JULY 2004 NUMBER 719 - Part II

Solar-Geophysical Data comprehensive reports

Data for January 2004 and Miscellaneous
Explanation of Data Reports Issued as Number 515 (Supplement) July 1987

NEW DATA:
ACE Solar Wind, Interplanetary Magnetic Field and Particles -- Monthly Plots

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JULY 2004 NUMBER 719 - Part II

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Data for January 2004 and Late Data

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SOLAR-GEOPHYSICAL DATA

Number 719

(Issued in Two Parts)

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Hα SOLAR FLARES

JANUARY 2004

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	0117		0736	No Flare Patrol													
0001	LEAR	01	0411	0412	0418	S07	E40	10534	01	4.2	7	SF		3	E		16		
		01	1114		1130	No Flare Patrol													
		01	1235		1303	No Flare Patrol													
		01	1353		1600	No Flare Patrol													
		01	1805		1926	No Flare Patrol													
		01	1948		2002	No Flare Patrol													
0002	HOLL	01	2240	2241	2245	S07	E73	10536	01	7.4	5	SF		3	E		31		F
		02	0024		0030	No Flare Patrol													
0003	LEAR	02	0254	0257	0311	S04	E28	10534	01	4.2	17	SF		3	E		37		F
		02	0346		0436	No Flare Patrol													
		02	1411		1420	No Flare Patrol													
		03	0044		0150	No Flare Patrol													
0004	LEAR	03	0559	0608	0611	S14	E64	10536	01	8.1	12	SF		3	E		15		
0005		03	08441	08452	0850	S14	E63	10536	01	8.1	6	SF					33		
	LEAR	03	0844	0845	0852	S15	E64	10536	01	8.2	8	SF		3	E		33		
	KANZ	03	0845	0847	0848	S12	E62	10536	01	8.0	3	SF		2	E				
		03	1031		1035	No Flare Patrol													
		03	1037		1055	No Flare Patrol													
		03	1104		1114	No Flare Patrol													
		03	1116		1117	No Flare Patrol													
		03	1119		1143	No Flare Patrol													
		03	1147		1151	No Flare Patrol													
		03	1159		1205	No Flare Patrol													
		03	1209		1222	No Flare Patrol													
		03	1233		1240	No Flare Patrol													
		03	1245		1248	No Flare Patrol													
		03	1250		1252	No Flare Patrol													
		03	1302		1304	No Flare Patrol													
		03	1306		1309	No Flare Patrol													
		03	1400		1420	No Flare Patrol													
		04	0019		0039	No Flare Patrol													
		04	0114		0141	No Flare Patrol													
		04	0220		0232	No Flare Patrol													
		04	0536		1125	No Flare Patrol													
		04	1127		1149	No Flare Patrol													
		04	1253		1300	No Flare Patrol													
		04	1323		1403	No Flare Patrol													
0006	HOLL	04	1511	1522	1544	S06	E45	10536	01	8.0	33	SF		3	E		32		F
		04	2145		2313	No Flare Patrol													
		04	2317		2400	No Flare Patrol													
		05	0000		0726	No Flare Patrol													
		05	0746		0831	No Flare Patrol													
0007	KANZ	05	1106	1112	1134	S12	E30	10536	01	7.7	28	SF		2	E				
0008	KANZ	05	1223	1237	1242	S12	E33	10536	01	8.0	19	SF		2	E				
		05	2128		2217	No Flare Patrol													
		05	2318		2400	No Flare Patrol													
		06	0000		0704	No Flare Patrol													
		06	0743		0745	No Flare Patrol													
0009	HOLL	06	2235	2237	2241	S11	E03	10536	01	7.2	6	SF		3	E		12		FH
		07	0003		0159	No Flare Patrol													
		07	0209		0311	No Flare Patrol													
		07	0320		0820	No Flare Patrol													

JANUARY 2004

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		07	1019	1031	1050	N04	E72	10537	01	12.8	31	1N					87		F
	KANZ	07	1019	1031	1050	N06	E76	10537	01	13.1	31	1N		2	E				
	SVTO	07	1024E	1024U	1111D	N02	E69	10537	01	12.6	47D	SF		1	E		87		F
		07	1230		1235	No Flare Patrol													
		07	1311		1312	No Flare Patrol													
		07	1337		1339	No Flare Patrol													
		07	1341		1344	No Flare Patrol													
		07	1346		1355	No Flare Patrol													
		07	1359		1421	No Flare Patrol													
		07	1507		1516	No Flare Patrol													
0011	HOLL	07	1520	1521	1525	N04	E68	10537	01	12.7	5	SF		3	E		24		
		07	2309		2400	No Flare Patrol													
		08	0000		0223	No Flare Patrol													
		08	0228		0330	No Flare Patrol													
0012	LEAR	08	0410	0412	0420	N02	E64	10537	01	12.9	10	SF		3	E		18		F
0013	LEAR	08	0427	0431	0434	N02	E64	10537	01	13.0	7	SF		3	E		11		F
0014	LEAR	08	0455	0503	0554	N01	E64	10537	01	13.0	59	1N		3	E		124		EF
		08	1440		1444	No Flare Patrol													
		08	1458		1623	No Flare Patrol													
		08	1710		1947	No Flare Patrol													
		08	1955		2005	No Flare Patrol													
		08	2157		2325	No Flare Patrol													
		08	2335		2400	No Flare Patrol													
		09	0000		0255	No Flare Patrol													
0015	LEAR	09	0334	0335	0339	N01	E49	10537	01	12.8	5	SF		3	E		21		FH
0016	LEAR	09	0506	0508	0518	N05	E46	10537	01	12.6	12	1F		3	E		54		F
		09	1031		1514	No Flare Patrol													
0017	HOLL	09	1841	1843	1849	N08	E42	10537	01	12.9	8	SF		3	E		42		F
0018	HOLL	09	1855	1855	1906	S07	W29	10536	01	7.6	11	SF		3	E		12		F
		09	2005		2122	No Flare Patrol													
		09	2127		2141	No Flare Patrol													
		09	2148		2400	No Flare Patrol													
		10	0000		0010	No Flare Patrol													
0019	LEAR	10	0118	0119	0124	S12	W31	10536	01	7.7	6	SF		3	E		12		
0020	LEAR	10	0328	0330	0346	S12	W29	10536	01	7.9	18	SF		3	E		41		F
0021	LEAR	10	0420	0421	0452	S11	W30	10536	01	7.9	32	1F		3	E		100		F
0022	LEAR	10	0508	0512	0540	S13	W32	10536	01	7.8	32	SF		3	E		56		F
0023	LEAR	10	1000	1000	1009	N06	E30	10537	01	12.7	9	SF		3	E		11		F
		10	1317		1321	No Flare Patrol													
		10	1402		1414	No Flare Patrol													
		10	1417		1457	No Flare Patrol													
		10	1549		1603	No Flare Patrol													
		10	1811		1821	No Flare Patrol													
		10	2048		2400	No Flare Patrol													
		11	0000		0004	No Flare Patrol													
0024	LEAR	11	0318	0318	0325	S11	W43	10536	01	7.9	7	SF		3	E		19		
0025	LEAR	11	0416	0417	0421	S11	W40	10536	01	8.2	5	SF		3	E		22		F
		11	0613		0706	No Flare Patrol													

Hα SOLAR FLARES

JANUARY 2004

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
0026	SVTO	11	0721	0721	0724	S11	W47	10536	01	7.8	3	SF		3	E		41		
0027	KANZ	11	1013	1015	1016	N03	E16	10537	01	12.6	3	SF		2	E				
		11	1512		1613	No Flare Patrol													
		11	1718		1746	No Flare Patrol													
		11	1844		2306	No Flare Patrol													
0028	LEAR	12	0348	0348	0352	S11	W56	10536	01	7.9	4	SF		3	E		13		F
0029	LEAR	12	0838	0840	0848	S11	W59	10536	01	7.9	10	SF		3	E		26		F
		12	1116		1452	No Flare Patrol													
		12	1502		1518	No Flare Patrol													
0030	LEAR	12	2352	2353	2406	S10	W68	10536	01	7.9	14	SF		3	E		14		F
		13	0000		0715	No Flare Patrol													
0031	LEAR	13	0244	0245	0253	S06	W75	10536	01	7.5	9	SF		3	E		17		F
0032	LEAR	13	0608	0608	0625	N03	W06	10537	01	12.8	17	SF		3	E		20		F
		13	0840		0845	No Flare Patrol													
		13	0915		0950	No Flare Patrol													
		13	1219		1323	No Flare Patrol													
		13	1404		1457	No Flare Patrol													
		13	1934		2104	No Flare Patrol													
		13	2123		2127	No Flare Patrol													
		13	2201		2210	No Flare Patrol													
		13	2218		2245	No Flare Patrol													
		14	1401		1402	No Flare Patrol													
		14	1404		1423	No Flare Patrol													
		14	1427		2237	No Flare Patrol													
0033	LEAR	15	0624	0629	0643	S16	E52	10540	01	19.2	19	1F		3	E		111		F
		15	1033		1115	No Flare Patrol													
		15	1226		1359	No Flare Patrol													
		15	1430		1501	No Flare Patrol													
		15	1509		2253	No Flare Patrol													
0034	LEAR	16	0119	0120	0128	N05	W47	10537	01	12.5	9	SF		3	E		70		
		16	0133		0142	No Flare Patrol													
		16	1244		1331	No Flare Patrol													
		16	1341		2253	No Flare Patrol													
0035	LEAR	17	0342	0355	0405	S15	E28	10540	01	19.3	23	SF		3	E		17		F
0036	LEAR	17	0756	0756	0813	S15	E26	10540	01	19.3	17	SF		3	E		26		F
0037		17	0914	0915	0923	S12	E20	10540	01	18.9	9	SF					29		FH
	SVTO	17	0914	0915	0922	S12	E20	10540	01	18.9	8	SF		3	E		22		FH
	LEAR	17	0914	0915	0924	S12	E20	10540	01	18.9	10	SF		3	E		36		FH
0038		17	09381	09401	0948	N06	W64	10537	01	12.6	10	SF					93		F
	LEAR	17	0938	0941	0950	N05	W64	10537	01	12.6	12	SF		3	E		89		F
	SVTO	17	0939	0940	0946	N08	W65	10537	01	12.5	7	SF		3	E		97		F
		17	1126		1138	No Flare Patrol													
		17	1207		2302	No Flare Patrol													
0039	LEAR	18	0014	0017	0030	S15	E19	10540	01	19.4	16	1N		3	E		109		EF
0040	LEAR	18	0558	0600	0603	S16	E16	10540	01	19.5	5	SF		3	E		13		F
		18	1040		1054	No Flare Patrol													

JANUARY 2004

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 Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	Remarks
0041	SVTO	18	1348	1353	1356	N05	W83	10537	01	12.4	8	SF		3	E		44		
		18	1453		1518	No Flare Patrol													
0042	LEAR	19	0529	0533	0543	S17	E05	10540	01	19.6	14	SF		3	E		60		F
0043	LEAR	19	0658	0658	0703	S15	W01	10540	01	19.2	5	SF		3	E		14		F
		19	1032		1339	No Flare Patrol													
		19	1343		1421	No Flare Patrol													
		19	1749		1834	No Flare Patrol													
0044	HOLL	19	1958	2000	2024	S15	W03	10540	01	19.6	26	SF		3	E		96		U
0045	LEAR	19	2346	2440	2537	S13	W09	10540	01	19.3	111	SF		3	E		71		FT
		20	0139		0706	No Flare Patrol													
0046	SVTO	20	0734	0744	0810	S16	W12	10540	01	19.4	36	2N		3	E		328		F
		20	1629		1707	No Flare Patrol													
		20	1954		2120	No Flare Patrol													
		20	2142		2259	No Flare Patrol													
0047	LEAR	21	0025	0029	0059	S16	W12	10543	01	20.1	34	SF		3	E		51		F
		21	0040		0053	No Flare Patrol													
		21	1036		1234	No Flare Patrol													
		21	1254		1255	No Flare Patrol													
		21	1307		1310	No Flare Patrol													
		21	1316		1318	No Flare Patrol													
		21	1323		1458	No Flare Patrol													
		21	2050		2106	No Flare Patrol													
		21	2156		2305	No Flare Patrol													
		22	0118		0401	No Flare Patrol													
		22	0411		0431	No Flare Patrol													
		22	0455		0540	No Flare Patrol													
		22	1426		1431	No Flare Patrol													
		22	1447		1759	No Flare Patrol													
		22	1837		1903	No Flare Patrol													
		23	1427		1439	No Flare Patrol													
		23	1504		1615	No Flare Patrol													
		23	2217		2246	No Flare Patrol													
		24	1409		1410	No Flare Patrol													
		24	1413		1423	No Flare Patrol													
		24	1449		1510	No Flare Patrol													
		24	1516		1525	No Flare Patrol													
		24	1644		1711	No Flare Patrol													
		24	1801		1818	No Flare Patrol													
		24	1844		2011	No Flare Patrol													
		24	2022		2027	No Flare Patrol													
		24	2108		2121	No Flare Patrol													
		24	2147		2257	No Flare Patrol													
		25	1033		2142	No Flare Patrol													
		25	2200		2214	No Flare Patrol													
0048	HOLL	25	2227	2227	2249	N11	W70	10542	01	20.7	22	SF		3	E		23		F
0049	HOLL	25	2232	2232	2248	S18	W72	10543	01	20.4	16	SF		3	E		64		F
		26	1140		1142	No Flare Patrol													
		26	1146		1147	No Flare Patrol													
		27	0304		0910	No Flare Patrol													
		27	1108		1127	No Flare Patrol													
		27	1149		1247	No Flare Patrol													
		27	1254		1419	No Flare Patrol													
		28	1032		1302	No Flare Patrol													
		28	1307		1309	No Flare Patrol													
		28	1331		1333	No Flare Patrol													
		28	1336		1339	No Flare Patrol													

Hα SOLAR FLARES

JANUARY 2004

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
		28	1343		1418	No Flare Patrol													
		29	1207		1213	No Flare Patrol													
		29	1308		1311	No Flare Patrol													
		29	1313		1339	No Flare Patrol													
		29	1346		1355	No Flare Patrol													
		29	1625		1629	No Flare Patrol													
		29	1642		1653	No Flare Patrol													
		30	1317		1320	No Flare Patrol													
		31	1426		1427	No Flare Patrol													
		31	1506		1538	No Flare Patrol													
		31	1745		2257	No Flare Patrol													

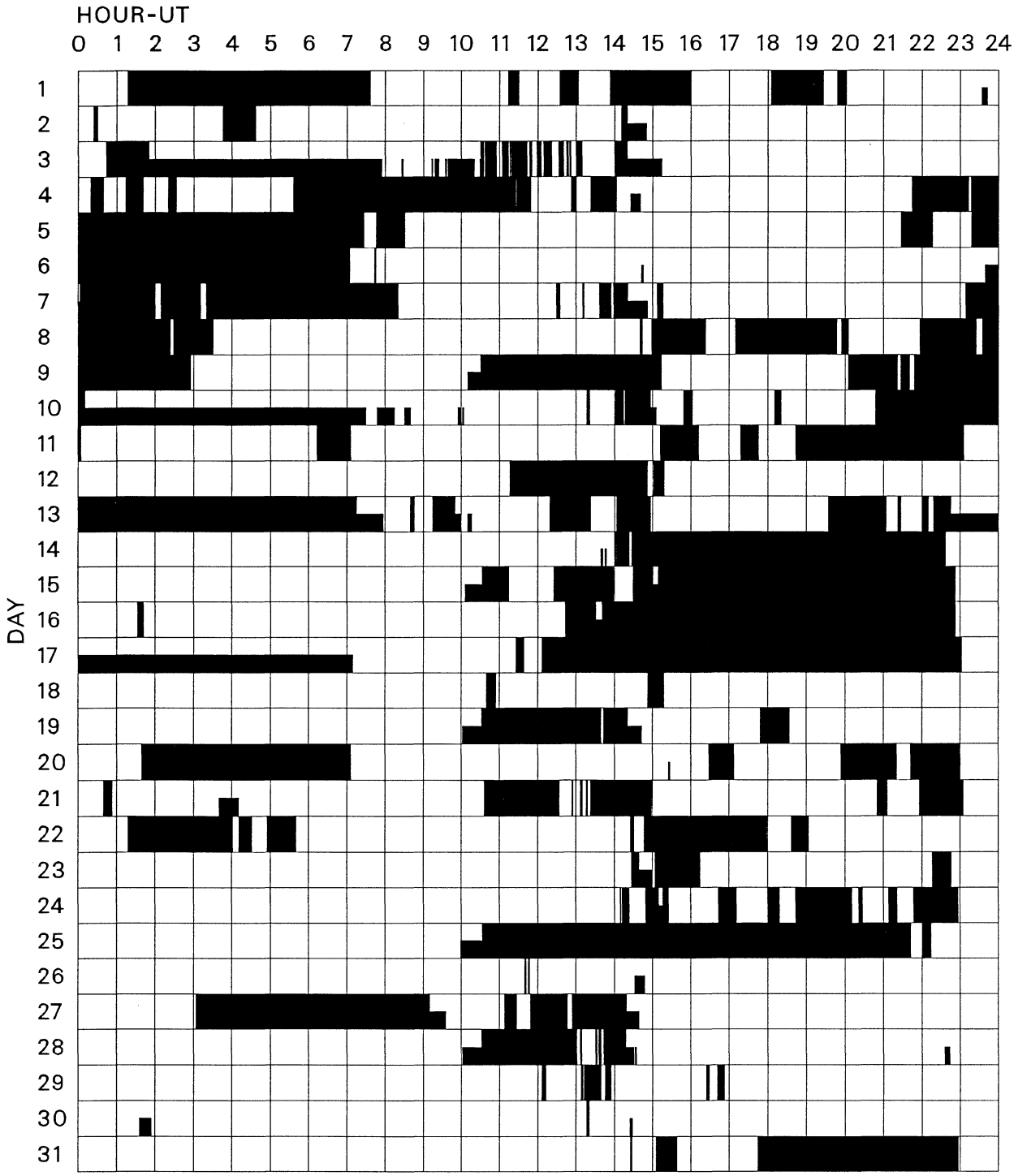
"Remarks"

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

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

INTERVALS OF NO FLARE PATROL OBSERVATION
FOR PRECEDING SOLAR FLARE TABLE

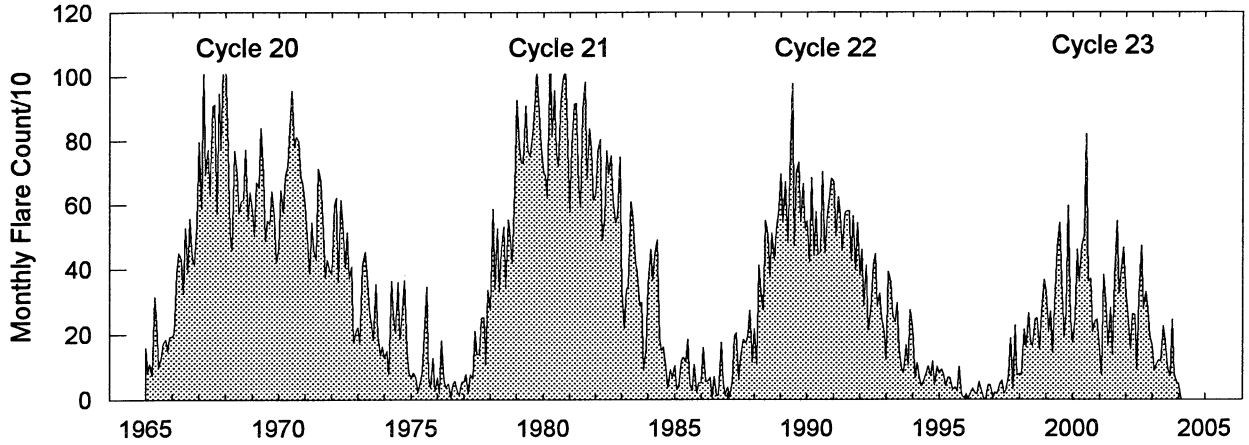
JANUARY 2004



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 or cinematographic): portions of a panel with only the bottom half shaded mark times of only visual patrol.

Holloman Learmonth San Vito
Kanzelhoehe

Monthly Counts of Grouped Solar Flares
Jan 1965 - Jan 2004



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	31	3	0	44	45	280
1997	8	22	18	43	59	18	26	75	188	31	228	74	790
1998	78	76	216	161	264	177	164	248	249	155	268	367	2423
1999	330	212	271	145	330	466	544	368	192	264	598	243	3963
2000	175	248	462	362	473	505	818	364	372	208	241	246	4474
2001	147	77	383	284	164	282	137	376	549	325	405	468	3597
2002	318	261	155	263	259	91	318	474	280	329	279	196	3223
2003	164	87	112	122	117	226	181	94	73	245	78	53	1552
2004	49												49

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

SOLAR RADIO EMISSION
Outstanding Occurrences

JANUARY 2004

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	204	IZMI	44	NS	0700.0E		300.0D		95.0		
	127	TORN	44	NS	0730.0E		390.0D		48.0		V=2
	245	SVTO	43	NS	0847.0	1336.0	302.0	270.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1238.0	1301.0	210.0	150.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1238.0	1238.0	682.0	51.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1238.0	1301.0	682.0	150.0			QL=4 ST=1 TYP=1
	235	CUBA	44	NS	1400.0E		300.0D		10.0		
	280	CUBA	44	NS	1400.0E		300.0D		32.0		
	245	SGMR	43	NS	1808.0	1838.0	157.0	260.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1917.0	2226.0	505.0	130.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	2228.0	0425.0	722.0	300.0			QL=4 ST=2 TYP=1
	500	HIRA	7	C	0120.0	0143.0	45.0	20.0			
	245	PALE	4	S/F	0305.0	0319.0	1255.0	410.0			QL=4 ST=1 TYP=3
	500	HIRA	3	S	0319.0	0319.0	3.0	15.0			
	245	LEAR	8	S	0319.0	0319.0	U	290.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	0647.0	0647.0	U	500.0			QL=2 ST=2 TYP=6
	245	SVTO	8	S	0647.0	0647.0	1.0	340.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0703.0	0703.0	1.0	51.0			QL=4 ST=3 TYP=3
	245	SVTO	4	S/F	1109.0	1110.0	3.0	150.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1110.0	1110.0	2.0	77.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1207.0	1208.0	1.0	140.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1208.0	1208.0	U	54.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1336.0	1336.0	U	330.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1336.0	1336.0	U	24.0			QL=4 ST=2 TYP=3
	9500	CUBA	1	S	1337.4	1337.8	1.1	23.0	11.0		
	245	SGMR	8	S	1712.0	1712.0	U	74.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1808.0	1808.0	1.0	180.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1824.0	1824.0	2.0	140.0			QL=4 ST=2 TYP=3
	2800	PENT	41	F	1832.0	1839.0	19.0	7.0			
	245	PALE	8	S	1842.0	1843.0	1.0	390.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1842.0	1842.0	U	61.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1842.0	1842.0	1.0	440.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1842.0	1842.0	U	67.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1845.0	1846.0	1.0	71.0			QL=4 ST=2 TYP=3
	2800	PENT	1	S	2109.0	2116.0	12.0	7.0			
	2800	PENT	3	S	2229.0	2239.0	20.0	45.0			
	245	LEAR	48	C	2236.0	2238.0	7.0	420.0			QL=2 ST=2 TYP=8
	500	HIRA	7	C	2236.0	2241.0	26.0	65.0			
	410	PALE	4	S/F	2237.0	2238.0	6.0	120.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	2237.0	2238.0	4.0	100.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	2237.0	2238.0	3.0	67.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	2238.0	2238.0	U	61.0			QL=4 ST=2 TYP=3
	1415	LEAR	8	S	2238.0	2239.0	1.0	83.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	2238.0	2238.0	U	59.0			QL=4 ST=2 TYP=3
	245	PALE	48	C	2238.0	2245.0	7.0	960.0			QL=4 ST=2 TYP=8
	1415	PALE	8	S	2238.0	2239.0	1.0	88.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	2238.0	2239.0	2.0	60.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	2240.0	2240.0	U	57.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	2240.0	2240.0	U	94.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	2244.0	2245.0	1.0	590.0			QL=2 ST=2 TYP=6
02	245	SVTO	43	NS	0636.0	0842.0	511.0	420.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0636.0	0640.0	1044.0	210.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0636.0	0640.0U	1044.0	210.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0636.0	0842.0U	1044.0	420.0			QL=4 ST=1 TYP=1
	204	IZMI	44	NS	0700.0E		300.0D		250.0		
	127	TORN	44	NS	0730.0E		320.0D		23.0		V=1
	245	SGMR	43	NS	1244.0	1958.0	454.0	780.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1244.0	1244.0	676.0	50.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1244.0	1256.0	676.0	210.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1244.0	1609.0	676.0	750.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1244.0	1958.0	676.0	780.0			QL=4 ST=1 TYP=1
	235	CUBA	44	NS	1305.0E		235.0D		29.0		
	280	CUBA	44	NS	1305.0E		235.0D		75.0		
	245	PALE	43	NS	1816.0	2018.0	536.0	560.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1839.0	2136.0	543.0	330.0			QL=4 ST=2 TYP=1
	245	LEAR	48	C	0116.0	0116.0	2.0	590.0			QL=2 ST=2 TYP=8
	500	HIRA	42	SER	0308.0	0348.0	40.0	15.0			
	245	LEAR	49	GB	0309.0	0309.0	U	1500.0			QL=2 ST=2 TYP=6

SOLAR RADIO EMISSION
Outstanding Occurrences

JANUARY 2004

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
02	245	PALE	49	GB	0309.0	0309.0	U	1100.0			QL=4 ST=2 TYP=6
	245	LEAR	49	GB	0432.0	0432.0	U	500.0			QL=2 ST=2 TYP=6
	500	HIRA	7	C	0537.0	0543.0	22.0	10.0			
	245	LEAR	49	GB	0540.0	0540.0	U	510.0			QL=2 ST=2 TYP=6
	500	HIRA	8	S	0632.0	0632.0	1.0	40.0			
	2840	PEKG	45	C	0634.0	0639.6	10.0	16.0			
	245	LEAR	49	GB	0640.0	0640.0	U	540.0			QL=2 ST=2 TYP=6
	245	PALE	49	GB	2156.0	2157.0	2.0	1000.0			QL=4 ST=2 TYP=6
03	204	IZMI	44	NS	0700.0E		300.0D		10.0		
	127	TORN	44	NS	0730.0E		390.0D		23.0		V=1
	235	CUBA	44	NS	1330.0E		150.0D		8.0		
	280	CUBA	44	NS	1330.0E		150.0D		27.0		
	245	LEAR	8	S	0144.0	0144.0	1.0	82.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0210.0	0210.0	U	69.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0614.0	0615.0	1.0	100.0			QL=4 ST=2 TYP=3
	9100	GORK	3	S	0821.4	0821.7	0.7	16.0			
	9100	GORK	3	S	0843.9	0844.1	0.5	16.0			
	9500	CUBA	2	S/F	1810.2	1811.8	5.6	24.0	12.0		
	2800	PENT	8	S	1829.0	1834.0	10.0	72.0			
	9500	CUBA	2	S/F	1832.8	1834.2	3.9	44.0	22.0		
	2695	PALE	8	S	1834.0	1834.0	U	83.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	1834.0	1834.0	U	50.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	1834.0	1834.0	U	45.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1834.0	1834.0	U	81.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1834.0	1834.0	U	54.0			QL=4 ST=2 TYP=3
	9500	CUBA	1	S	1905.0	1905.3	1.5	36.0	18.0		
04	127	TORN	44	NS	0730.0E		390.0D		42.0		V=1
	9100	GORK	46	C	0946.4	0947.3	7.2	21.0			
	9100	GORK	46	C	0946.4	0948.3		9.0			
	2950	GORK	22	GRF	0947.4	0949.0	7.4	22.0			
	9500	CUBA	1	S	1437.8	1439.1	2.8	14.0	7.0		
	9500	CUBA	21	GRF	1507.0	1516.0	22.0	22.0	11.0		
	8800	SGMR	4	S/F	1508.0	1510.0	13.0	74.0			QL=4 ST=2 TYP=3
	235	CUBA	6	S	1509.8	1510.7	1.5	28.0	14.0		
	280	CUBA	6	S	1509.8	1510.7	1.5	24.0	12.0		
	410	SGMR	8	S	1510.0	1510.0	1.0	53.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1510.0	1510.0	U	27.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1510.0	1510.0	1.0	38.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1510.0	1510.0	5.0	420.0			QL=4 ST=2 TYP=3
	15400	SGMR	4	S/F	1510.0	1510.0	8.0	43.0			QL=4 ST=2 TYP=3
	2695	SGMR	4	S/F	1510.0	1510.0	10.0	52.0			QL=4 ST=2 TYP=3
	4995	SGMR	4	S/F	1510.0	1510.0	11.0	87.0			QL=4 ST=2 TYP=3
	245	SGMR	4	S/F	1510.0	1510.0	530.0	420.0			QL=4 ST=1 TYP=3
	15400	SGMR	4	S/F	1510.0	1510.0	530.0	43.0			QL=4 ST=2 TYP=3
	9500	CUBA	2	S/F	1510.1	1510.5	3.9	32.0	16.0		
	9500	CUBA	2	S/F	1553.4	1554.8	5.9	36.0	18.0		
	9500	CUBA	1	S	1803.7	1804.3	2.0	10.0	5.0		
	8800	SGMR	8	S	1818.0	1819.0	1.0	41.0			QL=4 ST=2 TYP=3
	15400	SGMR	8	S	1818.0	1819.0	2.0	67.0			QL=4 ST=2 TYP=3
	9500	CUBA	2	S/F	1818.3	1819.0	1.6	40.0	20.0		
	15400	PALE	8	S	1819.0	1819.0	U	91.0			QL=4 ST=2 TYP=3
05	245	LEAR	43	NS	0512.0	0532.0	205.0	110.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0637.0	1008.0	230.0	190.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0637.0	0655.0U	1043.0	120.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0637.0	0657.0U	1043.0	130.0			QL=4 ST=1 TYP=1
	245	SVTO	43	NS	0637.0	1008.0U	1043.0	190.0			QL=4 ST=1 TYP=1
	204	IZMI	44	NS	0700.0E		300.0D		160.0		
	127	TORN	44	NS	0730.0E		390.0D		440.0		V=0
	245	SGMR	43	NS	1228.0	1333.0U	276.0	130.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1228.0	1237.0U	692.0	71.0			QL=4 ST=1 TYP=1
	235	CUBA	44	NS	1400.0E		360.0D		17.0		
	280	CUBA	44	NS	1400.0E		360.0D		41.0		
	2804	VORO	23	GRF	0038.6	0304.6	300.0	85.4			
	245	LEAR	8	S	0217.0	0217.0	U	65.0			QL=4 ST=2 TYP=3
	2840	PEKG	47	GB	0240.0	0320.5	80.0	506.6			
	2800	HIRA	7	C	0303.0	0321.0	73.0	480.0			

SOLAR RADIO EMISSION
Outstanding Occurrences

JANUARY 2004

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
05	2804	VORO	41	F	0303.8	0311.0	11.2	251.0			
	2804	VORO	41	F	0303.8	0316.5	12.7	161.0			
	2804	VORO	41	F	0303.8	0320.9	17.1	475.0			
	2804	VORO	41	F	0303.8	0330.9	27.1	120.0			
	4995	PALE	48	C	0305.0	0321.0	39.0	620.0			QL=4 ST=2 TYP=8
	8800	PALE	48	C	0307.0	0321.0	31.0	470.0			QL=4 ST=2 TYP=8
	1415	LEAR	48	C	0307.0	0320.0	54.0	240.0			QL=4 ST=2 TYP=8
	4995	LEAR	48	C	0307.0	0320.0	66.0	530.0			QL=4 ST=2 TYP=8
	8800	LEAR	48	C	0307.0	0320.0	73.0	420.0			QL=4 ST=2 TYP=8
	500	HIRA	47	GB	0307.0	0322.0	83.0	740.0			
	2695	PALE	48	C	0307.0	0311.0	1253.0	300.0			QL=4 ST=1 TYP=8
	2695	PALE	48	C	0307.0	0321.0	1253.0	510.0			QL=4 ST=1 TYP=8
	2695	PALE	4	S/F	0307.0	0311.0	1253.0	300.0			QL=4 ST=1 TYP=3
	1415	PALE	48	C	0308.0	0311.0	1252.0	130.0			QL=4 ST=1 TYP=8
	1415	PALE	48	C	0308.0	0344.0	1252.0	250.0			QL=4 ST=1 TYP=8
	1415	PALE	4	S/F	0308.0	0311.0	1252.0	130.0			QL=4 ST=1 TYP=3
	2695	LEAR	48	C	0309.0	0320.0	52.0	400.0			QL=4 ST=2 TYP=8
	410	LEAR	48	C	0309.0	0322.0	72.0	1400.0			QL=4 ST=2 TYP=8
	245	LEAR	8	S	0310.0	0310.0	U	71.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0310.0	0310.0	U	96.0			QL=4 ST=2 TYP=3
	610	LEAR	48	C	0310.0	0337.0	52.0	450.0			QL=4 ST=2 TYP=8
	15400	LEAR	48	C	0310.0	0320.0	81.0	250.0			QL=4 ST=2 TYP=8
	245	LEAR	48	C	0310.0	0320.0	118.0	860.0			QL=4 ST=2 TYP=8
	610	LEAR	4	S/F	0310.0	0310.0	1250.0	83.0			QL=4 ST=1 TYP=3
	15400	LEAR	4	S/F	0310.0	0310.0	1250.0	89.0			QL=4 ST=1 TYP=3
	410	PALE	48	C	0310.0	0318.0	1250.0	240.0			QL=4 ST=1 TYP=8
	410	PALE	48	C	0310.0	0322.0	1250.0	1000.0			QL=4 ST=1 TYP=8
	610	PALE	48	C	0310.0	0338.0	1250.0	340.0			QL=4 ST=1 TYP=8
	410	PALE	4	S/F	0310.0	0311.0	1250.0	150.0			QL=4 ST=1 TYP=3
	610	PALE	4	S/F	0310.0	0310.0	1250.0	71.0			QL=4 ST=1 TYP=3
	610	PALE	4	S/F	0310.0	0319.0	1250.0	94.0			QL=4 ST=1 TYP=3
	15400	PALE	4	S/F	0311.0	0311.0	8.0	99.0			QL=4 ST=2 TYP=3
	15400	PALE	48	C	0311.0	0321.0	24.0	250.0			QL=4 ST=2 TYP=8
	15400	PALE	4	S/F	0311.0	0311.0	1249.0	99.0			QL=4 ST=1 TYP=3
	15400	SVTO	8	S	0708.0	0710.0	2.0	58.0			QL=4 ST=2 TYP=3
	33	UPIC	45	C	0905.5	0906.5	2.0				
	600	GORK	40	F	0958.4	1043.3	51.0D	15.0			
	9100	GORK	4	S/F	1009.1	1010.5	2.8	16.0			
	900	GORK	41	F	1015.7	1020.7	30.8	15.0			
	900	GORK	41	F	1015.7	1042.9		15.0			
	204	IZMI	25	R	1027.0		93.0D		290.0		
	204	IZMI	42	SER	1031.9	1034.9	3.3	169.0			
	204	IZMI	42	SER	1150.9	1151.1	2.3	87.0			
	245	SGMR	8	S	1934.0	1934.0	U	57.0			QL=4 ST=2 TYP=3
	9500	CUBA	21	GRF	2010.0	2019.0	26.0	23.0	11.0		
	9500	CUBA	2	S/F	2010.3	2010.9	3.7	65.0	32.0		
	245	SGMR	48	C	2012.0E	2017.0U	8.0D	260.0			QL=4 ST=2 TYP=8
	410	SGMR	48	C	2012.0E	2013.0U	8.0D	100.0			QL=4 ST=2 TYP=8
	610	SGMR	46	C	2012.0E	2012.0U	U	49.0			QL=4 ST=2 TYP=8
	245	PALE	48	C	2013.0	2015.0	2.0	130.0			QL=4 ST=2 TYP=8
	245	PALE	48	C	2013.0	2018.0	5.0	270.0			QL=4 ST=2 TYP=8
	410	PALE	48	C	2013.0	2014.0	5.0	130.0			QL=4 ST=2 TYP=8
	410	PALE	8	S	2013.0	2014.0	1.0	130.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	2013.0	2013.0	U	78.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	2013.0	2013.0	U	52.0			QL=4 ST=2 TYP=3
	610	PALE	4	S/F	2013.0	2013.0	5.0	78.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	2015.0	2015.0	U	52.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	2206.0	2209.0	6.0	88.0			QL=4 ST=2 TYP=3
06	204	IZMI	44	NS	0700.0E		300.0D		20.0		
	127	TORN	44	NS	0730.0E		390.0D		42.0		V=1
	235	CUBA	44	NS	1330.0E		270.0D		8.0		
	280	CUBA	44	NS	1330.0E		270.0D		25.0		
	2840	PEKG	45	C	0609.0	0622.9	40.0	445.2			
	2800	HIRA	7	C	0617.0	0623.0	21.0	425.0			0
	500	HIRA	7	C	0618.0	0623.0	10.0	160.0			0
	4995	LEAR	48	C	0618.0	0622.0	18.0	1300.0			QL=4 ST=2 TYP=8
	4995	LEAR	49	GB	0618.0	0622.0	1062.0	1300.0			QL=4 ST=1 TYP=6
	2695	LEAR	48	C	0619.0	0622.0	14.0	340.0			QL=4 ST=2 TYP=8

SOLAR RADIO EMISSION
Outstanding Occurrences

JANUARY 2004

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
06	8800	LEAR	49	GB	0619.0	0622.0	17.0	2600.0			QL=4 ST=2 TYP=6
	8800	LEAR	49	GB	0619.0	0622.0	1061.0	2600.0			QL=4 ST=1 TYP=6
	2695	LEAR	4	S/F	0619.0	0622.0	1061.0	340.0			QL=4 ST=1 TYP=3
	15400	LEAR	49	GB	0620.0	0622.0	16.0	2300.0			QL=4 ST=2 TYP=6
	15400	LEAR	49	GB	0620.0	0622.0	1060.0	2300.0			QL=4 ST=1 TYP=6
	1415	LEAR	8	S	0622.0	0622.0	U	59.0			QL=4 ST=2 TYP=3
	2950	GORK	2	S/F	0711.2	0714.4	6.0	6.0			
	9100	GORK	46	C	0713.7	0715.2		16.0			
	9100	GORK	46	C	0713.7	0714.4	4.0	28.0			
	204	IZMI	42	SER	0817.6	0817.8	2.0	265.0			
	204	IZMI	42	SER	0824.6	0825.2	2.0	208.0			
	204	IZMI	41	F	0855.0	0858.3	12.6	55.0			
	245	LEAR	8	S	0857.0	0857.0	U	54.0			QL=2 ST=2 TYP=3
	245	LEAR	8	S	0903.0	0903.0	U	53.0			QL=2 ST=2 TYP=3
	245	SGMR	8	S	1449.0	1449.0	U	61.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1457.0	1457.0	1.0	95.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1615.0	1615.0	U	630.0			QL=4 ST=2 TYP=6
	2800	PENT	20	GRF	2231.0	2237.0	18.0	5.0			
	245	LEAR	8	S	2321.0	2321.0	U	57.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2321.0	2322.0	2.0	89.0			QL=4 ST=2 TYP=3
07	127	TORN	44	NS	0730.0E		390.0D		21.0		V=1
	245	SGMR	43	NS	1604.0	1634.0	109.0	160.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1729.0	1741.0	88.0	110.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	1729.0	1741.0	391.0	110.0			QL=4 ST=1 TYP=1
	2840	PEKG	3	S	0349.0	0357.2	41.0	65.8			
	610	LEAR	49	GB	0354.0	0355.0	4.0	6000.0			QL=4 ST=2 TYP=6
	500	HIRA	47	GB	0354.0	0356.0	19.0	1260.0			0
	2800	HIRA	7	C	0354.0	0357.0	24.0	60.0			0
	610	LEAR	49	GB	0354.0	0355.0	1206.0	3400.0			QL=4 ST=1 TYP=6
	2804	VORO	46	C	0354.2	0357.3	23.0	53.1			
	2804	VORO	46	C	0354.2	0411.3	23.0	35.7			
	410	LEAR	48	C	0355.0	0402.0	9.0	130.0			QL=4 ST=2 TYP=8
	15400	LEAR	49	GB	0355.0	0358.0	17.0	1400.0			QL=4 ST=2 TYP=6
	15400	LEAR	4	S/F	0355.0	0355.0	1205.0	92.0			QL=4 ST=1 TYP=3
	245	LEAR	8	S	0356.0	0356.0	1.0	160.0			QL=4 ST=2 TYP=3
	1415	LEAR	8	S	0356.0	0357.0	1.0	110.0			QL=4 ST=2 TYP=3
	4995	LEAR	48	C	0356.0	0401.0	16.0	360.0			QL=4 ST=2 TYP=8
	8800	LEAR	48	C	0356.0	0359.0	18.0	1100.0			QL=4 ST=2 TYP=8
	2840	PEKG	1	S	0714.0	0716.4	9.0	3.0			
	9100	GORK	2	S/F	0715.9	0716.3	1.7	12.0			
	9100	GORK	2	S/F	0734.4	0736.5	2.5	8.4			
	9100	GORK	3	S	0750.4	0750.7	1.9	12.0			
	2950	GORK	1	S	0825.5	0826.3	1.7	6.0			
	2950	GORK	20	GRF	0839.4	0844.2	20.6	9.0			
	9100	GORK	45	C	0839.5	0841.5	10.7	90.0			
	9100	GORK	45	C	0839.5	0841.7		110.0			
	8800	SVTO	4	S/F	0840.0	0841.0	7.0	160.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0841.0	0841.0	1.0	120.0			QL=4 ST=2 TYP=3
	4995	SVTO	8	S	0841.0	0841.0	1.0	40.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	0841.0	0841.0	1.0	64.0			QL=4 ST=2 TYP=3
	9100	GORK	4	S/F	0956.0	0956.2	0.4	20.0			
	3000	IZMI	46	C	1017.7	1022.8	15.6	411.0	141.0		
	2695	LEAR	48	C	1018.0	1022.0	13.0	410.0			QL=4 ST=2 TYP=8
	2695	SVTO	49	GB	1018.0	1022.0	15.0	510.0			QL=4 ST=2 TYP=6
	4995	SVTO	49	GB	1018.0	1022.0	19.0	1100.0			QL=4 ST=2 TYP=6
	1415	SVTO	4	S/F	1018.0	1023.0	13.0	86.0			QL=4 ST=2 TYP=3
	8800	SVTO	49	GB	1018.0	1022.0	21.0	1200.0			QL=4 ST=2 TYP=6
	2695	LEAR	4	S/F	1018.0	1020.0	822.0	170.0			QL=4 ST=1 TYP=3
	2695	LEAR	4	S/F	1018.0	1022.0	822.0	410.0			QL=4 ST=1 TYP=3
	2695	SVTO	4	S/F	1018.0	1020.0	822.0	160.0			QL=4 ST=1 TYP=3
	2695	SVTO	4	S/F	1018.0	1022.0	822.0	450.0			QL=4 ST=1 TYP=3
	4995	LEAR	48	C	1019.0	1022.0	12.0	1000.0			QL=4 ST=2 TYP=8
	15400	SVTO	49	GB	1019.0	1022.0	18.0	670.0			QL=4 ST=2 TYP=6
	204	IZMI	41	F	1019.2	1021.1	4.4	279.0			
	127	TORN	46	C	1019.8	1020.7	4.7	280.0	110.0		
	8800	LEAR	48	C	1020.0	1022.0	7.0	760.0			QL=4 ST=2 TYP=8
	245	LEAR	8	S	1020.0	1021.0	1.0	310.0			QL=4 ST=2 TYP=3
	1415	LEAR	4	S/F	1020.0	1022.0	9.0	90.0			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

JANUARY 2004

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
07	15400	LEAR	4	S/F	1020.0	1022.0	5.0	410.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	1020.0	1021.0	2.0	330.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1020.0	1020.0	2.0	23.0			QL=4 ST=2 TYP=3
	33	UPIC	47	GB	1020.0	1021.0	26.0				
	245	SVTO	4	S/F	1020.0	1020.0	820.0	33.0			QL=4 ST=1 TYP=3
	245	SVTO	4	S/F	1020.0	1021.0	820.0	330.0			QL=4 ST=1 TYP=3
	410	SVTO	4	S/F	1020.0	1020.0	820.0	23.0			QL=4 ST=1 TYP=3
	204	IZMI	41	F	1104.9	1105.2	0.7	92.0			
	245	SGMR	48	C	1525.0	1528.0	5.0	63.0			QL=4 ST=2 TYP=8
	245	SGMR	48	C	1549.0	1551.0	2.0	66.0			QL=4 ST=2 TYP=8
	245	SGMR	48	C	1559.0	1559.0	U	61.0			QL=4 ST=2 TYP=8
	9500	CUBA	2	S/F	1756.5	1757.1	3.0	22.0	11.0		
	9500	CUBA	1	S	2031.5	2032.0	0.9	14.0	7.0		
08	245	LEAR	43	NS	0710.0	0740.0	51.0	190.0			QL=4 ST=2 TYP=1
	245	SVTO	43	NS	0710.0	0740.0	51.0	220.0			QL=4 ST=2 TYP=1
	127	TORN	44	NS	1230.0E		90.0D		8.0		V=1,DISTURBED
	235	CUBA	44	NS	1600.0E		240.0D		4.0		
	280	CUBA	44	NS	1600.0E		240.0D		19.0		
	1415	LEAR	8	S	0007.0	0007.0	U	73.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	0007.0	0007.0	U	90.0			QL=4 ST=2 TYP=3
	2840	PEKG	45	C	0447.0	0456.3	44.0	30.3			
	4995	LEAR	48	C	0455.0	0459.0	5.0	140.0			QL=4 ST=2 TYP=8
	2804	VORO	46	C	0455.0	0456.3	10.0	88.5			
	2800	HIRA	7	C	0456.0	0456.0	9.0	85.0			0
	500	HIRA	3	S	0456.0	0456.0	2.0	50.0			0
	245	LEAR	8	S	0456.0	0456.0	U	88.0			QL=4 ST=2 TYP=3
	2695	LEAR	4	S/F	0456.0	0456.0	3.0	73.0			QL=4 ST=2 TYP=3
	8800	LEAR	4	S/F	0456.0	0459.0	4.0	110.0			QL=4 ST=2 TYP=3
	500	HIRA	1	S	0547.0	0547.0	2.0	10.0			0
	204	IZMI	25	R	0700.0E		154.0D		70.0		
	245	LEAR	8	S	0710.0	0710.0	U	75.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0710.0	0711.0	1.0	59.0			QL=4 ST=2 TYP=3
	9100	GORK	1	S	0821.1	0821.4	1.1	10.0			
	9100	GORK	2	S/F	0901.7	0902.1	2.4	9.4			
	600	GORK	46	C	0902.1	0903.0		8.0			
	600	GORK	46	C	0902.1	0902.8	1.2	11.0			
	900	GORK	46	C	0902.2	0902.2	0.3	130.0			
	900	GORK	46	C	0902.2	0902.3		60.0			
	204	IZMI	42	SER	0923.2	0923.6	1.5	171.0			
	9100	GORK	2	S/F	0936.4	0936.6	0.4	13.0			
	600	GORK	46	C	1027.0	1031.4		17.0			
	600	GORK	46	C	1027.0	1030.6	5.4	9.0			
	204	IZMI	42	SER	1027.1	1030.5	5.4	126.0			
	900	GORK	41	F	1028.6	1034.0	6.6	100.0			
	900	GORK	41	F	1028.6	1034.4		13.0			
	245	SVTO	8	S	1030.0	1030.0	U	170.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	1047.7	1047.7	0.2	108.0			
	204	IZMI	42	SER	1056.1	1056.2	4.3	31.0			
	204	IZMI	41	F	1059.5	1059.6	0.3	8.0			
	245	SVTO	8	S	1454.0	1454.0	U	250.0			QL=4 ST=2 TYP=3
	9500	CUBA	1	S	1456.4	1456.8	1.4	9.0	4.0		
	2695	SGMR	8	S	1639.0	1640.0	1.0	68.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1639.0	1640.0	1.0	76.0			QL=4 ST=2 TYP=3
	8800	SGMR	8	S	1639.0	1640.0	1.0	36.0			QL=4 ST=2 TYP=3
	9500	CUBA	1	S	1639.2	1640.0	1.1	16.0	8.0		
	1415	SGMR	8	S	1640.0	1640.0	U	22.0			QL=4 ST=2 TYP=3
	2800	PENT	40	F	1712.0	1726.0	20.0U	6.0			
09	245	LEAR	43	NS	0014.0	0014.0	51.0	74.0			QL=4 ST=2 TYP=1
	245	LEAR	43	NS	0014.0	0014.0	1426.0	74.0			QL=4 ST=1 TYP=1
	204	IZMI	43	NS	0700.0		300.0D		40.0		
	127	TORN	44	NS	0730.0E		390.0D		19.0		V=2
	245	SVTO	43	NS	1222.0	1226.0	13.0	100.0			QL=4 ST=2 TYP=1
	245	SGMR	43	NS	1237.0	1237.0	683.0	75.0			QL=4 ST=1 TYP=1
	245	SGMR	43	NS	1237.0	1237.0U	U	75.0			QL=4 ST=2 TYP=1
	235	CUBA	44	NS	1400.0E		300.0D		6.0		
	280	CUBA	44	NS	1400.0E		300.0D		21.0		
	2840	PEKG	45	C	0111.0	0200.1	73.0	236.3			

SOLAR RADIO EMISSION
Outstanding Occurrences

JANUARY 2004

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
09	8800	LEAR	8	S	0119.0	0120.0	2.0	210.0			QL=4 ST=2 TYP=3
	15400	LEAR	8	S	0119.0	0120.0	2.0	110.0			QL=4 ST=2 TYP=3
	4995	LEAR	4	S/F	0119.0	0120.0	3.0	180.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	0119.0	0121.0	2.0	130.0			QL=4 ST=2 TYP=3
	4995	PALE	4	S/F	0119.0	0121.0	4.0	220.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	0119.0	0121.0	3.0	260.0			QL=4 ST=2 TYP=3
	2800	HIRA	7	C	0119.0	0200.0	51.0	215.0			0
	2804	VORO	28	PRE	0119.4	0120.6	20.0	41.7			
	1415	LEAR	8	S	0120.0	0120.0	1.0	110.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	0121.0	0121.0	1.0	140.0			QL=4 ST=2 TYP=3
	8800	PALE	48	C	0133.0	0141.0	31.0	140.0			QL=4 ST=2 TYP=8
	4995	PALE	48	C	0135.0	0141.0	32.0	280.0			QL=4 ST=2 TYP=8
	4995	LEAR	4	S/F	0136.0	0141.0	8.0	240.0			QL=4 ST=2 TYP=3
	500	HIRA	7	C	0136.0	0155.0	52.0	105.0			WR
	2695	PALE	48	C	0139.0	0200.0	26.0	230.0			QL=4 ST=2 TYP=8
	2804	VORO	42	SER	0139.4	0153.2	13.8	64.7			
	2804	VORO	42	SER	0139.4	0200.3	20.9	166.1			
	2804	VORO	42	SER	0139.4	0149.6	10.2	117.4			
	2804	VORO	42	SER	0139.4	0141.8	7.7	131.2			
	1415	LEAR	4	S/F	0140.0	0143.0	4.0	140.0			QL=4 ST=2 TYP=3
	2695	LEAR	4	S/F	0140.0	0141.0	4.0	140.0			QL=4 ST=2 TYP=3
	8800	LEAR	4	S/F	0140.0	0141.0	3.0	98.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	0140.0	0140.0	U	51.0			QL=4 ST=2 TYP=3
	410	PALE	4	S/F	0140.0	0155.0	15.0	77.0			QL=4 ST=2 TYP=3
	1415	PALE	48	C	0140.0	0148.0	23.0	200.0			QL=4 ST=2 TYP=8
	2695	LEAR	4	S/F	0140.0	0141.0	1340.0	120.0			QL=4 ST=1 TYP=3
	15400	PALE	8	S	0141.0	0141.0	1.0	60.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	0141.0	0152.0	12.0	69.0			QL=4 ST=2 TYP=3
	245	PALE	48	C	0141.0	0200.0	20.0	250.0			QL=4 ST=2 TYP=8
	15400	PALE	20	GRF	0141.0	0141.0	20.0	60.0			QL=4 ST=2 TYP=2
	610	PALE	48	C	0143.0	0152.0	12.0	190.0			QL=4 ST=2 TYP=8
	2695	LEAR	48	C	0147.0	0149.0	6.0	130.0			QL=4 ST=2 TYP=8
	4995	LEAR	4	S/F	0147.0	0149.0	5.0	99.0			QL=4 ST=2 TYP=3
	610	LEAR	48	C	0148.0	0152.0	7.0	160.0			QL=4 ST=2 TYP=8
	1415	LEAR	48	C	0148.0	0148.0	5.0	200.0			QL=4 ST=2 TYP=8
	610	LEAR	4	S/F	0148.0	0148.0	1332.0	100.0			QL=4 ST=1 TYP=3
	245	LEAR	8	S	0152.0	0154.0	2.0	53.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0154.0	0154.0	U	55.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0158.0	0200.0	3.0	200.0			QL=4 ST=2 TYP=3
	1415	LEAR	4	S/F	0158.0	0200.0	5.0	130.0			QL=4 ST=2 TYP=3
	2695	LEAR	4	S/F	0158.0	0200.0	5.0	180.0			QL=4 ST=2 TYP=3
	4995	LEAR	4	S/F	0158.0	0200.0	5.0	130.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0159.0	0159.0	1.0	75.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	0213.0	0213.0	2.0	77.0			QL=4 ST=2 TYP=3
	2840	PEKG	1	S	0443.0	0444.3	7.0	5.8			
	2804	VORO	2	S/F	0444.0	0444.6	4.4	5.2			
	2840	PEKG	1	S	0503.0	0506.1	6.0	5.8			
	2804	VORO	1	S	0505.5	0506.0	1.4	5.6			
	2840	PEKG	1	S	0510.0	0511.6	5.0	2.2			
	204	IZMI	42	SER	0659.9	0700.8	1.2	124.0			
	245	LEAR	8	S	0809.0	0809.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0809.0	0809.0	1.0	100.0			QL=4 ST=2 TYP=3
	204	IZMI	45	C	0944.2	0944.2	0.2	288.0			
	204	IZMI	41	F	1005.6	1005.9	0.6	35.0			
	33	UPIC	8	S	1006.0	1006.2	0.8				
	33	UPIC	45	C	1211.0	1212.0	2.0				
	245	SGMR	8	S	1823.0	1825.0	2.0	100.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1825.0	1825.0	U	100.0			QL=4 ST=2 TYP=3
	2800	PENT	1	S	1832.0	1841.0	48.0	2.0			
	4995	SGMR	4	S/F	1838.0	1841.0	4.0	36.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	1840.0	1841.0	2.0	100.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1840.0	1841.0	2.0	100.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1841.0	1841.0	1.0	21.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1851.0	1852.0	1.0	84.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1852.0	1852.0	U	100.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1855.0	1855.0	U	420.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1855.0	1855.0	U	340.0			QL=4 ST=2 TYP=3
	9500	CUBA	1	S	1956.6	1957.0	1.1	15.0	7.0		
	245	PALE	8	S	2052.0	2052.0	U	87.0			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

JANUARY 2004

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
09	245	LEAR	8	S	2233.0	2233.0	U	100.0			QL=4 ST=2 TYP=3
10	204	IZMI	44	NS	0700.0E		300.0D		40.0		
	127	TORN	44	NS	0730.0E		390.0D		12.0		V=2
	235	CUBA	44	NS	1400.0E		180.0D		7.0		
	280	CUBA	44	NS	1400.0E		180.0D		29.0		
	2804	VORO	23	GRF	0318.0	0333.0	125.0	6.3			
	2840	PEKG	20	GRF	0408.0	0420.9	22.0	12.3			
	500	HIRA	7	C	0414.0	0419.0	7.0	50.0			ML
	245	LEAR	8	S	0414.0	0415.0	1.0	160.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0415.0	0415.0	U	59.0			QL=4 ST=2 TYP=3
	2804	VORO	2	S/F	0415.2	0417.8	3.8	12.7			
	245	LEAR	8	S	0418.0	0418.0	1.0	170.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0419.0	0421.0	2.0	160.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0420.0	0421.0	1.0	62.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0446.0	0446.0	U	62.0			QL=4 ST=2 TYP=3
	2840	PEKG	3	S	0508.0	0511.4	10.0	11.4			
	2804	VORO	1	S	0510.5	0511.2	1.2	8.9			
	4995	LEAR	8	S	0511.0	0511.0	U	100.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0548.0	0548.0	U	60.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0613.0	0613.0	U	98.0			QL=4 ST=2 TYP=3
	900	GORK	42	SER	0704.1	0704.3	17.0	10.0			
	900	GORK	42	SER	0704.1	0715.5		23.0			
	600	GORK	42	SER	0709.1	0715.5	12.5	20.0			
	600	GORK	42	SER	0709.1	0719.9		9.1			
	600	GORK	41	F	0824.2	0824.3	0.9	3.0			
	600	GORK	41	F	0824.2	0824.7		11.0			
	900	GORK	40	F	0824.6	0824.7	0.9	9.9			
	127	TORN	8	S	0931.2	0931.6	0.8	190.0	90.0		
	245	SVTO	4	S/F	0946.0	0950.0	4.0	130.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0954.0	0954.0	U	61.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1325.0	1325.0	U	62.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1408.0	1408.0	U	84.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1554.0	1554.0	U	82.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1634.0	1634.0	U	150.0			QL=4 ST=2 TYP=3
	410	PALE	48	C	2207.0	2209.0	2.0	180.0			QL=4 ST=2 TYP=8
	610	PALE	8	S	2207.0	2207.0	U	120.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2208.0	2209.0	2.0	170.0			QL=4 ST=2 TYP=3
	9500	CUBA	1	S	2208.0	2208.7	1.4	34.0	17.0		
	15400	PALE	8	S	2209.0	2209.0	U	63.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	2357.0	2357.0	1.0	20.0			0
11	127	TORN	43	NS	0807.0		353.0		16.0		V=2
	204	IZMI	43	NS	1011.0		109.0D		40.0		
	245	LEAR	8	S	0506.0	0506.0	U	70.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0745.0	0745.0	U	61.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0745.0	0745.0	U	76.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0858.0	0858.0	U	64.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0858.0	0858.0	U	68.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	0935.2	0936.6	2.2	182.0			
	245	LEAR	8	S	0936.0	0936.0	U	410.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0936.0	0936.0	U	420.0			QL=4 ST=2 TYP=3
	900	GORK	42	SER	0943.1	0943.2	29.9	19.0			
	900	GORK	42	SER	0943.1	0959.8		15.0			
	204	IZMI	41	F	0944.1	0944.6	0.8	31.0			
	600	GORK	42	SER	0951.5	0959.0		7.1			
	600	GORK	42	SER	0951.5	0951.7	8.3	7.1			
	204	IZMI	42	SER	1001.3	1002.1	6.2	126.0			
	33	UPIC	45	C	1122.0	1123.0	2.0				
	245	SVTO	8	S	1216.0	1216.0	U	92.0			QL=4 ST=2 TYP=3
	9500	CUBA	1	S	1734.3	1734.8	1.6	38.0	19.0		
12	127	TORN	43	NS	0820.0		340.0		10.0		V=1,DISTURBED
	2840	PEKG	1	S	0342.0	0344.6	8.0	9.5			
	245	LEAR	8	S	0345.0	0345.0	U	220.0			QL=4 ST=2 TYP=3
	2804	VORO	1	S	0345.7	0345.9	1.6	8.2			
	2800	HIRA	1	S	0346.0	0346.0	1.0	10.0			0
	500	HIRA	8	S	0346.0	0346.0	1.0	20.0			0
	204	IZMI	7	C	1011.8	1011.8	0.1	25.0			

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

JANUARY 2004

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
12	2800	PENT	1	S	1910.0	1915.0	10.0	3.0			
13	127	TORN	43	NS	0850.0		310.0		4.0		V=1
	235	CUBA	44	NS	1520.0E		280.0D		5.0		
	280	CUBA	44	NS	1520.0E		280.0D		20.0		
	2840	PEKG	1	S	0239.0	0242.0	7.0	2.8			
	245	PALE	8	S	0242.0	0242.0	U	120.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0431.0	0431.0	U	78.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	1019.2	1020.7	1.7	16.0			
	245	SVTO	8	S	1348.0	1348.0	U	50.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	2000.0	2000.0	U	68.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2354.0	2354.0	U	120.0			QL=4 ST=2 TYP=3
14	235	CUBA	44	NS	1350.0E		480.0D		4.0		
	280	CUBA	44	NS	1350.0E		480.0D		19.0		
	204	IZMI	42	SER	0844.9	0845.0	0.5	13.0			
	900	GORK	40	F	0907.6	0909.4	4.6	3.8			
	9100	GORK	3	S	0908.0	0908.4	1.9	13.0			
	2950	GORK	4	S/F	1008.3	1009.1	3.5	16.0			
	9100	GORK	1	S	1008.7	1009.0	1.1	4.7			
	204	IZMI	42	SER	1013.6	1015.4	2.0	35.0			
	204	IZMI	42	SER	1020.1	1020.6	0.5	11.0			
	245	LEAR	49	GB	2244.0	2244.0	1.0	780.0			QL=4 ST=2 TYP=6
	410	LEAR	8	S	2246.0	2246.0	U	73.0			QL=4 ST=2 TYP=3
	245	LEAR	49	GB	2339.0	2340.0	1.0	790.0			QL=4 ST=2 TYP=6
	500	HIRA	8	S	2340.0	2340.0	1.0	20.0			0
	245	PALE	8	S	2354.0	2354.0	U	160.0			QL=4 ST=2 TYP=3
15	245	PALE	43	NS	0123.0	0230.0	101.0	130.0			QL=4 ST=2 TYP=1
	245	PALE	43	NS	0123.0	0140.0	1357.0	130.0			QL=4 ST=1 TYP=1
	245	PALE	43	NS	0123.0	0230.0	1357.0	130.0			QL=4 ST=1 TYP=1
	235	CUBA	44	NS	1330.0E		270.0D		5.0		
	280	CUBA	44	NS	1330.0E		270.0D		21.0		
	2840	PEKG	20	GRF	0620.0	0632.2	18.0	15.1			
	410	LEAR	8	S	0623.0	0623.0	U	59.0			QL=4 ST=2 TYP=3
	500	HIRA	7	C	0623.0	0623.0	15.0	120.0			0
	2800	HIRA	7	C	0624.0	0624.0	9.0	15.0			0
	245	LEAR	8	S	0626.0	0626.0	U	65.0			QL=4 ST=2 TYP=3
	204	IZMI	7	C	1002.6	1002.6	0.1	29.0			
	2800	PENT	1	S	2254.0	2300.0	13.0	12.0			
	2800	HIRA	1	S	2259.0	2301.0	2.0	15.0			0
	500	HIRA	4	S/F	2259.0	2259.0	4.0	10.0			
	245	LEAR	8	S	2351.0	2351.0	U	52.0			QL=4 ST=2 TYP=3
16	280	CUBA	44	NS	1400.0E		390.0D		20.0		
	235	CUBA	44	NS	1400.0E		450.0D		5.0		
	500	HIRA	4	S/F	0504.0	0515.0	33.0	15.0			
	2840	PEKG	1	S	0530.0	0532.8	6.0	2.0			
	2840	PEKG	1	S	0603.0	0607.5	9.0	8.1			
	2840	PEKG	3	S	0648.0	0652.2	10.0	24.6			
	204	IZMI	7	C	1116.6	1116.7	0.2	12.0			
	245	SVTO	8	S	1256.0	1257.0	1.0	60.0			QL=4 ST=2 TYP=3
17	4995	SGMR	4	S/F	0000.0E	1750.0U	1071.0D	39.0			QL=2 ST=2 TYP=3
	15400	SGMR	4	S/F	0000.0E	1750.0U	1071.0D	57.0			QL=2 ST=2 TYP=3
	8800	SGMR	4	S/F	0000.0E	1752.0U	1082.0D	42.0			QL=2 ST=2 TYP=3
	2840	PEKG	1	S	0104.0	0106.9	7.0	3.5			
	2804	VORO	21	GRF	0320.0	0350.3	50.0	18.0			
	2840	PEKG	1	S	0347.0	0350.8	9.0	8.9			
	600	GORK	41	F	0753.3	0754.1	3.1	29.0			
	600	GORK	41	F	0753.3	0754.3		13.0			
	900	GORK	41	F	0756.7	0757.2		30.0			
	900	GORK	41	F	0756.7	0756.9	2.0	12.0			
	204	IZMI	42	SER	0824.2	0824.5	0.9	185.0			
	33	UPIC	45	C	0824.5	0825.5	2.0				
	245	LEAR	8	S	0827.0	0827.0	U	65.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0828.0	0828.0	U	63.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0852.0	0853.0	1.0	82.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0913.0	0913.0	U	52.0			QL=4 ST=2 TYP=3

SOLAR RADIO EMISSION
Outstanding Occurrences

JANUARY 2004

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
17	610	LEAR	8	S	0913.0	0913.0	U	140.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	0913.0	0913.0	U	100.0			QL=4 ST=2 TYP=3
	610	SVTO	8	S	0913.0	0913.0	U	160.0			QL=4 ST=2 TYP=3
	2695	SVTO	8	S	0913.0	0913.0	U	28.0			QL=4 ST=2 TYP=3
	900	GORK	46	C	0913.1	0913.6	4.3	15.0			
	900	GORK	46	C	0913.1	0915.9		37.0			
	600	GORK	46	C	0913.2	0916.2		60.0			
	600	GORK	46	C	0913.2	0913.7	3.9	350.0			
	3000	IZMI	22	GRF	0913.2	0913.8	0.8	28.0	10.2		
	204	IZMI	42	SER	0918.2	0918.5	0.4	24.0			
	33	UPIC	46	C	0936.5	0938.0	3.0				
	204	IZMI	7	C	0939.4	0939.5	0.1	8.0			
	9500	CUBA	4	S/F	1743.5	1746.8	5.5	358.0	179.0		
	2695	PALE	49	GB	1744.0	1747.0	4.0	580.0			QL=4 ST=2 TYP=6
	2695	PALE	4	S/F	1744.0	1745.0	376.0	140.0			QL=4 ST=1 TYP=3
	410	PALE	48	C	1745.0	1747.0	2.0	74.0			QL=4 ST=2 TYP=8
	4995	PALE	49	GB	1745.0	1747.0	4.0	880.0			QL=4 ST=2 TYP=6
	410	PALE	8	S	1745.0	1745.0	U	57.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	1745.0	1745.0	U	62.0			QL=4 ST=2 TYP=3
	8800	PALE	4	S/F	1745.0	1747.0	3.0	370.0			QL=4 ST=2 TYP=3
	4995	PALE	49	GB	1745.0	1747.0	375.0	880.0			QL=4 ST=1 TYP=6
	4995	PALE	4	S/F	1745.0	1745.0	375.0	150.0			QL=4 ST=1 TYP=3
	245	PALE	49	GB	1746.0	1749.0	3.0	270000.0			QL=4 ST=2 TYP=6
	1415	PALE	8	S	1746.0	1747.0	1.0	94.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	1746.0	1749.0	374.0	270000.0			QL=4 ST=1 TYP=6
	9500	CUBA	29	PBI	1749.0	1749.0	22.0	50.0	25.0		
	4995	SGMR	8	S	1750.0E	1750.0U	1.0D	39.0			QL=2 ST=3 TYP=3
	15400	SGMR	8	S	1750.0E	1750.0U	1.0D	57.0			QL=2 ST=3 TYP=3
	8800	SGMR	4	S/F	1750.0E	1752.0U	12.0D	42.0			QL=2 ST=3 TYP=3
18	500	HIRA	47	GB	0013.0	0014.0	7.0	1265.0			
	245	LEAR	48	C	0013.0	0014.0	7.0	25000.0			QL=4 ST=2 TYP=8
	410	LEAR	48	C	0013.0	0016.0	3.0	1400.0			QL=4 ST=2 TYP=8
	610	LEAR	49	GB	0013.0	0014.0	1.0	2300.0			QL=4 ST=2 TYP=6
	1415	LEAR	8	S	0013.0	0014.0	1.0	94.0			QL=4 ST=2 TYP=3
	2695	LEAR	8	S	0013.0	0014.0	1.0	140.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0013.0	0014.0	1.0	110.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0013.0	0014.0	1.0	150.0			QL=4 ST=2 TYP=3
	1415	LEAR	4	S/F	0013.0	0014.0	1427.0	88.0			QL=4 ST=1 TYP=3
	2804	VORO	46	C	0013.0	0014.4	7.6	175.0			
	2800	HIRA	7	C	0014.0	0014.0	7.0	170.0			
	15400	LEAR	8	S	0014.0	0014.0	U	56.0			QL=4 ST=2 TYP=3
	245	PALE	48	C	0014.0	0014.0	7.0	23000.0			QL=4 ST=2 TYP=8
	245	PALE	48	C	0014.0	0014.0	7.0	23000.0			QL=4 ST=3 TYP=8
	410	PALE	49	GB	0014.0	0017.0	3.0	2200.0			QL=4 ST=2 TYP=6
	410	PALE	49	GB	0014.0	0017.0	3.0	2200.0			QL=4 ST=3 TYP=6
	610	PALE	49	GB	0014.0	0014.0	1.0	2600.0			QL=4 ST=2 TYP=6
	610	PALE	49	GB	0014.0	0014.0	1.0	2600.0			QL=4 ST=3 TYP=6
	1415	PALE	8	S	0014.0	0014.0	1.0	92.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	0014.0	0014.0	1.0	92.0			QL=4 ST=3 TYP=3
	2695	PALE	8	S	0014.0	0014.0	1.0	190.0			QL=4 ST=2 TYP=3
	2695	PALE	8	S	0014.0	0014.0	1.0	190.0			QL=4 ST=3 TYP=3
	4995	PALE	8	S	0014.0	0014.0	1.0	160.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	0014.0	0014.0	1.0	160.0			QL=4 ST=3 TYP=3
	8800	PALE	8	S	0014.0	0014.0	1.0	220.0			QL=4 ST=2 TYP=3
	8800	PALE	8	S	0014.0	0014.0	1.0	220.0			QL=4 ST=3 TYP=3
	15400	PALE	8	S	0014.0	0014.0	U	62.0			QL=4 ST=2 TYP=3
	15400	PALE	8	S	0014.0	0014.0	U	62.0			QL=4 ST=3 TYP=3
	500	HIRA	8	S	0558.0	0559.0	1.0	50.0			
	204	IZMI	42	SER	0913.9	0914.1	0.5	78.0			
	204	IZMI	41	F	0940.1	0940.2	0.2	29.0			
	204	IZMI	42	SER	0949.6	0949.6	1.6	27.0			
	204	IZMI	42	SER	1033.8	1036.7	3.2	327.0			
	245	SVTO	4	S/F	1035.0	1036.0	3.0	180.0			QL=4 ST=2 TYP=3
	9100	GORK	46	C	1035.4	1036.5	3.2	9.6			
	9100	GORK	46	C	1035.4	1036.8		11.0			
	410	SVTO	8	S	1036.0	1036.0	1.0	25.0			QL=4 ST=2 TYP=3
	33	UPIC	45	C	1036.0	1037.0	1.5				UNCERTN
	600	GORK	46	C	1036.0	1036.4	2.2	11.0			

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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
18	600	GORK	46	C	1036.0	1036.8		13.0			
	900	GORK	41	F	1036.2	1036.8	1.8	3.0			
	900	GORK	41	F	1036.2	1037.9		11.0			
	204	IZMI	42	SER	1037.7	1037.9	0.4	467.0			
	245	SVTO	48	C	1151.0	1154.0	3.0	840.0			QL=4 ST=2 TYP=8
	410	SVTO	8	S	1151.0	1151.0	1.0	31.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	1151.1	1151.8	1.5	197.0			
	204	IZMI	42	SER	1154.0	1154.1	0.8	977.0			
	245	SGMR	49	GB	1353.0	1353.0	1.0	720.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	1353.0	1353.0	U	290.0			QL=4 ST=2 TYP=3
	410	SVTO	49	GB	1353.0	1353.0	U	830.0			QL=4 ST=2 TYP=6
	245	SVTO	8	S	1353.0	1353.0	1.0	200.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1946.0	1947.0	1.0	120.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1948.0	1948.0	U	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1948.0	1948.0	1.0	51.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	1949.0	1956.0	7.0	64.0			QL=4 ST=2 TYP=3
	610	PALE	4	S/F	1953.0	1956.0	3.0	59.0			QL=4 ST=2 TYP=3
	610	SGMR	4	S/F	1953.0	1958.0	6.0	230.0			QL=4 ST=2 TYP=3
	610	SGMR	4	S/F	1953.0	1958.0	247.0	230.0			QL=4 ST=1 TYP=3
	245	SGMR	4	S/F	1955.0	1956.0	4.0	67.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1956.0	1956.0	U	64.0			QL=4 ST=2 TYP=3
	610	PALE	4	S/F	1956.0	1958.0	3.0	220.0			QL=4 ST=2 TYP=3
	410	SGMR	8	S	1957.0	1958.0	2.0	65.0			QL=4 ST=2 TYP=3
	1415	SGMR	4	S/F	1957.0	1958.0	3.0	63.0			QL=4 ST=2 TYP=3
	1415	SGMR	4	S/F	1957.0	1958.0	243.0	63.0			QL=4 ST=1 TYP=3
	410	PALE	8	S	1958.0	1958.0	U	63.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	1958.0	1958.0	U	61.0			QL=4 ST=2 TYP=3
	245	PALE	49	GB	2142.0	2143.0	2.0	1700.0			QL=4 ST=2 TYP=6
19	127	TORN	44	NS	0850.0E		310.0D		12.0		V=1,DISTURBED
	2840	PEKG	45	C	0249.0	0254.0	12.0	12.8			
	2800	HIRA	1	S	0252.0	0254.0	5.0	15.0			
	245	LEAR	8	S	0321.0	0321.0	1.0	72.0			QL=4 ST=2 TYP=3
	610	LEAR	8	S	0409.0	0409.0	U	64.0			QL=4 ST=2 TYP=3
	2840	PEKG	45	C	0524.9	0532.9	16.0	24.0			
	245	LEAR	8	S	0527.0	0527.0	1.0	290.0			QL=4 ST=2 TYP=3
	2800	HIRA	7	C	0528.0	0533.0	7.0	20.0			
	4995	LEAR	8	S	0528.0	0528.0	U	51.0			QL=4 ST=2 TYP=3
	2804	VORO	46	C	0528.6	0529.2	3.4	15.1			
	2804	VORO	46	C	0528.6	0533.3	14.7	16.3			
	500	HIRA	7	C	0529.0	0529.0	6.0	10.0			
	245	LEAR	8	S	0532.0	0532.0	U	200.0			QL=4 ST=2 TYP=3
	4995	LEAR	8	S	0532.0	0532.0	U	62.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0656.0	0656.0	U	62.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0657.0	0657.0	U	65.0			QL=4 ST=2 TYP=3
	33	UPIC	46	C	0825.0	0826.0	11.0				UNCERTN
	4995	SVTO	48	C	1232.0	1234.0	14.0	120.0			QL=4 ST=2 TYP=8
	245	SGMR	49	GB	1233.0	1234.0	1.0	560.0			QL=4 ST=2 TYP=6
	410	SGMR	8	S	1233.0	1233.0	U	190.0			QL=4 ST=2 TYP=3
	2695	SGMR	8	S	1233.0	1234.0	1.0	38.0			QL=4 ST=2 TYP=3
	4995	SGMR	8	S	1233.0	1234.0	1.0	87.0			QL=4 ST=2 TYP=3
	245	SVTO	48	C	1233.0	1238.0	7.0	560.0			QL=4 ST=2 TYP=8
	410	SVTO	48	C	1233.0	1233.0	8.0	200.0			QL=4 ST=2 TYP=8
	610	SVTO	48	C	1233.0E	1238.0	9.0D	350.0			QL=2 ST=2 TYP=8
	8800	SVTO	48	C	1233.0	1234.0	8.0	76.0			QL=4 ST=2 TYP=8
	2695	SVTO	4	S/F	1233.0	1240.0	8.0	59.0			QL=4 ST=2 TYP=3
	127	TORN	4	S/F	1233.6	1234.1	1.2	340.0	170.0		
	245	SGMR	49	GB	1238.0	1238.0	2.0	780.0			QL=4 ST=2 TYP=6
	410	SGMR	4	S/F	1238.0	1240.0	3.0	150.0			QL=4 ST=2 TYP=3
	2695	SGMR	4	S/F	1238.0	1240.0	3.0	58.0			QL=4 ST=2 TYP=3
	4995	SGMR	4	S/F	1238.0	1240.0	5.0	100.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1238.0	1240.0	5.0	100.0			QL=4 ST=2 TYP=3
	33	UPIC	46	C	1238.0	1240.0	3.5				
	1415	SGMR	8	S	1239.0	1240.0	2.0	37.0			QL=4 ST=2 TYP=3
	610	SGMR	8	S	1240.0	1240.0	1.0	73.0			QL=4 ST=2 TYP=3
	1415	SVTO	8	S	1240.0	1240.0	U	27.0			QL=4 ST=2 TYP=3
	15400	SVTO	8	S	1240.0	1240.0	1.0	27.0			QL=4 ST=2 TYP=3
	4995	SGMR	4	S/F	1957.0	1959.0	8.0	100.0			QL=4 ST=2 TYP=3
	245	SGMR	49	GB	1958.0	1959.0	1.0	620.0			QL=4 ST=2 TYP=6

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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
19	2695	SGMR	4	S/F	1958.0	1959.0	3.0	67.0			QL=4 ST=2 TYP=3
	8800	SGMR	4	S/F	1958.0	1959.0	5.0	69.0			QL=4 ST=2 TYP=3
	9500	CUBA	2	S/F	1958.3	1959.2	4.5	44.0	22.0		
	245	PALE	49	GB	1959.0	1959.0	1.0	630.0			QL=4 ST=2 TYP=6
	410	PALE	49	GB	1959.0	2000.0	1.0	510.0			QL=4 ST=2 TYP=6
	2695	PALE	8	S	1959.0	2000.0	1.0	77.0			QL=4 ST=2 TYP=3
	4995	PALE	8	S	1959.0	2000.0	1.0	77.0			QL=4 ST=2 TYP=3
	410	SGMR	48	C	1959.0	1959.0	6.0	420.0			QL=4 ST=2 TYP=8
	610	SGMR	8	S	1959.0	1959.0	U	21.0			QL=4 ST=2 TYP=3
	1415	SGMR	8	S	1959.0	1959.0	1.0	70.0			QL=4 ST=2 TYP=3
	1415	PALE	8	S	2000.0	2000.0	U	74.0			QL=4 ST=2 TYP=3
	500	HIRA	7	C	2326.0	2347.0	42.0	70.0			
	245	LEAR	8	S	2330.0	2330.0	U	65.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2333.0	2333.0	U	90.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2343.0	2343.0	U	52.0			QL=4 ST=2 TYP=3
	2800	HIRA	7	C	2343.0	2351.0	12.0	25.0			
	610	LEAR	8	S	2345.0	2346.0	2.0	85.0			QL=4 ST=2 TYP=3
	610	PALE	8	S	2346.0	2346.0	1.0	71.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	2347.0	2347.0	1.0	69.0			QL=4 ST=2 TYP=3
	2804	VORO	2	S/F	2349.1	2351.0	4.3	15.9			
	245	LEAR	8	S	2351.0	2351.0	1.0	84.0			QL=4 ST=2 TYP=3
20	127	TORN	43	NS	0810.0		350.0		12.0		V=0
	235	CUBA	44	NS	1400.0E		355.0D		6.0		
	280	CUBA	44	NS	1400.0E		355.0D		21.0		
	245	PALE	43	NS	2328.0	2351.0	24.0	110.0			QL=4 ST=2 TYP=1
	245	LEAR	8	S	0042.0	0042.0	2.0	280.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	0043.0	0043.0	1.0	320.0			QL=4 ST=2 TYP=3
	245	LEAR	4	S/F	0048.0	0050.0	3.0	87.0			QL=4 ST=2 TYP=3
	245	PALE	4	S/F	0048.0	0051.0	3.0	100.0			QL=4 ST=2 TYP=3
	245	LEAR	48	C	0057.0	0102.0	11.0	190.0			QL=4 ST=2 TYP=8
	245	PALE	48	C	0058.0	0102.0	11.0	230.0			QL=4 ST=2 TYP=8
	204	IZMI	42	SER	0707.0	0708.4	1.8	342.0			
	245	LEAR	8	S	0708.0	0708.0	U	210.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0708.0	0708.0	U	180.0			QL=4 ST=2 TYP=3
	2840	PEKG	3	S	0727.0	0735.0	39.0	162.2			
	610	SVTO	8	S	0730.0	0730.0	2.0	300.0			QL=2 ST=1 TYP=3
	610	SVTO	48	C	0730.0	0730.0	11.0	300.0			QL=2 ST=2 TYP=8
	610	SVTO	4	S/F	0730.0	0730.0	990.0	300.0			QL=2 ST=1 TYP=3
	2950	GORK	46	C	0731.5	0737.3		44.0			
	2950	GORK	46	C	0731.5	0737.3		44.0			
	2950	GORK	46	C	0731.5	0739.5		40.0			
	2950	GORK	46	C	0731.5	0739.5		40.0			
	2950	GORK	46	C	0731.5	0734.9	14.0D	175.0			
	2950	GORK	46	C	0731.5	0734.9	14.0D	175.0			
	9100	GORK	46	C	0732.2	0735.0	28.0D	60.0			
	9100	GORK	46	C	0732.2	0735.0	28.0D	60.0			
	9100	GORK	46	C	0732.2	0737.2		50.0			
	9100	GORK	46	C	0732.2	0737.2		50.0			
	9100	GORK	46	C	0732.2	0739.6		47.0			
	9100	GORK	46	C	0732.2	0739.6		47.0			
	3000	IZMI	45	C	0732.4	0734.9	8.2	143.0			
	600	GORK	46	C	0732.8	0737.5	8.3	130.0			
	600	GORK	46	C	0732.8	0737.5	8.3	130.0			
	600	GORK	46	C	0732.8	0737.9		45.0			
	600	GORK	46	C	0732.8	0737.9		45.0			
	2695	SVTO	4	S/F	0733.0	0734.0	3.0	150.0			QL=4 ST=2 TYP=3
	4995	SVTO	4	S/F	0733.0	0734.0	4.0	90.0			QL=4 ST=2 TYP=3
	2695	SVTO	4	S/F	0733.0	0734.0	987.0	150.0			QL=4 ST=1 TYP=3
	4995	SVTO	4	S/F	0733.0	0734.0	987.0	90.0			QL=4 ST=1 TYP=3
	127	TORN	42	SER	0733.2	0737.0	7.0	770.0			
	900	GORK	46	C	0733.4	0734.2	6.9	56.0			
	900	GORK	46	C	0733.4	0734.2	6.9	56.0			
	900	GORK	46	C	0733.4	0734.8		130.0			
	900	GORK	46	C	0733.4	0734.8		130.0			
	204	IZMI	42	SER	0733.4	0733.8	1.4	118.0			
	4995	LEAR	48	C	0734.0	0734.0	3.0	99.0			QL=4 ST=2 TYP=8
	2695	LEAR	8	S	0734.0	0734.0	1.0	110.0			QL=4 ST=2 TYP=3
	8800	LEAR	8	S	0734.0	0735.0	1.0	57.0			QL=4 ST=2 TYP=3

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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
20	1415	SVTO	8	S	0734.0	0734.0	U	23.0			QL=4 ST=1 TYP=3
	1415	SVTO	8	S	0734.0	0734.0	U	23.0			QL=4 ST=2 TYP=3
	1415	SVTO	4	S/F	0734.0	0734.0	986.0	23.0			QL=4 ST=1 TYP=3
	245	LEAR	49	GB	0735.0	0737.0	3.0	3000.0			QL=4 ST=2 TYP=6
	245	SVTO	49	GB	0735.0	0738.0	5.0	4500.0			QL=4 ST=2 TYP=6
	8800	SVTO	8	S	0735.0	0735.0	U	51.0			QL=4 ST=1 TYP=3
	8800	SVTO	8	S	0735.0	0735.0	U	51.0			QL=4 ST=2 TYP=3
	410	SVTO	4	S/F	0735.0	0737.0	3.0	69.0			QL=4 ST=2 TYP=3
	8800	SVTO	4	S/F	0735.0	0735.0	985.0	51.0			QL=4 ST=1 TYP=3
	204	IZMI	42	SER	0735.1	0735.4	0.4	31.0			
	204	IZMI	41	F	0735.5	0735.7	1.5	160.0			
	610	LEAR	8	S	0737.0	0737.0	U	52.0			QL=4 ST=2 TYP=3
	204	IZMI	46	C	0737.2	0737.3	0.4	4756.0			
	204	IZMI	46	C	0737.8	0738.5	1.2	10920.0			
	204	IZMI	41	F	0739.2	0739.3	0.3	12.0			
	204	IZMI	41	F	0740.4	0740.9	0.8	43.0			
	127	TORN	47	GB	0740.5	0742.5	3.3	5400.0U	2800.0		DISTURBED
	204	IZMI	42	SER	0742.6	0748.1	5.8	33.0			
	245	PALE	8	S	1940.0	1940.0	1.0	66.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1940.0	1940.0	1.0	65.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2211.0	2211.0	U	92.0			QL=4 ST=2 TYP=3
21	127	TORN	44	NS	1110.0E		170.0D		8.0		V=1,DISTURBED
	2800	HIRA	3	S	0022.0	0025.0	4.0	25.0			0
	1415	LEAR	8	S	0024.0	0025.0	1.0	55.0			QL=4 ST=2 TYP=3
	2840	PEKG	5	S	0042.0	0045.7	7.0	16.2			
	2800	HIRA	1	S	0045.0	0045.0	1.0	15.0			0
	245	LEAR	8	S	0045.0	0046.0	1.0	98.0			QL=4 ST=2 TYP=3
	410	LEAR	8	S	0045.0	0046.0	2.0	93.0			QL=4 ST=2 TYP=3
	500	HIRA	8	S	0046.0	0047.0	1.0	15.0			0
	245	LEAR	8	S	0903.0	0903.0	U	140.0			QL=4 ST=2 TYP=3
	245	SVTO	8	S	0903.0	0903.0	1.0	140.0			QL=4 ST=2 TYP=3
	204	IZMI	41	F	0903.1	0903.4	1.4	290.0			
	204	IZMI	41	F	1009.4	1010.2	1.2	116.0			
	204	IZMI	42	SER	1025.5	1026.1	0.9	20.0			
22	204	IZMI	43	NS	0855.0		185.0D		15.0		
	127	TORN	44	NS	1000.0E		250.0D		8.0		V=1
	235	CUBA	44	NS	1315.0E		510.0D		9.0		
	280	CUBA	44	NS	1315.0E		510.0D		30.0		
	9100	GORK	46	C	0813.6	0814.2		110.0			
	9100	GORK	46	C	0813.6	0813.9	0.7	126.0			
	600	GORK	2	S/F	0905.2	0905.4	0.4	4.9			
	245	SGMR	8	S	1702.0	1702.0	U	52.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1732.0	1732.0	U	81.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1749.0	1749.0	1.0	360.0			QL=4 ST=2 TYP=3
	410	PALE	8	S	1749.0	1749.0	U	61.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	1802.0	1802.0	1.0	57.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2107.0	2107.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	PALE	8	S	2114.0	2114.0	U	53.0			QL=4 ST=2 TYP=3
23	204	IZMI	44	NS	0700.0E		300.0D		55.0		
	127	TORN	44	NS	1350.0E		30.0D		7.0		V=1
	280	CUBA	44	NS	1420.0E		100.0D		23.0		
	245	LEAR	8	S	0001.0	0002.0	1.0	56.0			QL=4 ST=2 TYP=3
	600	GORK	2	S/F	1012.5	1012.7	0.3	6.1			
	245	SGMR	8	S	1249.0	1249.0	U	53.0			QL=4 ST=2 TYP=3
	245	SGMR	8	S	1447.0	1447.0	U	51.0			QL=4 ST=2 TYP=3
24	280	CUBA	44	NS	1405.0E		100.0D		18.0		
	235	CUBA	44	NS	1405.0E		465.0D		4.0		
	500	HIRA	7	C	0454.0	0456.0	4.0	10.0			0
	245	LEAR	8	S	0827.0	0827.0	U	73.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	0910.0	0910.0	U	52.0			QL=4 ST=2 TYP=3
	245	LEAR	8	S	1007.0	1007.0	U	120.0			QL=4 ST=2 TYP=3
	204	IZMI	42	SER	1007.3	1007.4	0.5	58.0			
25	410	SGMR	8	S	1324.0	1324.0	U	190.0			QL=4 ST=2 TYP=3
	410	SVTO	8	S	1324.0	1324.0	U	240.0			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

JANUARY 2004

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
25	2800	PENT	29	PBI	2229.0	2232.0	34.0	3.0			
26	127	TORN	43	NS	1157.0		143.0		5.0		V=1
	280	CUBA	44	NS	1400.0E		240.0D		13.0		
⌐	900	GORK	40	F	0839.0	0839.2	1.9	17.0			
⌙	600	GORK	2	S/F	0840.5	0840.7	0.4	7.3			
	9100	GORK	2	S/F	0850.7	0850.9	0.7	5.9			
	9100	GORK	1	S	0857.4	0858.5	1.6	5.9			
	9100	GORK	1	S	0859.8	0900.4	1.2	5.9			
28	235	CUBA	44	NS	1300.0E		480.0D		4.0		
⌙	280	CUBA	44	NS	1300.0E		480.0D		17.0		
⌐	900	GORK	46	C	0841.9	0842.1	1.3	6.0			
⌙	900	GORK	46	C	0841.9	0842.8		15.0			
	600	GORK	2	S/F	0844.0	0844.3	0.6	4.0			
30	127	TORN	43	NS	1143.0		81.0		6.0		V=2
	9100	GORK	4	S/F	0907.5	0908.0	0.8	33.0			
31	127	TORN	43	NS	1132.0		168.0		7.0		V=0
	9100	GORK	4	S/F	0812.7	0812.8	0.3	15.0			
	600	GORK	2	S/F	0820.8	0821.1	0.4	5.0			
⌐	245	SGMR	49	GB	1358.0	1358.0	U	740.0			QL=4 ST=2 TYP=6
⌙	245	SVTO	49	GB	1358.0	1358.0	U	510.0			QL=4 ST=2 TYP=6

Reports are received routinely from the following observatories:

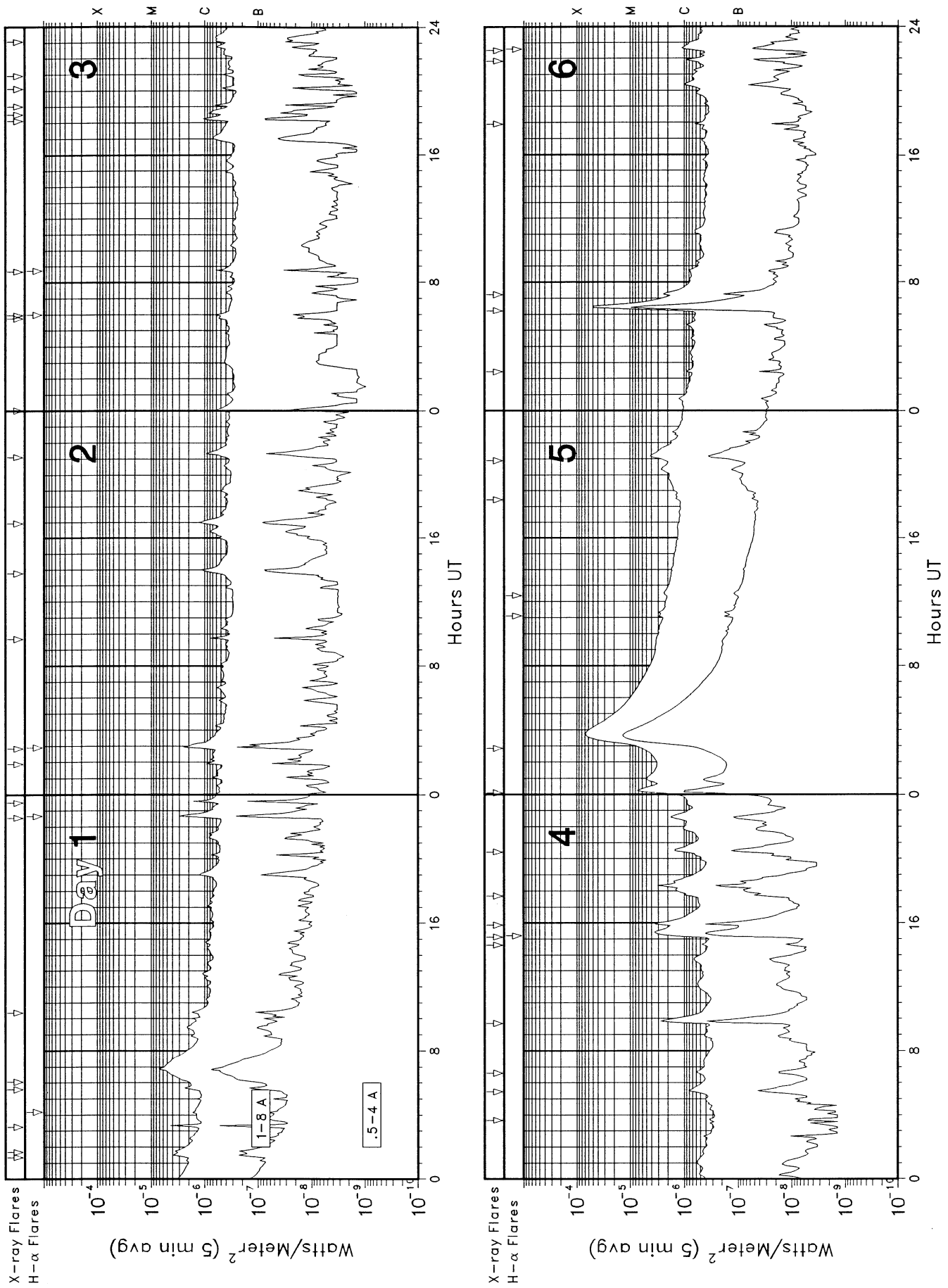
BERN = Berne	HUMN = Humain	ONDR = Ondrejov	SVTO = San Vito
CRIM = Crimea	IZMI = IZMIRAN	PEKG = Peking	TORN = Torun
CUBA = Havana	KISV = Kislovodsk	PALE = Palehua	TRST = Trieste
GORK = Gorky	KRAK = Krakow	PENT = Penticton	TYKW = Toyokawa
HIRA = Hiraiso	LEAR = Learmonth	POTS = Potsdam	UPIC = Upice
HUAN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

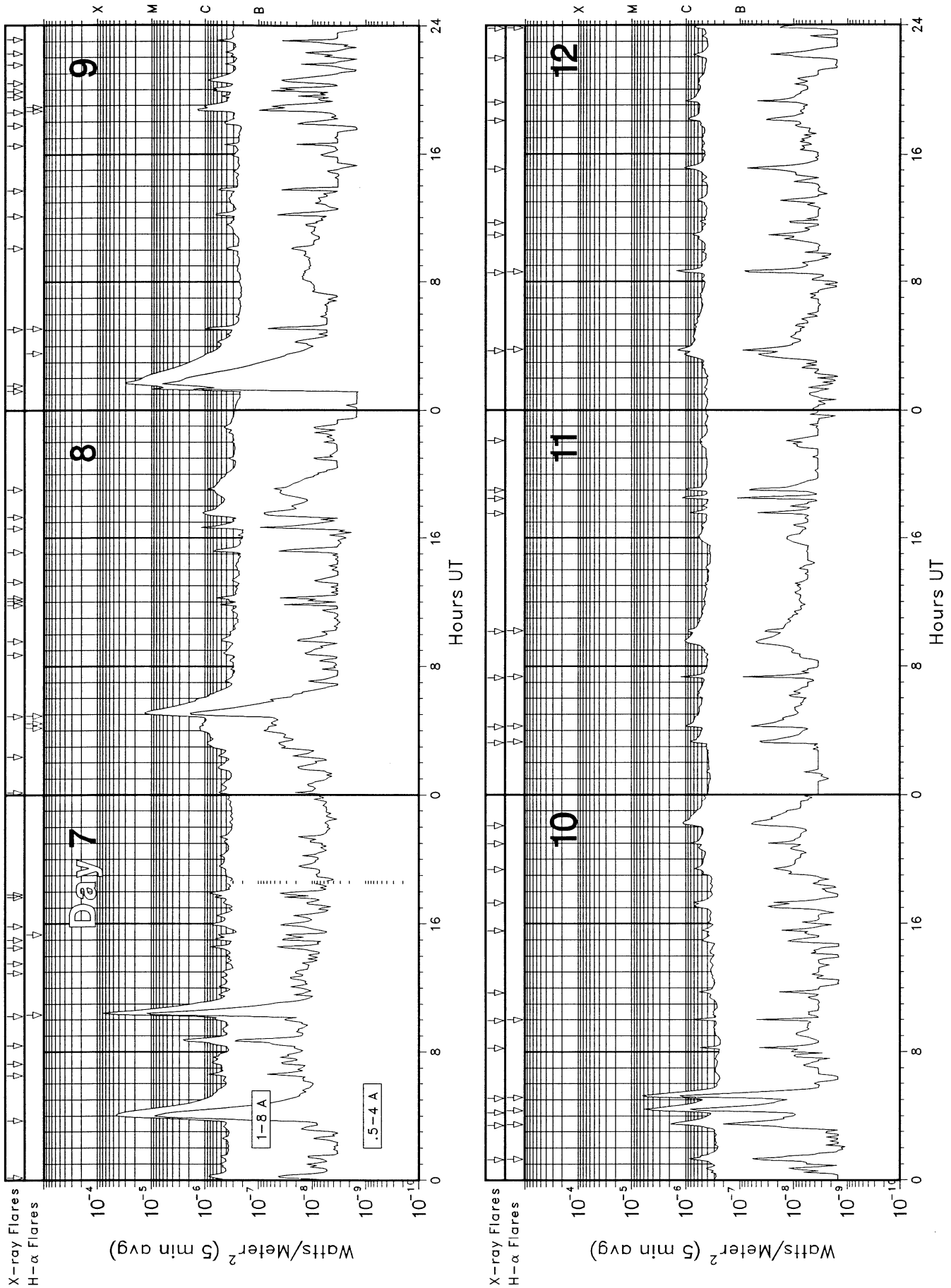
Explanation of Type Code:

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	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

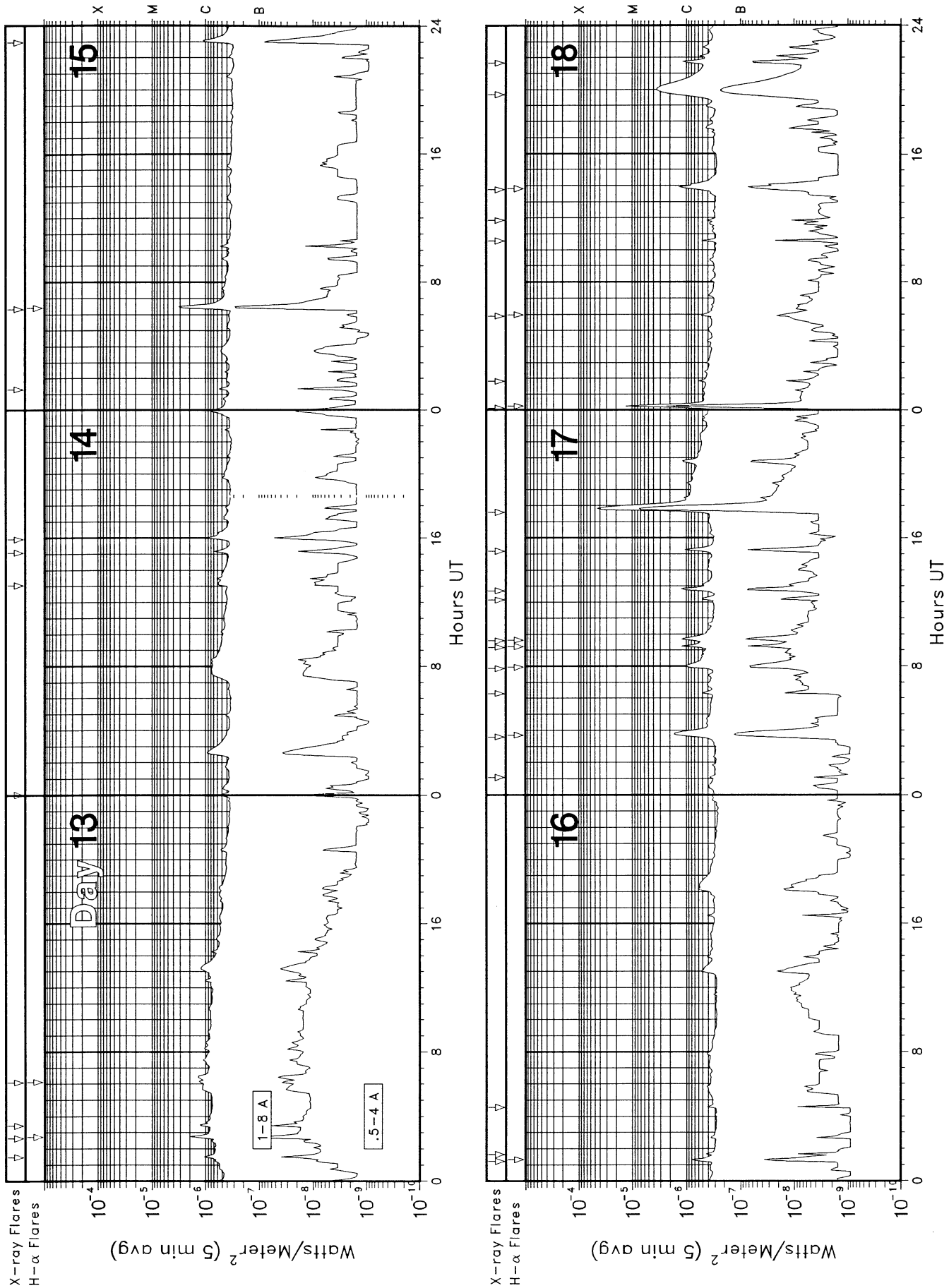
RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; and Hiraiso, Japan 500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


GOES X-RAY DETECTOR
January 2004
Day 1
1
2
3
4
5
6
X
M
C
B
1-8 A
.5-4 A
X-ray Flares
H-α Flares
Watts/Meter² (5 min avg)
Hours UT
0
8
16
24


GOES X-RAY DETECTOR
January 2004
X-ray Flares
H-α Flares
Watts/Meter² (5 min avg)
1-8 A
.5-4 A
Day 7
8
9
10
11
12
X
M
C
B
Hours UT

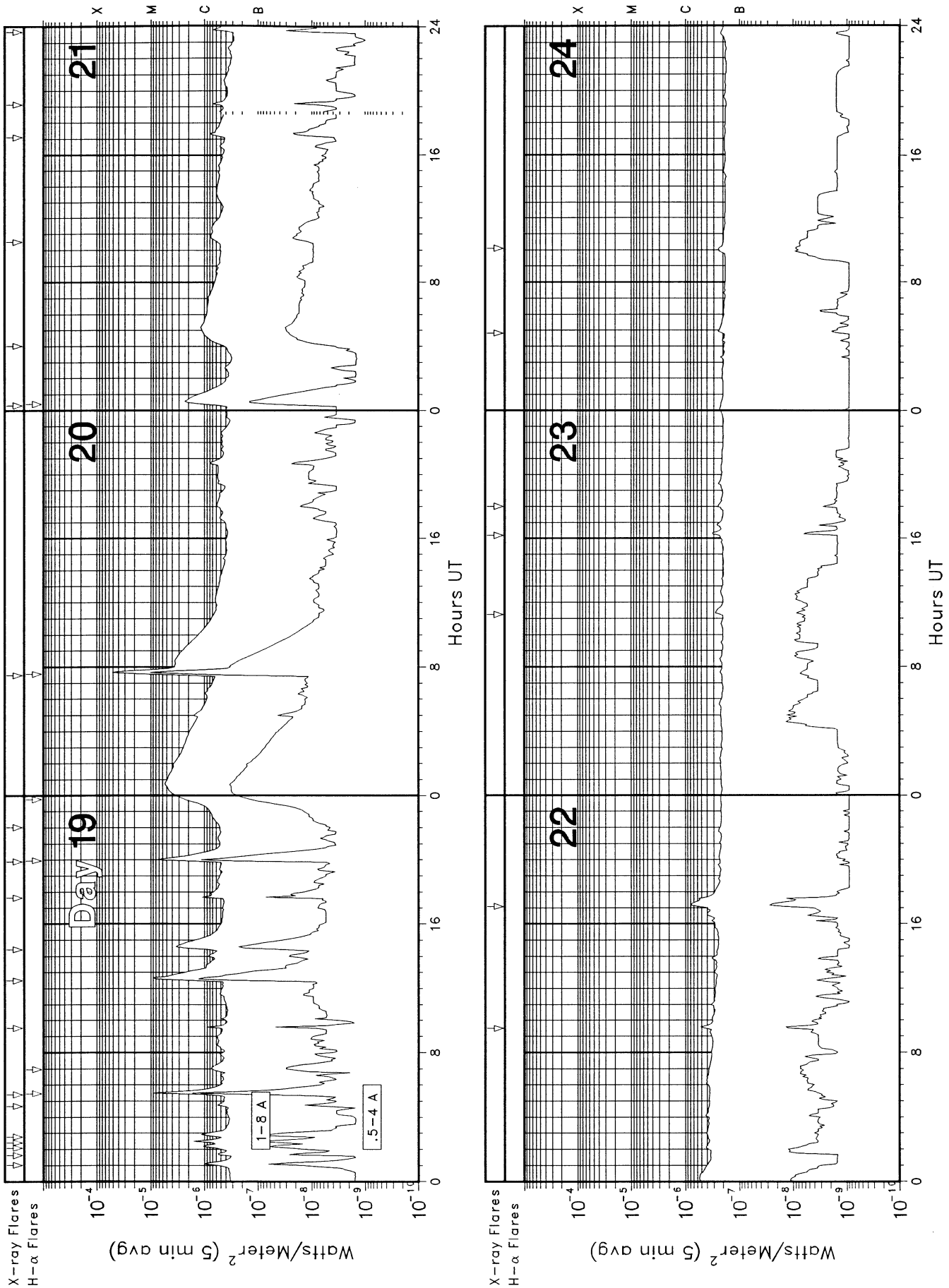
GOES X-RAY DETECTOR

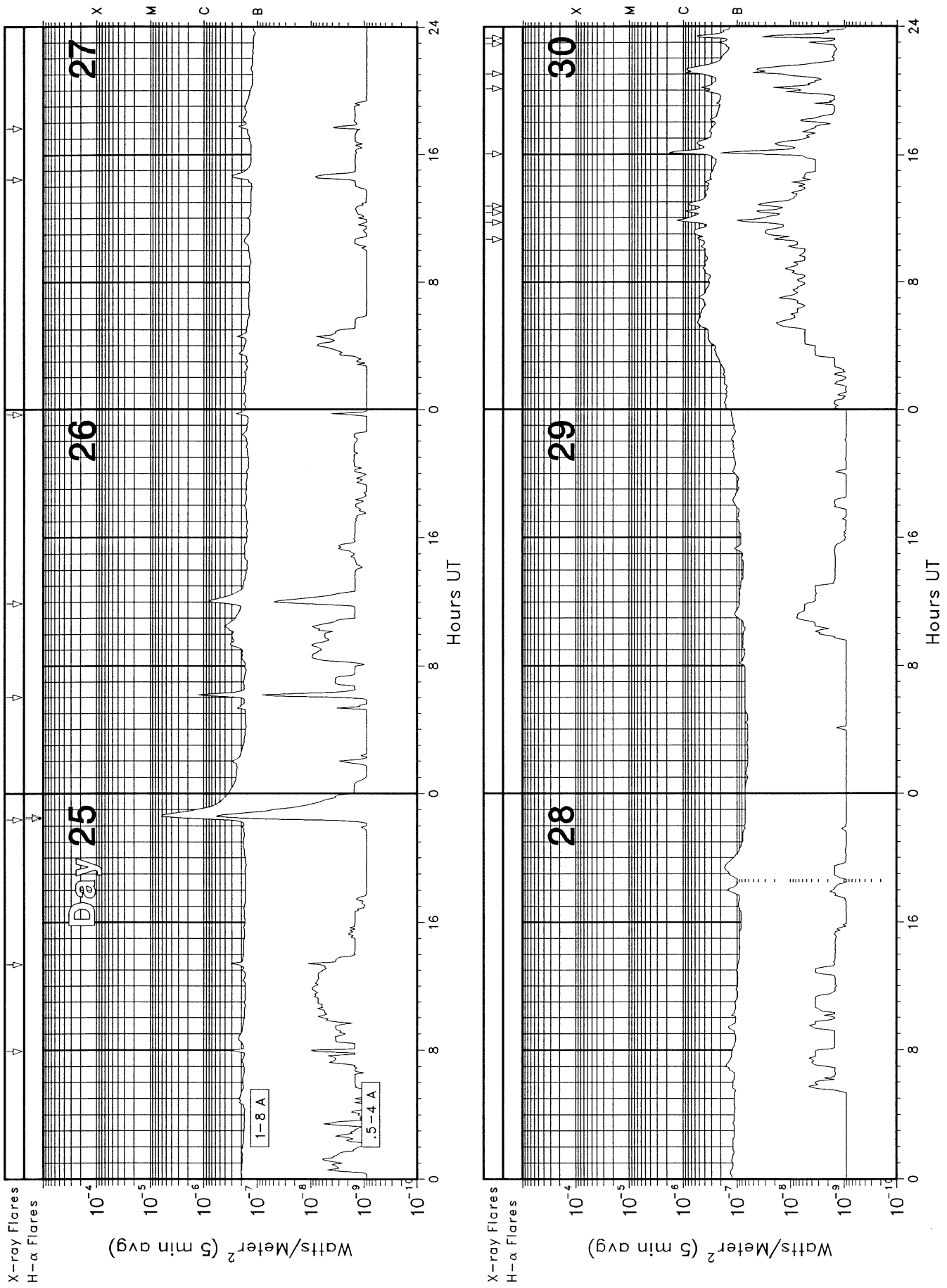
January 2004



GOES X-RAY DETECTOR

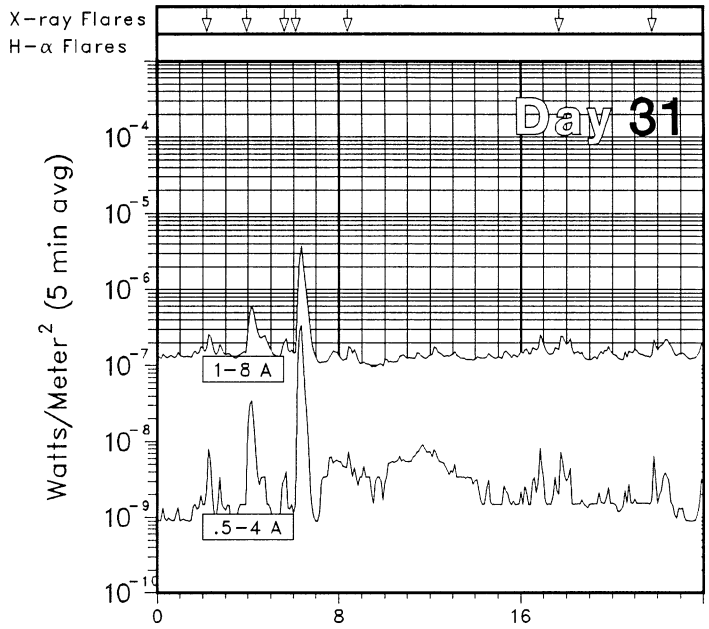
January 2004




GOES X-RAY DETECTOR
January 2004
Day 25
26
27
28
29
30
X
M
C
B
1–8 A
.5–4 A
Watts/Meter² (5 min avg)
Hours UT
X-ray Flares
H-α Flares

GOES X-RAY DETECTOR

January 2004



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

January 2004

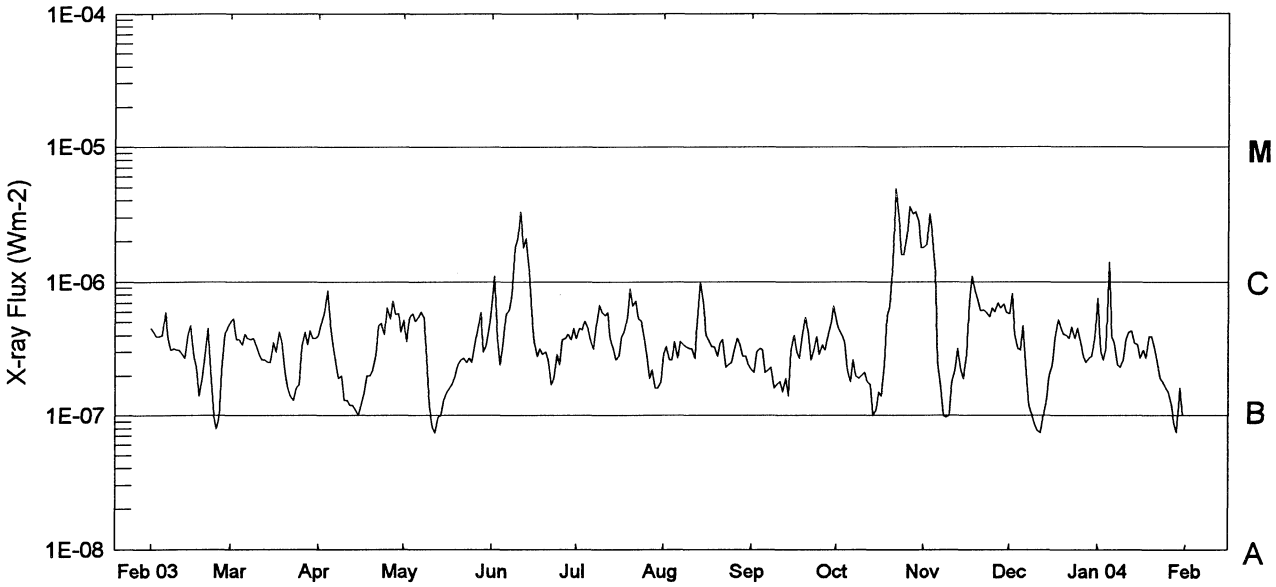
Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp	Xray	NOAA/ USAF Region	Flux
01	0122	0133	0141				C4.0			3.5E-03
01	0141	0146	0149				C3.7			1.6E-03
01	0316	0321	0323				C6.4		10528	1.5E-03
01	0535	0540	0547				C2.5		10534	1.5E-03
01	0604	0654	0700				C8.0			1.4E-02
01	1023	1026	1030				C1.8			6.9E-04
01	2234	2242	2249	S07	E73	SF	C3.0		10536	1.8E-03
01	2330	2337	2340				C2.0		10536	7.3E-04
02	0153	0157	0201				C1.0		10536	4.0E-04
02	0250	0258	0303	S04	E28	SF	C2.8		10534	1.5E-03
02	0941	0946	0949				B8.7		10536	3.2E-04
02	1346	1359	1406				C1.2		10536	1.1E-03
02	1656	1700	1709				C1.2		10536	8.7E-04
02	2107	2121	2133				B9.4		10536	1.1E-03
03	0001	0005	0014				B5.9		10536	4.4E-04
03	0545	0548	0551				B6.4		10536	2.0E-04
03	0557	0600	0603	S14	E64	SF	B6.9		10536	2.2E-04
03	0841	0845	0849	S15	E64	SF	B6.7		10536	2.5E-04
03	1808	1815	1823				C1.1		10536	7.8E-04
03	1832	1837	1849				B8.7		10536	7.5E-04
03	1903	1906	1910				B7.8		10536	2.5E-04
03	2008	2012	2015				B4.9		10536	1.8E-04
03	2056	2100	2103				B5.2		10536	1.9E-04
03	2304	2309	2312				B7.7		10536	3.0E-04
04	0340	0343	0348				B4.0		10536	1.7E-04
04	0526	0532	0540				B8.3			6.2E-04
04	0636	0639	0643				B6.8			2.5E-04
04	0942	0952	1001				C2.8		10536	2.1E-03
04	1437	1440	1443				B5.3		10536	1.7E-04
04	1507	1526	1548	S06	E45	SF	C3.5		10536	6.1E-03
04	1552	1558	1604				C3.7		10536	2.2E-03
04	1741	1820	1825				C3.8		10536	3.9E-03
04	2025	2035	2042				C1.5		10536	1.3E-03
05	0006	0016	0031	S11	E39	SF	C7.5		10536	8.3E-03
05	0250	0345	0520				M6.9			3.2E-01
05	1825	2021	2052				C2.6			1.6E-02
05	2053	2112	2127				C4.2			6.7E-03
06	0225	0228	0231				C1.0		10537	3.4E-04
06	0613	0629	0636				M5.8		10537	3.7E-02
06	0713	0718	0723				C2.5			1.4E-03
06	1754	1757	1800				B6.7		10537	2.2E-04
06	2151	2155	2159				C1.0		10536	4.2E-04
06	2230	2241	2258	S11	E03	SF	C1.1		10536	1.6E-03
07	0009	0014	0024				B9.1		10537	6.9E-04
07	0343	0404	0421	N02	E82	2N	M4.5		10537	5.7E-02
07	0631	0636	0640				B9.2		10537	3.9E-04
07	0715	0721	0731				B7.5		10536	6.5E-04
07	0824	0845	0850				C2.9		10536	2.2E-03
07	1014	1027	1033	N02	E69	SF	M8.3		10537	4.8E-02
07	1256	1259	1302				B5.4		10536	1.7E-04
07	1332	1335	1339				B4.4		10536	1.7E-04
07	1431	1435	1438				C1.0		10536	3.1E-04
07	1500	1505	1507				B8.4		10536	2.7E-04
07	1551	1600	1607				B7.7		10536	6.2E-04
07	1739	1742	1745				B7.5		10537	2.3E-04
07	1749	1758	1802				B9.6		10537	5.6E-04
08	0009	0012	0016				B6.4		10536	2.3E-04
08	0223	0226	0228	N03	E65	SF	B6.6		10537	1.6E-04
08	0453	0507	0521	N01	E64	1N	M1.3		10537	1.6E-02
08	0843	0850	0858				B4.6		10536	3.7E-04
08	0934	0937	0944				B5.8		10536	3.0E-04
08	1148	1152	1154				B8.5		10537	1.7E-04
08	1204	1209	1214				B4.2			2.2E-04
08	1214	1217	1220				B7.9		10536	2.2E-04
08	1315	1324	1332				B3.2		10537	3.0E-04
08	1507	1512	1521				B7.7		10536	4.8E-04
08	1636	1641	1646				C1.3		10537	5.1E-04
08	1719	1735	1750				C1.1		10537	1.5E-03
08	1902	1905	1909				B9.7		10536	3.5E-04
09	0113	0122	0127	N02	E50	2N	M1.1		10537	4.3E-03
09	0133	0144	0154				M3.2		10537	2.9E-02
09	0503	0508	0513	N05	E46	1F	C1.3		10537	5.3E-04
09	1006	1010	1012				B6.3		10536	1.6E-04
09	1208	1214	1218				B8.9		10536	3.7E-04
09	1344	1349	1352				B8.9		10536	2.8E-04
09	1632	1636	1638				B5.9		10536	1.5E-04
09	1747	1754	1807				B4.5			4.7E-04
09	1836	1844	1849	N08	E42	SF	C1.8		10537	8.8E-04
09	1933	1936	1941				B5.1		10536	2.2E-04
09	1955	1958	2001				C1.0		10536	2.8E-04
09	2025	2035	2046				B9.6		10534	8.8E-04
09	2133	2136	2138				B5.9		10536	1.3E-04
09	2216	2220	2224				B4.8		10536	1.9E-04
09	2307	2308	2310				C1.0		10536	1.4E-04
10	0116	0121	0123	S12	W31	SF	C1.2		10536	3.5E-04
10	0324	0330	0340	S12	W29	SF	C1.9		10536	1.4E-03
10	0412	0425	0431	S11	W30	1F	C7.3		10536	3.5E-03
10	0505	0513	0522	S13	W32	SF	C7.7		10536	4.3E-03
10	0813	0817	0819				B8.7		10536	1.8E-04
10	0957	1001	1005	N06	E30	SF	B9.3		10537	3.0E-04
10	1142	1146	1150				B6.1		10537	2.5E-04
10	1534	1538	1541				B5.7		10537	2.0E-04
10	1718	1721	1724				B8.0		10537	2.5E-04
10	1922	1925	1930				B7.2		10537	3.1E-04
10	2058	2102	2104	S11	W35	SF	C1.1		10536	2.8E-04
10	2205	2215	2233	S08	W45	SF	C1.1			1.6E-03
11	0314	0318	0325	S11	W43	SF	C1.0		10536	5.0E-04
11	0413	0416	0427	S11	W40	SF	C1.0		10536	7.5E-04
11	0717	0721	0724	S11	W47	SF	C1.6		10536	4.3E-04
11	1010	1013	1017				C1.1		10537	4.0E-04
11	1732	1736	1741				B9.1		10537	3.9E-04
11	1828	1834	1837				C1.8		10537	6.0E-04
11	1900	1904	1907				C1.7		10536	4.7E-04
11	2206	2209	2211				B6.7		10536	1.8E-04
12	0343	0348	0352	S11	W56	SF	C1.6		10536	7.0E-04
12	0834	0840	0844	S11	W59	SF	C1.8		10536	7.5E-04
12	1055	1058	1101				B9.4		10537	2.8E-04
12	1141	1145	1147				B6.7		10536	2.1E-04
12	1502	1506	1512				C1.1		10536	5.8E-04
12	1803	1809	1818				B9.5		10540	7.5E-04
12	1912	1917	1923				C1.1		10540	6.0E-04
12	2158	2211	2218				B7.7		10540	7.2E-04
12	2350	2354	2359	S10	W68	SF	B7.7		10536	3.7E-04
13	0129	0133	0136				C1.1		10536	4.3E-04
13	0239	0246	0251	S06	W75	SF	C2.0		10536	1.1E-03
13	0325	0329	0332				C1.7		10536	5.7E-04
13	0606	0609	0613	N03	W06	SF	C1.5		10537	5.7E-04

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

January 2004

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/ USAF Region	Flux
14	0001	0004	0007				B6.3	10536	2.3E-04
14	1304	1309	1325				B6.4		7.1E-04
14	1506	1510	1516				B7.1		3.6E-04
14	1555	1602	1608				C1.0	10536	6.3E-04
15	0119	0123	0126				B6.2	10540	2.3E-04
15	0620	0632	0637	S16	E52	1F	C3.2	10540	2.3E-03
15	2257	2304	2313				C1.2	10540	8.9E-04
16	0113	0119	0124	N05	W47	SF	B9.3	10537	4.5E-04
16	0138	0141	0144				B4.6		1.5E-04
16	0433	0437	0440				B4.5	10540	1.6E-04
17	0105	0108	0110				B4.1		1.1E-04
17	0335	0348	0400	S15	E28	SF	C1.6	10540	1.9E-03
17	0618	0623	0627				B5.3		2.5E-04
17	0751	0801	0816	S15	E26	SF	C1.0	10540	1.2E-03
17	0911	0916	0920	S12	E20	SF	C1.4	10540	5.4E-04
17	0935	0944	0950	N08	W65	SF	C1.2	10537	9.3E-04
17	1208	1213	1219				B5.6	10540	3.1E-04
17	1243	1249	1254				C1.5	10540	6.9E-04
17	1510	1517	1522				C1.1	10540	5.9E-04
17	1735	1750	1759				M5.0	10540	3.3E-02
18	0007	0017	0021	S15	E19	1N	M1.4	10540	5.3E-03
18	0148	0151	0154				B6.3		2.0E-04
18	0553	0600	0603	S16	E16	SF	B5.7	10540	3.0E-04
18	1033	1037	1039				B7.0	10540	1.7E-04
18	1150	1153	1155				B5.0	10540	1.3E-04
18	1344	1357	1401	N05	W83	SF	C1.4	10537	9.9E-04
18	1941	2003	2022				C3.7		7.4E-03
18	2140	2144	2149				C1.4	10540	5.9E-04
19	0102	0108	0112				C1.1	10537	5.5E-04
19	0138	0143	0149				B6.7	10540	3.5E-04
19	0206	0213	0219				C1.1	10540	7.3E-04
19	0226	0231	0235				C1.7	10540	6.7E-04
19	0248	0255	0303				C1.2	10540	8.5E-04
19	0442	0447	0455				B5.8		4.1E-04
19	0525	0532	0535	S17	E05	SF	M1.0	10540	3.2E-03
19	0932	0936	0938				C1.0	10537	2.9E-04
19	1230	1240	1246				M1.0	10540	6.3E-03
19	1425	1439	1456				C3.4	10543	4.5E-03
19	1738	1743	1746				C1.5	10537	4.7E-04
19	1954	2002	2008	S15	W03	SF	C8.2	10540	4.1E-03
19	2202	2445	2629				C5.5		4.6E-02T
20	0729	0743	0747	S16	W12	2N	M6.1	10540	2.8E-02
21	0020	0036	0102				C2.3	10543	4.2E-03
21	0402	0511	0530				C1.2		4.8E-03
21	1031	1052	1112				B7.6		1.7E-03
21	1706	1720	1729				B8.6		8.7E-04
21	1908	1913	1916				B7.4		3.1E-04
21	2340	2347	2357				B7.2	10540	5.8E-04
22	0930	0935	0940				B5.7	10544	2.9E-04
22	1705	1713	1726				B8.1		8.9E-04
23	1115	1122	1127				B2.7	10542	1.8E-04
23	1611	1619	1624				B3.3	10540	2.3E-04
23	1800	1804	1808				B2.5	10544	1.2E-04
24	0449	0455	0459				B2.5	10540	1.4E-04
24	1006	1009	1012				B2.5	10540	8.9E-05
25	0756	0800	0802				B4.3	10540	1.2E-04
25	1322	1325	1327				B3.9	10540	9.2E-05
25	2223	2241	2250				C6.3	10543	6.3E-03
26	0602	0610	0614				C1.6	10542	5.9E-04
26	1155	1205	1215				B8.3	10540	7.8E-04
26	2341	2346	2351				B2.6		1.4E-04
27	1428	1439	1449				B3.0	10542	3.4E-04
27	1740	1744	1749				B2.5	10542	1.2E-04
30	1040	1043	1048				B5.9		2.6E-04
30	1143	1152	1157				C1.4		8.8E-04
30	1221	1225	1228				C1.1		3.8E-04
30	1245	1253	1303				B8.3		7.8E-04
30	1601	1608	1614				C2.1		1.1E-03
30	2007	2011	2016				B4.9		2.3E-04
30	2102	2107	2111				C1.0		4.1E-04
30	2256	2302	2304				B2.3		9.6E-05
30	2318	2324	2328				B8.0		3.1E-04
31	0212	0219	0224				B2.7	10549	1.7E-04
31	0358	0412	0421				B6.3	10549	6.2E-04
31	0537	0540	0542				B3.0	10549	7.4E-05
31	0607	0622	0628				C4.1	10549	2.7E-03
31	0824	0828	0834				B1.8	10549	1.0E-04
31	1742	1750	1757				B2.5	10549	2.0E-04
31	2147	2151	2155				B2.4	10549	9.5E-05

Preliminary GOES Satellite Daily X-Ray Background
Feb 2003 - Jan 2004



Day	Feb 03	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 04
1	B4.5	B5.1	B4.0	B5.2	B6.8	B3.8	B2.9	B2.2	B5.0	C1.8	B5.8	B7.5
2	B4.2	B5.3	B5.1	B3.6	C1.1	B4.5	B3.3	B2.1	B4.4	C1.9	B8.1	B3.0
3	B3.9	B3.7	B5.9	B5.4	B3.8	B4.4	B2.6	B3.0	B4.0	C3.2	B4.1	B2.6
4	B3.9	B3.7	B8.6	B5.8	B2.4	B5.1	B2.6	B3.2	B3.5	C2.3	B3.2	B3.2
5	B4.0	B3.4	B5.1	B5.1	B3.6	B4.6	B3.6	B3.1	B2.2	C1.2	B3.1	C1.4
6	B5.9	B4.1	B3.3	B5.4	B5.7	B3.7	B2.7	B2.1	B1.8	B2.5	B4.7	B3.9
7	B3.8	B3.8	B2.5	B6.0	B6.2	B3.2	B3.6	B2.2	B2.6	B1.6	B2.1	B3.5
8	B3.1	B3.7	B1.9	B5.3	B7.9	B4.6	B3.4	B2.3	B2.0	B1.0	B1.2	B2.4
9	B3.2	B3.8	B2.0	B2.7	C1.8	B6.7	B3.3	B1.6	B1.9	A9.7	B1.0	B2.3
10	B3.1	B3.3	B1.3	B1.2	C2.1	B5.9	B3.2	B1.7	B2.0	B1.0	A8.7	B2.6
11	B3.1	B2.9	B1.3	A8.2	C3.3	B5.6	B3.2	B1.8	B2.1	B1.8	A7.7	B3.7
12	B2.9	B2.6	B1.2	A7.4	C1.8	B5.9	B2.7	B1.5	B1.8	B2.2	A7.4	B4.2
13	B2.7	B2.6	B1.2	A9.7	C2.1	B3.8	B6.0	B1.9	B1.7	B3.2	A9.7	B4.3
14	B4.1	B2.5	B1.1	B1.0	C1.2	B3.2	C1.0	B1.4	B1.0	B2.2	B1.3	B3.5
15	B4.7	B2.5	B1.0	B1.3	B5.8	B2.6	B6.8	B3.1	B1.1	B1.9	B2.0	B3.4
16	B2.8	B3.5	B1.2	B1.5	B3.6	B2.8	B4.0	B4.0	B1.5	B2.9	B2.4	B2.7
17	B2.3	B3.0	B1.5	B1.6	B2.8	B3.9	B3.7	B3.0	B1.4	B7.2	B3.8	B3.1
18	B1.4	B4.2	B2.0	B1.7	B3.2	B4.2	B3.3	B2.7	B2.4	C1.1	B5.2	B2.7
19	B1.9	B3.6	B2.0	B2.0	B2.9	B5.4	B3.3	B4.1	B5.6	B8.4	B4.6	B3.9
20	B2.8	B2.1	B2.2	B2.4	B3.0	B8.9	B2.8	B5.4	B6.5	B7.3	B4.1	B3.9
21	B4.5	B1.6	B2.9	B2.6	B2.6	B6.6	B3.5	B4.2	C1.4	B6.1	B4.0	B3.3
22	B2.2	B1.4	B4.7	B2.7	B1.7	B7.2	B3.7	B2.6	C4.9	B6.2	B3.8	B2.5
23	B1.0	B1.3	B4.9	B2.5	B1.9	B5.3	B2.3	B3.0	C3.0	B5.9	B4.6	B1.9
24	A8.0	B1.6	B4.1	B2.7	B2.9	B5.1	B2.4	B3.9	C1.6	B5.5	B3.8	B1.8
25	A9.4	B1.7	B6.4	B2.5	B2.4	B4.0	B2.5	B2.9	C1.6	B6.4	B4.5	B1.6
26	B2.2	B3.3	B5.3	B3.5	B3.7	B2.8	B3.1	B3.4	C2.2	B6.0	B3.5	B1.5
27	B4.1	B4.2	B7.2	B4.3	B3.8	B1.9	B3.8	B3.1	C3.6	B7.0	B2.8	B1.2
28	B4.5	B3.4	B5.7	B5.9	B4.1	B2.2	B3.4	B4.0	C3.2	B6.4	B2.5	A8.7
29		B4.3	B5.8	B3.0	B3.7	B1.6	B2.8	B4.8	C3.3	B6.8	B2.7	A7.5
30		B3.8	B4.2	B3.3	B4.5	B1.6	B2.8	B6.6	C2.8	B5.9	B2.8	B1.6
31		B3.8		B4.5		B1.8	B2.4		C1.8		B3.9	B1.0

NOTE: * = Data not available.

ACTIVE PROMINENCES AND FILAMENTS

JANUARY 2004

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	LPS	0815E	0916D	S15	E90	01	8.1	1		8	9	E	LEAR		
05	DSF	2103	1500U	S06	E36	01	8.6		11	0	0	E	HOLL	0536	
06	DSF	2313U	1447U	N10	E04	01	7.3		09	0	0	E	HOLL		
08	DSF	1953U	2013U	S10	E45	01	12.2		15	0	0	E	HOLL	0537	
09	DSF	2332U	1516U	S21	E09	01	10.7		12	0	0	E	HOLL		
12	EPL	1945	2001	N00	E90	01	19.5	3		9	9	E	HOLL		
13	EPL	1508	1540	N07	E90	01	20.4	1		9	9	E	HOLL		
13	DSF	2338U	1459U	S57	E19	01	15.6		09	0	0	E	HOLL		
13	DSF	2338U	1459U	S57	E19	01	15.6		09	0	0	E	HOLL		
20	DSF	2335U	1537U	N21	W10	01	20.2		12	0	0	E	HOLL		
21	DSF	2330U	1501U	S48	E85	01	29.1		28	0	0	E	HOLL		
21	EPL	2345	0101	N09	W90	01	15.2	3		9	9	E	LEAR		
29	DSF	1434U	0709U	S08	W50	01	25.8		12	0	0	E	SVTO		
29	DSF	2205	2320	S08	W59	01	25.5	3	12	0	0	E	HOLL		
31	DSF	0045U	1543U	S13	W42	01	27.9		06	0	0	E	HOLL		

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.

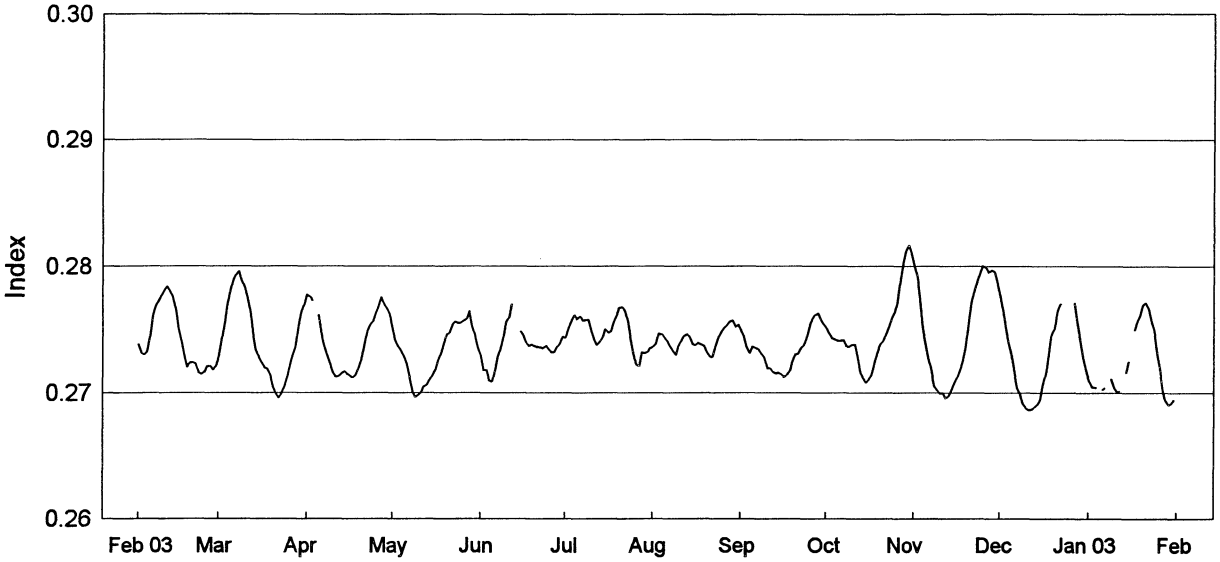
ABST = Abastumani
ATHN = Athens
BUCA = Bucharest
CATA = Catania
HOLL = Holloman
KHAR = Kharkov
LEAR = Learmonth
PALE = Palehua
RAMY = Ramey
SVTO = San Vito
VORO = Voroshilov
VALA = Valasske Mezirici
WROC = Wroclaw

NOTE: The U.S. Air Force solar observing sites (HOLL, LEAR, RAMY, AND SVTO) have changed operational requirements and will only report the following: BSL, EPL, LPS, SPY, and DSF's.

NOAA Solar Ultraviolet (UV) MgII Core-to-Wing Index

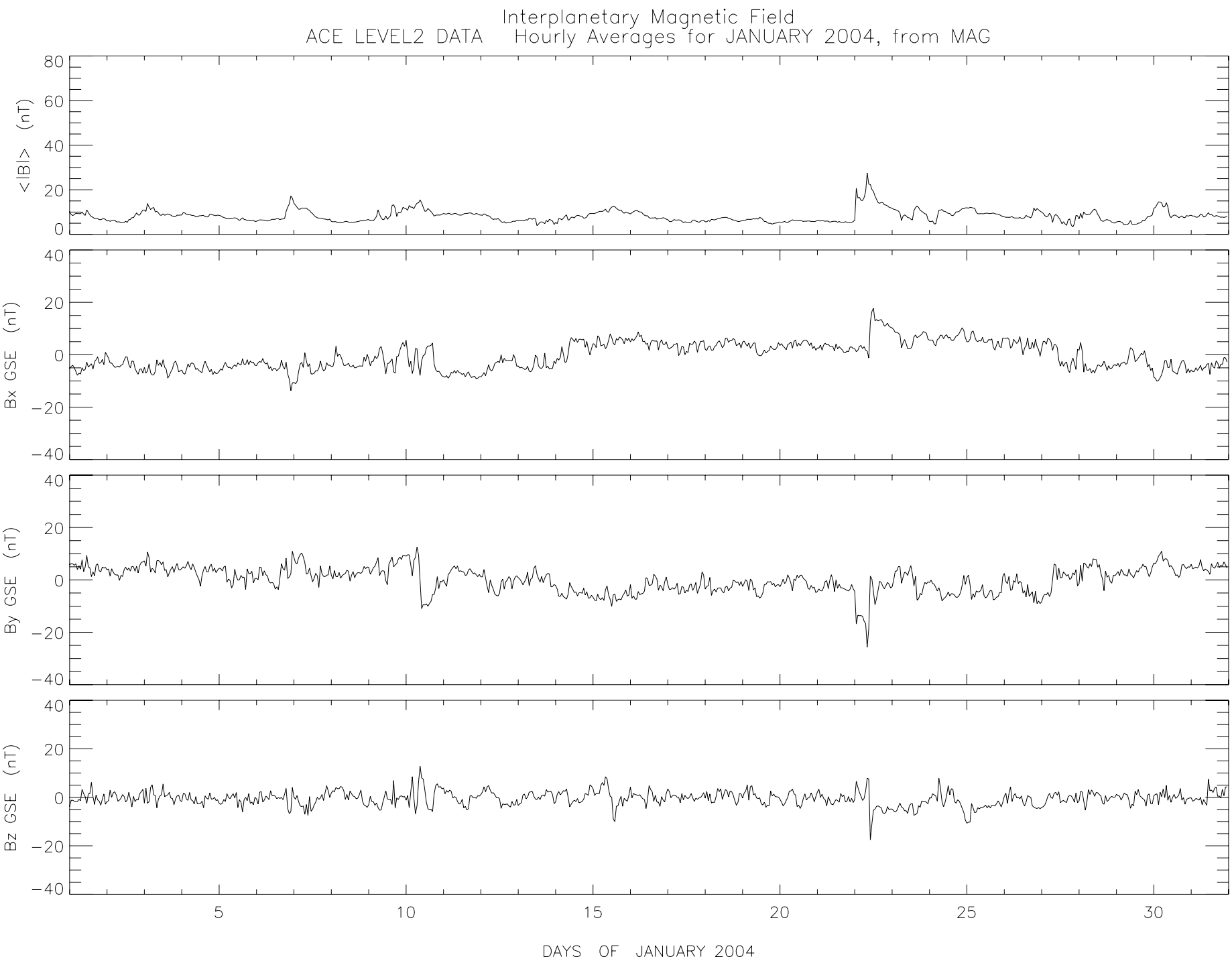
Feb 2003 - Jan 2004

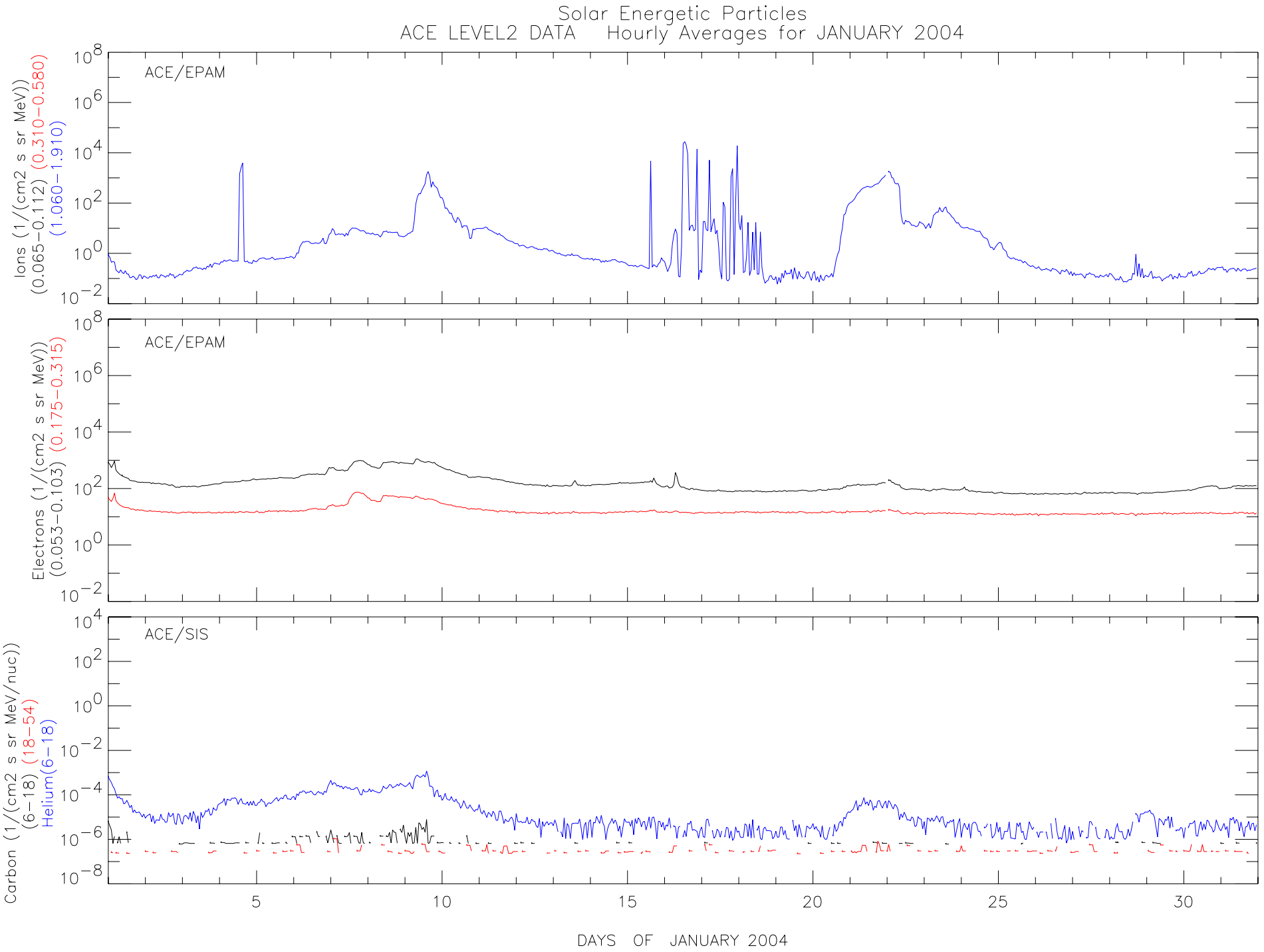
Version 9.1

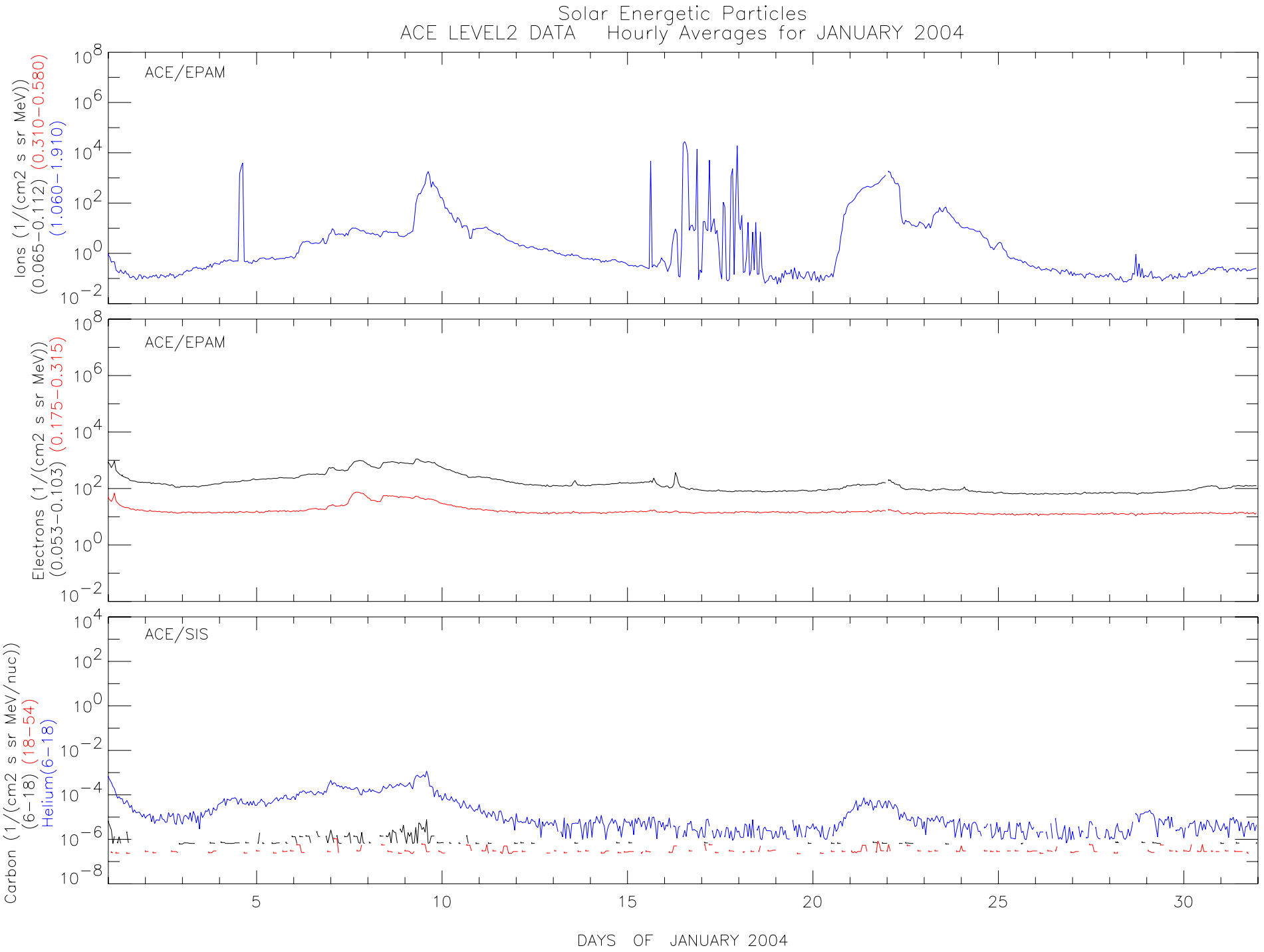


Day	Feb 03	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 04
1	0.2738	0.2728	0.2778	0.2749	0.2729	0.2743	0.2736	0.2749	0.2751	0.2801	0.2777	0.2711
2	0.2732	0.2743	0.2776	0.2741	0.2718	0.2751	0.2739	0.2744	0.2746	0.2792	0.2764	0.2705
3	0.2730	0.2754	0.2772	0.2736	0.2718	0.2756	0.2747	0.2736	0.2743	0.2774	0.2750	0.2704
4	0.2732	0.2769	---	0.2733	0.2710	0.2761	0.2746	0.2731	0.2743	0.2752	0.2740	0.2704
5	0.2745	0.2781	0.2761	0.2728	0.2709	0.2758	0.2744	0.2737	0.2741	0.2738	0.2730	---
6	0.2761	0.2789	0.2747	0.2722	0.2717	0.2760	0.2741	0.2736	0.2741	0.2727	0.2717	0.2703
7	0.2769	0.2793	0.2738	0.2713	0.2728	0.2757	0.2736	0.2734	0.2742	0.2719	0.2704	0.2705
8	0.2772	0.2796	0.2730	0.2701	0.2735	0.2758	0.2732	0.2730	0.2737	0.2706	0.2699	---
9	0.2777	0.2788	0.2724	0.2697	0.2743	0.2758	0.2730	0.2728	0.2737	0.2702	0.2691	0.2711
10	0.2781	0.2784	0.2716	0.2698	0.2756	0.2749	0.2737	0.2720	0.2738	0.2700	0.2688	0.2703
11	0.2784	0.2776	0.2713	0.2700	0.2759	0.2742	0.2741	0.2719	0.2738	0.2700	0.2686	0.2701
12	0.2780	0.2763	0.2713	0.2705	0.2770	0.2738	0.2745	0.2717	0.2728	0.2696	0.2687	0.2701
13	0.2775	0.2746	0.2715	0.2706	---	0.2740	0.2746	0.2715	0.2717	0.2698	0.2688	---
14	0.2765	0.2734	0.2717	0.2710	---	0.2743	0.2744	0.2716	0.2712	0.2702	0.2691	0.2716
15	0.2749	0.2728	0.2715	0.2714	0.2748	0.2750	0.2739	0.2715	0.2708	0.2707	0.2694	0.2725
16	0.2740	0.2724	0.2714	0.2718	0.2745	0.2747	0.2738	0.2713	0.2710	0.2712	0.2706	---
17	0.2729	0.2720	0.2712	0.2725	0.2739	0.2748	0.2740	0.2714	0.2714	0.2717	0.2716	0.2750
18	0.2720	0.2719	0.2714	0.2731	0.2737	0.2756	0.2738	0.2717	0.2723	0.2724	0.2730	0.2756
19	0.2724	0.2714	0.2720	0.2738	0.2738	0.2760	0.2737	0.2725	0.2732	0.2737	0.2746	0.2762
20	0.2724	0.2705	0.2726	0.2746	0.2737	0.2767	0.2731	0.2731	0.2738	0.2754	0.2706	0.2770
21	0.2723	0.2699	0.2738	0.2747	0.2736	0.2768	0.2729	0.2731	0.2740	0.2773	0.2764	0.2772
22	0.2716	0.2696	0.2748	0.2754	0.2736	0.2765	0.2728	0.2735	0.2746	0.2780	0.2771	0.2767
23	0.2715	0.2699	0.2753	0.2756	0.2735	0.2757	0.2737	0.2737	0.2752	0.2789	---	0.2757
24	0.2716	0.2705	0.2756	0.2755	0.2737	0.2743	0.2743	0.2743	0.2758	0.2795	---	0.2749
25	0.2721	0.2712	0.2762	0.2755	0.2734	0.2729	0.2749	0.2753	0.2762	0.2801	0.2781	0.2732
26	0.2721	0.2721	0.2767	0.2757	0.2732	0.2723	0.2751	0.2759	0.2770	0.2799	---	0.2718
27	0.2718	0.2730	0.2775	0.2758	0.2732	0.2721	0.2754	0.2762	0.2786	0.2795	0.2771	0.2702
28	0.2721	0.2736	0.2770	0.2764	0.2736	0.2732	0.2756	0.2763	0.2802	0.2797	0.2756	0.2694
29		0.2754	0.2766	0.2752	0.2738	0.2732	0.2757	0.2757	0.2811	0.2796	0.2741	0.2691
30		0.2764	0.2762	0.2745	0.2744	0.2732	0.2752	0.2753	0.2817	0.2786	0.2729	0.2691
31		0.2770		0.2736		0.2735	0.2754		0.2810		0.2717	0.2695
Mean	0.2742	0.2743	0.2741	0.2732	0.2736	0.2748	0.2742	0.2734	0.2748	0.2749	0.2728	0.2722

Data at: http://www.sec.noaa.gov/ftpmenu/sbuv.html


Interplanetary Magnetic Field
ACE LEVEL2 DATA Hourly Averages for JANUARY 2004, from MAG
<|B|> (nT)
Bx GSE (nT)
By GSE (nT)
Bz GSE (nT)
80
60
40
20
0
40
20
0
−20
−40
5
10
15
20
25
30
DAYS OF JANUARY 2004


Solar Energetic Particles
ACE LEVEL2 DATA Hourly Averages for JANUARY 2004
ACE/EPAM
Ions (1/(cm2 s sr MeV))
(0.065–0.112) (0.310–0.580)
(1.060–1.910)
ACE/EPAM
Electrons (1/(cm2 s sr MeV))
(0.053–0.103) (0.175–0.315)
ACE/SIS
Carbon (1/(cm2 s sr MeV/nuc))
(6–18) (18–54)
Helium(6–18)
DAYS OF JANUARY 2004


Solar Energetic Particles
ACE LEVEL2 DATA Hourly Averages for JANUARY 2004
ACE/EPAM
Ions (1/(cm2 s sr MeV))
(0.065–0.112) (0.310–0.580)
(1.060–1.910)
ACE/EPAM
Electrons (1/(cm2 s sr MeV))
(0.053–0.103) (0.175–0.315)
ACE/SIS
Carbon (1/(cm2 s sr MeV/nuc))
(6–18) (18–54)
Helium(6–18)
DAYS OF JANUARY 2004