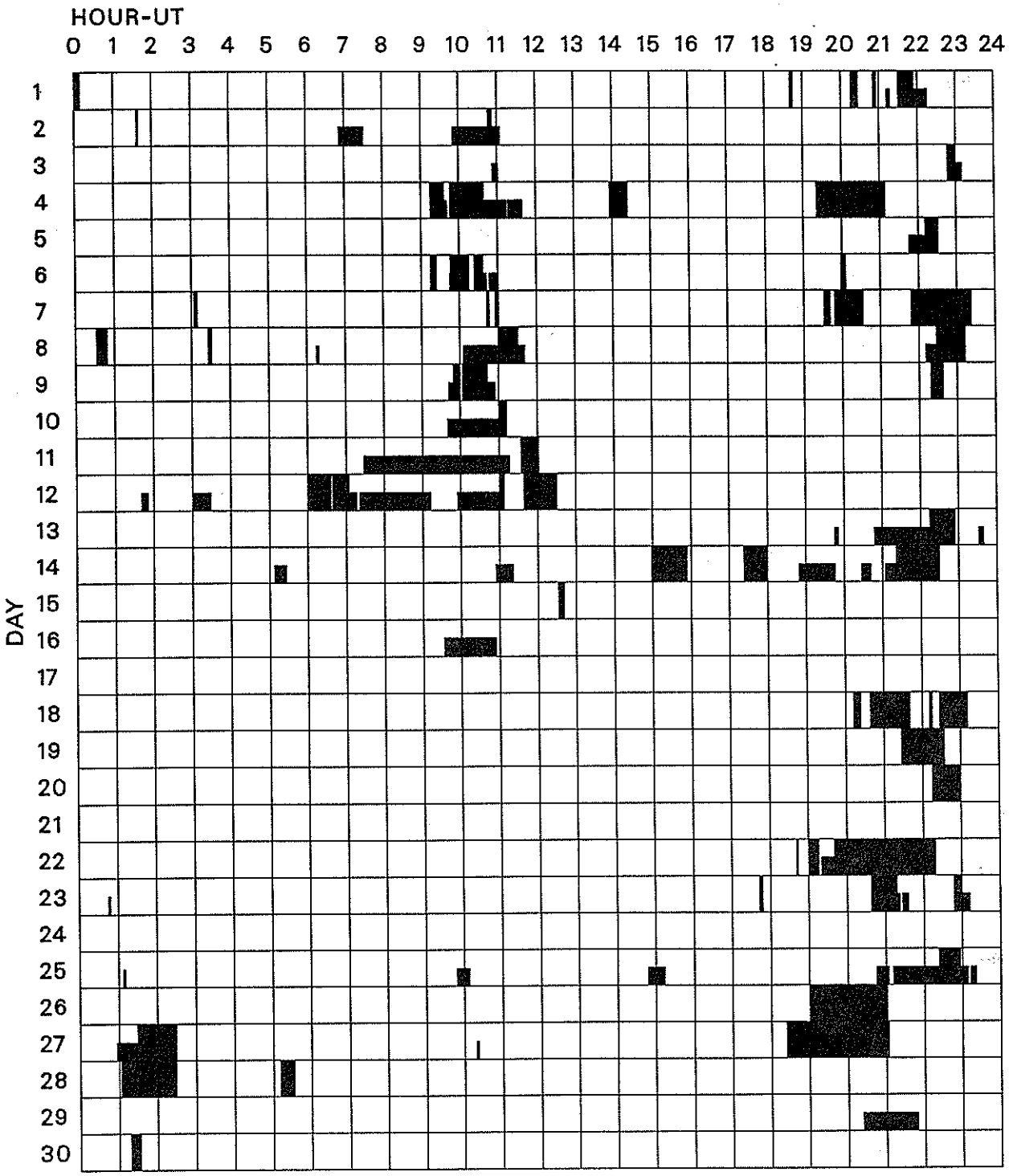
"Remarks"

A = Eruptive prominence whose base is less than 90 degrees from central meridian.
B = Probably the end of a more important flare.
C = Invisible 10 minutes before.
D = Brilliant point.
E = Two or more brilliant points.
F = Several eruptive centers.
G = No visible spots in the neighborhood.
H = Flare accompanied by high-speed dark filament.
I = Active region very extended.
J = Distinct variations of plage intensity before or after the flare.
K = Several intensity maxima.
L = Existing filaments show signs of sudden activity.
M = White-light flare.
N = Continuous spectrum shows effects of polarization.
O = Observations have been made in the H and K lines of Ca II.
P = Flare shows Helium D3 in emission.
Q = Flare shows Balmer continuum in emission.
R = Marked asymmetry in H-alpha line suggests ejection of high-velocity material.
S = Brightness follows disappearance of filament in same position.
T = Region active all day.
U = Two bright branches, parallel or converging.
V = Occurrence of an explosive phase; important, expansion within roughly 1 minute that often includes a significant intensity increase.
W = Great increase in area after time of maximum intensity.
X = Unusually wide H-alpha line.
Y = System of loop-type prominences.
Z = Major sunspot umbra covered by flare.

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

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

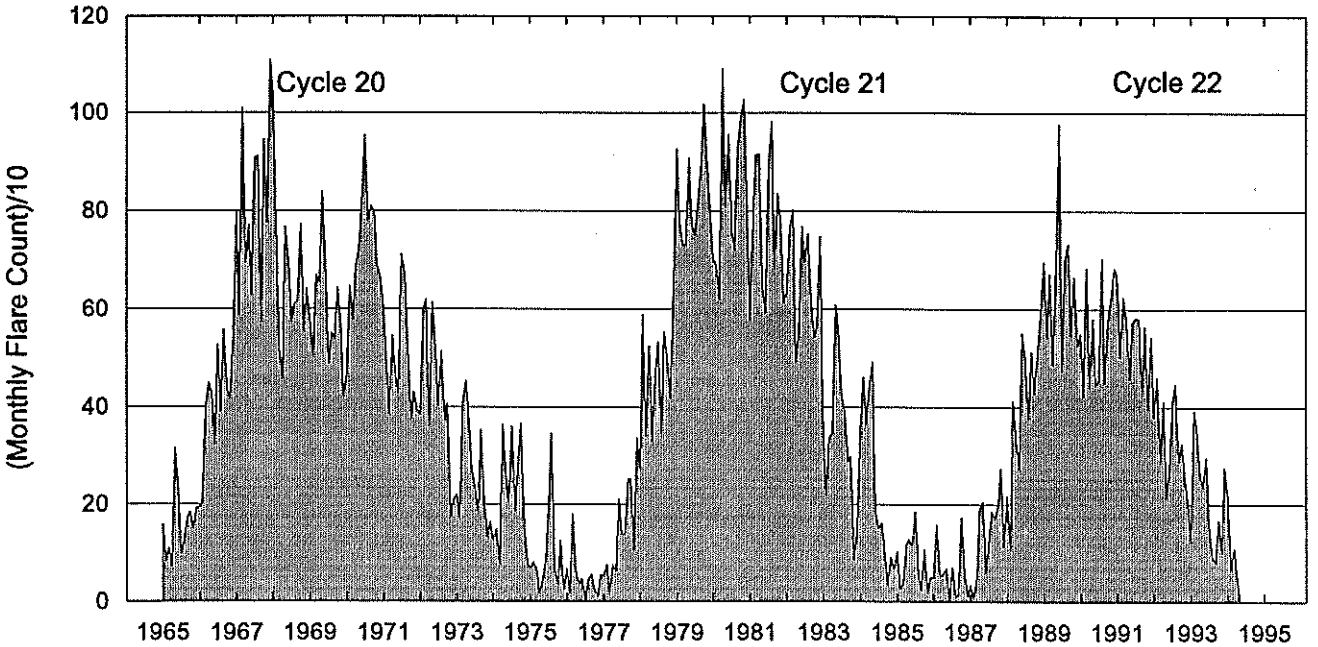
APRIL 1994



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.

Athens
Haute Province
Holloman
Hurbanovo
Istanbul
Kanzelhoehe
Kharkov
Learmonth
Mitaka
Ramey
San Vito
Tashkent
Urumqi
Yunnan

Monthly Counts of Grouped Solar Flares
Jan 1965 - Apr 1994



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									455

Monthly totals for the last 6 months may change significantly, as more stations submit their reports. The term 'grouped' means observations of the same event by different sites were lumped together and counted as one.

SOLAR RADIO EMISSION
Outstanding Occurrences

APRIL 1994

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
01	235	CUBA	44	NS	1353.0E		289.0D		9.0		
	280	CUBA	44	NS	1356.0E		289.0D		13.0		
	610	LEAR	4	S/F	0838.0E	0839.0	3.0D	59.0			QL=4 ST=2 TYP=3
02	235	CUBA	44	NS	1350.0E		460.0D		8.0		
	280	CUBA	44	NS	1350.0E		460.0D		14.0		
	33	UPIC	3	S	0804.0	0804.3	0.5				
	204	IZMI	5	S	0812.2	0812.3	0.5	42.0	21.0		
	204	IZMI	5	S	0932.8	0933.0	0.3	38.0	19.0		
	127	TORN	46	C	1122.3	1123.1	2.0	30.0	10.0		
	127	TORN	8	S	1152.7	1153.3	1.4	140.0	30.0		
	33	UPIC	3	S	1153.3	1153.5	0.6				
04	235	CUBA	44	NS	1530.0E		300.0D		8.0		
	245	LEAR	8	S	0756.0	0756.0	1.0	70.0			QL=4 ST=2 TYP=3
05	280	CUBA	44	NS	1530.0E		300.0D		14.0		
06	280	CUBA	44	NS	1320.0E		114.0D		13.0		
	235	CUBA	44	NS	1326.0E		114.0D		8.0		
	410	SGMR	8	S	1627.0	1627.0	U	220.0			QL=4 ST=2 TYP=3
07	280	CUBA	44	NS	1300.0E		236.0D		14.0		
	235	CUBA	44	NS	1636.0E		204.0D		9.0		
	127	TORN	42	SER	0712.0	0721.1	20.0	420.0			
08	235	CUBA	44	NS	1312.0E		438.0D		8.0		
	280	CUBA	44	NS	1312.0E		438.0D		13.0		
11	235	CUBA	44	NS	1600.0E		245.0D		9.0		
	280	CUBA	44	NS	1600.0E		240.0D		12.0		
	245	LEAR	8	S	0253.0	0254.0	1.0	70.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0254.0	0254.0	U	53.0			QL=2 ST=2 TYP=3
12	280	CUBA	44	NS	1303.0E		422.0D		13.0		
	235	CUBA	44	NS	1305.0E		420.0D		7.0		
	204	IZMI	41	F	0912.0	0912.6	3.0	39.0			
	204	IZMI	42	SER	1051.0	1058.5	18.0	1700.0			
13	410	LEAR	8	S	0559.0	0559.0	1.0	87.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0559.0	0600.0	1.0	43.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	1115.0	1117.0	8.0	99.0			
15	235	CUBA	44	NS	1533.0E		295.0D		9.0		
	280	CUBA	44	NS	1533.0E		295.0D		14.0		
	245	LEAR	8	S	0602.0	0603.0	1.0	66.0			QL=4 ST=2 TYP=3
16	235	CUBA	44	NS	1300.0E		454.0D		8.0		
	280	CUBA	44	NS	1300.0E		450.0D		15.0		
17	245	LEAR	8	S	0924.0	0924.0	1.0	130.0			QL=4 ST=2 TYP=3
18	235	CUBA	44	NS	1700.0E		235.0D		9.0		
	280	CUBA	44	NS	1750.0E		195.0D		14.0		
	2800	HIRA	1	S	0820.5	0821.1	1.7	7.0	3.0		0
	410	LEAR	4	S/F	0841.0	0842.0	8.0	67.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0842.0	0842.0	1.0	110.0			QL=4 ST=2 TYP=3
19	260	ONDR	8	S	1008.0	1008.1	1.5	25.0			UNCERTN
	127	TORN	8	S	1033.5	1034.0	1.0	80.0	40.0		
	127	TORN	4	S/F	1035.4	1036.0	1.5	100.0	50.0		
21	245	SVTO	8	S	1256.0	1258.0	2.0	29.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1257.0	1258.0	1.0	74.0			QL=4 ST=2 TYP=3
	610	SVTO	4	S/F	1258.0	1258.0	5.0	40.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2312.0	2312.0	1.0	52.0			QL=4 ST=2 TYP=3
22	235	CUBA	44	NS	1300.0E		450.0D		9.0		
	280	CUBA	44	NS	1300.0E		450.0D		14.0		

SOLAR RADIO EMISSION
Outstanding Occurrences

APRIL 1994

Day	Freq	Sta	Type		Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Flux Density Mean (10 -22 W/m 2 Hz)	Int	Remarks
22	2800	PENT	4	S/F	0017.0	0020.7	7.8	8.1	1.0		
	610	PALE	8	S	0018.0	0019.0	2.0	270.0			QL=2 ST=3 TYP=3
	500	HIRA	42	SER	0018.0	0019.8	3.0	190.0			O
	410	LEAR	8	S	0019.0	0019.0	1.0	61.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0019.0	0019.0	U	330.0			QL=4 ST=2 TYP=3
	2800	HIRA	45	C	0019.0	0020.6	2.0	10.0	4.0		WL
23	235	CUBA	44	NS	1305.0E		115.0D		8.0		
	280	CUBA	44	NS	1305.0E		115.0D		15.0		
	500	HIRA	42	SER	0048.9	0052.6	6.0	2.0			O
	260	ONDR	41	F	1015.0	1023.0	50.0	35.0			
24	235	CUBA	44	NS	1312.0E		221.0D		10.0		
	280	CUBA	44	NS	1312.0E		221.0D		18.0		
25	235	CUBA	44	NS	1300.0E		295.0D		12.0		
	280	CUBA	44	NS	1300.0E		290.0D		18.0		
26	127	TORN	43	NS	0940.0	1135.0	181.0	40.0	1.0		V=1
	260	ONDR	43	NS	1250.0	1313.0	160.0D	85.0			
	280	CUBA	44	NS	1500.0E		160.0D		17.0		
	235	CUBA	44	NS	1500.0E		175.0D		11.0		
	245	LEAR	8	S	0642.0	0642.0	1.0	160.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0642.0	0642.0	U	120.0			QL=4 ST=3 TYP=3
	245	SVTO	8	S	0647.0	0648.0	1.0	21.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0648.0	0648.0	1.0	67.0			QL=4 ST=3 TYP=3
	204	IZMI	7	C	0741.8	0742.5	1.5	120.0			
27	204	IZMI	42	SER	0539.0	00-0.0	107.0		5.0		
	260	ONDR	40	F	0803.0	0815.0	15.0	35.0			
28	500	HIRA	6	S	0140.5	0141.1	2.0	5.0	1.0		O
	808	ONDR	8	S	1509.0	1509.1	1.0				
	536	ONDR	8	S	1509.5	1509.6	1.0	100.0			
	260	ONDR	8	S	1511.0	1512.0	1.5	160.0			
	500	HIRA	6	S	2141.0	2141.2	1.0	6.0	4.0		O
30	204	IZMI	41	F	1048.1	1048.3	3.0	70.0			

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 Precusor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major

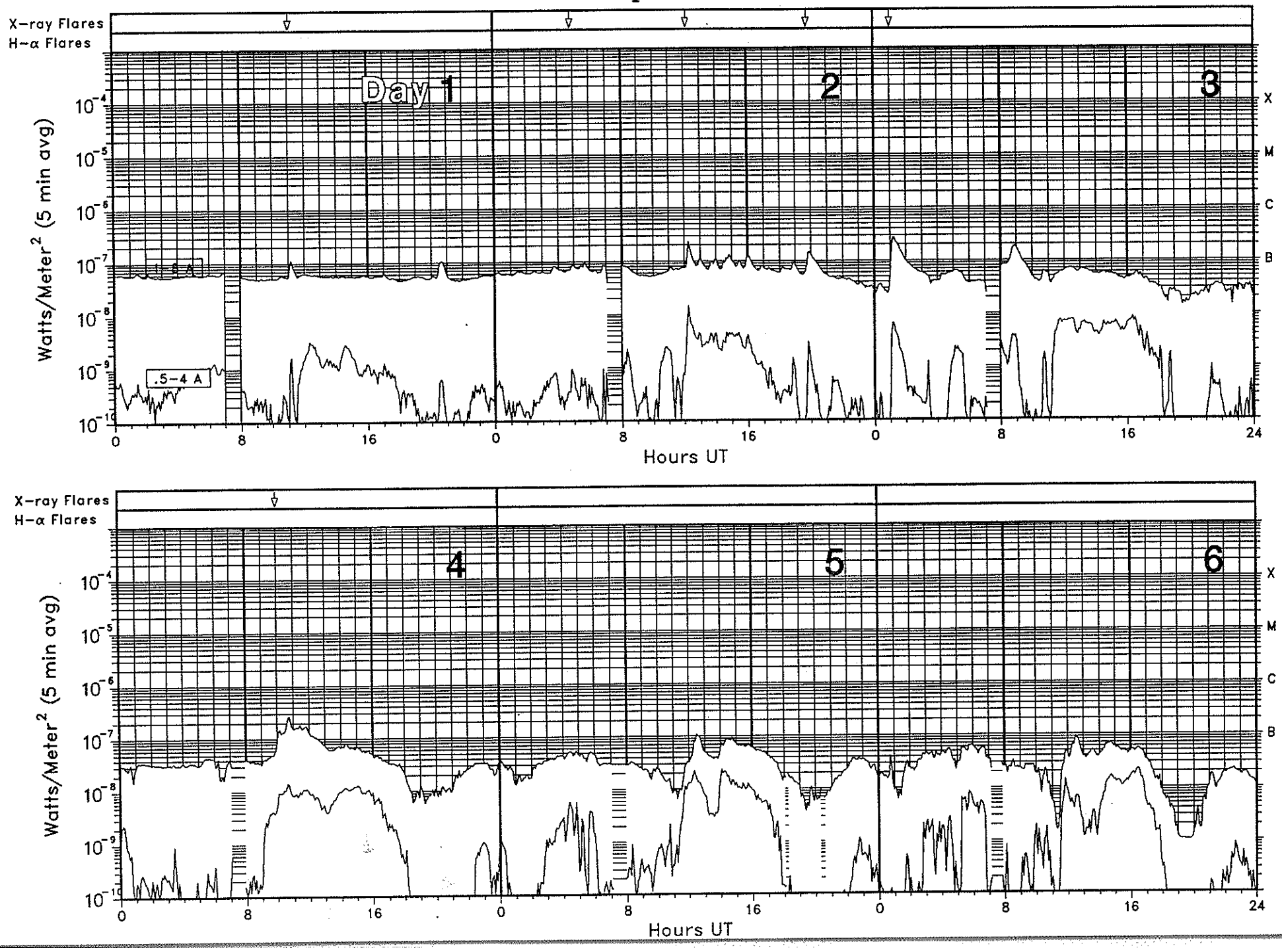
1A Simple 1A	4A Simple 2AF	24PF Post Rise F		27F Rise and Fall F
3A Simple 2A	4O Rise Only	16A Fall A		27AF Rise and Fall AF
21A Simple 3A GRF	4OF Rise Only F	26O Fall Only		31A Post Burst Decrease A
2A Simple 1AF	4P Post Rise	26F Fall F		32A Absorption A

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

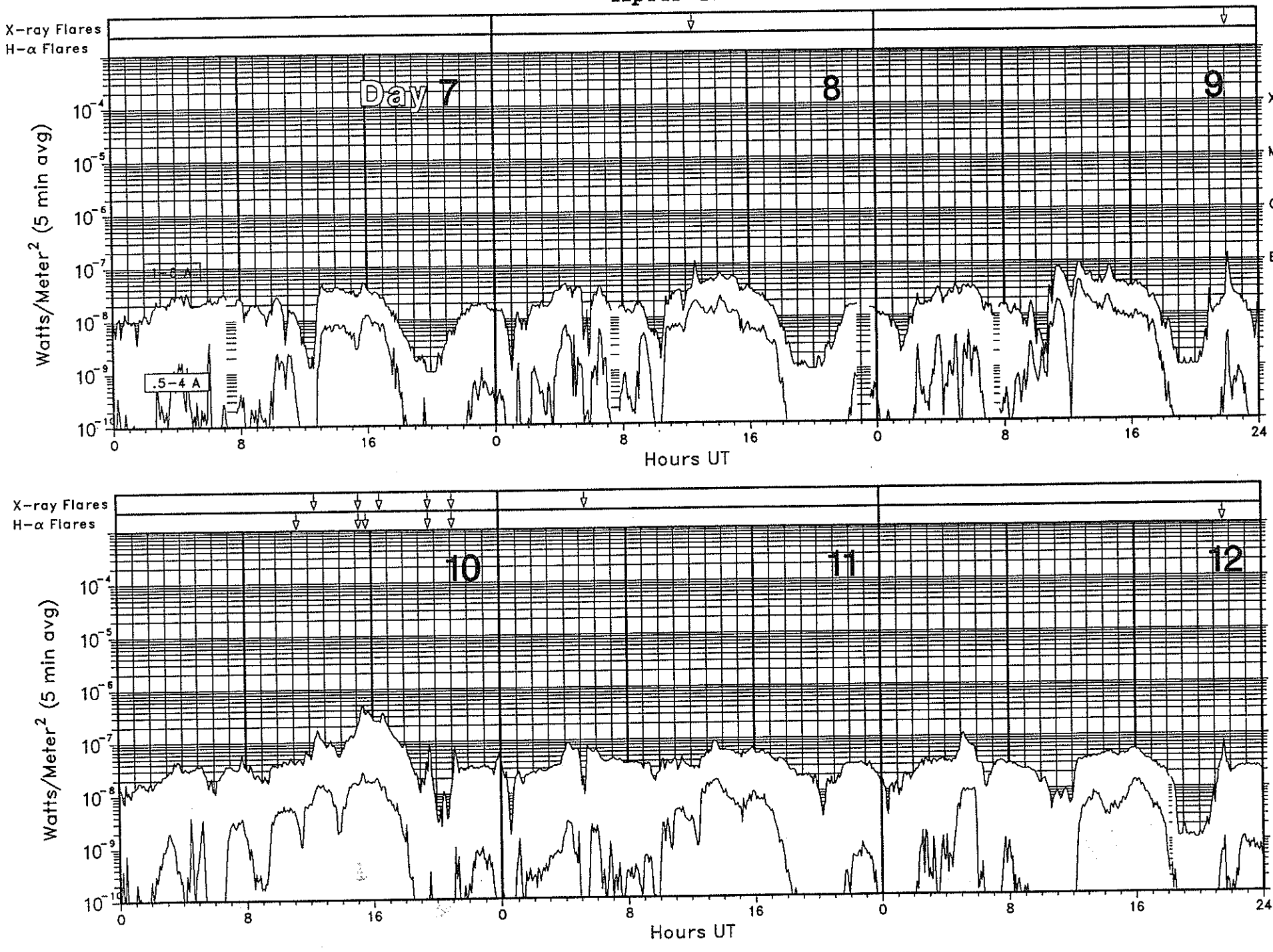
April 1994

12 Apr 94



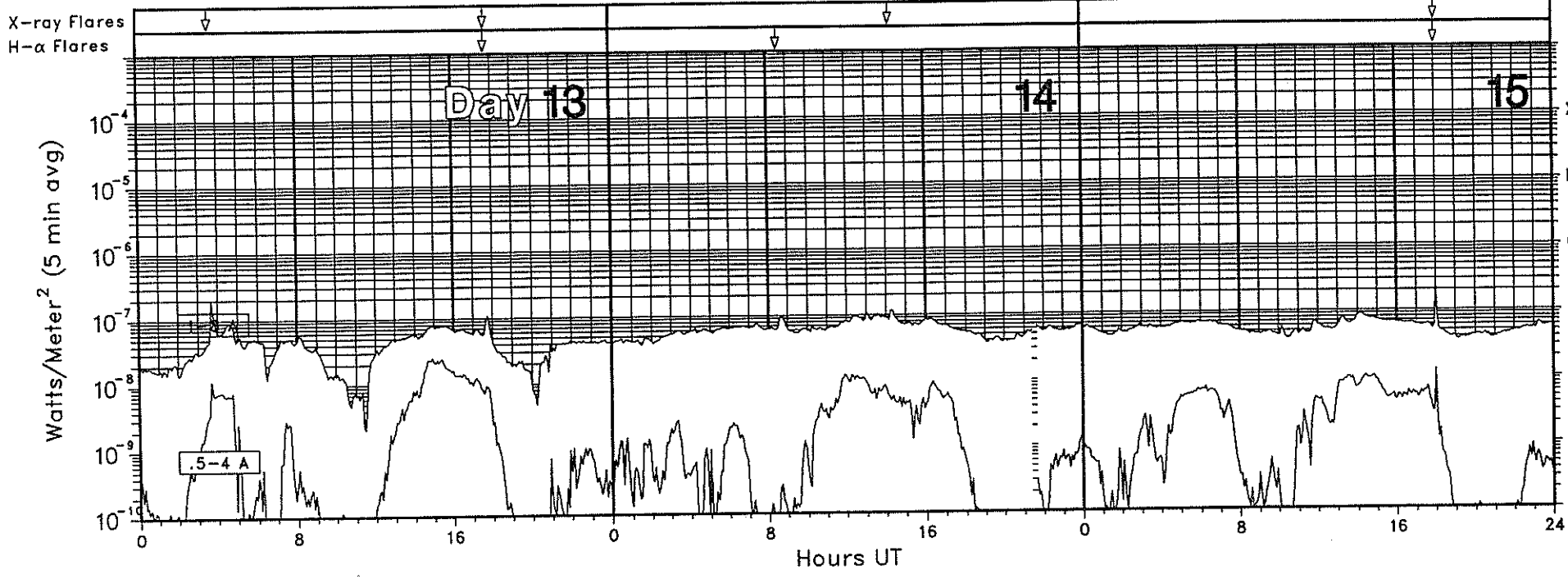
GOES-7 X-RAY DETECTOR

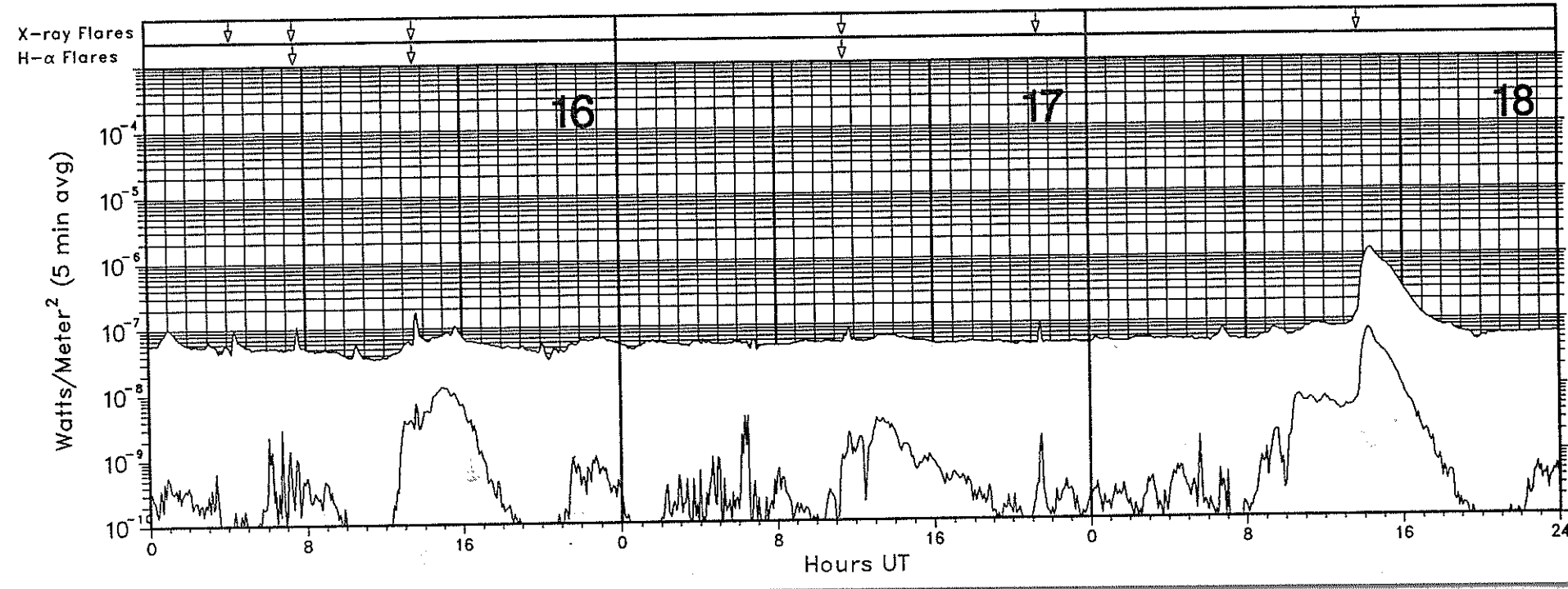
April 1994



GOES-7 X-RAY DETECTOR

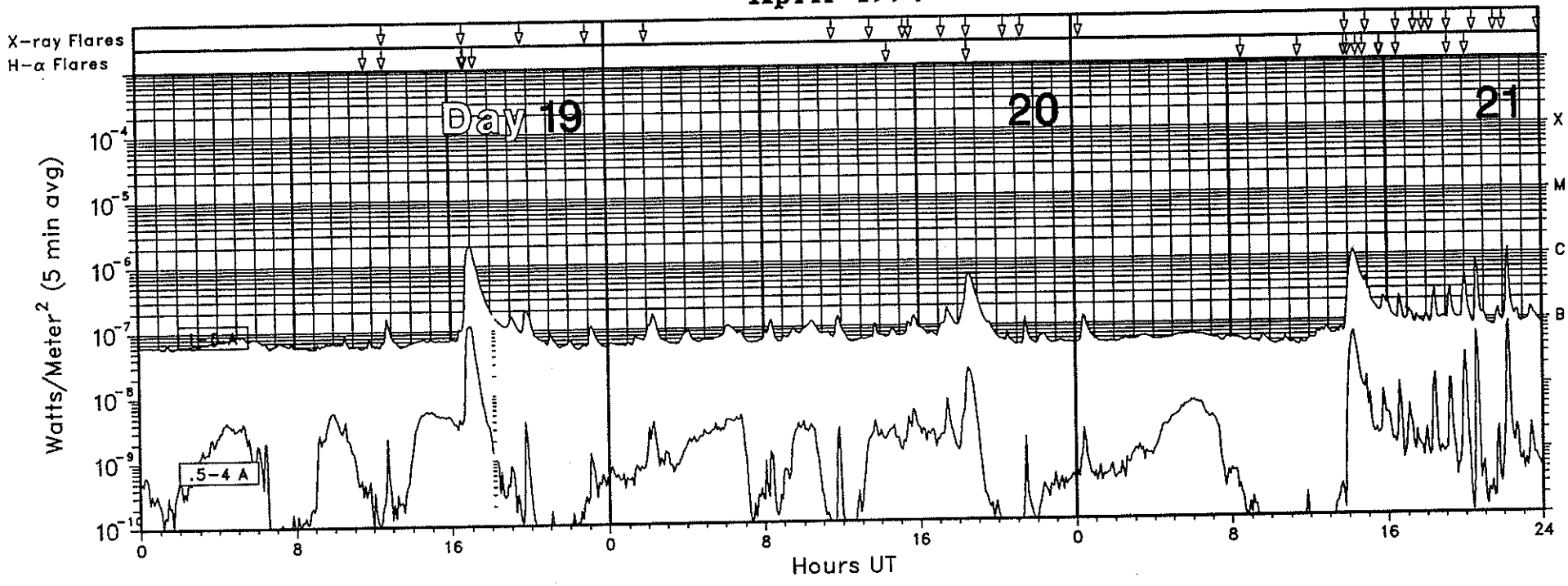
April 1994

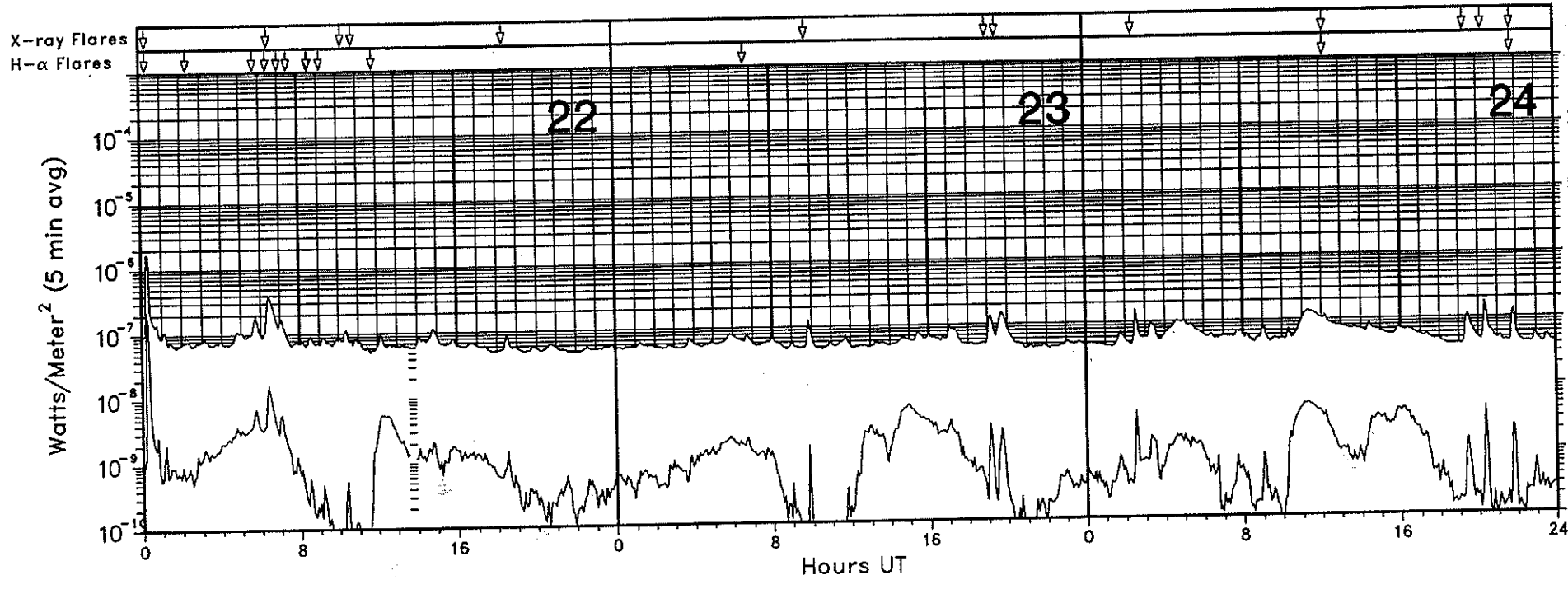




GOES-7 X-RAY DETECTOR

April 1994

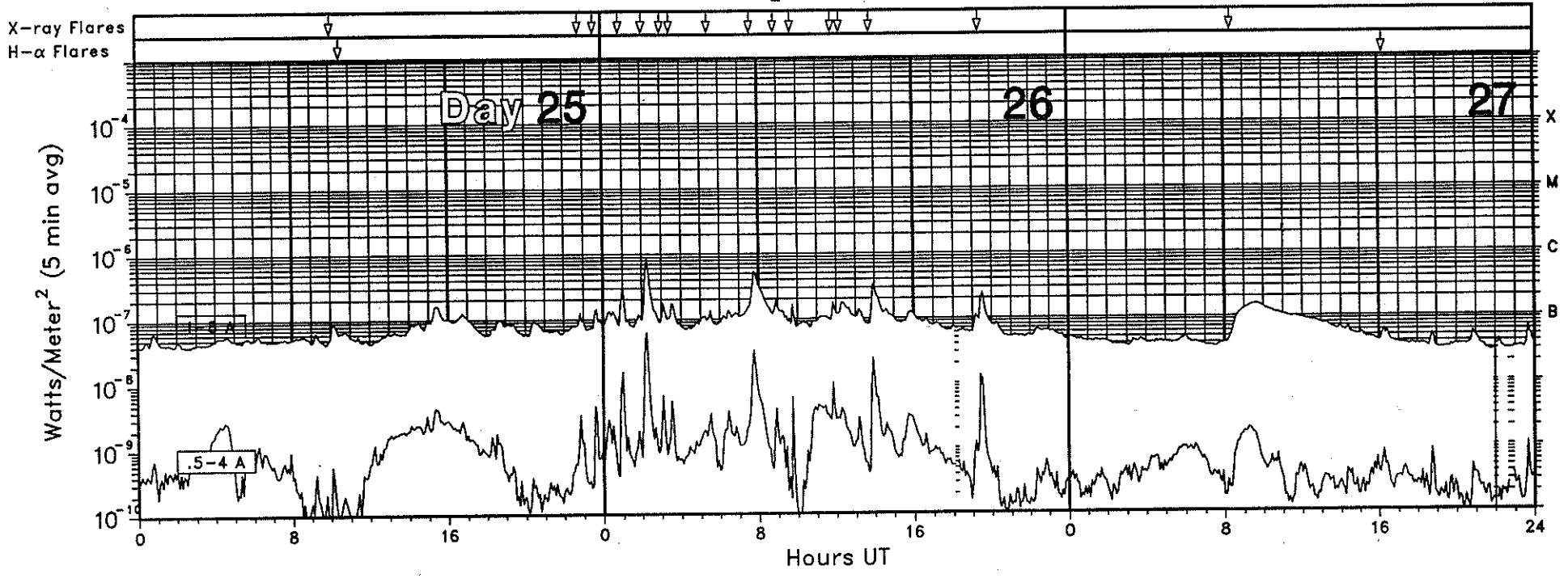


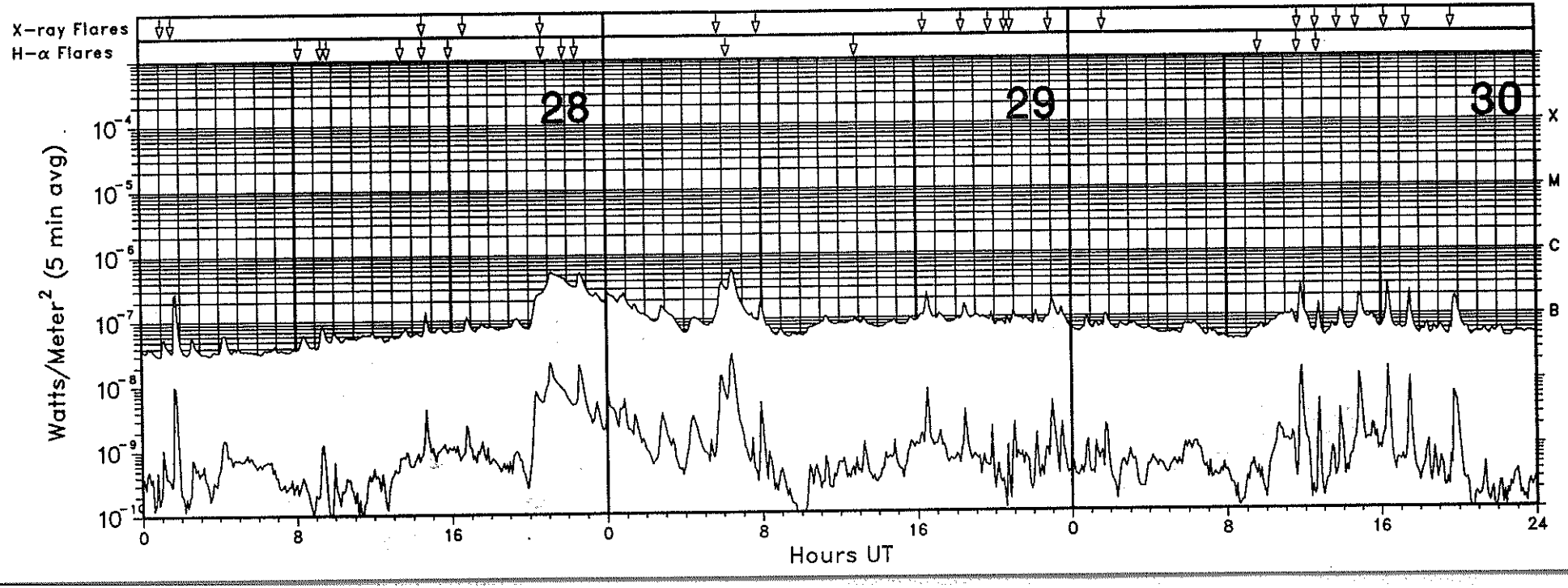


GOES-7 X-RAY DETECTOR

April 1994

16 Apr 94





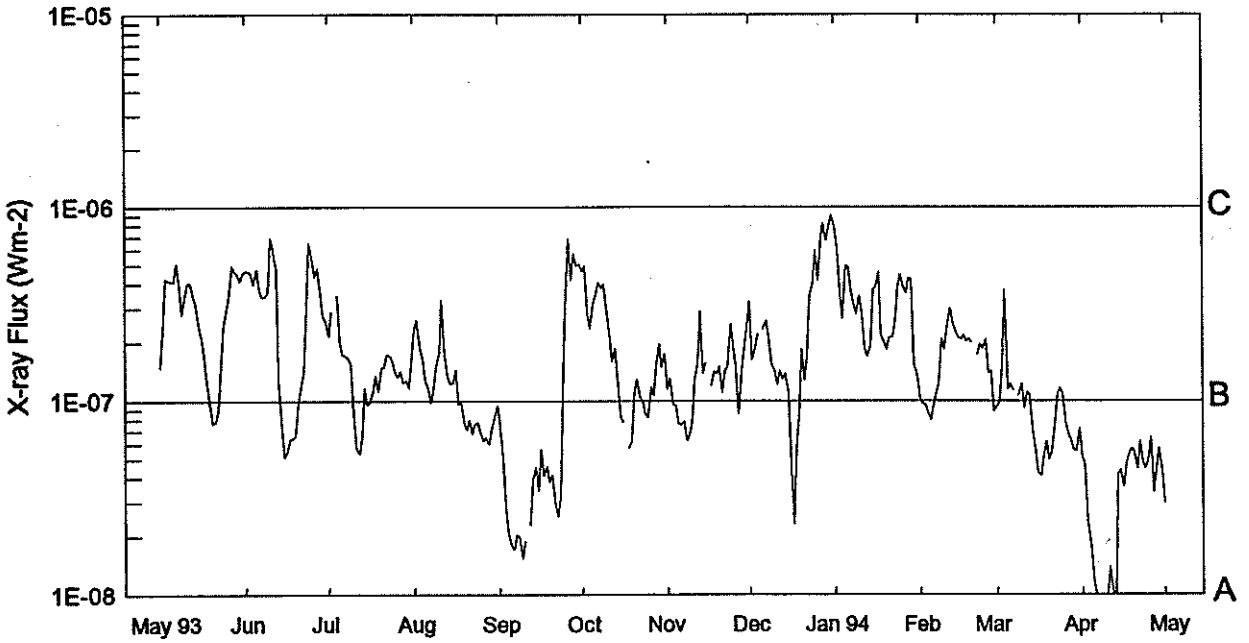
GOES S O L A R X-RAY F L A R E S
Preliminary Listing

April 1994

Day	Start (UT)	Max (UT)	End (UT)	Lat CMD	Imp Opt	Xray	NOAA/ USAF Region
01	1105	1110	1115			B1.3	
02	0451	0454	0456			B1.0	
02	1210	1217	1225			B2.3	
02	1947	1955	2009			B1.5	
03	0102	0114	0139			B2.7	
04	1000	1046	1057			B2.8	
08	1232	1238	1241			B1.2	
09	2201	2205	2210			B1.6	
10	1228	1231	1237			B1.8	
10	1514	1526	1534	N11E52SF		B5.8	7700
10	1634	1638	1647			B4.2	
10	1939	1944	1954	N11E51SF		B2.2	7700
10	2108	2109	2122	N10E50SF		B1.0	7700
11	0524	0527	0530			B1.0	
13	0338	0341	0345			B2.4	
13	1740	1741	1800	N08E09SF		B1.1	7700
14	1415	1418	1424			B1.4	
15	1800	1801	1805	N05E72SF		B3.7	7701
16	0419	0425	0429			B1.0	
16	0730	0735	0739			B1.3	
16	1336	1338	1344	N07E62SF		B2.3	7701
17	1133	1133	1144	N09E49SF		B1.0	7701
17	2126	2130	2133			B1.2	
18	1347	1421	1514			C1.2	
19	1244	1245	1309	N08E21SF		B1.6	7701
19	1644	1647	1705	N08E85?N		C2.1	7704
19	1942	1948	2001			B2.2	
19	2303	2311	2323			B1.1	
20	0205	0208	0212			B1.3	
20	1142	1151	1159			B1.4	
20	1339	1344	1349			B1.2	
20	1522	1529	1536			B1.1	
20	1539	1544	1552			B1.4	
20	1721	1726	1738			B1.9	
20	1838	1846	1852	N09E05SF		B6.1	7701
20	2029	2032	2035			B1.0	
20	2122	2126	2131			B1.4	
21	0022	0028	0035			B1.3	
21	1400	1408	1447	N06E62SF		C1.1	7704
21	1504	1507	1509			B3.6	
21	1636	1637	1642	N05E17SF		B2.6	7705
21	1730	1733	1735			B1.3	
21	1756	1759	1801			B1.4	
21	1819	1826	1829			B3.6	
21	1914	1914	1917	N03E15SF		B4.1	7705
21	1914	1919	1922	N05E17SF		B5.7	7705
21	2032	2037	2039	N06E19SF		C1.1	7705
21	2139	2147	2149			B1.6	
21	2206	2214	2217			C2.3	
21	2355	0024	0031			B2.8	
22	0018	0019	0029	N06E14SN		C5.2	7705
22	0629	0630	0633	N04E09SF		B4.1	7705
22	1017	1025	1029			B1.2	
22	1050	1053	1058			B1.0	
22	1826	1831	1834			B1.0	
23	0947	0951	0956			B1.4	
23	1902	1910	1919			B1.4	
23	1930	1946	1957			B1.5	
24	0227	0231	0238			B1.7	
24	1212	1213	1219	N07W67SF		B1.3	7706
24	1920	1929	1935			B1.1	
24	2016	2021	2029			B1.9	
24	2146	2147	2150	N08W72SF		B1.6	7706
25	1005	1010	1017			B1.0	
25	2249	2254	2256			B1.3	
25	2335	2339	2342			B2.3	
26	0055	0101	0106			B3.6	
26	0205	0215	0223			B9.7	
26	0301	0307	0312			B1.9	
26	0329	0333	0338			B2.0	
26	0526	0530	0533			B1.5	
26	0738	0748	0758			B5.7	
26	0852	0856	0859			B2.1	
26	0943	0947	0950			B1.9	
26	1148	1152	1157			B1.9	
26	1214	1218	1229			B1.8	
26	1349	1357	1408			B3.5	
26	1922	1930	1938			B2.5	
27	0821	0929	1054			B1.5	
28	0106	0109	0111			B1.0	
28	0138	0144	0149			B3.9	
28	1437	1442	1446			B1.6	
28	1644	1649	1656			B1.2	
28	2046	2231	2234	N02W69SF		B5.9	7707
29	0548	0556	0613			B3.6	
29	0752	0759	0804			B1.9	
29	1626	1633	1638			B2.4	
29	1824	1828	1832			B1.9	
29	1949	1952	1954			B1.6	
29	2038	2042	2045			B1.2	
29	2056	2100	2106			B1.3	
29	2256	2302	2310			B1.9	
30	0144	0147	0154			B1.2	
30	1144	1149	1154			B3.8	
30	1241	1245	1248			B1.9	
30	1348	1352	1401			B1.4	
30	1447	1453	1500			B2.6	
30	1616	1623	1627			B3.3	
30	1725	1730	1733			B3.2	
30	1943	1948	1959			B2.1	

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 SEL "Preliminary Report and Forecast of Solar Geophysical Data" weekly report.

Preliminary GOES Satellite Daily X-Ray Background
May 93 - Apr 94



Day	May 93	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 94	Feb	Mar	Apr
1	B1.4	B4.6	B2.1	B2.3	A8.0	B4.6	B1.1	B3.2	B7.9	B1.0	A9.4	A5.1
2	B2.2	B4.5	B2.8	B2.5	A5.1	B4.9	B1.3	B1.6	B6.0	A9.7	A9.9	A4.7
3	B4.2	B4.5	---	B1.9	A2.8	B2.8	A9.5	B1.8	B3.6	A9.5	B1.5	A2.4
4	B4.1	B3.9	B3.4	B1.6	A2.1	B2.3	A9.5	B2.2	B2.6	A8.6	B3.7	A1.8
5	B4.1	B4.7	B2.0	B1.2	A1.7	B3.1	A7.5	---	B4.9	A8.0	B1.1	A1.2
6	B4.0	B3.6	B1.7	B1.1	A1.7	B3.4	A7.5	B2.3	B4.8	A9.6	B1.2	<A1.0
7	B5.0	B3.4	B1.7	A9.8	A2.0	B4.0	A7.8	B2.5	B3.7	B1.1	B1.1	<A1.0
8	B4.0	B3.4	B1.6	B1.1	A2.0	B3.7	A6.2	B2.1	B3.1	B1.2	---	<A1.0
9	B2.7	B3.5	B1.5	B1.5	A1.5	B3.9	A6.6	B1.5	B2.7	B2.0	B1.0	<A1.0
10	B3.4	B6.8	A8.5	B1.7	A1.9	B2.8	A7.7	B1.4	B3.4	B1.8	B1.2	<A1.0
11	B4.0	B5.9	A5.7	B3.3	---	B2.2	B1.2	B1.2	B2.7	B2.3	A9.1	A1.4
12	B4.0	B4.7	A5.3	B1.7	A2.2	B1.6	B1.5	B1.4	B1.8	B2.9	B1.1	<A1.0
13	B3.4	B1.3	A6.6	B1.3	A3.8	B1.8	B2.8	B1.2	B1.6	B2.5	B1.0	<A1.0
14	B3.2	A7.2	B1.1	B1.2	A4.5	B1.2	B1.3	B1.3	B1.9	B2.3	A6.9	A4.2
15	B2.4	A5.1	A9.5	B1.2	A3.4	A8.2	B1.5	B1.1	B3.6	B2.1	A5.6	A4.4
16	B2.1	A5.4	A9.9	B1.4	A5.6	A7.7	---	A4.5	B3.8	B2.0	A4.2	A3.6
17	B1.7	A6.3	B1.1	A9.6	A4.1	---	B1.1	A2.3	B4.6	B2.1	A4.0	A4.8
18	B1.2	A6.3	B1.3	A9.9	A4.5	A5.7	B1.4	A5.7	B2.1	B2.0	A5.0	A5.3
19	A9.5	A6.5	B1.1	A7.6	A3.8	A6.2	B1.3	A8.2	B2.0	B2.0	A6.1	A5.7
20	A7.6	A9.5	B1.4	A7.1	A4.1	B1.0	B1.5	B1.8	B1.8	B1.9	A4.9	A5.5
21	A7.7	B1.2	B1.5	A7.9	A2.9	B1.2	B1.1	B1.2	B2.1	---	A5.4	A4.5
22	A9.0	B1.4	B1.7	A6.7	A2.5	B1.0	B1.4	B1.6	B2.1	B1.7	A7.7	A6.2
23	B1.3	B3.0	B1.7	A7.5	A3.2	A9.9	B1.4	B3.4	B2.5	B1.9	B1.0	A4.9
24	B2.4	B6.4	B1.6	A7.7	B1.0	A8.5	B2.4	B3.9	B3.8	B1.8	B1.1	A4.5
25	B2.8	B5.5	B1.4	A6.8	B3.0	A8.2	B1.9	B5.9	B4.4	B2.0	B1.0	A5.0
26	B3.3	B4.3	B1.3	A6.2	B6.8	B1.1	B1.4	B4.1	B3.8	B1.3	A7.5	A6.5
27	B4.9	B4.7	B1.4	A6.4	B4.2	B1.0	A8.5	B6.9	B3.5	B1.4	A6.7	A3.4
28	B4.6	B3.6	B1.2	A6.0	B5.7	B1.5	B1.4	B8.1	B4.2	A8.8	A6.2	A4.7
29	B4.4	B2.7	B1.2	A7.1	B4.9	B1.9	B1.8	B6.6	B4.2		A5.5	A5.7
30	B4.1	B2.5	B1.1	A8.1	B5.0	B1.4	B2.3	B7.8	B1.5		A5.5	A4.4
31	B4.5		B1.6	A9.4		B1.7		B8.9	B1.3		A7.2	

NOTE: Background levels below B1.0 are unreliable.

ACTIVE PROMINENCES AND FILAMENTS

APRIL 1994

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
01	SSB	0030		153	W32	04	5.2			0	0	E	LEAR		
01	ADF	0510E	1653	S16	W33	03	29.8		06	9	9	E	SVTO	7695	
01	ADF	0545E	1005	N00	W35	03	29.7	1	30	8	7	E	LEAR		
01	ADF	0545E	1005	N10	W21	03	30.8	1	09	7	7	E	LEAR	7697	
01	ASR	0550E	0850D	S15	W83	03	26.0			9	9	E	SVTO	7696	
01	SSB	0744		145	W28	04	4.8			0	0	E	SVTO		
01	ADF	1015E	1653	S15	W19	03	31.0		03	9	9	E	SVTO	7698	
01	BSL	1030	1112D	S37	W90	03	25.3			9	9	E	SVTO		
01	ADF	1129E	2223	N08	W28	03	30.5	1	06	7	9	E	RAMY	7697	
01	ASR	1140E	1653	S13	W86	03	26.1			9	9	E	SVTO	7696	
01	APR	1154E	2223	N02	W90	03	25.9	1		7	9	E	RAMY		
01	DSD	1238E	2205D	S15	W41	03	29.5		08	7	9	E	RAMY	7695	
01	SSB	1319		145	W32	04	5.1			0	0	E	RAMY		
01	APR	1328E	1653	N02	W90	03	25.9	1		8	7	E	SVTO		
01	SSB	1915		154	W43	04	6.2			0	0	E	PALE		
01	ASR	2057E	2223	S13	W90	03	26.2			9	9	E	RAMY	7696	
01	ASR	2243E	2345	S14	W90	03	26.2			9	9	E	HOLL	7696	
01	DSD	2327E	2345	N10	W33	03	30.6		04	7	7	E	HOLL	7697	
02	SSB	1100		144	W42	04	6.1			0	0	E	RAMY		153 W51
02	ASR	1200E	1322D	S14	W90	03	26.8			9	9	E	RAMY	7696	
02	ASR	1200E	1322D	S16	W90	03	26.8			9	9	E	RAMY	7696	
02	CAP	1200E	2014	S19	W90	03	26.7		02	9	9	E	RAMY	7696	
02	ASR	1501E	2014	S16	W90	03	26.9			9	9	E	RAMY	7696	
02	DSF	1959U	1113U	S03	E06	04	3.3	2	11	0	0	E	RAMY		
02	ASR	2238E	0046	S20	W90	03	27.1			9	9	E	HOLL		
02	AFS	2325E	1002	S15	W41	03	31.0		02	9	9	E	LEAR	7698	
02	ASR	2330E	0948D	S20	W90	03	27.2			9	9	E	LEAR		
03	DSF	0044U	1334U	S03	W04	04	2.7	2	08	0	0	E	HOLL		
03	ADF	0120E	1002	N12	W47	03	30.6	1	05	9	9	E	LEAR	7697	
03	DSD	0730E	1230D	N07	W52	03	30.5		01	9	9	E	SVTO	7697	
03	AFS	0827E	1320	S14	W43	03	31.1		02	9	7	E	SVTO	7698	
03	ASR	0844E	0943D	S18	W90	03	27.6			9	9	E	SVTO		
03	SSB	1032		152	W62	04	8.0			0	0	E	SVTO		
03	SSB	1051		144	W56	04	7.3			0	0	E	RAMY		154 W66
03	AFS	1230E	1320	N12	W54	03	30.5		02	9	9	E	SVTO	7697	
03	AFS	1245E	1320	S11	E30	04	5.8		02	9	9	E	SVTO		
03	SSB	1425		156	W68	04	8.6			0	0	E	HOLL		
03	DSD	1553E	1805D	S09	E28	04	5.8		01	9	9	E	RAMY		
03	SSB	1830		181	W75	04	11.2			0	0	E	PALE		
04	AFS	0525E	0835D	N03	E47	04	7.7		02	8	7	E	LEAR		
04	DSF	1044U	1140U	N14	W78	03	29.6	1	11	0	0	E	RAMY	7697	
04	SSB	1051		452	W17	03	31.5			0	0	E	RAMY		
04	AFS	1606E	1905D	N02	E41	04	7.7		01	8	7	E	RAMY		
05	ADF	1043E	1320D	S14	W72	03	31.0	1	05	9	9	E	RAMY	7698	
05	AFS	1045E	2210	N02	E30	04	7.7		01	9	9	E	RAMY		
05	AFS	1047E	2210	S10	E04	04	5.7		01	7	7	E	RAMY		
05	ADF	1058E	1320D	N12	W82	03	30.4	1	04	9	9	E	RAMY	7697	
05	ASR	1320E	1553D	N15	W90	03	29.8			9	9	E	RAMY		
05	ASR	1709E	2210	S16	W90	03	30.0			6	8	E	RAMY		
06	AFS	1042E	1425D	N02	E18	04	7.8		02	6	7	E	RAMY		
06	DSD	1430E	1614D	N04	E15	04	7.7		02	9	9	E	RAMY		
07	DSD	1234E	1652	N03	E05	04	7.9		01	9	9	E	SVTO		
07	DSD	1333E	1652	S09	W18	04	6.2		01	9	9	E	SVTO	7699	
07	DSD	2146E	2147	S08	W22	04	6.2		02	8	8	E	RAMY		
08	AFS	0146E	0607D	S09	W26	04	6.1		01	9	9	E	LEAR	7699	
08	AFS	1336E	1602	S09	W32	04	6.2		02	9	9	E	SVTO	7699	
08	DSD	1742E	1952D	S09	W35	04	6.1		01	9	9	E	RAMY		
09	AFS	1619E	2217	S09	W48	04	6.1		01	8	9	E	RAMY		
09	DSD	1620E	2217	S08	W46	04	6.2		01	7	9	E	RAMY		
10	DSF	0925U	1434U	N20	E74	04	16.0	1	13	0	0	E	LEAR		
10	AFS	1100E	1522D	N06	E54	04	14.5		01	9	9	E	RAMY	7700	

ACTIVE PROMINENCES AND FILAMENTS

APRIL 1994

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
10	DSD	1100E	1522D	N11	E56	04	14.7		02	9	9	E	RAMY	7700	
10	AFS	1100E	2216	N10	E54	04	14.5		01	9	9	E	RAMY	7700	
10	ADF	1404E	2216	N16	E69	04	15.8	3	14	9	9	E	RAMY		
10	DSF	1423U	1434U	N13	E55	04	14.7	2	13	0	0	E	HOLL		
11	AFS	0002E	0515D	N10	E46	04	14.4		04	9	9	E	LEAR	7700	
11	DSD	1050E	2156	S15	E47	04	15.0		01	9	9	E	RAMY		
11	AFS	1111E	2156	N09	E41	04	14.5		02	8	9	E	RAMY	7700	
11	DSD	1111E	2156	N11	E41	04	14.5		01	9	9	E	RAMY	7700	
11	ADF	1113E	2156	N10	E38	04	14.3	1	03	9	9	E	RAMY	7700	
11	ADF	1117E	2156	N15	E49	04	15.2	1	09	9	9	E	RAMY		
11	DSD	1435E	1600D	N10	E38	04	14.5		02	9	9	E	HOLL	7700	
11	ADF	1450E	0040	N16	E49	04	15.3	1	07	9	9	E	HOLL		
11	ADF	1608E	2156	N08	E37	04	14.4	1	04	9	9	E	RAMY	7700	
12	ADF	0035E	0401	N13	E31	04	14.4	1	04	9	9	E	LEAR	7700	
12	ADF	1116E	2201	N11	E26	04	14.4	1	06	9	9	E	RAMY	7700	
12	ADF	1126E	2201	N16	E10	04	13.2	1	18	9	9	E	RAMY		
12	AFS	1557E	2201	N07	E23	04	14.4		02	9	9	E	RAMY	7700	
12	AFS	1620E	1825D	S10	W44	04	9.4		02	8	8	E	RAMY		
12	ADF	1810E	2337	N09	E30	04	15.0	1	11	9	9	E	HOLL	7700	
12	AFS	1847E	2201	N06	E08	04	13.4		02	9	9	E	RAMY		
12	AFS	1952E	2337	N06	E09	04	13.5		03	9	9	E	HOLL		
13	SSB	0645		326	W07	04	11.3			0	0	E	SVTO		
13	AFS	1140E	2036	N08	E13	04	14.5		01	9	9	E	RAMY	7700	
13	ADF	1140E	2036	N12	E12	04	14.4	1	04	9	9	E	RAMY	7700	
13	SSB	1145		325	W09	04	11.6			0	0	E	RAMY		
13	ADF	1613E	2036	N13	E19	04	15.1	1	07	9	9	E	RAMY	7700	
14	SSB	0300		328	W20	04	12.0			0	0	E	LEAR		
14	AFS	0400E	0904	N08	E04	04	14.5		02	9	9	E	LEAR	7700	
14	APR	0510E	1259D	N28	W90	04	7.2	2		9	9	E	SVTO		
14	SSB	0528		327	W20	04	12.2			0	0	E	SVTO		
14	DSD	0550E	1429	N08	W01	04	14.2		02	9	9	E	SVTO	7700	
14	SSB	1204		327	W24	04	12.4			0	0	E	RAMY		
14	DSD	1212E	2000D	N08	E00	04	14.5		01	9	9	E	RAMY	7700	
14	AFS	1212E	2103	N08	E01	04	14.6		01	9	9	E	RAMY	7700	
14	ASR	1348E	1429	N09	E89	04	21.2			9	9	E	SVTO		
14	BSD	1417E	1429	N05	E83	04	20.8		02	9	9	E	SVTO		
14	ASR	1600E	2000D	N09	E90	04	21.4			9	9	E	RAMY	7701	
14	ASR	1634E	1801D	N13	E90	04	21.5			9	9	E	RAMY		
14	SSB	1937		135	W31	04	17.6			0	0	E	PALE		
14	AFS	2030E	0022D	N09	W03	04	14.6		02	9	9	E	HOLL	7700	
15	SSB	0020		326	W31	04	13.0			0	0	E	LEAR		
15	SSB	1058		329	W38	04	13.1			0	0	E	RAMY		
15	AFS	1108E	1506D	N08	W13	04	14.5		01	5	6	E	RAMY	7700	
15	MDP	1130E	2220	S23	E90	04	22.4			8	8	E	RAMY		
15	SSB	1730		145	W42	04	19.4			0	0	E	PALE		
15	ASR	2006E	2220	N06	W90	04	9.1			7	9	E	RAMY		
16	AFS	0125E	0830D	N09	W22	04	14.4		01	9	9	E	LEAR	7700	
16	ASR	0415E	0710D	S23	E90	04	23.1			7	8	E	LEAR		
16	SSB	0515		297	W17	04	23.6			0	0	E	LEAR		
16	SSB	0752		338	W59	04	13.0			0	0	E	SVTO		
16	DSD	0807E	1114D	N09	W26	04	14.4		01	9	9	E	SVTO	7700	
16	AFS	1041E	1338D	N06	E61	04	21.0		01	9	9	E	RAMY	7701	
16	SSB	1053		330	W52	04	13.9			0	0	E	RAMY		
16	DSD	1101E	1203D	N07	E57	04	20.7		02	9	9	E	RAMY	7701	
17	SSB	0052		334	W64	04	14.0			0	0	E	PALE		
17	ADF	0310E	0950	N07	E57	04	21.4	1	09	9	9	E	LEAR	7701	
17	SSB	0812		329	W64	04	14.7			0	0	E	SVTO		
17	DSD	0852E	1010D	N04	E47	04	20.9		01	9	9	E	SVTO	7701	
17	ADF	0912E	1658	N07	E58	04	21.7	1	10	9	9	E	SVTO	7701	
17	ADF	1040E	1658	S13	E62	04	22.1	1	18	9	9	E	SVTO		
17	DSD	1041E	2202	N05	E47	04	21.0		01	9	8	E	RAMY	7701	
17	ADF	1045E	2202	N11	E50	04	21.2	1	05	9	9	E	RAMY	7701	
17	SSB	1145		332	W69	04	14.6			0	0	E	RAMY		

ACTIVE PROMINENCES AND FILAMENTS

APRIL 1994

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
17	ADF	1515E	2202	S15	E64	04	22.5	1	21	9	9	E	RAMY		
17	ADF	1622E	0110	S15	E60	04	22.2	1	08	9	7	E	HOLL	7702	
17	DSF	2121U	1112U	S11	W12	04	17.0	2	13	0	0	E	RAMY		
18	SSB	0002		328	W71	04	15.4			0	0	E	LEAR		
18	AFS	0545E	0950	N04	E38	04	21.1		04	7	7	E	LEAR	7701	
18	ADF	0736E	1529	N10	W53	04	14.3	1	08	9	9	E	SVTO	7700	
18	APR	0936	1020	S40	E90	04	25.7	1					KHAR		Rn A E Ws
18	ADF	1018E	1529	N06	E35	04	21.0	1	02	9	9	E	SVTO	7701	
18	SSB	1045		332	W81	04	15.5			0	0	E	RAMY		
18	DSD	1050E	1430D	N05	E32	04	20.8		01	8	9	E	RAMY	7701	
18	ADF	1052E	2012	N10	E45	04	21.8	1	12	9	9	E	RAMY	7701	
18	ADF	1103E	2012	N12	W46	04	15.0	1	06	9	9	E	RAMY	7700	
18	AFS	1220E	1529	S14	E47	04	22.1		02	9	9	E	SVTO	7702	
18	DSD	1237E	1529	N07	E38	04	21.4		02	9	9	E	SVTO	7701	
18	AFS	1406E	2012	S14	E46	04	22.1		02	9	9	E	RAMY	7702	
18	DSD	1608E	1647D	N03	E46	04	22.1		02	9	9	E	HOLL	7701	
18	AFS	1726E	0019	S15	E44	04	22.0		02	9	9	E	HOLL	7702	
18	AFS	1810E	1932D	S13	E43	04	22.0		01	9	9	E	PALE	7702	
18	ADF	2355E	0945	N07	E28	04	21.1	1	10	8	8	E	LEAR	7701	
19	AFS	0500E	0945	N06	E25	04	21.1		01	9	9	E	LEAR	7701	
19	AFS	0531E	0910D	S14	E37	04	22.0		01	9	9	E	SVTO	7702	
19	AFS	0532E	1705	N06	E39	04	22.1		01	9	9	E	SVTO		
19	AFS	0535E	0910D	N06	E24	04	21.0		01	9	9	E	SVTO	7701	
19	AFS	0540E	0945	S12	E31	04	21.6		02	9	9	E	LEAR	7702	
19	DSD	0555E	0938D	S12	E31	04	21.6		02	9	9	E	SVTO	7702	
19	DSD	0635E	0646D	N08	E28	04	21.4		02	4	5	E	SVTO	7701	
19	AFS	0940E	1705	S13	E27	04	21.4		02	9	9	E	SVTO	7702	
19	AFS	1043E	2126	S13	E27	04	21.5		01	9	9	E	RAMY	7702	
19	AFS	1046E	2126	N08	E37	04	22.2		01	6	6	E	RAMY	7703	
19	AFS	1139E	2126	N07	E21	04	21.0		01	9	9	E	RAMY	7701	
19	CAP	1152E	1705	N08	E90	04	26.2		01	9	9	E	RAMY		
19	DSD	1244	1409D	N06	E18	04	20.9		01	9	9	E	SVTO	7701	Flare Associated
19	ADF	1526E	2126	N09	E20	04	21.1	1	05	9	9	E	RAMY	7701	
19	ADF	1546E	1705	N10	E20	04	21.1	1	03	9	9	E	SVTO	7701	
19	ADF	1603E	0103	N07	E19	04	21.1	1	05	9	9	E	HOLL	7701	
19	AFS	1615E	0103	S14	E24	04	21.5		02	9	9	E	HOLL	7702	
19	MDP	1617E	1648	N07	E90	04	26.4			9	9	E	HOLL		
19	LPS	1642E	1705	N08	E85	04	26.1			9	9	E	RAMY		Flare Associated
19	ASR	1647E	1705	N07	E90	04	26.4			9	9	E	SVTO		
19	ASR	1648E	0027D	N06	E90	04	26.4			9	9	E	HOLL	7704	Flare Associated
19	APR	1648E	1911D	N07	E90	04	26.4	1		9	9	E	HOLL		
19	ADF	1926E	0103	N08	E32	04	22.2	1	04	8	7	E	HOLL	7703	
19	ADF	2315E	0948	N07	E24	04	21.8	1	11	9	9	E	LEAR	7701	
19	AFS	2327E	0536D	S13	E21	04	21.6		02	9	9	E	LEAR	7702	
20	AFS	0005E	0948	N09	E16	04	21.2		02	9	9	E	LEAR	7701	
20	AFS	0755E	1652	N07	E09	04	21.0		02	9	9	E	SVTO	7701	
20	ADF	0810E	1652	N10	E10	04	21.1	1	11	9	9	E	SVTO	7701	
20	ADF	1039E	1949	N13	E13	04	21.4	1	08	9	9	E	RAMY	7701	
20	DSD	1044E	1949	N08	E75	04	26.1		03	9	9	E	RAMY	7704	
20	AFS	1052E	1949	S13	E22	04	22.1		02	9	9	E	RAMY	7702	
20	DSD	1059E	1949	S27	W56	04	16.1		02	9	9	E	RAMY		
20	ASR	1100E	1111D	S13	E23	04	22.2			9	9	E	SVTO		
20	AFS	1357E	2214	S14	E20	04	22.1		02	9	9	E	HOLL		
20	DSD	1520E	1652	N08	E05	04	21.0		03	9	9	E	SVTO	7701	
20	AFS	1525E	1652	S14	E17	04	21.9		01	9	9	E	SVTO		
20	ADF	1624E	1949	S25	E30	04	23.0	1	13	9	9	E	RAMY		
21	ADF	0330E	0943	N11	E09	04	21.8	1	10	6	6	E	LEAR	7701	
21	DSD	0515E	0837D	N07	E61	04	25.8		01	9	9	E	SVTO	7704	
21	AFS	0845E	0943	N04	E21	04	22.9		04	9	8	E	LEAR	7703	
21	AFS	0920E	0947	N06	E21	04	23.0		02	9	9	E	SVTO		
21	AFS	1344E	0012	N04	E19	04	23.0		01	9	9	E	HOLL		
21	DSD	1406E	1452D	N05	E64	04	26.4		03	9	9	E	HOLL	7704	Flare Associated
21	ADF	1424E	0012	N12	E03	04	21.8	1	09	9	9	E	HOLL	7701	
21	DSD	1551E	1715D	N05	E20	04	23.1		02	9	9	E	HOLL	7705	Flare Associated
21	DSD	1743E	0012	N03	E16	04	22.9		03	9	9	E	HOLL	7705	
21	DSD	1805E	0240	N04	E18	04	23.1		02	0	0	E	PALE	7705	

ACTIVE PROMINENCES AND FILAMENTS

APRIL 1994

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
21	AFS	1805E	0240	N05	E18	04	23.1		03	0	0	E	PALE	7705	
21	AFS	2335E	0850D	N05	E15	04	23.1		03	9	9	E	LEAR	7705	
22	DSD	0035E	0340D	N05	E15	04	23.1		04	9	9	E	LEAR	7705	
22	AFS	0625E	0948	N04	E09	04	22.9		04	9	9	E	LEAR	7705	
22	AFS	0635E	1327	N06	E11	04	23.1		03	9	9	E	SVTO	7705	
22	ADF	0655E	1327	N12	W17	04	21.0	1	04	9	9	E	SVTO	7701	
22	DSD	0705E	1327	N05	E11	04	23.1		03	9	9	E	SVTO	7705	
22	AFS	0708E	1327	N09	E49	04	26.0		02	9	9	E	SVTO	7704	
22	AFS	1142E	1940	N05	E07	04	23.0		02	9	9	E	RAMY	7705	
22	AFS	1256E	1919	N01	E09	04	23.2		01	9	9	E	HOLL	7705	
22	ADF	1339E	1940	N09	W22	04	20.9	1	14	9	9	E	RAMY	7701	
22	ADF	1410E	1919	N09	W21	04	21.0	1	09	9	9	E	HOLL	7701	
22	DSD	1601E	1940	N04	E05	04	23.0		01	9	9	E	RAMY	7705	
22	DSD	1602E	1940	N07	W26	04	20.7		01	9	9	E	RAMY	7701	
23	AFS	0020E	0948	N01	E05	04	23.4		04	9	7	E	LEAR	7705	
23	AFS	0455E	1230D	N03	W03	04	23.0		03	9	9	E	SVTO	7705	
23	DSD	0619E	1702	N06	E37	04	26.0		02	9	9	E	SVTO	7704	
23	DSD	0630E	0930D	S03	E14	04	24.3		02	9	9	E	SVTO		
23	APR	0730E	1702	N08	W90	04	16.6	1		6	6	E	SVTO		
23	APR	0800E	1702	S19	E90	04	30.2	1		9	9	E	SVTO		
23	AFS	1033E	2152	N05	W06	04	23.0		02	9	9	E	RAMY	7705	
23	DSD	1035E	2152	N06	W09	04	22.8		02	7	8	E	RAMY	7705	
23	DSD	1039E	1355D	N05	W36	04	20.7		02	9	9	E	RAMY	7701	
23	DSD	1044E	2152	N06	W51	04	19.6		01	9	9	E	RAMY		
23	AFS	1049E	1620D	S02	E10	04	24.2		01	9	8	E	RAMY		
23	ADF	1120E	2152	N12	W23	04	21.7	1	15	9	9	E	RAMY	7701	
23	DSF	1237U		S25	W09	04	22.8	2	10	0	0	E	RAMY	1821	
23	AFS	1257E	1516D	N07	E34	04	26.1		01	9	9	E	RAMY	7704	
23	SSB	1535		227	W45	04	25.9			0	0	E	HOLL		
23	DSD	1540E	1702	N07	W08	04	23.0		01	9	9	E	SVTO	7705	
23	AFS	2119E	2152	S12	W26	04	21.9		02	9	9	E	RAMY	7702	
23	AFS	2142E	0005	S12	W27	04	21.9		02	9	9	E	HOLL	7702	
23	AFS	2310E	0940	N04	W13	04	23.0		03	7	7	E	LEAR	7705	
23	AFS	2332E	0830D	S13	W29	04	21.8		01	8	8	E	LEAR	7702	
23	DSF	2354U	1338U	S21	W19	04	22.5	2	10	0	0	E	HOLL		
24	AFS	0530E	1555	S12	W34	04	21.7		02	9	6	E	SVTO	7702	
24	DSF	0645U	2330U	N38	W12	04	23.3		20	0	0	E	LEAR		
24	DSF	0645U	2330U	S22	W08	04	23.7		12	0	0	E	LEAR		
24	AFS	0800E	1555	N07	W65	04	19.5		02	9	9	E	SVTO		
24	AFS	1032E	2054	N04	W20	04	22.9		02	7	8	E	RAMY	7705	
24	AFS	1035E	2054	N08	E22	04	26.1		02	9	8	E	RAMY	7704	
24	AFS	1044E	2054	S13	W37	04	21.6		02	9	9	E	RAMY	7702	
24	AFS	1046E	2054	S12	W32	04	22.0		01	9	9	E	RAMY	7702	
24	AFS	1049E	2054	N06	W67	04	19.4		01	9	9	E	RAMY	7706	
24	DSD	1105	1555	N07	W66	04	19.5		02	9	9	E	SVTO		
24	DSD	1850E	0100D	N05	W28	04	22.7		02	8	9	E	HOLL	7705	
24	DSF	2354U	1338U	S21	W19	04	23.5	2	10	0	0	E	HOLL		
25	AFS	0700E	1009D	N00	E06	04	25.7		02	9	9	E	SVTO		
25	DSD	0700E	1247D	N06	W78	04	19.4		02	9	9	E	SVTO	7706	
25	AFS	0700E	1447	S13	W47	04	21.7		02	7	7	E	SVTO	7702	
25	APR	0833E	1015D	N11	W90	04	18.6	1		9	9	E	SVTO	7706	
25	DSD	1052E	2058D	N07	E07	04	26.0		02	9	9	E	RAMY	7704	
25	AFS	1055E	2109D	N04	W32	04	23.1		01	6	6	E	RAMY	7705	
25	DSD	1055E	2109D	N04	W36	04	22.8		03	9	9	E	RAMY	7705	
25	BSD	1101E	2109D	N07	W82	04	19.3		02	9	9	E	RAMY	7706	
25	AFS	1105E	2222	S11	W47	04	21.9		01	9	9	E	RAMY	7702	
25	DSD	1107E	2048D	N01	E19	04	26.9		01	9	9	E	RAMY		
25	AFS	1108E	2020D	N01	E03	04	25.7		02	9	9	E	RAMY		
25	DSD	1113E	2050D	S13	E49	04	29.2		01	9	9	E	RAMY		
25	BSD	1247E	1307D	N06	W84	04	19.2		02	9	9	E	SVTO	7706	
25	APR	1307E	1336D	N01	W80	04	19.6			9	9	E	SVTO	7706	
25	AFS	1408E	1447	S13	E49	04	29.3		01	9	9	E	SVTO		
25	ASR	1700E	2122	N07	W90	04	19.0			9	9	E	HOLL	7706	
25	DSD	1725E	2122	N01	W21	04	24.1		03	9	9	E	HOLL		
25	AFS	1725E	2122	N01	W22	04	24.1		01	9	9	E	HOLL		
25	AFS	1805E	2122	S12	W49	04	22.1		02	8	9	E	HOLL	7702	

ACTIVE PROMINENCES AND FILAMENTS

APRIL 1994

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
25	SSB	2024		164	W11	04	30.7			0	0	E	PALE		
25	AFS	2048E	2222	S13	E49	04	29.6		01	9	9	E	RAMY		
25	AFS	2105E	2337D	N01	W22	04	24.2		02	0	0	E	PALE		
25	ASR	2105E	2337D	N07	W90	04	19.1			0	0	E	PALE	7706	
25	ASR	2109E	2222	N06	W90	04	19.1			9	9	E	RAMY	7706	
25	AFS	2325E	0948	N00	W25	04	24.1		02	9	9	E	LEAR		
25	ASR	2327E	0948	N06	W90	04	19.2			9	9	E	LEAR	7706	
26	DSD	0050E	0140D	S12	W54	04	22.0		03	9	9	E	LEAR	7702	
26	SSB	0200		164	W14	04	30.9			0	0	E	LEAR		
26	ADF	0340E	0948	S02	W27	04	24.1	1	05	9	9	E	LEAR		
26	AFS	0525E	0948	N07	W47	04	22.7		02	5	5	E	LEAR	7705	
26	AFS	0850E	1646	N12	W64	04	21.5		02	9	9	E	SVTO		
26	DSD	0935E	1646	N01	W33	04	23.9		02	9	9	E	SVTO		
26	DSD	1110E	1832	N10	W65	04	21.6		02	9	9	E	RAMY	7708	
26	AFS	1110E	2144	N10	W64	04	21.6		02	9	9	E	RAMY	7708	
26	DSD	1119E	1832	N01	W33	04	24.0		02	9	9	E	RAMY	7707	
26	AFS	1120E	1832	S14	E37	04	29.3		01	7	7	E	RAMY		
26	AFS	1122E	1832	N09	W73	04	21.0		02	7	7	E	RAMY	7701	
26	AFS	1421E	1827D	N01	W35	04	24.0		03	8	9	E	HOLL	7707	
26	AFS	1433E	0128	N11	W69	04	21.4		02	9	9	E	HOLL	7708	
26	SSB	1720		125	W24	04	28.6			0	0	E	PALE		
26	DSD	1810E	1818D	N15	W11	04	25.9		04	0	0	E	HOLL		
27	DSD	0505E	1655	N06	W59	04	22.8		02	9	9	E	SVTO	7705	
27	DSD	0509E	1655	N11	W73	04	21.7		01	9	9	E	SVTO	7708	
27	DSD	0516E	1655	N01	W45	04	23.8		01	9	9	E	SVTO	7707	
27	AFS	0528E	1655	N14	W18	04	25.9		02	9	9	E	SVTO	7704	
27	DSD	0529E	1655	N13	W18	04	25.9		01	9	9	E	SVTO	7704	
27	AFS	1317E	1733D	N01	W30	04	25.3		01	9	9	E	RAMY		
27	SSB	1412		166	W36	05	2.9			0	0	E	RAMY		206 W76
27	DSD	1730E	1733D	N01	W51	04	23.9		01	8	8	E	RAMY	7707	
27	SSB	1858		156	W27	05	2.1			0	0	E	HOLL		
28	AFS	0540E	1523	N13	W31	04	25.9		02	9	9	E	SVTO	7704	
28	ASR	0543E	1523	N09	W90	04	21.5			9	9	E	SVTO	7708	
28	DSD	0654E	0738D	N00	W57	04	24.0		02	9	9	E	SVTO	7707	
28	SSB	0700		166	W45	05	3.8			0	0	E	SVTO		
28	AFS	0738E	1523	S01	W58	04	24.0		02	9	9	E	SVTO	7707	
28	BSL	0936	0950	N07	W90	04	21.6	1					KHAR		Rs B Ws
28	AFS	1026E	1523	S06	E05	04	28.8		02	9	9	E	SVTO		
28	SSB	1459		160	W44	05	3.6			0	0	E	RAMY		
28	AFS	1548E	1714D	N00	W62	04	24.0		02	9	9	E	RAMY	7707	
28	AFS	1640E	0138	N01	W61	04	24.1		01	8	8	E	HOLL	7707	
28	DSD	1655E	1714D	N08	W35	04	26.1		01	8	7	E	RAMY	7704	
28	AFS	1700E	1714D	N01	W44	04	25.4		01	7	9	E	RAMY	7709	
28	AFS	1705E	1714D	S06	E01	04	28.8		01	9	9	E	RAMY		
28	APR	1714E	0115D	N10	W89	04	22.0	1		4	4	E	HOLL	7708	
28	ASR	2021E	2145D	N10	W90	04	22.1			7	6	E	HOLL	7708	
29	AFS	0235E	0735D	S01	W69	04	23.9		04	9	9	E	LEAR	7707	
29	DSD	0710E	1545	N00	W72	04	23.9		03	9	9	E	SVTO	7707	
29	AFS	1114E	2026	N01	W73	04	24.0		01	9	9	E	RAMY	7707	
29	AFS	1121E	2026	S23	E57	05	3.9		01	8	8	E	RAMY		
29	SSB	1130		163	W58	05	5.0			0	0	E	RAMY		
29	AFS	1135E	2026	S05	W10	04	28.7		01	7	9	E	RAMY		
29	SSB	1230		160	W55	05	4.7			0	0	E	SVTO		
29	AFS	1439E	2026	S11	W20	04	28.1		01	9	8	E	RAMY		
29	AFS	1510E	0015	S11	W21	04	28.0		01	9	8	E	HOLL		
29	AFS	1540E	2006D	N00	W78	04	23.8		01	9	9	E	HOLL	7707	
29	DSD	1604E	2026	S12	E15	04	30.8		01	9	9	E	RAMY		
29	DSD	1614E	1800D	S12	E14	04	30.7		03	9	7	E	HOLL		
29	AFS	1951E	0015	S12	E13	04	30.8		01	9	9	E	HOLL		
29	DSD	2006E	0015	N01	W79	04	23.9		04	9	9	E	HOLL	7707	
30	ASR	0425E	1723	N00	W88	04	23.6			9	9	E	SVTO	7707	
30	AFS	0435E	1723	S11	E07	04	30.7		02	9	9	E	SVTO	7711	
30	DSD	0450E	0510D	N15	W57	04	25.9		01	9	9	E	SVTO	7704	
30	DSD	0510E	0700D	S12	E32	05	2.6		01	9	9	E	SVTO		
30	DSD	0510E	1723	S23	E49	05	4.0		01	9	9	E	SVTO		

ACTIVE PROMINENCES AND FILAMENTS

APRIL 1994

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	CMP Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
30	SSB	0635		160	W66	05	5.7			0	0	E	SVTO		
30	ASR	0649E	0906	S01	W88	04	23.7			7	7	E	LEAR	7707	
30	AFS	0700E	1723	S13	E30	05	2.5		01	9	9	E	SVTO	7712	
30	DSD	0730E	1723	S15	W48	04	26.7		04	9	9	E	SVTO	7710	
30	BSL	1050	1105	S01	W90	04	23.7	1					KHAR		Rs A Ws
30	ASR	1100E	1533	N00	W86	04	24.0			9	9	E	RAMY	7707	
30	AFS	1104E	1533	S11	E04	04	30.8		01	8	9	E	RAMY		
30	AFS	1110E	1533	S24	E45	05	3.9		01	9	9	E	RAMY		
30	SSB	1111		104	W12	04	30.8			0	0	E	RAMY		
30	AFS	1205E	1533	S13	E27	05	2.5		02	8	8	E	RAMY		
30	AFS	1207E	1533	S14	W50	04	26.7		01	9	9	E	RAMY		
30	ASR	1328E	0117	N01	W90	04	23.8			5	7	E	HOLL	7707	
30	AFS	1337E	1555D	S11	E02	04	30.7		02	6	7	E	HOLL	7711	
30	AFS	1340E	0117	S13	E26	05	2.5		02	7	7	E	HOLL	7712	
30	DSD	1408E	1530D	S14	E24	05	2.4		01	9	9	E	HOLL	7712	
30	AFS	1420E	0117	S14	W52	04	26.7		01	9	9	E	HOLL	7710	
30	DSD	1555E	0117	S01	E11	05	1.5		02	7	7	E	HOLL	7711	
30	ASR	1912E	0245	N00	W90	04	24.1			0	0	E	PALE	7707	
30	AFS	1925E	0245	S11	E00	04	30.8		02	0	0	E	PALE	7711	
30	AFS	2350E	0936	S13	E19	05	2.4		02	7	7	E	LEAR	7712	

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

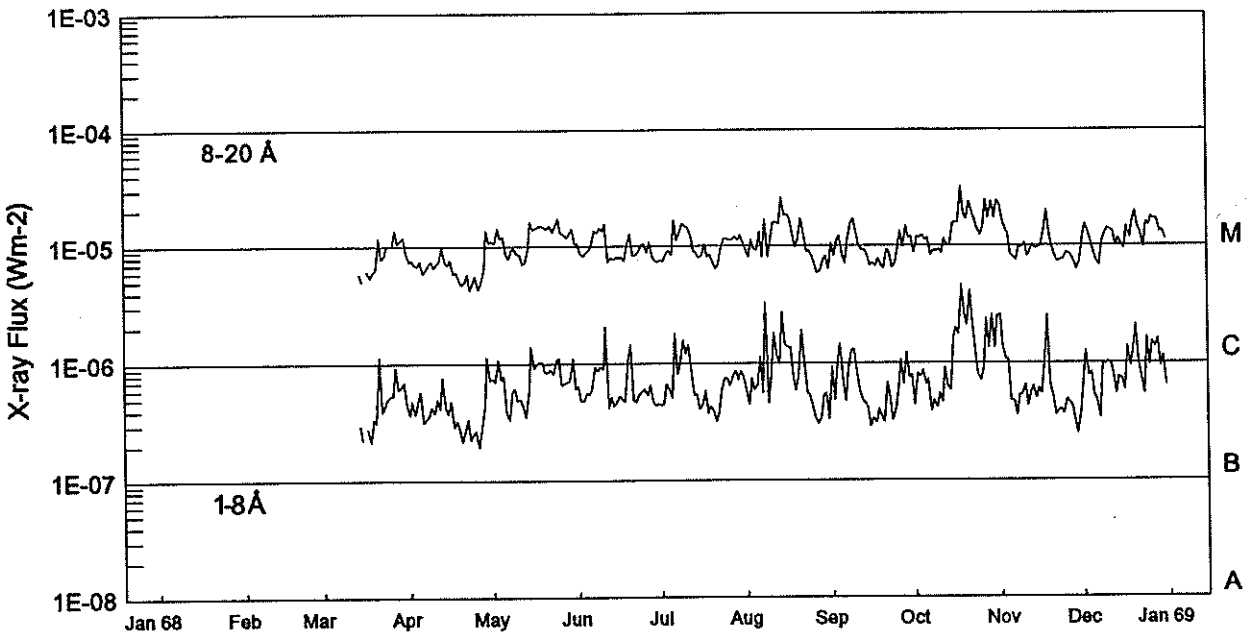
ABST = Abastumani
ATHN = Athens
BUCA = Bucharest
CATA = Catania
HOLL = Holloman
KHAR = Kharkov
LEAR = Learmonth
PALE = Palehua
RAMY = Ramey
SVTO = San Vito
VORO = Voroshilov
VALA = Valasske Mezirici

CONTENTS

Comprehensive Reports Number 602 Part II

MISCELLANEOUS DATA

SOLRAD Daily X-ray Background 1968



1-8 Angstroms

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	--	--	--	B3.6	B7.4	B6.5	B4.3	B5.8	B9.2	B4.3	C2.5	B6.8
2	--	--	--	B4.8	B7.0	B4.8	B4.5	B4.4	B4.8	B8.1	C1.4	C1.2
3	--	--	--	B3.7	C1.0	B4.8	B6.6	B7.5	B9.7	B7.6	C1.0	B7.7
4	--	--	--	B4.6	B7.3	B5.5	B6.0	B6.0	C1.4	B8.6	C1.0	B8.2
5	--	--	--	B5.8	B7.8	B5.4	B5.1	B6.5	B7.1	B6.6	B4.7	B5.3
6	--	--	--	B3.1	B3.9	B6.1	C1.7	C1.1	B4.7	B7.1	B4.7	B4.8
7	--	--	--	B3.3	B3.3	B9.4	B8.0	B5.5	B8.9	B3.9	B3.6	B3.4
8	--	--	--	B3.5	B5.7	B8.6	B9.8	C3.2	C1.2	B4.8	B5.3	C1.0
9	--	--	--	B4.3	B6.2	B9.4	C1.5	B4.5	C1.3	B4.2	B5.4	B9.6
10	--	--	--	B3.8	B4.9	B8.9	C1.1	B7.9	B8.7	B5.5	B6.4	C1.0
11	--	--	--	B5.0	B5.0	C2.0	C1.4	C1.7	B5.9	B4.7	B4.3	B9.7
12	--	--	--	B4.2	B4.2	B4.2	B8.0	C1.1	B4.7	B9.2	B5.5	B7.7
13	--	--	--	B7.7	B3.5	B5.2	B5.3	B9.9	B4.5	B6.4	B6.3	B5.4
14	--	--	B3.0	B4.2	B5.8	B4.3	B5.4	C2.7	B4.1	B5.9	B5.0	B7.5
15	--	--	B2.2	B3.7	C1.4	B4.7	B4.1	C1.4	B2.9	C1.6	B6.1	B7.2
16	--	--	--	B4.7	B9.1	B5.3	B4.5	C1.3	B3.4	C1.9	B5.5	B5.9
17	--	--	B2.7	B2.9	B9.8	B5.0	B5.8	C1.3	B3.1	C1.7	C1.1	C1.3
18	--	--	B2.1	B3.2	C1.0	B4.7	B3.7	B7.6	B4.1	C4.5	C2.5	B9.3
19	--	--	B3.3	B2.7	C1.0	C1.1	B4.3	B5.9	B3.4	C2.6	B6.6	C1.3
20	--	--	B3.1	B2.1	B8.3	C1.4	B3.9	B7.6	B3.1	C2.0	B5.4	C2.1
21	--	--	C1.1	B2.7	B8.3	B4.8	B3.1	C1.8	B6.8	C4.1	B3.6	C1.0
22	--	--	B3.9	B3.3	B8.9	B4.6	B3.8	C1.0	B5.1	C2.1	B3.9	B7.9
23	--	--	B4.3	B2.2	B8.2	B5.4	B5.9	B5.4	B3.3	C1.2	B4.0	B5.4
24	--	--	B5.0	B2.5	C1.0	B5.7	B7.4	B5.4	B4.0	B7.9	B3.7	C1.6
25	--	--	B5.3	B2.6	C1.1	B6.0	B7.4	B4.2	B6.1	B7.1	B4.9	B9.5
26	--	--	B5.3	B1.9	B6.5	B5.4	B6.4	B3.4	C1.0	B9.0	B4.5	C1.5
27	--	--	B9.2	B2.8	B6.7	B6.5	B7.8	B3.0	B6.6	C2.3	B4.3	C1.3
28	--	--	B6.0	B4.4	B6.9	B4.8	B8.6	B3.4	C1.2	C1.3	B3.3	C1.5
29	--	--	B6.2	C1.1	B7.2	B4.3	B7.2	B5.4	B7.6	C2.5	B2.5	B9.2
30	--	--	B6.9	B7.2	C1.1	B4.5	B8.6	B5.5	B7.9	C1.3	B3.7	C1.1
31	--	--	B4.4		B6.1		B7.6	B3.3		C2.4		B6.4

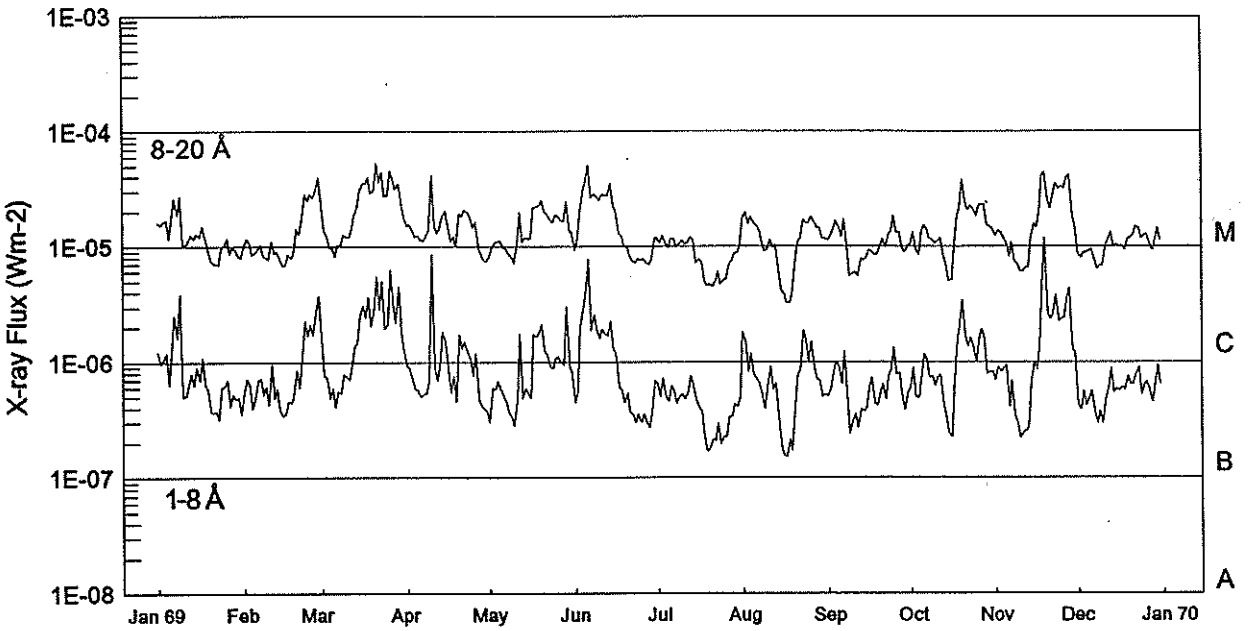
'--' indicates data not available.

SOLRAD 8-20 Angstrom Daily X-ray Background 1968 (Wm-2)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	--	--	--	7.3E-06	1.1E-05	1.0E-05	7.5E-06	9.0E-06	1.0E-05	8.6E-06	2.2E-05	1.1E-05
2	--	--	--	7.5E-06	1.0E-05	8.6E-06	7.3E-06	7.9E-06	8.0E-06	1.1E-05	1.6E-05	1.5E-05
3	--	--	--	6.9E-06	1.3E-05	8.1E-06	8.5E-06	1.1E-05	1.1E-05	1.1E-05	1.3E-05	1.2E-05
4	--	--	--	6.7E-06	1.1E-05	8.7E-06	9.1E-06	9.3E-06	1.2E-05	1.2E-05	1.2E-05	1.0E-05
5	--	--	--	7.4E-06	1.2E-05	9.1E-06	8.2E-06	9.1E-06	8.2E-06	1.1E-05	8.3E-06	8.7E-06
6	--	--	--	5.9E-06	8.8E-06	9.9E-06	1.6E-05	1.2E-05	7.0E-06	1.1E-05	7.8E-06	7.3E-06
7	--	--	--	6.2E-06	7.7E-06	1.3E-05	1.1E-05	7.9E-06	1.1E-05	8.2E-06	7.5E-06	6.7E-06
8	--	--	--	6.9E-06	9.2E-06	1.2E-05	1.2E-05	1.6E-05	1.5E-05	9.0E-06	9.7E-06	1.0E-05
9	--	--	--	7.3E-06	9.5E-06	1.4E-05	1.5E-05	7.9E-06	1.7E-05	8.9E-06	9.6E-06	1.2E-05
10	--	--	--	6.6E-06	8.7E-06	1.3E-05	1.4E-05	1.1E-05	1.2E-05	9.2E-06	1.0E-05	1.3E-05
11	--	--	--	7.1E-06	8.3E-06	1.5E-05	1.4E-05	1.5E-05	1.0E-05	8.6E-06	8.0E-06	1.3E-05
12	--	--	--	7.4E-06	7.0E-06	7.2E-06	1.2E-05	1.6E-05	9.1E-06	1.1E-05	8.9E-06	1.3E-05
13	--	--	--	9.8E-06	7.1E-06	7.9E-06	9.0E-06	1.5E-05	9.1E-06	1.0E-05	1.0E-05	9.9E-06
14	--	--	5.7E-06	7.2E-06	9.6E-06	7.7E-06	8.6E-06	2.5E-05	8.3E-06	9.9E-06	9.3E-06	1.1E-05
15	--	--	4.9E-06	6.9E-06	1.6E-05	7.9E-06	7.8E-06	1.8E-05	6.7E-06	1.5E-05	9.6E-06	1.0E-05
16	--	--	--	7.6E-06	1.3E-05	7.8E-06	8.2E-06	1.8E-05	7.1E-06	1.5E-05	9.9E-06	9.3E-06
17	--	--	6.1E-06	5.8E-06	1.4E-05	7.9E-06	1.0E-05	1.6E-05	6.6E-06	1.5E-05	1.3E-05	1.4E-05
18	--	--	5.4E-06	6.0E-06	1.4E-05	7.4E-06	7.9E-06	1.2E-05	7.6E-06	3.1E-05	2.0E-05	1.1E-05
19	--	--	6.0E-06	5.1E-06	1.4E-05	1.0E-05	8.3E-06	9.7E-06	6.7E-06	1.8E-05	1.2E-05	1.6E-05
20	--	--	6.2E-06	4.7E-06	1.4E-05	1.2E-05	7.2E-06	1.1E-05	6.3E-06	1.6E-05	9.6E-06	1.9E-05
21	--	--	1.1E-05	4.9E-06	1.4E-05	8.2E-06	6.3E-06	1.7E-05	9.2E-06	2.3E-05	7.8E-06	1.4E-05
22	--	--	7.7E-06	5.7E-06	1.4E-05	8.2E-06	6.9E-06	1.2E-05	8.6E-06	1.9E-05	7.2E-06	1.2E-05
23	--	--	8.1E-06	4.2E-06	1.3E-05	8.9E-06	9.2E-06	8.8E-06	6.5E-06	1.6E-05	7.4E-06	9.5E-06
24	--	--	9.9E-06	4.7E-06	1.5E-05	9.9E-06	1.1E-05	9.1E-06	7.0E-06	1.3E-05	7.6E-06	1.5E-05
25	--	--	1.0E-05	5.5E-06	1.7E-05	1.0E-05	1.1E-05	8.0E-06	9.3E-06	1.2E-05	8.5E-06	1.4E-05
26	--	--	1.0E-05	4.2E-06	1.2E-05	8.8E-06	1.1E-05	6.7E-06	1.3E-05	1.4E-05	8.4E-06	1.7E-05
27	--	--	1.3E-05	4.8E-06	1.2E-05	1.0E-05	1.1E-05	5.8E-06	9.8E-06	2.4E-05	7.9E-06	1.6E-05
28	--	--	1.0E-05	6.4E-06	1.1E-05	8.2E-06	1.1E-05	6.1E-06	1.4E-05	1.7E-05	7.2E-06	1.6E-05
29	--	--	1.1E-05	1.3E-05	1.2E-05	7.4E-06	1.1E-05	7.4E-06	1.1E-05	2.3E-05	6.2E-06	1.3E-05
30	--	--	1.1E-05	1.0E-05	1.4E-05	7.3E-06	1.2E-05	8.0E-06	1.1E-05	1.7E-05	7.4E-06	1.3E-05
31	--	--	8.7E-06		1.0E-05		1.0E-05	6.3E-06		2.4E-05		1.1E-05

'--' indicates data not available.

SOLRAD Daily X-ray Background 1969



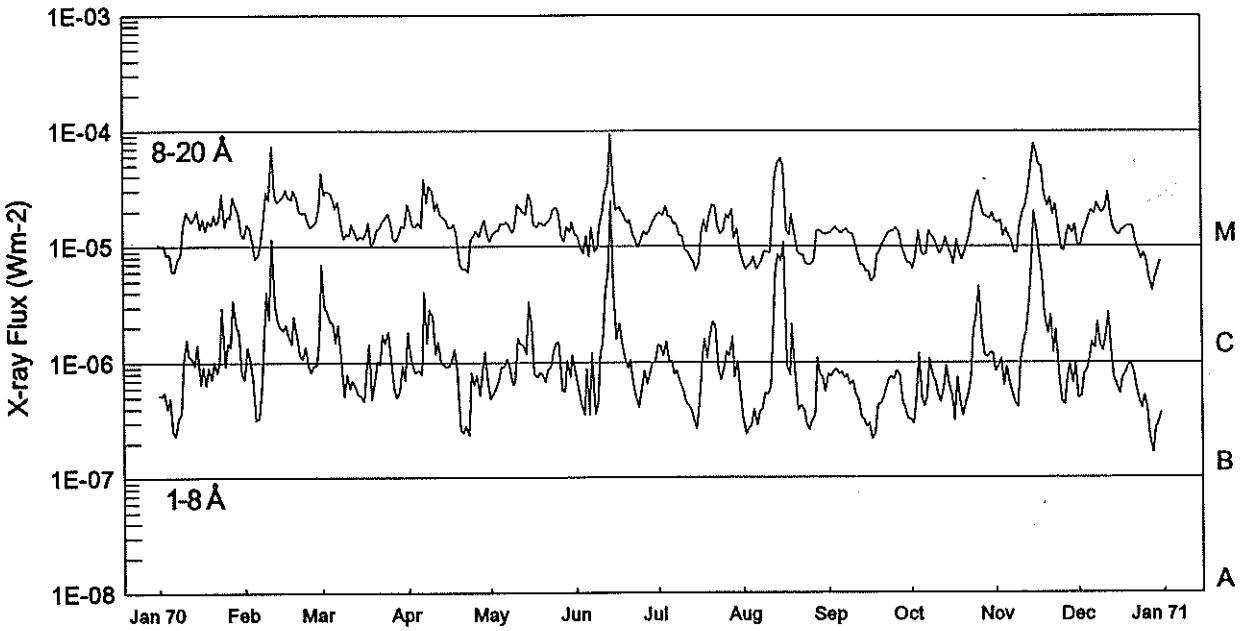
1-8 Angstroms

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	C1.2	B5.2	C1.6	B9.2	B3.0	B4.4	B6.5	C1.8	B5.1	B6.0	B6.9	B4.3
2	B9.7	B7.1	B7.6	B8.8	B6.0	B5.5	B4.9	C1.4	B5.8	B8.9	B9.0	B3.8
3	C1.0	B6.3	B7.4	B7.0	B5.7	C2.0	B7.2	B8.2	B7.9	B4.9	B8.2	B5.6
4	C1.1	B3.9	B4.9	B5.8	B6.7	C2.8	B4.9	C1.1	C1.0	B4.9	B8.7	B4.2
5	B6.4	B4.6	B5.8	B5.7	B5.9	C4.1	B4.5	B7.8	B8.9	B7.7	B9.3	B4.8
6	C1.2	B6.9	B4.1	B5.0	B5.0	C7.7	B6.2	B7.1	B6.4	C1.1	B4.0	B5.6
7	C2.5	B7.2	B5.5	B5.2	B4.5	C1.8	B5.6	B6.4	C1.2	C1.0	B6.8	B3.6
8	C1.6	B5.3	B5.4	B5.3	B3.6	C2.5	B4.4	B5.3	B5.3	B7.3	B3.4	B2.9
9	C3.8	B6.1	B7.8	B6.7	B3.2	C1.9	B5.0	B3.9	B2.3	B7.4	B2.9	B3.7
10	B4.9	B4.3	B7.4	C8.5	B2.8	C1.6	B5.2	B5.9	B3.1	B6.2	B2.2	B2.9
11	B5.1	B9.5	B7.1	B9.1	B4.8	C1.9	B4.8	B9.0	B3.4	B7.3	B2.4	B4.9
12	B5.9	B4.8	B8.9	B6.9	C1.7	C1.7	B5.5	B5.7	B2.7	B7.7	B2.5	B5.8
13	B7.9	B5.8	C1.3	B9.2	B4.8	C1.7	B7.6	B6.4	B3.8	B4.3	B2.7	B8.8
14	B6.3	B3.8	C1.4	C1.8	B5.8	C2.2	B6.1	B3.5	B3.7	B3.3	B6.5	B5.4
15	B8.9	B3.4	C2.5	C1.4	B5.4	C1.3	B4.7	B1.8	B3.9	B2.4	C1.0	B5.8
16	B7.0	B3.5	C3.1	B8.6	B4.8	C1.2	B4.0	B1.5	B6.0	B2.2	B8.7	B5.6
17	C1.0	B4.5	C2.4	B5.5	C1.7	B6.0	B3.7	B1.5	B7.2	B5.7	C1.3	B6.0
18	B6.4	B4.4	C3.6	B7.4	C1.6	B5.7	B2.2	B2.1	B4.3	C1.4	C4.6	B5.7
19	B5.8	B5.0	C2.0	B4.5	C1.8	B4.4	B1.7	B1.7	B4.2	C2.1	M1.1	B7.5
20	B3.6	B8.5	C2.8	C1.7	C2.1	B5.3	B1.7	B4.3	B5.3	C3.4	C2.6	B6.3
21	B3.6	B6.0	C5.4	C1.3	C1.2	B3.7	B2.1	B7.8	B6.4	C1.6	C2.3	B6.4
22	B3.7	C1.0	C2.8	C1.4	C1.1	B3.5	B2.1	B8.4	B4.7	C1.3	C2.6	B7.8
23	B3.2	C2.2	C5.0	C1.2	B9.1	B3.0	B2.9	C1.8	B7.6	C1.6	C3.8	B8.9
24	B5.9	C1.7	C1.9	C1.0	B8.7	B3.5	B1.9	C1.5	B8.5	C1.3	C2.2	B5.2
25	B6.2	C2.1	C2.1	B7.6	C1.0	B3.0	B2.2	C1.0	C1.3	B9.9	C2.3	B6.2
26	B7.0	C1.7	C6.2	C1.1	C1.1	B3.5	B2.2	C1.4	B7.8	C1.5	C2.4	B6.7
27	B4.1	C2.8	C3.2	B4.7	B9.8	B3.0	B3.3	B8.7	B8.0	C1.9	C3.5	B5.8
28	B5.2	C3.7	C2.2	B4.1	B9.5	B2.7	B3.3	B7.0	B5.0	C1.6	C4.3	B4.5
29	B4.7		C4.4	B3.9	C3.0	B3.6	B4.2	B6.8	B3.8	B7.9	C1.2	B6.5
30	B4.9		C1.7	B3.7	B9.0	B6.8	B4.1	B4.9	B5.5	B8.2	C1.2	B9.2
31	B3.5		C1.2		B8.2		B4.9	B5.1		B8.2		B6.3

SOLRAD 8-20 Angstrom Daily X-ray Background 1969 (Wm-2)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.5E-05	9.9E-06	2.3E-05	1.5E-05	8.1E-06	9.3E-06	1.1E-05	1.7E-05	1.1E-05	1.0E-05	1.2E-05	8.7E-06
2	1.5E-05	1.1E-05	1.4E-05	1.5E-05	1.0E-05	1.1E-05	1.0E-05	1.9E-05	1.2E-05	1.3E-05	1.3E-05	8.0E-06
3	1.6E-05	1.0E-05	1.2E-05	1.4E-05	1.0E-05	2.0E-05	1.2E-05	1.5E-05	1.3E-05	9.3E-06	1.3E-05	8.8E-06
4	1.6E-05	8.5E-06	9.7E-06	1.2E-05	1.1E-05	3.0E-05	1.0E-05	1.8E-05	1.6E-05	8.5E-06	1.1E-05	8.8E-06
5	1.1E-05	8.6E-06	9.5E-06	1.2E-05	1.1E-05	3.7E-05	9.8E-06	1.5E-05	1.4E-05	1.3E-05	1.0E-05	9.1E-06
6	1.7E-05	9.5E-06	8.1E-06	1.1E-05	9.9E-06	5.1E-05	1.1E-05	1.5E-05	1.2E-05	1.5E-05	8.1E-06	9.4E-06
7	2.6E-05	1.0E-05	1.0E-05	1.1E-05	9.5E-06	2.6E-05	1.1E-05	1.3E-05	1.7E-05	1.4E-05	1.0E-05	7.5E-06
8	1.8E-05	8.3E-06	1.0E-05	1.2E-05	8.6E-06	2.8E-05	9.9E-06	1.0E-05	9.9E-06	1.1E-05	7.4E-06	6.3E-06
9	2.7E-05	7.9E-06	1.2E-05	1.3E-05	8.0E-06	2.7E-05	1.0E-05	9.0E-06	5.6E-06	1.1E-05	7.1E-06	6.8E-06
10	1.0E-05	7.7E-06	1.2E-05	4.1E-05	7.2E-06	2.5E-05	1.1E-05	9.4E-06	5.7E-06	1.0E-05	6.0E-06	6.7E-06
11	1.0E-05	1.1E-05	1.2E-05	1.5E-05	1.0E-05	2.8E-05	1.0E-05	1.1E-05	5.9E-06	1.1E-05	6.0E-06	1.0E-05
12	1.0E-05	8.6E-06	1.3E-05	1.3E-05	1.9E-05	2.7E-05	1.0E-05	9.7E-06	5.5E-06	1.1E-05	6.6E-06	1.1E-05
13	1.2E-05	8.9E-06	1.9E-05	1.4E-05	1.0E-05	2.7E-05	1.2E-05	1.0E-05	7.8E-06	8.2E-06	6.5E-06	1.3E-05
14	1.1E-05	7.9E-06	2.1E-05	1.8E-05	1.1E-05	3.5E-05	1.1E-05	6.5E-06	7.5E-06	6.7E-06	1.1E-05	9.9E-06
15	1.2E-05	6.8E-06	3.0E-05	2.0E-05	1.1E-05	2.3E-05	7.2E-06	4.1E-06	8.0E-06	5.0E-06	1.5E-05	1.0E-05
16	1.2E-05	6.9E-06	3.5E-05	1.4E-05	1.1E-05	2.0E-05	7.8E-06	3.8E-06	9.3E-06	5.1E-06	1.4E-05	9.9E-06
17	1.4E-05	8.5E-06	3.4E-05	1.1E-05	2.1E-05	1.2E-05	7.3E-06	3.2E-06	9.0E-06	9.6E-06	1.9E-05	1.0E-05
18	1.2E-05	7.9E-06	3.9E-05	1.2E-05	2.2E-05	1.2E-05	5.0E-06	3.2E-06	8.3E-06	1.7E-05	4.1E-05	9.3E-06
19	9.7E-06	8.5E-06	2.9E-05	1.0E-05	2.2E-05	9.8E-06	4.5E-06	3.7E-06	8.5E-06	2.2E-05	4.4E-05	1.1E-05
20	7.5E-06	1.4E-05	3.0E-05	1.9E-05	2.5E-05	9.8E-06	4.7E-06	7.1E-06	9.9E-06	3.8E-05	2.5E-05	1.2E-05
21	7.1E-06	1.2E-05	5.2E-05	1.8E-05	2.0E-05	8.4E-06	4.4E-06	1.0E-05	1.1E-05	2.3E-05	2.1E-05	1.2E-05
22	7.0E-06	1.7E-05	3.6E-05	2.0E-05	1.8E-05	7.3E-06	4.8E-06	1.1E-05	9.8E-06	2.0E-05	2.7E-05	1.4E-05
23	6.8E-06	2.8E-05	4.3E-05	1.9E-05	1.7E-05	7.1E-06	6.0E-06	1.6E-05	1.2E-05	2.2E-05	3.5E-05	1.4E-05
24	9.7E-06	2.5E-05	2.7E-05	1.8E-05	1.6E-05	7.8E-06	4.7E-06	1.5E-05	1.3E-05	2.1E-05	3.1E-05	1.1E-05
25	1.0E-05	2.8E-05	2.7E-05	1.4E-05	1.8E-05	7.5E-06	5.0E-06	1.5E-05	1.8E-05	1.8E-05	3.3E-05	1.2E-05
26	1.1E-05	2.6E-05	4.4E-05	1.6E-05	1.8E-05	7.8E-06	5.2E-06	1.8E-05	1.3E-05	2.3E-05	3.1E-05	1.2E-05
27	8.6E-06	3.1E-05	3.8E-05	9.6E-06	1.6E-05	7.1E-06	7.0E-06	1.6E-05	1.3E-05	2.3E-05	3.9E-05	1.0E-05
28	9.7E-06	3.9E-05	3.1E-05	8.3E-06	1.6E-05	6.9E-06	7.5E-06	1.4E-05	9.5E-06	2.3E-05	4.1E-05	9.2E-06
29	9.2E-06		3.5E-05	7.5E-06	2.4E-05	7.8E-06	8.6E-06	1.4E-05	8.9E-06	1.5E-05	1.8E-05	1.1E-05
30	8.1E-06		2.3E-05	7.4E-06	1.3E-05	1.1E-05	8.8E-06	1.1E-05	1.0E-05	1.4E-05	1.4E-05	1.4E-05
31	7.9E-06		1.7E-05		1.3E-05		1.0E-05	1.1E-05		1.4E-05		1.1E-05

SOLRAD Daily X-ray Background 1970



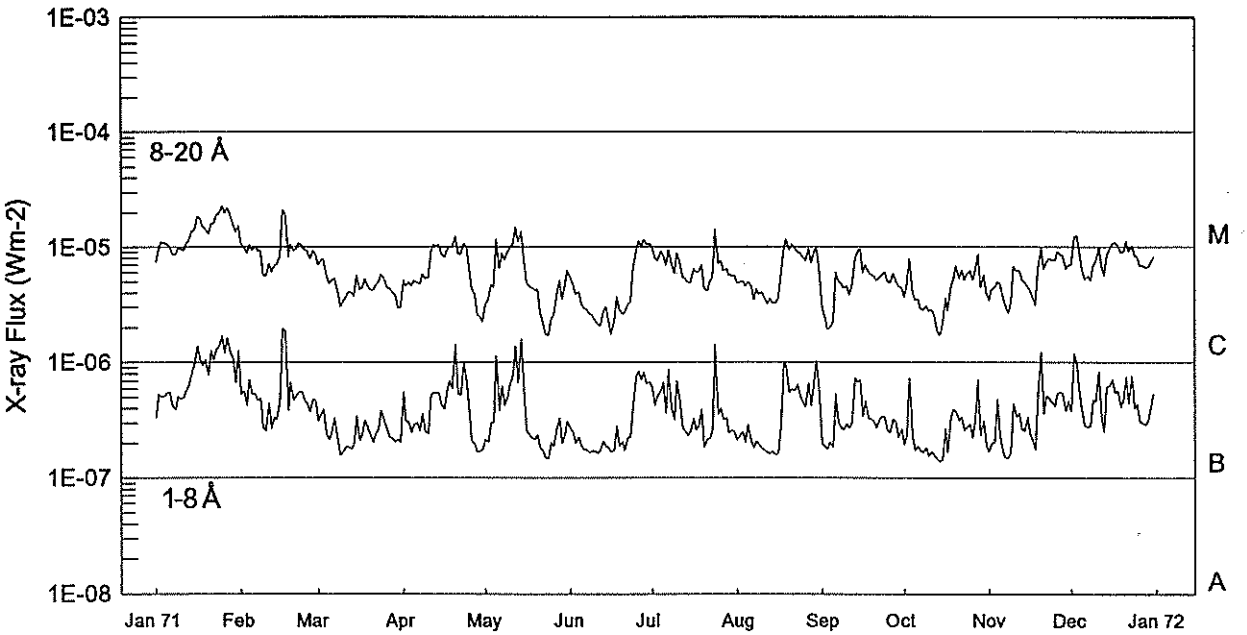
1-8 Angstroms

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	B5.2	B7.1	C6.9	C1.8	B4.8	B7.9	C1.4	B3.2	B8.0	B3.2	B8.4	B4.9
2	B5.1	C1.3	C3.0	C1.2	B5.4	B5.9	C1.3	B2.4	B7.5	B2.9	B9.0	B5.0
3	B5.5	C1.0	C2.7	B8.8	B6.1	B4.4	C1.1	B2.7	B8.3	B4.6	C1.0	B8.0
4	B3.9	B7.0	C2.2	B8.1	B7.1	B3.5	C1.5	B2.8	B8.7	C1.1	B6.3	B8.6
5	B4.9	B3.1	C2.2	B8.6	B9.0	B8.8	C1.0	B3.9	B7.9	B4.9	B9.1	C1.0
6	B2.4	B3.3	C1.5	B7.8	B9.2	B3.5	C1.0	B2.8	B8.2	B4.1	B6.3	C1.4
7	B2.3	B5.7	C2.1	C4.0	C1.0	C1.2	B7.8	B3.7	B7.3	B4.9	B5.5	C1.3
8	B3.3	C1.4	B9.5	C1.4	B9.1	B3.6	B8.6	B3.9	B7.8	C1.0	B4.3	C2.2
9	B3.5	C4.0	B5.0	C2.8	B6.3	B4.3	B6.5	B5.4	B6.3	B7.7	B4.0	C1.4
10	B9.8	C2.3	B7.9	C2.4	B6.6	C1.2	B6.0	B5.2	B6.8	B6.7	C1.0	C1.2
11	C1.5	M1.1	B6.0	C1.1	C1.6	C1.4	B4.6	B6.1	B5.2	B5.3	C1.5	C1.7
12	C1.1	C3.2	B6.9	C1.5	C1.4	C3.8	B4.2	C1.7	B4.8	B4.5	C1.7	C2.7
13	C1.0	C2.3	B6.1	C1.0	C1.3	C6.3	B3.8	C5.9	B3.3	B6.0	C2.8	C1.2
14	B9.5	C2.0	B5.2	B9.5	C1.1	M2.4	B3.1	C8.4	B3.1	B9.4	C5.7	B7.2
15	C1.4	C1.8	B5.2	B9.0	C3.3	C4.0	B2.6	C7.4	B2.7	B6.4	M1.9	B6.4
16	B6.5	C2.1	B4.5	B9.3	C2.1	C1.5	B4.9	M1.0	B2.9	B5.0	M1.4	B5.4
17	B9.1	C1.6	B8.5	C1.0	B7.9	C2.1	C1.0	B9.6	B2.1	B3.1	C8.7	B7.4
18	B6.3	C1.4	C1.4	C1.3	B7.4	C1.4	C1.6	B7.7	B2.4	B7.4	C5.7	B7.9
19	B8.9	C2.4	B4.8	B9.0	B8.2	C1.0	C1.0	C2.1	B4.2	B4.6	C2.5	B9.4
20	B7.2	C1.7	B7.1	B2.5	B7.8	B8.9	C1.6	B7.3	B4.3	B3.5	C1.7	B9.7
21	C1.0	C1.1	C1.0	B2.4	B6.8	C1.0	C2.2	B3.8	B4.7	B4.5	C2.5	B8.5
22	B8.2	C1.0	B9.5	B2.8	B8.5	B6.1	C2.0	B4.2	B6.0	B5.4	C1.2	B6.2
23	B9.9	C1.3	C1.7	B2.3	B9.3	B5.0	B8.8	B3.9	B7.1	B7.5	C1.9	B4.6
24	C2.9	B9.6	C1.4	B8.2	C1.2	B4.0	B7.0	B2.9	B7.5	C1.7	B6.9	B4.0
25	B9.3	B8.2	C1.8	B6.4	C1.4	B6.2	B9.0	B2.5	B7.1	C2.6	B4.4	B5.2
26	C1.4	B9.3	C1.0	B7.8	C1.5	B8.5	C1.2	B3.1	B8.4	C4.4	B4.3	B4.0
27	C1.3	B9.4	B6.0	B5.2	B5.7	B6.4	C1.1	B3.5	B7.9	C1.9	B7.4	B2.2
28	C3.4	C1.5	B4.9	B8.4	B5.5	B7.9	C1.6	C1.0	B4.5	C1.1	B9.7	B1.6
29	C2.1		B5.7	C1.2	C1.0	B9.9	B7.4	B7.8	B3.9	C1.1	B6.6	B2.7
30	C1.8		B9.5	B6.8	B7.5	C1.0	C1.0	B7.3	B3.2	C1.2	B9.8	B2.9
31	B7.8		B7.0		C1.1		B5.2	B5.6		C1.2		B3.6

SOLRAD 8-20 Angstrom Daily X-ray Background 1970 (Wm-2)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.0E-05	1.1E-05	4.2E-05	2.3E-05	1.1E-05	1.2E-05	1.9E-05	7.6E-06	1.2E-05	7.1E-06	1.6E-05	1.0E-05
2	9.9E-06	1.5E-05	2.7E-05	2.0E-05	1.2E-05	1.2E-05	1.9E-05	6.3E-06	1.2E-05	6.3E-06	1.6E-05	1.0E-05
3	1.0E-05	1.4E-05	3.0E-05	1.5E-05	1.3E-05	9.8E-06	1.8E-05	6.7E-06	1.4E-05	7.9E-06	1.6E-05	1.3E-05
4	8.3E-06	1.1E-05	2.8E-05	1.4E-05	1.3E-05	8.7E-06	2.2E-05	7.0E-06	1.4E-05	1.3E-05	1.2E-05	1.5E-05
5	8.5E-06	7.7E-06	2.6E-05	1.6E-05	1.5E-05	1.2E-05	1.8E-05	8.0E-06	1.3E-05	9.3E-06	1.4E-05	1.7E-05
6	6.0E-06	8.2E-06	2.0E-05	1.4E-05	1.5E-05	8.1E-06	1.7E-05	6.3E-06	1.2E-05	8.3E-06	1.2E-05	2.0E-05
7	6.0E-06	1.0E-05	2.4E-05	3.7E-05	1.6E-05	1.4E-05	1.5E-05	6.8E-06	1.3E-05	8.5E-06	1.1E-05	1.9E-05
8	7.8E-06	1.6E-05	1.5E-05	2.3E-05	1.5E-05	9.0E-06	1.5E-05	7.5E-06	1.4E-05	1.3E-05	8.8E-06	2.3E-05
9	8.2E-06	2.9E-05	1.1E-05	3.3E-05	1.3E-05	9.5E-06	1.2E-05	9.0E-06	1.2E-05	1.2E-05	8.7E-06	2.1E-05
10	1.4E-05	2.5E-05	1.2E-05	2.9E-05	1.4E-05	1.5E-05	1.2E-05	8.9E-06	1.2E-05	1.1E-05	1.5E-05	1.9E-05
11	1.9E-05	7.3E-05	1.2E-05	2.0E-05	2.2E-05	1.9E-05	9.3E-06	8.8E-06	1.0E-05	9.7E-06	1.9E-05	2.1E-05
12	1.8E-05	2.8E-05	1.5E-05	2.3E-05	2.1E-05	2.8E-05	8.9E-06	1.9E-05	8.6E-06	8.6E-06	2.2E-05	2.9E-05
13	1.6E-05	2.4E-05	1.3E-05	1.8E-05	1.9E-05	3.5E-05	7.8E-06	4.0E-05	6.9E-06	9.9E-06	2.9E-05	1.8E-05
14	1.7E-05	2.5E-05	1.1E-05	1.7E-05	1.8E-05	9.2E-05	7.3E-06	5.1E-05	6.7E-06	1.1E-05	4.4E-05	1.4E-05
15	2.0E-05	2.6E-05	1.2E-05	1.6E-05	2.8E-05	3.5E-05	6.2E-06	5.7E-05	6.0E-06	9.7E-06	7.7E-05	1.3E-05
16	1.4E-05	3.0E-05	1.1E-05	1.4E-05	2.4E-05	2.0E-05	7.2E-06	4.7E-05	6.1E-06	8.2E-06	6.5E-05	1.2E-05
17	1.7E-05	2.6E-05	1.3E-05	1.4E-05	1.5E-05	2.1E-05	1.3E-05	1.3E-05	4.9E-06	6.9E-06	5.0E-05	1.3E-05
18	1.3E-05	2.5E-05	1.5E-05	1.5E-05	1.4E-05	1.9E-05	1.6E-05	1.2E-05	5.3E-06	1.1E-05	4.9E-05	1.4E-05
19	1.6E-05	3.0E-05	1.0E-05	1.2E-05	1.5E-05	1.7E-05	1.3E-05	1.8E-05	8.3E-06	9.0E-06	2.7E-05	1.5E-05
20	1.5E-05	2.5E-05	1.1E-05	6.8E-06	1.5E-05	1.5E-05	1.8E-05	1.2E-05	9.1E-06	7.6E-06	2.2E-05	1.5E-05
21	1.8E-05	1.9E-05	1.3E-05	6.3E-06	1.5E-05	1.7E-05	2.2E-05	9.0E-06	1.0E-05	9.2E-06	2.6E-05	1.4E-05
22	1.5E-05	1.9E-05	1.4E-05	6.5E-06	1.6E-05	1.2E-05	2.2E-05	8.5E-06	1.1E-05	1.0E-05	1.9E-05	1.1E-05
23	1.7E-05	1.9E-05	1.6E-05	6.0E-06	1.7E-05	1.1E-05	1.4E-05	8.3E-06	1.2E-05	1.3E-05	2.3E-05	9.0E-06
24	2.8E-05	1.6E-05	1.7E-05	1.1E-05	2.0E-05	9.7E-06	1.2E-05	7.0E-06	1.3E-05	2.0E-05	1.3E-05	7.7E-06
25	1.4E-05	1.4E-05	1.9E-05	1.2E-05	2.1E-05	1.1E-05	1.3E-05	6.8E-06	1.3E-05	2.6E-05	9.5E-06	8.7E-06
26	1.7E-05	1.5E-05	1.6E-05	1.3E-05	1.9E-05	1.3E-05	1.8E-05	6.9E-06	1.4E-05	3.0E-05	9.1E-06	7.6E-06
27	1.7E-05	1.6E-05	1.1E-05	1.2E-05	1.2E-05	1.2E-05	1.7E-05	7.6E-06	1.3E-05	2.3E-05	1.2E-05	5.2E-06
28	2.6E-05	2.0E-05	1.1E-05	1.4E-05	1.0E-05	1.3E-05	2.0E-05	1.3E-05	1.0E-05	1.8E-05	1.4E-05	4.1E-06
29	2.1E-05		1.2E-05	1.6E-05	1.4E-05	1.5E-05	1.1E-05	1.3E-05	8.5E-06	1.7E-05	1.2E-05	5.2E-06
30	1.9E-05		1.5E-05	1.2E-05	1.3E-05	1.7E-05	1.4E-05	1.3E-05	7.1E-06	1.7E-05	1.5E-05	6.2E-06
31	1.2E-05		1.4E-05		1.6E-05		9.4E-06	1.2E-05		1.9E-05		7.4E-06

SOLRAD Daily X-ray Background 1971



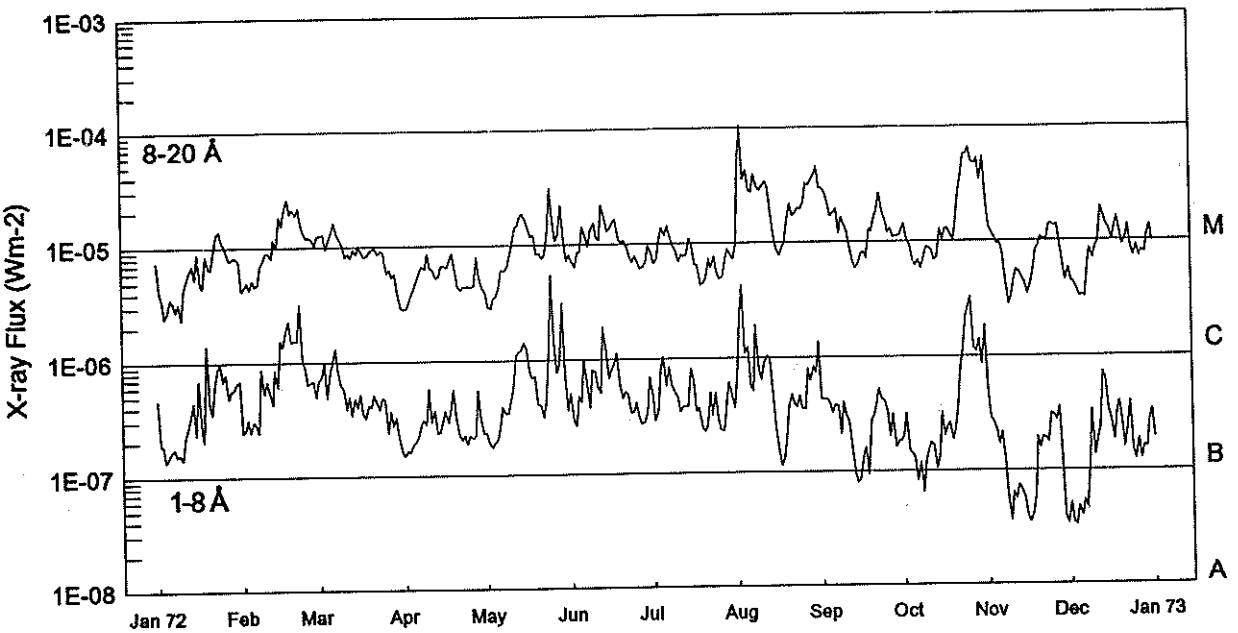
1-8 Angstroms

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	B3.3	B5.2	B3.0	B5.5	B2.1	B2.6	B6.0	B2.1	B1.9	B1.9	B1.6	B3.8
2	B5.3	B5.6	B3.5	B3.1	B2.0	B2.5	B4.2	B2.3	B1.8	B2.3	B1.9	C1.2
3	B5.0	B4.3	B3.9	B3.0	B2.9	B1.9	B5.0	B2.5	B1.7	B7.3	B2.0	B9.6
4	B5.1	B7.1	B2.3	B2.4	B3.0	B2.2	B5.6	B2.0	B2.0	B2.2	B4.8	B5.5
5	B5.4	B5.4	B2.1	B2.8	C1.1	B1.9	B6.7	B2.8	B1.8	B1.7	B2.3	B3.8
6	B5.5	B5.3	B2.4	B3.0	B3.8	B1.7	B3.6	B2.0	B5.3	B1.8	B1.6	B2.8
7	B4.2	B4.6	B3.3	B2.5	B6.2	B1.7	B8.6	B1.8	B3.0	B1.7	B1.5	B2.7
8	B3.9	B4.9	B2.1	B3.6	B4.3	B1.6	B4.1	B2.0	B2.7	B1.6	B1.4	B2.8
9	B5.0	B2.6	B1.5	B2.5	B5.0	B1.7	B3.1	B1.9	B2.6	B1.8	B1.6	B4.7
10	B4.8	B2.5	B1.6	B2.4	B6.4	B1.6	B6.9	B1.8	B2.9	B1.5	B4.4	B4.6
11	B4.9	B4.4	B1.8	B5.2	B7.6	B1.6	B4.8	B1.7	B2.7	B1.6	B3.3	B8.3
12	B5.6	B2.7	B1.8	B5.4	C1.3	B1.7	B2.7	B1.6	B3.0	B1.5	B3.6	B3.3
13	B6.4	B3.3	B1.7	B5.4	B6.7	B2.0	B2.5	B1.6	B7.3	B1.4	B2.6	B2.5
14	B7.9	B3.2	B1.9	B5.4	C1.5	B1.8	B2.3	B1.6	B6.7	B1.3	B2.5	B6.1
15	B9.6	B4.7	B3.4	B4.2	B5.6	B1.8	B2.5	B1.5	B7.0	B1.4	B3.3	B6.2
16	C1.3	C1.9	B2.0	B3.9	B2.5	B1.6	B3.2	B1.6	B3.4	B2.6	B2.3	B7.0
17	C1.0	C1.9	B2.4	B5.5	B2.3	B1.7	B2.6	B2.7	B4.6	B1.6	B2.0	B5.4
18	B9.4	B3.8	B3.1	B6.9	B2.1	B2.8	B2.8	C1.0	B3.2	B3.3	B1.7	B5.7
19	C1.0	B6.7	B2.7	B5.9	B2.1	B1.8	B3.8	B9.2	B3.2	B3.9	B5.2	B4.2
20	B7.8	B4.7	B2.3	C1.4	B2.3	B2.0	B1.8	B5.5	B3.0	B3.7	C1.2	B4.8
21	C1.2	B5.1	B2.0	B5.4	B1.8	B1.7	B2.1	B5.9	B2.7	B3.1	B3.6	B7.5
22	C1.0	B5.4	B2.4	B5.1	B1.7	B2.2	B2.1	B5.6	B3.2	B3.3	B5.1	B4.5
23	C1.2	B5.5	B2.6	B9.7	B1.4	B2.2	B2.5	B6.3	B3.4	B2.5	B4.9	B7.7
24	C1.3	B4.6	B3.8	B7.2	B1.4	B4.2	C1.4	B5.1	B3.3	B2.7	B4.5	B4.0
25	C1.7	B4.4	B3.0	B4.1	B2.0	B7.5	B3.5	B4.5	B2.5	B2.9	B4.2	B4.4
26	C1.2	B3.7	B2.6	B2.0	B1.8	B8.3	B4.0	B4.0	B2.4	B2.2	B5.4	B3.0
27	C1.6	B4.8	B2.2	B1.9	B2.7	B7.1	B3.2	B6.5	B3.2	B3.2	B5.5	B3.0
28	C1.2	B4.6	B2.1	B1.6	B3.2	B8.2	B3.2	B4.2	B3.0	B7.1	B5.4	B2.8
29	C1.0		B2.0	B1.6	B2.0	B6.6	B2.4	B6.4	B2.2	B2.3	B3.8	B3.1
30	B6.8		B2.1	B1.7	B2.4	B6.7	B2.6	C1.0	B2.6	B3.1	B4.7	B4.1
31	C1.2		B2.0		B3.0		B2.4	B6.0		B1.9		B5.4

SOLRAD 8-20 Angstrom Daily X-ray Background 1971 (Wm-2)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.4E-06	1.0E-05	7.0E-06	5.1E-06	3.1E-06	5.4E-06	9.7E-06	4.9E-06	2.9E-06	3.6E-06	3.4E-06	6.9E-06
2	9.6E-06	9.9E-06	7.6E-06	4.5E-06	3.5E-06	4.6E-06	8.0E-06	4.9E-06	2.4E-06	4.7E-06	4.3E-06	1.2E-05
3	1.1E-05	8.7E-06	7.8E-06	4.9E-06	4.7E-06	3.8E-06	7.6E-06	5.0E-06	1.9E-06	7.9E-06	4.5E-06	1.2E-05
4	1.0E-05	1.0E-05	5.4E-06	4.6E-06	4.4E-06	4.0E-06	9.1E-06	4.5E-06	2.0E-06	3.9E-06	5.0E-06	8.7E-06
5	1.0E-05	9.3E-06	4.8E-06	5.0E-06	1.1E-05	3.2E-06	8.3E-06	4.9E-06	2.2E-06	3.4E-06	4.8E-06	6.2E-06
6	1.0E-05	1.0E-05	5.1E-06	4.9E-06	6.4E-06	2.9E-06	6.9E-06	4.6E-06	5.9E-06	3.5E-06	3.6E-06	5.2E-06
7	8.6E-06	9.2E-06	5.3E-06	4.7E-06	8.8E-06	2.8E-06	9.3E-06	3.5E-06	5.0E-06	2.9E-06	3.1E-06	5.5E-06
8	8.5E-06	9.2E-06	4.1E-06	5.7E-06	7.6E-06	2.6E-06	7.3E-06	4.3E-06	4.8E-06	2.8E-06	2.6E-06	5.1E-06
9	9.7E-06	5.6E-06	3.0E-06	5.3E-06	9.1E-06	2.5E-06	5.8E-06	3.9E-06	4.4E-06	3.1E-06	3.2E-06	6.8E-06
10	9.5E-06	5.5E-06	3.3E-06	5.4E-06	9.9E-06	2.2E-06	8.7E-06	4.0E-06	4.5E-06	2.8E-06	6.7E-06	7.5E-06
11	9.4E-06	7.1E-06	3.7E-06	9.0E-06	1.0E-05	2.1E-06	7.4E-06	3.6E-06	3.8E-06	2.8E-06	6.1E-06	1.0E-05
12	1.0E-05	6.1E-06	4.0E-06	1.0E-05	1.4E-05	2.0E-06	5.4E-06	3.2E-06	4.5E-06	2.6E-06	6.2E-06	6.8E-06
13	1.1E-05	6.8E-06	4.0E-06	9.9E-06	1.1E-05	2.7E-06	5.3E-06	3.5E-06	7.9E-06	1.8E-06	5.1E-06	5.6E-06
14	1.3E-05	7.1E-06	3.7E-06	1.0E-05	1.3E-05	2.9E-06	4.9E-06	3.3E-06	9.0E-06	1.7E-06	4.9E-06	8.3E-06
15	1.3E-05	8.3E-06	5.6E-06	8.6E-06	7.6E-06	2.2E-06	4.9E-06	3.2E-06	9.5E-06	2.0E-06	4.5E-06	9.6E-06
16	1.8E-05	2.0E-05	4.2E-06	8.0E-06	4.9E-06	1.7E-06	6.4E-06	3.6E-06	5.9E-06	3.6E-06	4.1E-06	1.0E-05
17	1.7E-05	1.9E-05	4.4E-06	9.3E-06	4.5E-06	2.2E-06	5.9E-06	5.7E-06	6.9E-06	2.8E-06	3.6E-06	1.0E-05
18	1.4E-05	8.2E-06	5.2E-06	1.0E-05	4.4E-06	3.7E-06	6.0E-06	1.0E-05	5.9E-06	4.5E-06	3.1E-06	1.0E-05
19	1.4E-05	1.0E-05	4.5E-06	9.8E-06	4.2E-06	2.8E-06	6.9E-06	1.1E-05	5.7E-06	5.2E-06	6.5E-06	8.9E-06
20	1.3E-05	9.2E-06	4.2E-06	1.2E-05	4.3E-06	2.6E-06	4.3E-06	9.3E-06	5.5E-06	6.8E-06	9.7E-06	9.0E-06
21	1.5E-05	9.5E-06	4.2E-06	8.7E-06	2.6E-06	2.6E-06	4.1E-06	1.0E-05	5.1E-06	5.3E-06	6.4E-06	1.1E-05
22	1.5E-05	1.0E-05	4.7E-06	8.7E-06	2.2E-06	3.1E-06	4.9E-06	9.7E-06	5.4E-06	6.2E-06	7.4E-06	9.0E-06
23	1.8E-05	1.0E-05	4.9E-06	1.0E-05	1.7E-06	3.3E-06	5.4E-06	9.0E-06	5.7E-06	5.1E-06	7.9E-06	1.0E-05
24	1.9E-05	9.3E-06	5.7E-06	1.0E-05	1.7E-06	6.5E-06	1.4E-05	8.7E-06	6.0E-06	5.8E-06	7.7E-06	8.4E-06
25	2.2E-05	9.1E-06	5.2E-06	6.8E-06	2.3E-06	9.2E-06	7.1E-06	8.1E-06	5.0E-06	6.2E-06	7.6E-06	8.1E-06
26	1.9E-05	7.8E-06	4.4E-06	4.4E-06	2.5E-06	1.1E-05	7.6E-06	7.6E-06	4.8E-06	5.1E-06	9.1E-06	6.8E-06
27	2.1E-05	9.1E-06	4.3E-06	3.8E-06	3.9E-06	1.0E-05	6.2E-06	9.5E-06	5.8E-06	6.2E-06	8.6E-06	6.9E-06
28	1.9E-05	8.5E-06	4.1E-06	2.5E-06	5.1E-06	1.1E-05	6.4E-06	7.2E-06	5.1E-06	8.6E-06	8.4E-06	6.6E-06
29	1.5E-05		3.8E-06	2.4E-06	3.4E-06	1.0E-05	5.6E-06	8.8E-06	4.6E-06	4.5E-06	6.4E-06	6.7E-06
30	1.3E-05		2.9E-06	2.2E-06	4.8E-06	1.0E-05	5.6E-06	9.9E-06	4.4E-06	5.6E-06	7.0E-06	7.3E-06
31	1.5E-05		2.9E-06		6.1E-06		5.6E-06	6.5E-06		3.9E-06		8.1E-06

SOLRAD Daily X-ray Background 1972



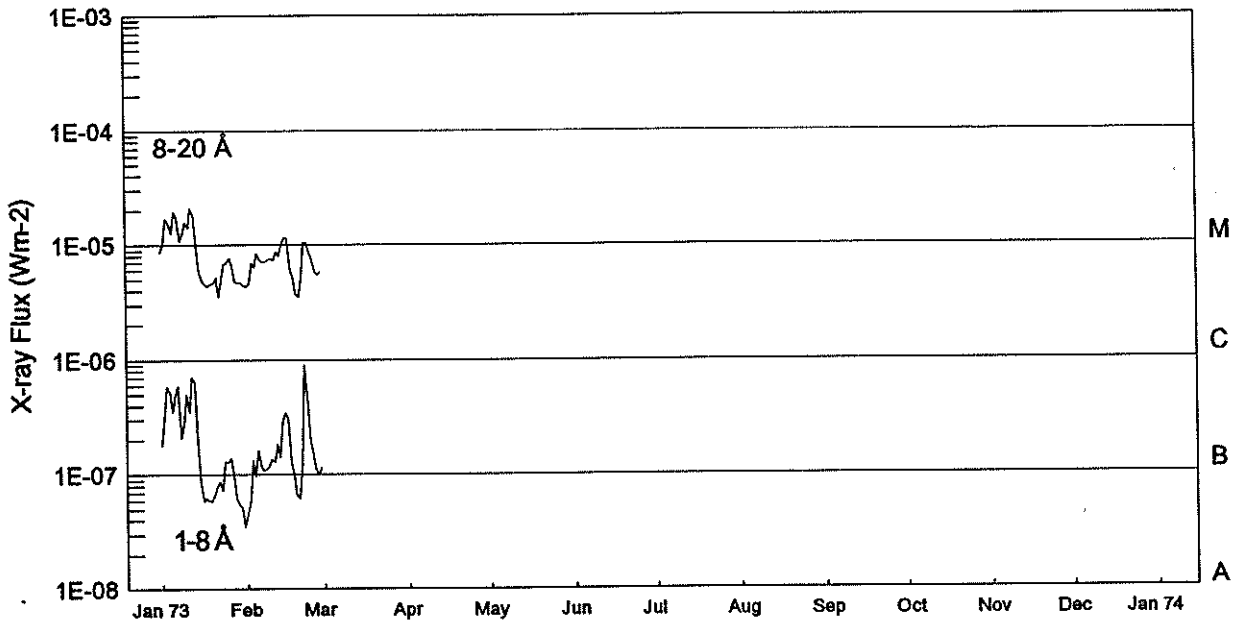
1-8 Angstroms

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	B4.6	B2.4	B7.5	B1.6	B1.9	B2.9	B2.9	C2.1	B4.2	B3.1	B2.8	A3.4
2	B1.9	B2.5	B9.9	B1.6	B1.7	B2.6	B3.5	C4.3	B4.2	B1.5	B2.6	A3.3
3	B1.8	B3.1	B4.8	B1.8	B1.9	B4.7	B7.9	C1.0	B4.0	B1.4	B2.3	A4.7
4	B1.3	B2.4	B8.2	B1.9	B2.0	B4.2	C1.0	C1.2	B3.2	B1.2	B1.6	A3.9
5	B1.5	B3.0	C1.0	B2.1	B2.5	B9.9	B5.8	B5.7	B3.7	A8.3	B2.1	A5.4
6	B1.6	B2.8	C1.3	B2.7	B3.8	B6.1	B8.4	B5.0	B3.7	B1.1	B1.2	A4.6
7	B1.7	B2.4	B8.1	B3.0	B3.4	B3.7	B5.9	C1.9	B2.1	A6.5	A6.0	B1.2
8	B1.5	B8.7	B6.4	B2.8	B3.4	B8.0	B5.1	B7.9	B4.0	B1.1	A3.6	B3.3
9	B1.5	B5.3	B5.7	B5.8	B4.4	B7.7	B4.5	B6.5	B3.1	B1.5	A6.4	B1.3
10	B1.4	B6.7	B3.8	B2.9	B5.6	B5.7	B3.4	B8.9	B2.7	B1.7	A5.7	B1.8
11	B2.2	B5.5	B4.9	B3.7	C1.1	B5.1	B3.7	C1.0	B1.5	B1.6	A7.4	B2.3
12	B2.6	B4.2	B3.3	B2.3	C1.1	C1.9	B3.7	B9.8	A9.8	B1.0	A6.7	B7.1
13	B3.2	B8.6	B4.8	B2.4	C1.2	C1.1	B3.8	B5.2	A7.9	B1.2	A5.8	B6.2
14	B4.4	B6.1	B4.0	B2.9	C1.4	B6.8	B8.1	B2.5	A8.6	B3.2	A4.0	B3.3
15	B2.3	C1.5	B5.2	B3.6	C1.2	B8.1	B6.6	B1.6	B1.3	B2.0	A3.5	B2.8
16	B6.9	C1.3	B3.5	B2.9	B7.7	B9.1	B3.4	B1.1	B1.6	B2.4	A4.1	B1.8
17	B2.5	C1.9	B3.2	B3.7	B7.0	C1.1	B3.7	B1.2	A9.4	B2.6	A6.0	B3.1
18	B2.0	C2.2	B4.1	B5.6	B7.1	B5.8	B2.4	B1.9	B2.8	B1.8	B1.9	B3.9
19	C1.4	C1.5	B4.0	B3.1	B4.1	B4.5	B2.3	B3.7	B2.9	B2.3	B1.5	B2.6
20	B4.4	C1.5	B5.0	B2.2	B4.0	B5.1	B2.5	B4.7	B3.9	B3.7	B1.9	B1.5
21	B3.4	C1.5	B4.3	B2.0	B3.1	B4.9	B4.9	B3.8	B5.2	B7.8	B1.9	B2.4
22	B6.8	C3.2	B3.8	B2.2	B4.2	B3.4	B3.1	B3.7	B4.3	C1.0	B1.7	B3.9
23	B8.9	C1.0	B4.7	B1.8	C1.3	B3.4	B4.9	B4.6	B4.0	C2.2	B3.0	B1.5
24	B9.8	B9.1	B4.6	B2.2	C5.5	B4.2	B2.8	B3.5	B3.3	C2.6	B3.0	B1.2
25	B6.8	B6.4	B2.3	B2.1	C1.4	B3.1	B2.3	B3.5	B2.0	C3.3	B2.7	B1.8
26	B7.8	B6.6	B3.6	B2.2	B7.8	B2.7	B2.3	B7.9	B3.1	C1.1	B3.5	B1.2
27	B4.8	B6.8	B2.7	B5.5	B9.1	B2.8	B3.9	B6.2	B1.6	C1.1	B1.2	B1.6
28	B5.6	B4.8	B3.2	B3.0	C3.1	B3.3	B6.2	B8.2	B1.8	C1.4	A3.9	B1.5
29	B5.7	B6.8	B2.2	B2.3	B7.0	B7.0	B4.9	B7.2	B1.8	B8.4	A3.4	B2.6
30	B6.5		B1.6	B2.3	B3.6	B4.5	B3.6	C1.3	B2.0	C1.8	A5.1	B3.3
31	B6.9		B1.4		B5.1		B6.8	B4.3		B5.1		B1.8

SOLRAD 8-20 Angstrom Daily X-ray Background 1972 (Wm-2)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	7.4E-06	4.2E-06	1.2E-05	2.9E-06	2.9E-06	7.0E-06	6.8E-06	4.6E-05	2.9E-05	1.4E-05	1.3E-05	4.5E-06
2	4.2E-06	4.4E-06	1.2E-05	3.2E-06	2.8E-06	6.4E-06	7.3E-06	1.0E-04	2.6E-05	1.0E-05	1.2E-05	4.3E-06
3	3.5E-06	5.0E-06	9.5E-06	3.9E-06	3.4E-06	8.5E-06	1.0E-05	3.5E-05	2.1E-05	9.3E-06	1.0E-05	3.9E-06
4	2.4E-06	4.3E-06	1.1E-05	4.4E-06	3.7E-06	8.6E-06	1.3E-05	4.3E-05	1.6E-05	7.0E-06	9.4E-06	3.2E-06
5	2.8E-06	5.2E-06	1.3E-05	5.1E-06	4.3E-06	1.4E-05	1.1E-05	2.8E-05	1.7E-05	6.2E-06	9.5E-06	3.4E-06
6	3.6E-06	4.6E-06	1.6E-05	6.0E-06	6.1E-06	1.1E-05	1.4E-05	2.7E-05	1.9E-05	7.0E-06	7.7E-06	3.2E-06
7	3.3E-06	4.7E-06	1.3E-05	6.7E-06	6.0E-06	9.6E-06	1.1E-05	3.9E-05	1.1E-05	5.8E-06	4.6E-06	6.6E-06
8	2.8E-06	6.9E-06	1.1E-05	6.3E-06	6.5E-06	1.3E-05	9.6E-06	3.0E-05	1.6E-05	7.1E-06	2.8E-06	8.5E-06
9	3.3E-06	7.8E-06	1.0E-05	8.6E-06	7.9E-06	1.5E-05	8.6E-06	2.8E-05	1.4E-05	8.9E-06	3.3E-06	7.0E-06
10	2.3E-06	8.9E-06	8.2E-06	6.5E-06	9.6E-06	1.1E-05	7.0E-06	3.1E-05	1.2E-05	8.8E-06	4.7E-06	8.7E-06
11	4.4E-06	8.9E-06	8.7E-06	6.1E-06	1.4E-05	1.0E-05	7.9E-06	3.3E-05	8.6E-06	8.3E-06	5.6E-06	9.6E-06
12	5.2E-06	8.0E-06	8.0E-06	5.3E-06	1.4E-05	2.2E-05	7.8E-06	3.0E-05	6.8E-06	6.9E-06	5.4E-06	1.9E-05
13	6.1E-06	1.1E-05	9.5E-06	5.5E-06	1.7E-05	1.7E-05	7.9E-06	1.7E-05	5.9E-06	7.3E-06	4.8E-06	1.6E-05
14	7.0E-06	9.9E-06	8.6E-06	6.6E-06	1.8E-05	1.2E-05	1.1E-05	1.1E-05	6.4E-06	1.2E-05	4.3E-06	1.3E-05
15	5.2E-06	1.8E-05	1.0E-05	6.8E-06	1.7E-05	1.3E-05	9.3E-06	9.0E-06	7.9E-06	1.0E-05	3.5E-06	1.2E-05
16	8.8E-06	1.5E-05	8.9E-06	6.6E-06	1.3E-05	1.5E-05	6.6E-06	7.8E-06	8.1E-06	1.2E-05	4.3E-06	1.0E-05
17	4.7E-06	2.1E-05	8.1E-06	7.4E-06	1.1E-05	1.6E-05	6.5E-06	8.8E-06	7.3E-06	1.3E-05	5.5E-06	1.3E-05
18	4.5E-06	2.5E-05	8.4E-06	8.6E-06	1.2E-05	1.1E-05	4.3E-06	1.0E-05	1.2E-05	1.1E-05	8.2E-06	1.5E-05
19	8.4E-06	1.9E-05	9.0E-06	6.3E-06	8.3E-06	1.0E-05	4.6E-06	1.5E-05	1.2E-05	1.0E-05	8.9E-06	1.2E-05
20	6.7E-06	2.1E-05	9.5E-06	4.3E-06	8.5E-06	1.0E-05	4.9E-06	2.1E-05	1.6E-05	1.5E-05	1.0E-05	9.2E-06
21	6.5E-06	1.9E-05	9.5E-06	4.1E-06	7.6E-06	9.8E-06	7.3E-06	1.7E-05	1.8E-05	2.6E-05	1.0E-05	1.0E-05
22	9.6E-06	2.1E-05	8.5E-06	4.4E-06	8.3E-06	7.8E-06	6.1E-06	1.7E-05	2.6E-05	3.5E-05	9.9E-06	1.3E-05
23	1.3E-05	1.5E-05	9.1E-06	4.4E-06	1.3E-05	7.0E-06	7.6E-06	1.9E-05	1.8E-05	5.7E-05	1.3E-05	8.7E-06
24	1.3E-05	1.3E-05	8.7E-06	4.4E-06	3.1E-05	7.9E-06	5.6E-06	1.9E-05	1.5E-05	5.7E-05	1.4E-05	7.3E-06
25	1.1E-05	1.1E-05	5.8E-06	4.4E-06	1.5E-05	7.0E-06	4.9E-06	2.1E-05	1.2E-05	6.6E-05	1.3E-05	9.0E-06
26	1.0E-05	1.2E-05	6.3E-06	4.6E-06	1.0E-05	6.1E-06	5.1E-06	3.2E-05	1.2E-05	4.9E-05	1.3E-05	7.3E-06
27	8.5E-06	1.1E-05	5.4E-06	8.0E-06	1.2E-05	6.4E-06	6.8E-06	3.1E-05	1.0E-05	4.7E-05	9.2E-06	8.1E-06
28	7.7E-06	1.0E-05	5.8E-06	5.3E-06	2.2E-05	7.2E-06	8.8E-06	3.5E-05	1.1E-05	5.3E-05	6.3E-06	7.8E-06
29	8.1E-06	1.2E-05	4.0E-06	4.2E-06	1.0E-05	9.6E-06	8.1E-06	3.8E-05	1.1E-05	3.4E-05	4.6E-06	1.0E-05
30	8.1E-06		2.9E-06	3.9E-06	7.3E-06	8.1E-06	7.2E-06	4.5E-05	1.2E-05	5.4E-05	5.8E-06	1.3E-05
31	7.7E-06		2.8E-06		8.1E-06		9.5E-06	2.9E-05		2.3E-05		9.6E-06

SOLRAD Daily X-ray Background 1973



1-8 Angstroms

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	B1.8	A4.4										
2	B3.0	A5.9										
3	B5.8	B1.3										
4	B5.2	A9.6										
5	B3.5	B1.6										
6	B5.0	B1.1										
7	B5.9	B1.0										
8	B2.1	B1.1										
9	B2.7	B1.1										
10	B5.0	B1.3										
11	B3.4	B1.3										
12	B7.1	B1.8										
13	B6.5	B1.4										
14	B1.9	B2.9										
15	A9.0	B3.4										
16	A5.8	B2.9										
17	A6.2	B1.2										
18	A5.9	A9.3										
19	A5.8	A6.7										
20	A6.7	A6.1										
21	A8.0	B1.2										
22	A8.7	B8.9										
23	A7.3	B4.2										
24	B1.3	B1.9										
25	B1.2	B1.5										
26	B1.4	B1.1										
27	B1.0	A9.9										
28	A6.2	B1.1										
29	A5.4											
30	A5.2											
31	A3.4											

No data available after Feb 73.

SOLRAD 8-20 Angstrom Daily X-ray Background 1973 (Wm-2)

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	8.7E-06	4.3E-06										
2	1.0E-05	4.5E-06										
3	1.7E-05	6.9E-06										
4	1.5E-05	6.3E-06										
5	1.2E-05	8.3E-06										
6	1.9E-05	7.3E-06										
7	1.7E-05	7.1E-06										
8	1.0E-05	7.1E-06										
9	1.2E-05	7.3E-06										
10	1.5E-05	7.6E-06										
11	1.4E-05	7.4E-06										
12	2.0E-05	8.7E-06										
13	1.8E-05	7.9E-06										
14	9.5E-06	1.0E-05										
15	5.7E-06	1.1E-05										
16	4.7E-06	1.1E-05										
17	4.4E-06	6.3E-06										
18	4.3E-06	5.0E-06										
19	4.5E-06	3.8E-06										
20	4.6E-06	3.4E-06										
21	5.1E-06	4.9E-06										
22	3.5E-06	1.0E-05										
23	4.9E-06	1.0E-05										
24	6.7E-06	8.4E-06										
25	7.0E-06	7.3E-06										
26	7.6E-06	5.9E-06										
27	6.3E-06	5.4E-06										
28	4.7E-06	5.8E-06										
29	4.6E-06											
30	4.6E-06											
31	4.3E-06											

Data not available after Feb 73.

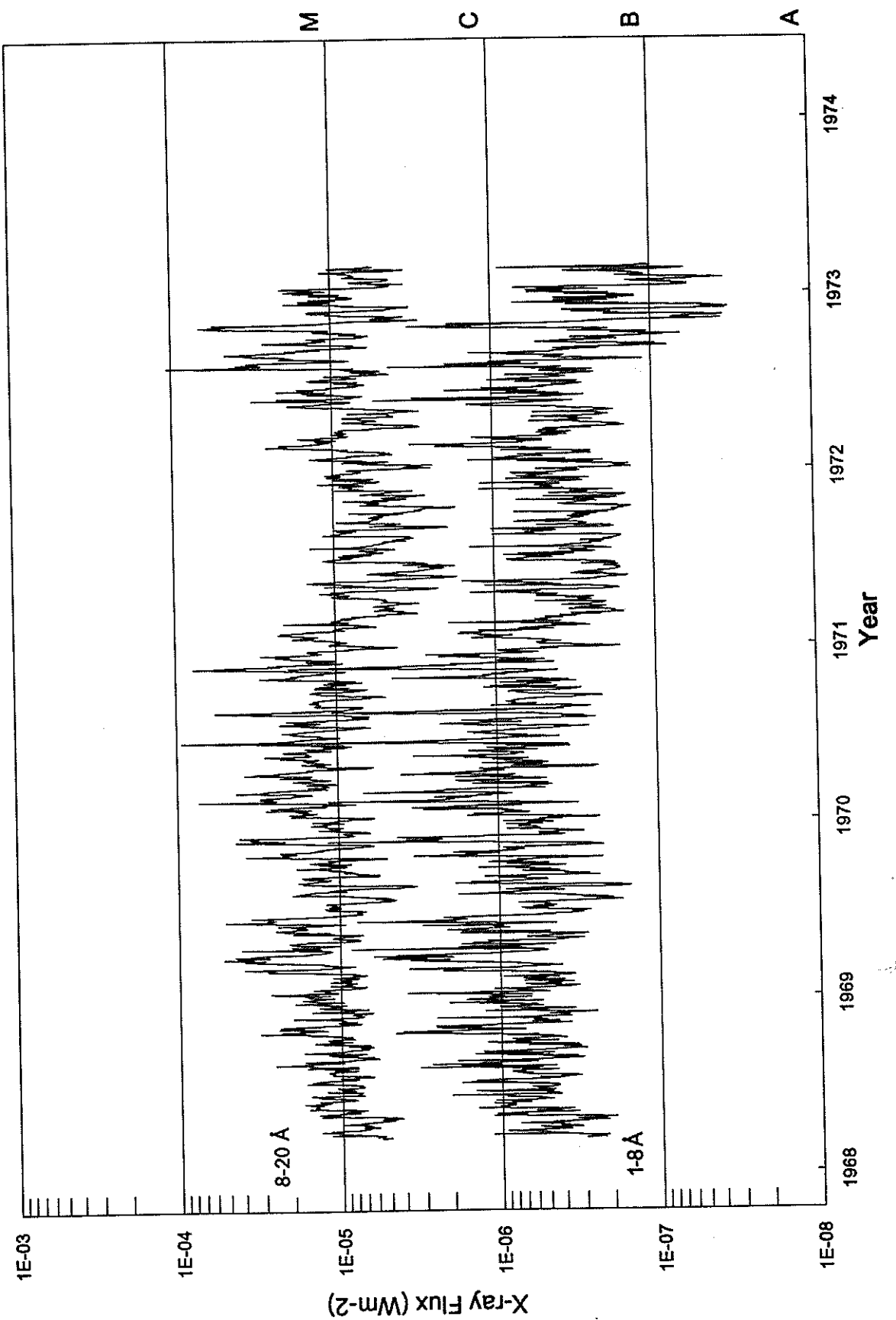
The Naval Research Laboratory's SOLRAD 9 (1968-17A) and SOLRAD 10 (1971-058A) satellite solar x-ray data were published in hourly tables and graphs in earlier SGDs. The data extend from 14 Mar 68 to 28 Feb 73. NGDC recently computed daily background values in order to extend the GOES x-ray background data to earlier years. We hope to compute the GOES x-ray background data for the years 1974-1985 in the near future.

The daily averages include data obtained during solar flares, but the data contaminated by charged particle interference were excluded whenever possible. The daily x-ray background levels were computed by averaging the hourly values in three 8-hour periods (01-08, 09-16, and 17-24). The lowest value of the three became the x-ray background of the day. This is the same procedure for producing the GOES x-ray background.

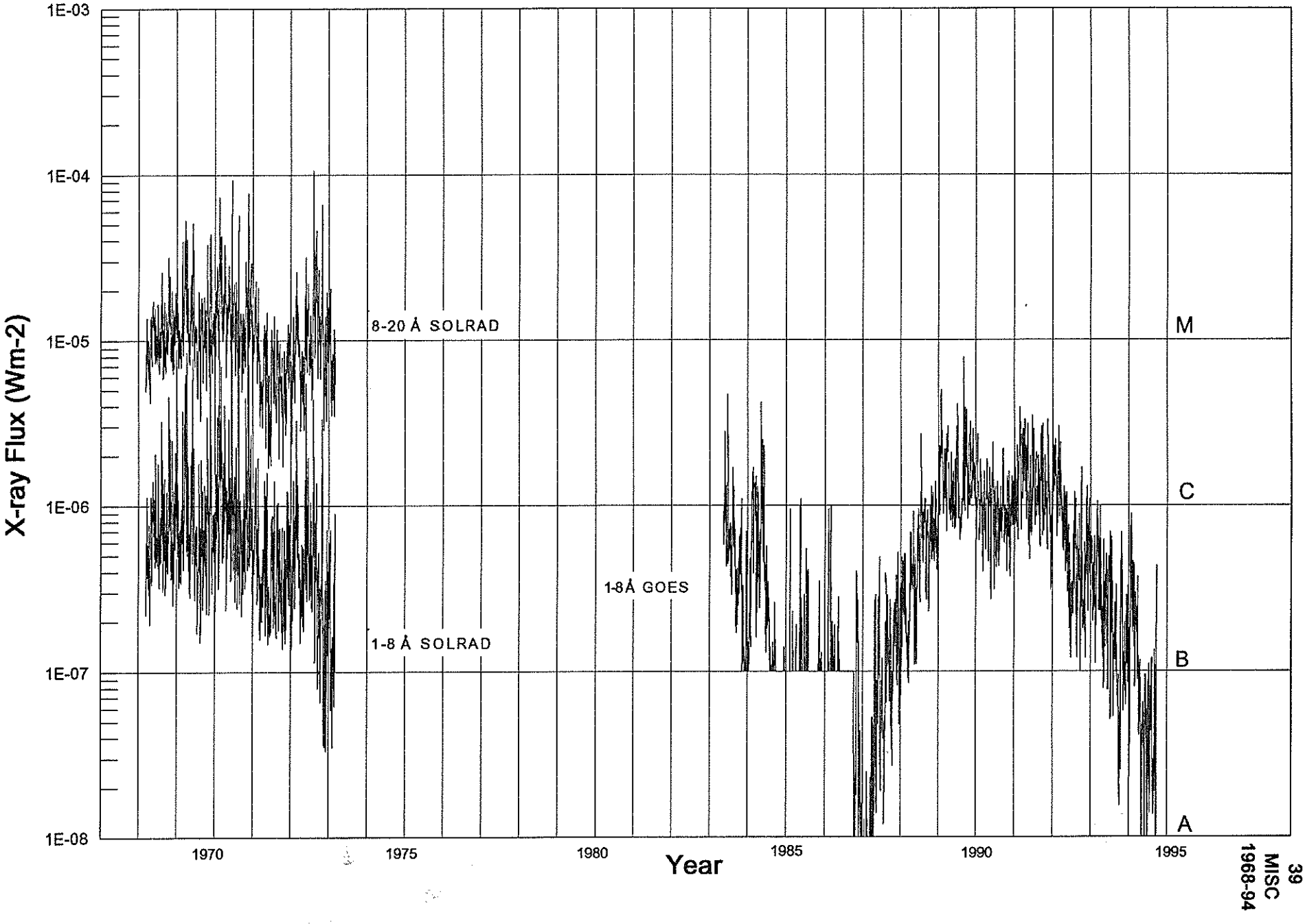
A complete description of the SOLRAD-9 satellite is given in the NRL Report Number 6800 entitled "The NRL SOLRAD-9 Satellite, Solar Explorer B, 1968-17A." The description for SOLRAD-10 is given in the NRL Report Number 7408 entitled "The NRL SOLRAD-10 Satellite, Solar Explorer 44, 1971-058A."

38
MISC
1968-73

SOLRAD Daily X-ray Background 14 Mar 1968 - 28 Feb 1973



SOLRAD and GOES Daily X-ray Background



39
MISC
1968-94

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."