

Solar-Geophysical Data comprehensive reports



Data for December 2006 and Miscellaneous
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NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE,
DATA, AND INFORMATION SERVICE

NATIONAL GEOPHYSICAL
DATA CENTER

BOULDER,
COLORADO



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Solar-Geophysical Data comprehensive reports

Data for December 2006 and Late Data

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NATIONAL GEOPHYSICAL DATA CENTER

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SOLAR-GEOPHYSICAL DATA

Number 754

(Issued in Two Parts)

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H α S O L A R F L A R E S

DECEMBER 2006

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF		CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
								Region									Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0001	LEAR	01	2243	2243	2251	S09	W06	10926	12	1.5	8	SF			3	E		14		EF
0002	LEAR	02	0022	0049	0053	N09	E04	10926	12	2.3	31	SF			3	E		21		E
0003	LEAR	02	0704	0713	0727	S09	W10	10926	12	1.5	23	SF			3	E		38		EF
0004	SVTO	02	0706E	0715U	0728D	S08	W10	10926	12	1.5	22D	SF			2	E		30		E
0005		02	09581	1000	1003	N07	W02	10927	12	2.3	5	SF						22		EH
	KANZ	02	0958	1000	1003	N06	W04	10927	12	2.1	5	SF			2	E				
	LEAR	02	0959	1000	1003	N08	E01	10927	12	2.5	4	SF			3	E		22		EH
		02	1341		1402	No Flare Patrol														
0006	HOLL	02	1727	1727	1747	S11	W16	10926	12	1.5	20	SF			3	E		11		FH
0007		02	2202	2202	2225	S08	W18	10926	12	1.6	23	SF						18		FH
	HOLL	02	2202	2202	2222	S09	W18	10926	12	1.6	20	SF			3	E		20		FH
	LEAR	02	2216E	2218U	2228	S07	W18	10926	12	1.6	12D	SF			3	E		17		F
0008	LEAR	03	0321	0324	0337	S08	W22	10926	12	1.5	16	SF			3	E		66		EF
0009	LEAR	03	0859	0901	0910	S09	W24	10926	12	1.6	11	SF			3	E		16		EF
		03	1451		1455	No Flare Patrol														
		04	0053		0257	No Flare Patrol														
		04	0329		0420	No Flare Patrol														
		04	0454		0501	No Flare Patrol														
0010	LEAR	04	0757	0759	0801	S08	W37	10926	12	1.5	4	SF			3	E		14		F
		04	1045		1108	No Flare Patrol														
		04	1121		1136	No Flare Patrol														
		04	1150		1231	No Flare Patrol														
		04	1242		1423	No Flare Patrol														
		04	1500		1503	No Flare Patrol														
		04	1630		1643	No Flare Patrol														
		04	2222		2229	No Flare Patrol														
0011	LEAR	05	0504	0506	0520	S07	E90	10930	12	11.9	16	SF			3	E		31		
0012	LEAR	05	0522	0527	0531	S07	E90	10930	12	12.0	9	SF			3	E		39		
0013	LEAR	05	0801	0802	0812	S07	E89	10930	12	12.0	11	SF			3	E		65		F
0014	SVTO	05	1028	1038	1100	S07	E79	10930	12	11.3	32	2N			3	E		464		F
0015	HOLL	05	1524	1525	1529	S07	E77	10930	12	11.4	5	SF			3	E		12		
0016	HOLL	05	1538	1539	1543	S05	E76	10930	12	11.3	5	SF			3	E		16		
0017	HOLL	05	1903	1957	2305	S05	E75	10930	12	11.4	242	1F			3	E		150		FH
0018	LEAR	05	2223E	2253	2323	S07	E75	10930	12	11.5	60D	SF			3	E		61		EF
0019	LEAR	05	2340	2344	2347	S07	E71	10930	12	11.3	7	SF			3	E		15		EF
0020	LEAR	05	2354	2355	2401	S07	E71	10930	12	11.3	7	SF			3	E		38		EF
0021	LEAR	06	0014	0016	0021	S07	E68	10930	12	11.1	7	SF			3	E		13		EF
0022	LEAR	06	0138	0236	0333	S07	E69	10930	12	11.2	115	SF			3	E		94		EF
0023	LEAR	06	0337	0338	0341	S07	E69	10930	12	11.3	4	SF			3	E		24		EF
		06	0420		0433	No Flare Patrol														
0024	LEAR	06	0539	0540	0545	S08	E70	10930	12	11.5	6	SF			3	E		39		F

DECEMBER 2006

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF		CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
								Region	Mo								Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0025	LEAR	06	0715	0716	0720	S06	E68	10930	12	11.4	5	SF			3	E		30		
0026	LEAR	06	0721	0735	0740	S07	E67	10930	12	11.3	19	SF			3	E		42		F
0027	KANZ	06	0824E	0833U	0930	S06	E63	10930	12	11.1	66D	2N			2	E				
0028	SVTO	06	0857E	0903U	0918	S07	E66	10930	12	11.3	21D	SF			2	E		36		F
0029	SVTO	06	0919	0923	0927	S07	E66	10930	12	11.3	8	SF			3	E		13		
		06	1506		1802	No Flare Patrol														
0030	HOLL	06	1818	1818	1827	S07	E61	10930	12	11.3	9	SF			3	E		10		
0031	HOLL	06	1832	1845	2135	S06	E63	10930	12	11.5	183	3B			3	E		815		FZ
0032	HOLL	06	2312	2312	2316	S03	E57	10930	12	11.2	4	SF			3	E		18		
		06	2356		2400	No Flare Patrol														
0033	LEAR	07	0323	0324	0326	S07	E56	10930	12	11.3	3	SF			3	E		30		EF
0034	LEAR	07	0328	0329	0332	S07	E56	10930	12	11.3	4	SF			3	E		11		EF
0035	LEAR	07	0335	0336	0347	S07	E56	10930	12	11.3	12	SF			3	E		40		EF
0036	LEAR	07	0411	0413	0418	S07	E55	10930	12	11.3	7	SF			3	E		20		EF
0037	LEAR	07	0423	0424	0427	S07	E55	10930	12	11.3	4	SF			3	E		10		EF
0038	LEAR	07	0428	0437	0612	S08	E55	10930	12	11.3	104	1F			3	E		150		EF
0039	HOLL	07	1841	1903	2059	S07	E47	10930	12	11.3	138	1N			3	E		145		F
		08	1100		1142	No Flare Patrol														
		08	1149		1150	No Flare Patrol														
		08	1254		1258	No Flare Patrol														
		08	1300		1322	No Flare Patrol														
		08	1336		1423	No Flare Patrol														
		08	1504		1852	No Flare Patrol														
		08	1933		2157	No Flare Patrol														
		09	1049		1149	No Flare Patrol														
		09	1215		1224	No Flare Patrol														
		09	1321		1344	No Flare Patrol														
		09	1352		2033	No Flare Patrol														
0040		09	22581	23001	2307	S03	E18	10930	12	11.3	9	SF						16		
	LEAR	09	2258	2301	2308	S04	E18	10930	12	11.3	10	SF			3	E		19		
	HOLL	09	2259	2300	2306	S02	E18	10930	12	11.3	7	SF			3	E		12		
0041	LEAR	10	0518	0523	0532	S03	E15	10930	12	11.3	14	SF			3	E		15		E
0042	LEAR	10	0719	0719	0727	S06	E13	10930	12	11.3	8	SF			3	E		15		H
0043	LEAR	10	0728	0730	0739	S03	E14	10930	12	11.3	11	SF			3	E		29		F
		10	1448		1548	No Flare Patrol														
		10	2038		2128	No Flare Patrol														
0044	LEAR	11	0104	0105	0110	S08	E06	10930	12	11.5	6	SF			3	E		27		F
0045	LEAR	11	0111	0127	0146	S07	E01	10930	12	11.1	35	SF			3	E		64		FU
0046	LEAR	11	0511	0516	0604	S07	E03	10930	12	11.4	53	1F			3	E		146		EF
0047	LEAR	11	0615	0616	0618	S07	E01	10930	12	11.3	3	SF			3	E		18		E
0048	LEAR	11	0817	0818	0838	S07	E00	10930	12	11.3	21	SB			3	E		89		EF

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Dec 06

H α S O L A R F L A R E S

DECEMBER 2006

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/		CMP	Dur	Imp	Obs	Area Measurement			Remarks				
						Lat	CMD					Region	Mo	Day		(Min)	Opt	Xray	See
0049	LEAR	11	0940	0940	0946	S07	W01	10930	12	11.3	6	SF		3	E		12		F
		11	1050		1056	No Flare	Patrol												
		11	1126		1132	No Flare	Patrol												
		11	1135		1152	No Flare	Patrol												
		11	1201		1203	No Flare	Patrol												
		11	1222		1230	No Flare	Patrol												
		11	1301		1319	No Flare	Patrol												
		11	1324		1325	No Flare	Patrol												
		11	1327		1328	No Flare	Patrol												
		11	1333		1338	No Flare	Patrol												
		11	1340		1410	No Flare	Patrol												
0050	LEAR	12	0200	0228	0307	S06	W10	10930	12	11.3	67	SF		3	E		25		F
0051	LEAR	12	0307	0308	0345	S07	W11	10930	12	11.3	38	SF		3	E		34		F
0052	LEAR	12	0742	0751	0755	S09	W10	10930	12	11.6	13	SF		3	E		12		
0053	LEAR	12	0846	0847	0855	S07	W16	10930	12	11.2	9	SF		3	E		13		
		12	1452		1503	No Flare	Patrol												
0054	LEAR	12	2332	2335	2338	S06	W22	10930	12	11.3	6	2F		3	E		261		F
		13	0034		0056	No Flare	Patrol												
0055	LEAR	13	0220	0234	0618	S06	W24	10930	12	11.3	238	4B		3	E				EF
		13	0220		0226	No Flare	Patrol												
		13	0316		0400	No Flare	Patrol												
0056	LEAR	13	0619	0619	0625	S06	W26	10930	12	11.3	6	SF		3	E		15		EF
0057	LEAR	13	0626	0631	0634	S08	W26	10930	12	11.3	8	SF		3	E		12		EF
		13	0636		0655	No Flare	Patrol												
0058	LEAR	13	0643	0643	0703	S06	W26	10930	12	11.3	20	SF		3	E		30		EF
0059	LEAR	13	0704	0704	0712	S06	W26	10930	12	11.3	8	2F		3	E		556		EF
0060	LEAR	13	1011	1018	1050D	S06	W28	10930	12	11.3	39D	SF		1	E		11		EF
		13	1350		1450	No Flare	Patrol												
0061	HOLL	13	1821	1825	1838	S07	W31	10930	12	11.4	17	SF		3	E		26		F
0062	LEAR	13	2217	2221	2226	S06	W35	10930	12	11.3	9	SF		3	E		13		E
0063	LEAR	14	0056	0057	0102	S06	W36	10930	12	11.3	6	SF		3	E		57		E
		14	0259		0314	No Flare	Patrol												
0064	KANZ	14	1159	1203	1232	S07	W37	10930	12	11.7	33	SF		2	E				
		14	1352		1419	No Flare	Patrol												
		14	1429		1455	No Flare	Patrol												
		14	1521		1542	No Flare	Patrol												
		14	1630		1639	No Flare	Patrol												
0065	HOLL	14	1641	1648	1811	S06	W45	10930	12	11.3	90	SF		3	E		58		F
		14	1719		1724	No Flare	Patrol												
		14	1731		1739	No Flare	Patrol												
0066	HOLL	14	1856	1857	1905	S06	W44	10930	12	11.5	9	SF		3	E		36		F
0067	HOLL	14	1935	1936	1939	S06	W47	10930	12	11.3	4	SF		3	E		15		

Dec 06

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/	CMP	Dur	Imp	Obs	Time	Area Measurement		Corr	Remarks	
								USAF Region						Mo	Day			(Min)
0068	HOLL	14	1941	1942	1948	S06	W47	10930	12	11.3	7	SF		3	E		88	F
0069	HOLL	14	1952	1954	2005	S06	W47	10930	12	11.3	13	SF		3	E		19	F
		14	2012		2018	No	Flare	Patrol										
		14	2110		2159	No	Flare	Patrol										
0070		14	2206	2214	2411	S06	W46	10930	12	11.5	125	2B					420	EFZ
	HOLL	14	2206	2215	2238	S06	W48	10930	12	11.3	32	2B		3	E		495	ZF
	LEAR	14	2207	2211	2411	S06	W44	10930	12	11.6	124	2B		3	E		346	FE
0071	LEAR	14	2215	2215	2221	S05	W31		12	12.6	6	SF		3	E		14	EF
0072	LEAR	15	0259	0300	0306	S06	W51	10930	12	11.3	7	SF		3	E		14	EF
0073		15	0755	0758	0834	S09	W48	10930	12	11.7	39	SF					53	E
	KANZ	15	0755	0758	0828	S09	W48	10930	12	11.7	33	SF		2	E			
	LEAR	15	0756	0802	0841	S09	W49	10930	12	11.6	45	SF		3	E		53	E
0074		15	0848*	0909	0922	S08	W50	10930	12	11.6	34	SF					20	EF
	LEAR	15	0848	0909	0926	S09	W49	10930	12	11.7	38	SF		3	E		20	FE
	KANZ	15	0902	0909	0917	S08	W50	10930	12	11.6	15	SF		2	E			
0075	KANZ	15	1320	1322	1324	S06	W59	10930	12	11.1	4	SF		2	E			
		15	1354		1430	No	Flare	Patrol										
		15	1503		1510	No	Flare	Patrol										
		15	1739		1819	No	Flare	Patrol										
		15	1834		1858	No	Flare	Patrol										
		15	2011		2025	No	Flare	Patrol										
		15	2035		2204	No	Flare	Patrol										
0076	LEAR	16	0711	0722	0737	S07	W62	10930	12	11.6	26	SF		3	E		24	F
0077	LEAR	16	0830	0831	0852	S07	W62	10930	12	11.7	22	SF		3	E		68	F
0078	LEAR	16	0853	0910	0935	S08	W67	10930	12	11.3	42	SF		3	E		34	F
		16	1157		1201	No	Flare	Patrol										
		16	1226		1232	No	Flare	Patrol										
		16	2033		2106	No	Flare	Patrol										
		16	2120		2202	No	Flare	Patrol										
		17	1053		1508	No	Flare	Patrol										
		17	2208		2215	No	Flare	Patrol										
		18	1054		1529	No	Flare	Patrol										
		18	1919		1956	No	Flare	Patrol										
		18	2021		2037	No	Flare	Patrol										
		18	2103		2254	No	Flare	Patrol										
		19	1055		1105	No	Flare	Patrol										
		19	1108		1109	No	Flare	Patrol										
		19	1137		1140	No	Flare	Patrol										
		19	1145		1159	No	Flare	Patrol										
		19	1202		1207	No	Flare	Patrol										
		19	1210		1223	No	Flare	Patrol										
		19	1226		1228	No	Flare	Patrol										
		19	1230		1245	No	Flare	Patrol										
		19	1255		1319	No	Flare	Patrol										
		19	1330		1345	No	Flare	Patrol										
		19	1354		2159	No	Flare	Patrol										
		20	1348		1426	No	Flare	Patrol										
		20	1809		1817	No	Flare	Patrol										
		20	1846		1907	No	Flare	Patrol										
		20	1932		1956	No	Flare	Patrol										
		20	2023		2040	No	Flare	Patrol										
		21	0518		0529	No	Flare	Patrol										
		21	1056		1451	No	Flare	Patrol										
		22	1054		1537	No	Flare	Patrol										
		22	1622		2114	No	Flare	Patrol										
		22	2118		2203	No	Flare	Patrol										
		23	1449		1615	No	Flare	Patrol										

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Dec 06

H α SOLAR FLARES

DECEMBER 2006

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/		Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
								USAF Region	CMP Mo Day							Apparent (10-6 Disk)	Corr (Sq Deg)	
		23	2145		2154	No	Flare Patrol											
0079	HOLL	25	1933	1935	1940	S06 E38	10932	12	28.6	7	SF		3	E			13	
		26	0156		0522	No	Flare Patrol											
		27	0231		0304	No	Flare Patrol											
		27	0444		0552	No	Flare Patrol											
		27	1359		1419	No	Flare Patrol											
		27	1455		1502	No	Flare Patrol											
		27	1540		1544	No	Flare Patrol											
		27	1958		2154	No	Flare Patrol											
		28	1437		1620	No	Flare Patrol											
		28	1625		1640	No	Flare Patrol											
		28	1744		2127	No	Flare Patrol											
		29	0500		0506	No	Flare Patrol											
		29	1314		1315	No	Flare Patrol											
		29	1359		1435	No	Flare Patrol											
		30	1402		2158	No	Flare Patrol											
		31	0000		0717	No	Flare Patrol											
0080	LEAR	31	0715	0715	0734	S01 E75	10933	01	5.9	19	SF		3	E			40	FH
		31	0823		0941	No	Flare Patrol											
		31	1127		1128	No	Flare Patrol											
		31	1130		1131	No	Flare Patrol											
		31	1137		1155	No	Flare Patrol											
		31	1204		1205	No	Flare Patrol											
		31	1227		1242	No	Flare Patrol											
		31	1349		2058	No	Flare Patrol											
		31	2327		2400	No	Flare Patrol											

"Remarks"

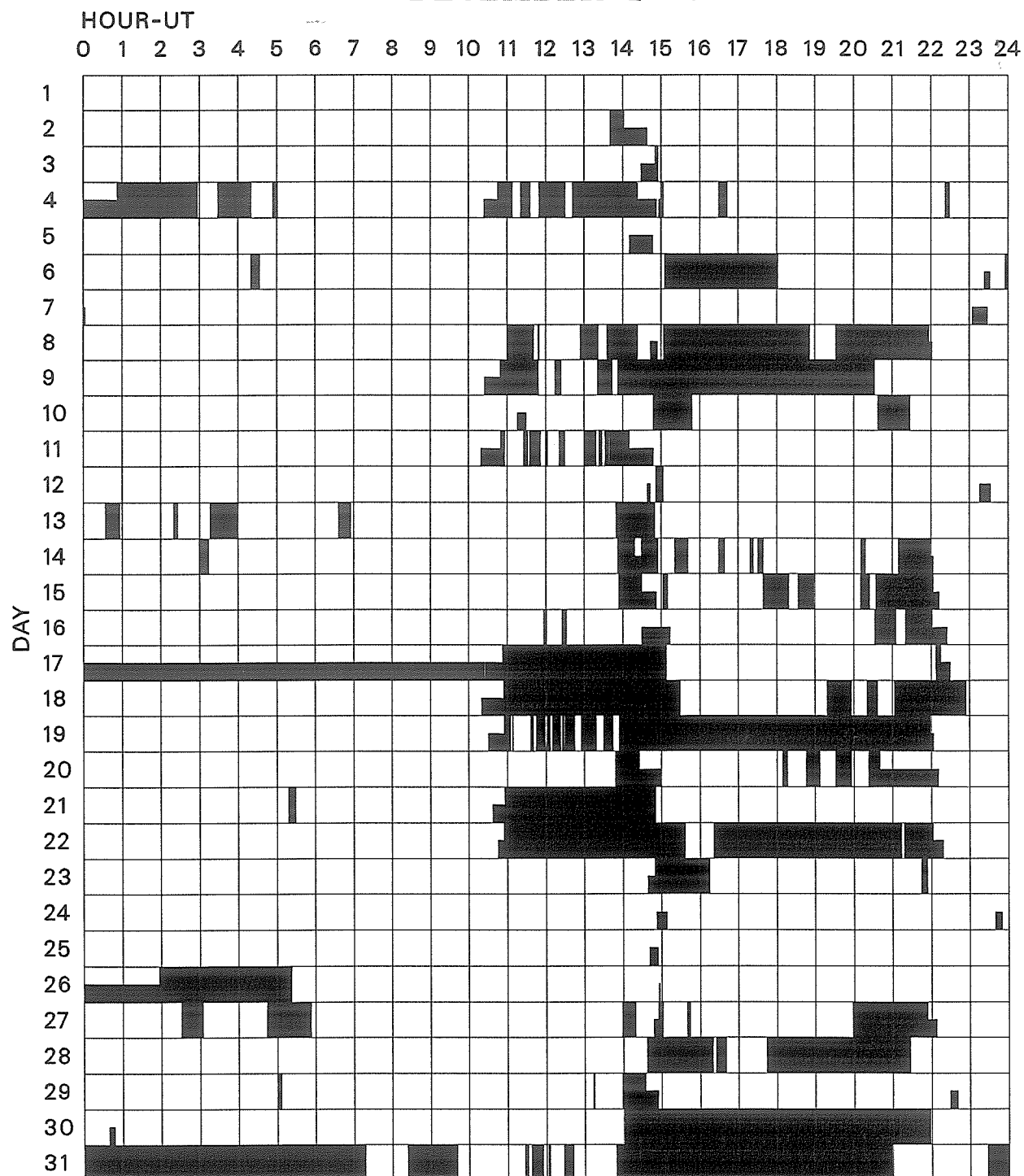
A = Eruptive prominence whose base is less than 90 degrees from central meridian.
 B = Probably the end of a more important flare.
 C = Invisible 10 minutes before.
 D = Brilliant point.
 E = Two or more brilliant points.
 F = Several eruptive centers.
 G = No visible spots in the neighborhood.
 H = 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

DECEMBER 2006



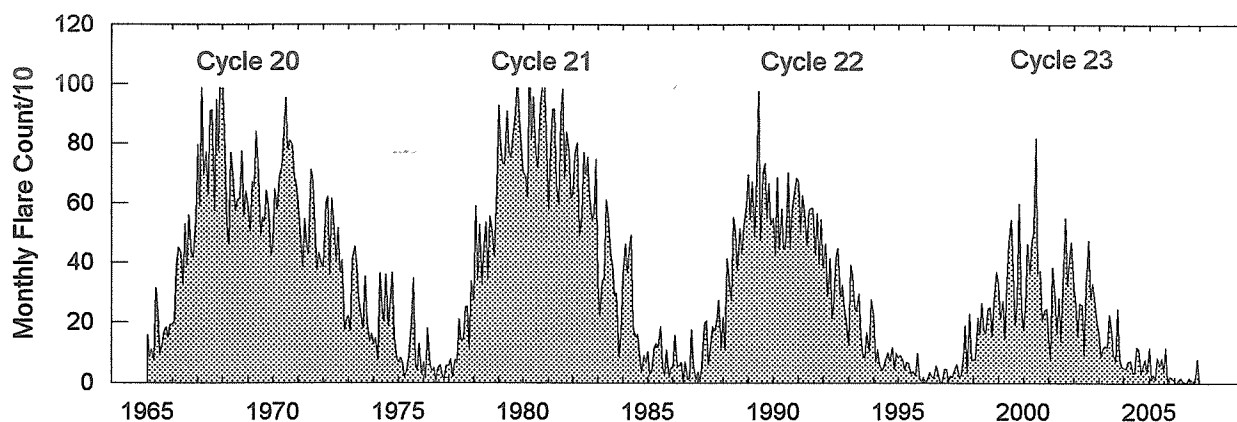
Times of no flare patrol, shown here as shaded areas, combine reports from the stations listed below. Portions of a panel completely shaded mark dates and times of no patrol of any kind (neither visual or cinematographic); portions of a panel with only the bottom half shaded mark times of only visual patrol.

Holloman
Kanzelhoehe

Learmonth

San Vito

Monthly Counts of Grouped Solar Flares Jan 1965 - Dec 2006



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	47	71	72	32	33	118	112	30	54	76	34	728
2005	114	10	28	11	82	56	81	35	114	4	20	16	571
2006	4	0	11	16	4	2	1	17	11	3	12	78	159

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

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

Outstanding Occurrences

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Dec 06

DECEMBER 2006

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean (10 -22 W/m 2 Hz)		
04	4995	SGMR	4 S/F	1428.0	1430.0	5.0	140.0			QL=4 ST=2 TYP=3
	15400	SGMR	8 S	1429.0E	1429.0	1.0D	89.0			QL=4 ST=2 TYP=3
	2695	SGMR	4 S/F	1429.0	1430.0	4.0	58.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1429.0	1430.0	3.0	81.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	1429.0	1430.0	2.0	65.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	1429.0	1430.0	4.0	180.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1429.0	1430.0	3.0	110.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1430.0	1430.0	1.0	63.0			QL=4 ST=2 TYP=3
	8800	SGMR	8 S	1708.0	1708.0	2.0	84.0			QL=4 ST=2 TYP=3
	15400	SGMR	8 S	1708.0	1708.0	1.0	160.0			QL=4 ST=2 TYP=3
05	127	TORN	43 NS	1044.0	1045.8	126.0	350.0	2.0		V=1
	8800	LEAR	8 S	0203.0	0203.0	U	97.0			QL=4 ST=2 TYP=3
	15400	LEAR	8 S	0203.0	0203.0	U	160.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	0203.0	0203.0	U	150.0			QL=4 ST=2 TYP=3
	2840	PEKG	45 C	0800.0	0801.6	10.0	18.5			
	4995	SVTO	8 S	0801.0	0802.0	2.0	86.0			QL=4 ST=2 TYP=3
	15400	SVTO	8 S	0801.0	0802.0	2.0	340.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	0801.0	0802.0	3.0	180.0			QL=4 ST=2 TYP=3
	15400	LEAR	8 S	0802.0	0803.0	2.0	350.0			QL=4 ST=2 TYP=3
	8800	LEAR	4 S/F	0802.0	0803.0	3.0	200.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0803.0	0803.0	U	72.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0954.0	0955.0	1.0	110.0			QL=4 ST=2 TYP=3
	2695	SVTO	48 C	1024.0	1029.0	32.0	12000.0			QL=4 ST=2 TYP=8
	8800	LEAR	8 S	1025.0	1025.0	U	53.0			QL=4 ST=2 TYP=3
	2695	LEAR	48 C	1025.0	1030.0	14.0	11000.0			QL=4 ST=2 TYP=8
	4995	SVTO	48 C	1025.0	1030.0	32.0	4100.0			QL=4 ST=2 TYP=8
	8800	SVTO	49 GB	1025.0	1030.0	33.0	6800.0			QL=4 ST=2 TYP=6
	15400	SVTO	48 C	1025.0	1030.0	40.0	11000.0			QL=4 ST=2 TYP=8
	4995	LEAR	48 C	1026.0	1031.0	13.0	3500.0			QL=4 ST=2 TYP=8
	1415	SVTO	48 C	1026.0	1028.0	28.0	3900.0			QL=4 ST=2 TYP=8
	410	SVTO	48 C	1026.0	1029.0	33.0	980.0			QL=4 ST=2 TYP=8
	127	TORN	49 GB	1026.0	1032.2	16.0	670.0	220.0		
	610	LEAR	48 C	1027.0	1029.0	5.0	290.0			QL=2 ST=2 TYP=8
	610	LEAR	8 S	1027.0	1027.0	U	73.0			QL=2 ST=2 TYP=3
	1415	LEAR	48 C	1027.0	1030.0	10.0	5900.0			QL=4 ST=2 TYP=8
	610	SVTO	48 C	1027.0	1028.0	17.0	440.0			QL=2 ST=2 TYP=8
	245	SVTO	49 GB	1027.0	1027.0	38.0	270000.0			QL=2 ST=2 TYP=6
	1415	LEAR	4 S/F	1027.0	1027.0	813.0	390.0			QL=4 ST=1 TYP=3
	410	LEAR	48 C	1028.0	1030.0	4.0	350.0			QL=2 ST=2 TYP=8
	245	LEAR	49 GB	1028.0	1028.0	7.0	210000.0			QL=4 ST=2 TYP=6
	610	SVTO	49 GB	1111.0	1113.0	8.0	500.0			QL=2 ST=2 TYP=6
	245	SVTO	8 S	1111.0	1111.0	2.0	240.0			QL=2 ST=2 TYP=3
	410	SVTO	48 C	1112.0	1118.0	7.0	420.0			QL=4 ST=2 TYP=8
	2695	SVTO	4 S/F	1112.0	1116.0	6.0	130.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	1112.0	1116.0	7.0	160.0			QL=4 ST=2 TYP=3
	8800	SVTO	4 S/F	1114.0	1116.0	3.0	76.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	1114.0	1115.0	3.0	54.0			QL=4 ST=2 TYP=3
	15400	SVTO	4 S/F	1114.0	1115.0	766.0	54.0			QL=4 ST=2 TYP=3
	245	SVTO	48 C	1128.0	1129.0	5.0	160.0			QL=4 ST=2 TYP=8
	410	SVTO	49 GB	1128.0	1129.0	5.0	780.0			QL=4 ST=2 TYP=6
	410	SVTO	49 GB	1128.0	1129.0	5.0	780.0			QL=4 ST=3 TYP=6
	2695	SVTO	8 S	1128.0	1129.0	2.0	93.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1128.0	1129.0	2.0	93.0			QL=4 ST=3 TYP=3
	4995	SVTO	8 S	1129.0	1129.0	2.0	100.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	1129.0	1129.0	2.0	100.0			QL=4 ST=3 TYP=3
	245	SVTO	8 S	1139.0	1139.0	U	160.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1139.0	1139.0	U	370.0			QL=4 ST=2 TYP=3
	410	SVTO	48 C	1144.0	1147.0	3.0	220.0			QL=4 ST=3 TYP=8
	245	SVTO	4 S/F	1144.0	1146.0	3.0	110.0			QL=4 ST=3 TYP=3
	2695	SVTO	8 S	1145.0	1146.0	2.0	97.0			QL=4 ST=3 TYP=3
	4995	SVTO	8 S	1145.0	1146.0	1.0	86.0			QL=4 ST=3 TYP=3
	1415	SVTO	8 S	1146.0	1146.0	U	62.0			QL=4 ST=3 TYP=3
	410	SVTO	48 C	1152.0E	1204.0	16.0D	670.0			QL=2 ST=2 TYP=8
	245	SVTO	48 C	1152.0E	1209.0	20.0D	480.0			QL=2 ST=2 TYP=8
	610	SVTO	48 C	1153.0E	1211.0	18.0D	180.0			QL=2 ST=2 TYP=8
	1415	SVTO	8 S	1156.0	1156.0	2.0	88.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	1156.0	1157.0	1.0	65.0			QL=4 ST=2 TYP=3
	410	SVTO	4 S/F	1230.0	1231.0	3.0	270.0			QL=4 ST=2 TYP=3

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Dec 06

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

Outstanding Occurrences

DECEMBER 2006

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean (W/m 2 Hz)		
05	410	SGMR	8 S	1231.0	1231.0	1.0	270.0			QL=2 ST=2 TYP=3
	9500	CUBA	1 S	1713.3	1714.7	2.8	6.0	3.0		
	6700	CUBA	1 S	1719.4	1719.9	1.7	7.0	3.0		
	410	PALE	8 S	1943.0	1943.0	1.0	260.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	2055.0	2055.0	U	190.0			QL=4 ST=2 TYP=3
06	2800	HIRA	7 C	0116.0	0155.0	143.0	30.0			
	2840	PEKG	1 S	0143.0	0145.6	7.0	6.2			
	2840	PEKG	5 S	0154.0	0155.0	3.0	10.5			
	2840	PEKG	3 S	0805.0	0817.3	25.0	248.8			
	127	TORN	27 RF	0809.4	0817.4	41.0	220.0	90.0		DISTURBED
	4995	LEAR	48 C	0810.0	0818.0	82.0	310.0			QL=4 ST=2 TYP=8
	4995	LEAR	4 S/F	0810.0	0811.0	950.0	79.0			QL=4 ST=1 TYP=3
	4995	LEAR	4 S/F	0810.0	0818.0	950.0	310.0			QL=4 ST=1 TYP=3
	410	SVTO	48 C	0812.0	0818.0	38.0	750.0			QL=4 ST=2 TYP=8
	2695	SVTO	48 C	0812.0	0836.0	76.0	340.0			QL=4 ST=2 TYP=8
	410	SVTO	48 C	0812.0	0818.0	948.0	750.0			QL=4 ST=1 TYP=8
	2695	SVTO	48 C	0812.0	0817.0	948.0	260.0			QL=4 ST=1 TYP=8
	1415	LEAR	48 C	0813.0	0850.0	77.0	380.0			QL=4 ST=2 TYP=8
	2695	LEAR	48 C	0813.0	0837.0	79.0	290.0			QL=4 ST=2 TYP=8
	2695	LEAR	48 C	0813.0	0818.0	947.0	220.0			QL=4 ST=1 TYP=8
	1415	LEAR	4 S/F	0813.0	0815.0	947.0	74.0			QL=4 ST=1 TYP=3
	1415	LEAR	4 S/F	0813.0	0818.0	947.0	330.0			QL=4 ST=1 TYP=3
	2695	LEAR	4 S/F	0813.0	0815.0	947.0	190.0			QL=4 ST=1 TYP=3
	1415	SVTO	48 C	0816.0	0849.0	67.0	230.0			QL=4 ST=2 TYP=8
	4995	SVTO	48 C	0816.0	0836.0	75.0	360.0			QL=4 ST=2 TYP=8
	8800	SVTO	48 C	0816.0	0823.0	75.0	530.0			QL=4 ST=2 TYP=8
	4995	SVTO	48 C	0816.0	0817.0	944.0	350.0			QL=4 ST=1 TYP=8
	1415	SVTO	4 S/F	0816.0	0817.0	944.0	200.0			QL=4 ST=1 TYP=3
	8800	SVTO	4 S/F	0816.0	0820.0	944.0	450.0			QL=4 ST=1 TYP=3
	8800	LEAR	48 C	0817.0	0824.0	38.0	350.0			QL=4 ST=2 TYP=8
	8800	LEAR	48 C	0817.0	0824.0	943.0	350.0			QL=4 ST=1 TYP=8
	245	SVTO	48 C	0818.0	0820.0	15.0	350.0			QL=4 ST=2 TYP=8
	15400	LEAR	48 C	0818.0	0821.0	55.0	310.0			QL=4 ST=2 TYP=8
	15400	LEAR	48 C	0818.0	0821.0	942.0	310.0			QL=4 ST=1 TYP=8
	245	SVTO	4 S/F	0818.0	0820.0	942.0	350.0			QL=4 ST=1 TYP=3
	15400	SVTO	48 C	0820.0	0820.0	4.0	240.0			QL=4 ST=2 TYP=8
	15400	SVTO	4 S/F	0820.0	0820.0	940.0	240.0			QL=4 ST=1 TYP=3
	610	SVTO	48 C	0849.0	0923.0	43.0	410.0			QL=2 ST=2 TYP=8
	6700	CUBA	47 GB	1831.5	1854.3	37.4	9415.0	4708.0		
	9500	CUBA	47 GB	1831.9	1854.6	40.4	4111.0	2055.0		
	4995	SGMR	48 C	1832.0	1855.0	87.0	9900.0			QL=4 ST=2 TYP=8
	8800	SGMR	49 GB	1833.0	1855.0	86.0	13000.0			QL=4 ST=2 TYP=8
	15400	SGMR	48 C	1838.0	1847.0	59.0	12000.0			QL=4 ST=2 TYP=8
	2695	SGMR	48 C	1838.0	1854.0	81.0	5800.0			QL=4 ST=2 TYP=8
	4995	PALE	48 C	1839.0	1856.0	321.0	8600.0			QL=4 ST=1 TYP=8
	4995	PALE	49 GB	1839.0	1843.0	321.0	4400.0			QL=4 ST=1 TYP=6
	1415	SGMR	48 C	1841.0	1917.0	75.0	13000.0			QL=4 ST=2 TYP=8
	1415	SGMR	48 C	1841.0	1847.0	319.0	2800.0			QL=4 ST=1 TYP=8
	1415	SGMR	49 GB	1841.0	1843.0	319.0	1800.0			QL=4 ST=1 TYP=6
	1415	SGMR	4 S/F	1841.0	1841.0	319.0	91.0			QL=4 ST=1 TYP=3
	610	SGMR	48 C	1842.0	1930.0	74.0	51000.0			QL=4 ST=2 TYP=8
	1415	PALE	48 C	1842.0	1917.0	318.0	150000.0			QL=4 ST=1 TYP=8
	1415	PALE	48 C	1842.0	1931.0	318.0	150000.0			QL=4 ST=1 TYP=8
	2695	PALE	48 C	1842.0	1855.0	318.0	7500.0			QL=4 ST=1 TYP=8
	8800	PALE	48 C	1842.0	1844.0	318.0	3600.0			QL=4 ST=1 TYP=8
	8800	PALE	48 C	1842.0	1856.0	318.0	7800.0			QL=4 ST=1 TYP=8
	15400	PALE	48 C	1842.0	1848.0	318.0	12000.0			QL=4 ST=1 TYP=8
	1415	PALE	49 GB	1842.0	1844.0	318.0	1900.0			QL=4 ST=1 TYP=6
	2695	PALE	49 GB	1842.0	1844.0	318.0	3600.0			QL=4 ST=1 TYP=6
	15400	PALE	49 GB	1842.0	1845.0	318.0	8900.0			QL=4 ST=1 TYP=6
	610	SGMR	49 GB	1842.0	1843.0	318.0	10000.0			QL=4 ST=1 TYP=6
	245	SGMR	49 GB	1843.0	1844.0	64.0	30000.0			QL=4 ST=2 TYP=6
	410	SGMR	48 C	1843.0	1844.0	73.0	7500.0			QL=4 ST=2 TYP=8
	245	SGMR	49 GB	1843.0	1844.0	317.0	30000.0			QL=4 ST=1 TYP=6
	410	SGMR	49 GB	1843.0	1844.0	317.0	7500.0			QL=4 ST=1 TYP=6
	235	CUBA	49 GB	1843.0	1844.5	97.7	673.0	337.0		
	245	PALE	49 GB	1844.0	1844.0	11.0	31000.0			QL=4 ST=2 TYP=6
	410	PALE	48 C	1844.0	1845.0	316.0	8500.0			QL=4 ST=1 TYP=8

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

Outstanding Occurrences

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Dec 06

DECEMBER 2006

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
06	610	PALE	48 C	1844.0	1918.0	316.0	19000.0			QL=4 ST=1 TYP=8
	610	PALE	48 C	1844.0	1931.0	316.0	52000.0			QL=4 ST=1 TYP=8
	410	PALE	49 GB	1844.0	1845.0	316.0	8500.0			QL=4 ST=1 TYP=6
	610	PALE	49 GB	1844.0	1844.0	316.0	10000.0			QL=4 ST=1 TYP=6
	245	SGMR	48 C	1848.0	1849.0	11.0	750.0			QL=4 ST=2 TYP=8
	410	SGMR	48 C	1848.0	1850.0	15.0	610.0			QL=4 ST=2 TYP=8
	610	SGMR	48 C	1848.0	1900.0	16.0	2900.0			QL=4 ST=2 TYP=8
	245	SGMR	48 C	1848.0	1849.0	30.0	750.0			QL=4 ST=2 TYP=8
	245	SGMR	48 C	1848.0	1849.0	36.0	750.0			QL=4 ST=2 TYP=8
	15400	SGMR	48 C	1848.0	1852.0	49.0	11000.0			QL=4 ST=2 TYP=8
	9500	CUBA	45 C	1916.2	1917.2	43.4	614.0	307.0		
	6700	CUBA	45 C	1916.2	1932.8	42.3	1515.0	757.0		
	8800	PALE	48 C	1944.0	1945.0	6.0	180.0			QL=4 ST=2 TYP=8
	1415	PALE	4 S/F	1944.0	1944.0	5.0	270.0			QL=4 ST=2 TYP=3
	410	PALE	48 C	1944.0	1954.0	12.0	400.0			QL=4 ST=2 TYP=8
	4995	PALE	48 C	1944.0	1945.0	14.0	520.0			QL=4 ST=2 TYP=8
	610	PALE	49 GB	1944.0	1953.0	12.0	1200.0			QL=4 ST=2 TYP=6
	2695	PALE	49 GB	1944.0	1945.0	13.0	630.0			QL=4 ST=2 TYP=6
	15400	PALE	4 S/F	1944.0	1945.0	11.0	260.0			QL=4 ST=2 TYP=3
	6700	CUBA	29 PBI	1958.5	1958.5	22.8	100.0	50.0		
	9500	CUBA	29 PBI	1959.6	1959.6	19.5	97.0	48.0		
	410	SGMR	48 C	2002.0	2006.0	7.0	580.0			QL=4 ST=2 TYP=8
	610	SGMR	48 C	2002.0	2005.0	7.0	740.0			QL=4 ST=2 TYP=8
	610	PALE	48 C	2003.0	2006.0	9.0	860.0			QL=4 ST=2 TYP=8
	410	PALE	48 C	2003.0	2006.0	10.0	620.0			QL=4 ST=2 TYP=8
	2695	PALE	4 S/F	2004.0	2008.0	9.0	120.0			QL=4 ST=2 TYP=3
07	2840	PEKG	3 S	0332.0	0335.5	10.0	20.2			
	2804	VORO	4 S/F	0335.0	0335.4	2.0	18.5			
	2804	VORO	32 ABS	0337.4	0350.0	30.0	8.3			
	2800	HIRA	8 S	0355.0	0355.0	1.0	15.0			
	2800	HIRA	7 C	0429.0	0443.0	58.0	20.0			
	2804	VORO	23 GRF	0430.0	0436.8	60.0	11.6			
	2840	PEKG	1 S	0440.0	0442.5	6.0	7.9			
	2804	VORO	2 S/F	0441.0	0442.5	4.5	12.6			
	127	TORN	4 S/F	1048.5	1050.3	5.4	20.0	5.0		
	1415	SGMR	48 C	1901.0	1905.0	9.0	340.0			QL=4 ST=2 TYP=8
	245	SGMR	4 S/F	1901.0	1904.0	5.0	85.0			QL=4 ST=2 TYP=3
	410	SGMR	4 S/F	1901.0	1902.0	4.0	43.0			QL=4 ST=2 TYP=3
	245	SGMR	4 S/F	1901.0	1902.0	299.0	58.0			QL=4 ST=1 TYP=3
	410	SGMR	4 S/F	1901.0	1902.0	299.0	35.0			QL=4 ST=1 TYP=3
	1415	SGMR	4 S/F	1901.0	1902.0	299.0	89.0			QL=4 ST=1 TYP=3
	1415	PALE	48 C	1902.0	1905.0	4.0	380.0			QL=4 ST=2 TYP=8
	2695	PALE	49 GB	1902.0	1905.0	5.0	2600.0			QL=4 ST=2 TYP=6
	4995	PALE	4 S/F	1902.0	1904.0	5.0	390.0			QL=4 ST=2 TYP=3
	2695	SGMR	49 GB	1902.0	1905.0	8.0	1900.0			QL=4 ST=2 TYP=6
	610	SGMR	8 S	1902.0	1902.0	2.0	46.0			QL=4 ST=2 TYP=3
	4995	SGMR	4 S/F	1902.0	1904.0	9.0	350.0			QL=4 ST=2 TYP=3
	8800	SGMR	4 S/F	1902.0	1904.0	7.0	110.0			QL=4 ST=2 TYP=3
	2695	PALE	49 GB	1902.0	1903.0	298.0	2000.0			QL=4 ST=1 TYP=6
	1415	PALE	4 S/F	1902.0	1904.0	298.0	220.0			QL=4 ST=1 TYP=3
	4995	PALE	4 S/F	1902.0	1904.0	298.0	250.0			QL=4 ST=1 TYP=3
	2695	SGMR	4 S/F	1902.0	1902.0	298.0	240.0			QL=4 ST=1 TYP=3
	4995	SGMR	4 S/F	1902.0	1902.0	298.0	57.0			QL=4 ST=1 TYP=3
	15400	SGMR	4 S/F	1903.0	1904.0	8.0	56.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	1904.0	1904.0	2.0	150.0			QL=4 ST=2 TYP=3
	8800	PALE	4 S/F	1904.0	1904.0	296.0	100.0			QL=4 ST=1 TYP=3
	245	PALE	49 GB	1905.0	1905.0	U	800.0			QL=4 ST=2 TYP=6
	1415	PALE	8 S	1910.0	1910.0	U	100.0			QL=4 ST=2 TYP=3
09	2804	VORO	8 S	0349.7	0349.9	0.3	15.7			
	2804	VORO	8 S	0404.4	0404.5	0.3	8.3			
	2804	VORO	40 F	0441.9	0449.0	7.1	4.8			
	2804	VORO	8 S	0453.1	0453.2	0.3	27.8			
	610	SGMR	4 S/F	1354.0	1355.0	3.0	100.0			QL=4 ST=2 TYP=3
	610	SVTO	4 S/F	1354.0	1355.0	3.0	100.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	1914.0	1916.0	2.0	110.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1916.0	1916.0	U	25.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1916.0	1916.0	1.0	100.0			QL=4 ST=2 TYP=3

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Dec 06

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

Outstanding Occurrences

DECEMBER 2006

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Mean	Int	Remarks
09	L	410 PALE	8 S	1917.0	1917.0	U	190.0			QL=4 ST=2 TYP=3
10		2804 VORO	40 F	0518.8	0519.2	1.0	4.9			
		245 LEAR	8 S	0652.0	0652.0	U	330.0			QL=4 ST=2 TYP=3
		245 SVTO	8 S	0652.0	0652.0	1.0	270.0			QL=4 ST=2 TYP=3
		245 LEAR	49 GB	0729.0	0729.0	U	1000.0			QL=4 ST=2 TYP=6
		410 LEAR	8 S	0729.0	0729.0	U	120.0			QL=2 ST=2 TYP=3
		245 SVTO	49 GB	0729.0	0729.0	U	710.0			QL=4 ST=2 TYP=6
		410 SVTO	8 S	0729.0	0729.0	U	120.0			QL=4 ST=2 TYP=3
		410 SGMR	8 S	1958.0	1958.0	U	240.0			QL=4 ST=2 TYP=3
		610 SGMR	8 S	1958.0	1958.0	U	21.0			QL=4 ST=2 TYP=3
11		127 TORN	43 NS	0824.0		263.0		1.0		V=1
		2804 VORO	21 GRF	0055.3	0117.2	77.0	8.5			
		2804 VORO	40 F	0059.4	0059.8	1.6	3.8			
		2804 VORO	3 S	0512.7	0515.3	18.1	10.3			
		2800 HIRA	4 S/F	0513.0	0515.0	4.0	10.0			
		2840 PEKG	3 S	0513.0	0515.0	10.0	21.4			
		245 LEAR	8 S	0532.0	0532.0	U	220.0			QL=4 ST=2 TYP=3
		410 LEAR	8 S	0532.0	0532.0	U	55.0			QL=4 ST=2 TYP=3
		610 LEAR	8 S	0532.0	0532.0	1.0	130.0			QL=2 ST=2 TYP=3
		2840 PEKG	5 S	0813.0	0817.3	8.0	73.2			
		127 TORN	4 S/F	0813.0	0817.3	6.5	250.0	60.0		
		410 LEAR	4 S/F	0815.0	0817.0	3.0	150.0			QL=2 ST=2 TYP=3
		410 SVTO	4 S/F	0815.0	0817.0	4.0	220.0			QL=4 ST=2 TYP=3
		1415 LEAR	8 S	0816.0	0817.0	1.0	390.0			QL=4 ST=2 TYP=3
		4995 LEAR	8 S	0816.0	0817.0	1.0	140.0			QL=4 ST=2 TYP=3
		15400 LEAR	8 S	0816.0	0817.0	1.0	150.0			QL=4 ST=2 TYP=3
		1415 SVTO	8 S	0816.0	0817.0	1.0	240.0			QL=4 ST=2 TYP=3
		4995 SVTO	8 S	0816.0	0817.0	1.0	120.0			QL=4 ST=2 TYP=3
		8800 SVTO	8 S	0816.0	0817.0	1.0	130.0			QL=4 ST=2 TYP=3
		15400 SVTO	8 S	0816.0	0817.0	1.0	150.0			QL=4 ST=2 TYP=3
		245 LEAR	8 S	0817.0	0819.0	2.0	410.0			QL=2 ST=2 TYP=3
		610 LEAR	8 S	0817.0	0818.0	2.0	220.0			QL=2 ST=2 TYP=3
		2695 LEAR	8 S	0817.0	0817.0	U	60.0			QL=4 ST=2 TYP=3
		8800 LEAR	8 S	0817.0	0817.0	U	130.0			QL=4 ST=2 TYP=3
		245 SVTO	8 S	0817.0	0819.0	2.0	330.0			QL=4 ST=2 TYP=3
		610 SVTO	8 S	0817.0	0818.0	2.0	230.0			QL=2 ST=2 TYP=3
		2695 SVTO	8 S	0817.0	0817.0	U	62.0			QL=4 ST=2 TYP=3
		410 LEAR	8 S	0939.0	0939.0	1.0	390.0			QL=2 ST=2 TYP=3
		610 LEAR	8 S	0939.0	0939.0	1.0	140.0			QL=2 ST=2 TYP=3
		410 SVTO	49 GB	0939.0	0939.0	1.0	560.0			QL=4 ST=2 TYP=6
		610 SVTO	8 S	0939.0	0940.0	2.0	120.0			QL=2 ST=2 TYP=3
		127 TORN	5 S	0939.3	0939.9	1.9	200.0	100.0		
		410 LEAR	49 GB	1028.0	1029.0	1.0	970.0			QL=2 ST=2 TYP=6
		410 SVTO	49 GB	1028.0	1029.0	1.0	1300.0			QL=4 ST=2 TYP=6
		410 SVTO	49 GB	1028.0	1029.0	1.0	1300.0			QL=4 ST=3 TYP=6
		610 SVTO	4 S/F	1028.0	1029.0	3.0	170.0			QL=2 ST=2 TYP=3
		610 SVTO	4 S/F	1028.0	1029.0	3.0	170.0			QL=2 ST=3 TYP=3
		410 SVTO	8 S	1103.0	1103.0	2.0	150.0			QL=4 ST=2 TYP=3
		245 SVTO	8 S	1105.0	1105.0	1.0	230.0			QL=4 ST=2 TYP=3
		610 SVTO	4 S/F	1119.0	1121.0	5.0	450.0			QL=4 ST=2 TYP=3
		410 SVTO	8 S	1123.0	1123.0	U	270.0			QL=4 ST=2 TYP=3
		410 SVTO	8 S	1142.0	1143.0	1.0	160.0			QL=4 ST=2 TYP=3
		610 SVTO	8 S	1142.0	1142.0	1.0	100.0			QL=2 ST=2 TYP=3
		127 TORN	45 C	1142.0	1143.3	6.3	50.0	6.0		
		235 CUBA	7 C	1719.8	1725.2	11.4	10.0	5.0		
		410 SGMR	8 S	1720.0	1720.0	2.0	120.0			QL=4 ST=2 TYP=3
		610 SGMR	8 S	1720.0	1720.0	U	49.0			QL=4 ST=2 TYP=3
		245 SGMR	8 S	1722.0	1722.0	U	23.0			QL=4 ST=2 TYP=3
		410 PALE	8 S	2231.0	2232.0	1.0	480.0			QL=4 ST=2 TYP=3
		610 PALE	8 S	2232.0	2232.0	U	110.0			QL=4 ST=2 TYP=3
12		127 TORN	43 NS	0800.0		360.0		1.0		V=1
		245 SGMR	43 NS	1716.0	1916.0	183.0	2900.0			QL=4 ST=2 TYP=1
		410 SGMR	43 NS	1716.0	1753.0	404.0	520.0			QL=2 ST=3 TYP=1
		610 SGMR	43 NS	1731.0	1913.0	152.0	490.0			QL=4 ST=2 TYP=1
		410 PALE	43 NS	1746.0	0333.0	374.0	260.0			QL=4 ST=1 TYP=1
		410 PALE	43 NS	1746.0	1751.0	374.0	260.0			QL=4 ST=1 TYP=1

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

Outstanding Occurrences

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Dec 06

DECEMBER 2006

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean (W/m 2 Hz)		
12	410	PALE	43 NS	1746.0	1833.0	374.0	890.0			QL=4 ST=1 TYP=1
	410	PALE	43 NS	1746.0	1853.0	374.0	1000.0			QL=4 ST=1 TYP=1
	410	PALE	43 NS	1746.0	1915.0	374.0	1300.0			QL=4 ST=1 TYP=1
	410	PALE	43 NS	1746.0	1751.0	587.0	260.0			QL=4 ST=1 TYP=1
	610	PALE	43 NS	1748.0	1913.0	192.0	440.0			QL=4 ST=2 TYP=1
	245	PALE	43 NS	1748.0	0333.0	372.0	460.0			QL=4 ST=1 TYP=1
	245	PALE	43 NS	1748.0	1750.0	372.0	460.0			QL=4 ST=1 TYP=1
	245	PALE	43 NS	1748.0	1804.0	372.0	810.0			QL=4 ST=1 TYP=1
	245	PALE	43 NS	1748.0	1852.0	372.0	1100.0			QL=2 ST=1 TYP=1
	245	PALE	43 NS	1748.0	1852.0	372.0	1100.0			QL=4 ST=1 TYP=1
	610	PALE	43 NS	1748.0	0333.0	372.0	110.0			QL=4 ST=1 TYP=1
	610	PALE	43 NS	1748.0	1751.0	372.0	110.0			QL=4 ST=1 TYP=1
	610	PALE	43 NS	1748.0	1822.0	372.0	320.0			QL=4 ST=1 TYP=1
	245	PALE	43 NS	1748.0	1750.0	585.0	460.0			QL=4 ST=1 TYP=1
	610	PALE	43 NS	1748.0	1751.0	585.0	110.0			QL=4 ST=1 TYP=1
	245	LEAR	43 NS	2314.0	0026.0	46.0	550.0			QL=2 ST=1 TYP=1
	410	LEAR	43 NS	2321.0	2325.0	92.0	370.0			QL=2 ST=2 TYP=1
	610	LEAR	43 NS	2323.0	2324.0	11.0	180.0			QL=2 ST=2 TYP=1
	245	SGMR	8 S	1310.0	1310.0	U	100.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1310.0	1310.0	U	200.0			QL=4 ST=2 TYP=3
	245	SGMR	48 C	1654.0	1707.0	14.0	100.0			QL=4 ST=2 TYP=8
	245	SGMR	48 C	1654.0	1709.0	15.0	110.0			QL=4 ST=2 TYP=8
	610	SGMR	48 C	1655.0	1706.0	14.0	300.0			QL=4 ST=2 TYP=8
	410	SGMR	4 S/F	1655.0	1710.0	15.0	110.0			QL=2 ST=2 TYP=3
	610	SGMR	48 C	1655.0	1706.0	425.0	300.0			QL=4 ST=1 TYP=8
	410	SGMR	4 S/F	1655.0	1705.0	425.0	73.0			QL=2 ST=1 TYP=3
	410	SGMR	4 S/F	1655.0	1705.0	425.0	81.0			QL=2 ST=1 TYP=3
	1415	SGMR	4 S/F	1659.0	1700.0	3.0	45.0			QL=4 ST=1 TYP=3
	1415	SGMR	4 S/F	1659.0	1700.0	3.0	45.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1705.0	1705.0	U	38.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1713.0	1713.0	U	110.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	1716.0	1717.0	1.0	120.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1717.0	1717.0	U	100.0			QL=2 ST=2 TYP=3
	410	SGMR	8 S	1729.0E	1730.0U	2.0D	180.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	1730.0E	1731.0U	1.0D	120.0			QL=4 ST=2 TYP=3
	1415	SGMR	48 C	1731.0	1731.0	5.0	220.0			QL=4 ST=2 TYP=8
	610	SGMR	8 S	1731.0E	1731.0U	U	100.0			QL=4 ST=2 TYP=3
	245	PALE	48 C	1733.0	1737.0	5.0	180.0			QL=4 ST=1 TYP=8
	610	PALE	4 S/F	1733.0	1733.0	4.0	110.0			QL=4 ST=1 TYP=3
	610	PALE	4 S/F	1733.0	1744.0	12.0	110.0			QL=4 ST=1 TYP=3
	245	PALE	48 C	1733.0	1804.0	31.0	810.0			QL=4 ST=1 TYP=8
	410	PALE	48 C	1733.0	1802.0	30.0	580.0			QL=4 ST=1 TYP=8
	610	PALE	48 C	1733.0	1806.0	33.0	210.0			QL=4 ST=1 TYP=8
	245	PALE	48 C	1733.0	1743.0	387.0	250.0			QL=4 ST=1 TYP=8
	410	PALE	48 C	1733.0	1744.0	387.0	210.0			QL=4 ST=1 TYP=8
	410	PALE	4 S/F	1733.0	1738.0	387.0	150.0			QL=4 ST=1 TYP=3
	1415	PALE	8 S	1736.0	1736.0	U	150.0			QL=4 ST=1 TYP=3
	1415	PALE	8 S	1736.0	1736.0	U	150.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2156.0	2157.0	1.0	320.0			QL=4 ST=2 TYP=3
	245	LEAR	48 C	2319.0	2328.0	41.0	350.0			QL=2 ST=1 TYP=8
	245	LEAR	48 C	2319.0	2328.0	516.0	350.0			QL=2 ST=2 TYP=8
	410	LEAR	48 C	2321.0	2325.0	24.0	350.0			QL=2 ST=2 TYP=8
	410	LEAR	48 C	2321.0	2325.0	39.0	350.0			QL=2 ST=1 TYP=8
	610	LEAR	48 C	2323.0	2324.0	11.0	170.0			QL=2 ST=2 TYP=8
	1415	LEAR	48 C	2323.0	2345.0	25.0	430.0			QL=4 ST=2 TYP=8
	610	LEAR	48 C	2323.0	2324.0	37.0	170.0			QL=2 ST=1 TYP=8
13	127	TORN	44 NS	0730.0E		390.0D		29.0		V=2
	235	CUBA	44 NS	1300.0E		510.0D	8.0	4.0		
	1415	LEAR	48 C	0003.0	0025.0	24.0	390.0			QL=4 ST=2 TYP=8
	2804	VORO	40 F	0020.2	0027.8	19.6	60.7			
	1415	PALE	4 S/F	0023.0	0025.0	4.0	280.0			QL=4 ST=2 TYP=3
	245	LEAR	48 C	0030.0	0225.0	196.0	98000.0			QL=2 ST=2 TYP=8
	245	LEAR	48 C	0030.0	0225.0	196.0	98000.0			QL=2 ST=3 TYP=8
	410	LEAR	48 C	0036.0	0305.0	194.0	17000.0			QL=2 ST=2 TYP=8
	410	LEAR	48 C	0036.0	0305.0	194.0	17000.0			QL=2 ST=3 TYP=8
	2840	PEKG	47 GB	0220.0	0224.6	152.0	1448.4			
	8800	PALE	48 C	0221.0	0229.0	64.0	7100.0			QL=4 ST=2 TYP=8
	8800	LEAR	48 C	0221.0	0229.0	78.0	6700.0			QL=4 ST=2 TYP=8

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Dec 06

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

Outstanding Occurrences

DECEMBER 2006

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density		Int	Remarks
							Peak (10 -22 W/m 2 Hz)	Mean		
13	8800	LEAR	48 C	0221.0	0229.0	78.0	6700.0			QL=4 ST=3 TYP=8
	15400	LEAR	48 C	0221.0	0229.0	82.0	10000.0			QL=4 ST=2 TYP=8
	15400	LEAR	48 C	0221.0	0229.0	82.0	10000.0			QL=4 ST=3 TYP=8
	4995	LEAR	48 C	0221.0	0225.0	1299.0	3000.0			QL=4 ST=1 TYP=8
	4995	LEAR	48 C	0221.0	0232.0	1299.0	3700.0			QL=4 ST=1 TYP=8
	8800	LEAR	48 C	0221.0	0225.0	1299.0	4900.0			QL=4 ST=1 TYP=8
	15400	LEAR	48 C	0221.0	0225.0	1299.0	7900.0			QL=4 ST=1 TYP=8
	2804	VORO	49 GB	0221.1	0254.7	180.0	21700.0			
	2695	PALE	48 C	0222.0	0302.0	64.0	65000.0			QL=4 ST=2 TYP=8
	4995	PALE	48 C	0222.0	0233.0	64.0	4700.0			QL=4 ST=2 TYP=8
	15400	PALE	48 C	0222.0	0229.0	63.0	9900.0			QL=4 ST=2 TYP=8
	4995	LEAR	48 C	0222.0	0232.0	77.0	3700.0			QL=4 ST=2 TYP=8
	4995	LEAR	48 C	0222.0	0232.0	77.0	3700.0			QL=4 ST=3 TYP=8
	2695	LEAR	48 C	0222.0	0302.0	84.0	44000.0			QL=4 ST=2 TYP=8
	2695	LEAR	48 C	0222.0	0302.0	84.0	44000.0			QL=4 ST=3 TYP=8
	2695	LEAR	48 C	0222.0	0223.0	1298.0	14000.0			QL=4 ST=1 TYP=8
	2695	LEAR	48 C	0222.0	0302.0	1298.0	38000.0			QL=4 ST=1 TYP=8
	610	PALE	48 C	0223.0	0306.0	63.0	120000.0			QL=4 ST=2 TYP=8
	1415	PALE	48 C	0223.0	0225.0	63.0	150000.0			QL=4 ST=2 TYP=8
	610	LEAR	48 C	0223.0	0306.0	84.0	100000.0			QL=2 ST=2 TYP=8
	610	LEAR	48 C	0223.0	0306.0	84.0	100000.0			QL=2 ST=3 TYP=8
	1415	LEAR	48 C	0223.0	0336.0	88.0	130000.0			QL=4 ST=2 TYP=8
	1415	LEAR	48 C	0223.0	0336.0	88.0	130000.0			QL=4 ST=3 TYP=8
	610	LEAR	48 C	0223.0	0224.0	1297.0	4700.0			QL=4 ST=1 TYP=8
	610	LEAR	48 C	0223.0	0302.0	1297.0	30000.0			QL=4 ST=1 TYP=8
	245	PALE	48 C	0224.0	0225.0	62.0	100000.0			QL=4 ST=2 TYP=8
	410	PALE	48 C	0224.0	0306.0	62.0	20000.0			QL=4 ST=2 TYP=8
	410	LEAR	48 C	0355.0	0403.0	9.0	1000.0			QL=2 ST=2 TYP=8
	610	LEAR	48 C	0355.0	0359.0	9.0	3400.0			QL=2 ST=2 TYP=8
	1415	LEAR	48 C	0355.0	0402.0	9.0	110000.0			QL=4 ST=2 TYP=8
	2695	LEAR	48 C	0355.0	0357.0	9.0	1500.0			QL=4 ST=2 TYP=8
	4995	LEAR	48 C	0355.0	0401.0	9.0	550.0			QL=4 ST=2 TYP=8
	8800	LEAR	4 S/F	0356.0	0357.0	3.0	190.0			QL=4 ST=2 TYP=3
	15400	LEAR	4 S/F	0356.0	0357.0	6.0	180.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0403.0	0403.0	U	460.0			QL=2 ST=2 TYP=3
	245	LEAR	49 GB	0407.0	0408.0	1.0	500.0			QL=2 ST=2 TYP=6
	610	LEAR	49 GB	0407.0	0408.0	2.0	950.0			QL=2 ST=2 TYP=6
	1415	LEAR	49 GB	0407.0	0408.0	2.0	16000.0			QL=4 ST=2 TYP=6
	410	LEAR	8 S	0407.0	0408.0	2.0	300.0			QL=2 ST=2 TYP=3
	2695	LEAR	8 S	0407.0	0408.0	2.0	480.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0408.0	0408.0	U	160.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0416.0	0418.0	4.0	200.0			QL=2 ST=2 TYP=3
	2695	LEAR	4 S/F	0417.0	0418.0	3.0	170.0			QL=4 ST=2 TYP=3
	1415	LEAR	49 GB	0418.0	0418.0	1.0	550.0			QL=4 ST=2 TYP=6
	410	LEAR	8 S	0418.0	0418.0	1.0	170.0			QL=2 ST=2 TYP=3
	610	LEAR	8 S	0418.0	0418.0	U	100.0			QL=2 ST=2 TYP=3
	1415	LEAR	49 GB	0428.0	0429.0	1.0	570.0			QL=4 ST=2 TYP=6
	410	LEAR	48 C	0431.0	0437.0	9.0	270.0			QL=2 ST=2 TYP=8
	410	LEAR	48 C	0431.0	0437.0	9.0	270.0			QL=2 ST=3 TYP=8
	610	LEAR	48 C	0431.0	0437.0	9.0	840.0			QL=2 ST=2 TYP=8
	610	LEAR	48 C	0431.0	0437.0	9.0	840.0			QL=2 ST=3 TYP=8
	1415	LEAR	48 C	0431.0	0437.0	9.0	57000.0			QL=4 ST=2 TYP=8
	1415	LEAR	48 C	0431.0	0437.0	9.0	57000.0			QL=4 ST=3 TYP=8
	2695	LEAR	8 S	0436.0	0437.0	1.0	140.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0436.0	0437.0	1.0	140.0			QL=4 ST=3 TYP=3
	1415	LEAR	49 GB	0443.0	0443.0	1.0	830.0			QL=4 ST=3 TYP=6
	2695	LEAR	8 S	0443.0	0443.0	U	100.0			QL=4 ST=3 TYP=3
	6700	CUBA	2 S/F	1416.9	1417.5	4.1	13.0	6.0		
	9500	CUBA	2 S/F	1417.0	1418.8	4.7	15.0	7.0		
14	127	TORN	44 NS	0730.0E		390.0D		21.0		V=2
	245	LEAR	8 S	0621.0	0621.0	1.0	190.0			QL=2 ST=2 TYP=3
	245	LEAR	49 GB	0935.0	0935.0	1.0	1000.0			QL=2 ST=2 TYP=6
	245	SVTO	49 GB	0935.0	0935.0	U	760.0			QL=4 ST=2 TYP=6
	8800	SVTO	8 S	0935.0	0935.0	U	76.0			QL=4 ST=2 TYP=3
	610	SVTO	4 S/F	1105.0	1106.0	3.0	380.0			QL=2 ST=2 TYP=3
	15400	SVTO	4 S/F	1105.0	1107.0	3.0	67.0			QL=4 ST=2 TYP=3
	410	SVTO	49 GB	1107.0	1107.0	U	720.0			QL=4 ST=2 TYP=6
	245	SVTO	8 S	1107.0	1107.0	U	72.0			QL=4 ST=2 TYP=3

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

Outstanding Occurrences

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Dec 06

DECEMBER 2006

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Mean	Int	Remarks
14	8800	SVTO	8 S	1107.0	1107.0	1.0	83.0			QL=4 ST=2 TYP=3
	4995	LEAR	48 C	2206.0	2211.0	65.0	1200.0			QL=4 ST=2 TYP=8
	4995	PALE	48 C	2206.0	2211.0	70.0	1500.0			QL=4 ST=2 TYP=8
	4995	LEAR	48 C	2206.0	2211.0	114.0	1200.0			QL=4 ST=1 TYP=8
	4995	LEAR	49 GB	2206.0	2209.0	114.0	1100.0			QL=4 ST=3 TYP=6
	4995	LEAR	4 S/F	2206.0	2207.0	114.0	170.0			QL=4 ST=1 TYP=3
	4995	PALE	49 GB	2206.0	2209.0	114.0	980.0			QL=4 ST=3 TYP=6
	8800	LEAR	48 C	2207.0	2211.0	59.0	1900.0			QL=2 ST=3 TYP=8
	8800	LEAR	48 C	2207.0	2211.0	59.0	1900.0			QL=4 ST=2 TYP=8
	15400	LEAR	48 C	2207.0	2209.0	59.0	1700.0			QL=2 ST=3 TYP=8
	15400	LEAR	48 C	2207.0	2209.0	59.0	1700.0			QL=4 ST=2 TYP=8
	15400	PALE	48 C	2207.0	2209.0	58.0	1600.0			QL=4 ST=2 TYP=8
	1415	LEAR	48 C	2207.0	2307.0	68.0	63000.0			QL=4 ST=2 TYP=8
	2695	LEAR	48 C	2207.0	2228.0	66.0	2100.0			QL=4 ST=2 TYP=8
	410	PALE	48 C	2207.0	2247.0	62.0	2000.0			QL=4 ST=2 TYP=8
	610	PALE	48 C	2207.0	2302.0	61.0	7700.0			QL=4 ST=2 TYP=8
	2695	PALE	48 C	2207.0	2228.0	69.0	2600.0			QL=4 ST=2 TYP=8
	8800	PALE	48 C	2207.0	2211.0	67.0	2500.0			QL=4 ST=2 TYP=8
	1415	LEAR	48 C	2207.0	2254.0	113.0	37000.0			QL=4 ST=1 TYP=8
	2695	LEAR	48 C	2207.0	2228.0	113.0	2100.0			QL=4 ST=1 TYP=8
	8800	LEAR	48 C	2207.0	2211.0	113.0	1900.0			QL=4 ST=1 TYP=8
	15400	LEAR	48 C	2207.0	2209.0	113.0	1700.0			QL=4 ST=1 TYP=8
	1415	LEAR	49 GB	2207.0	2209.0	113.0	11000.0			QL=4 ST=3 TYP=6
	2695	LEAR	49 GB	2207.0	2209.0	113.0	510.0			QL=4 ST=3 TYP=6
	8800	LEAR	49 GB	2207.0	2209.0	113.0	1800.0			QL=4 ST=3 TYP=6
	15400	LEAR	49 GB	2207.0	2209.0	113.0	1700.0			QL=4 ST=3 TYP=6
	2695	PALE	49 GB	2207.0	2208.0	113.0	620.0			QL=4 ST=3 TYP=6
	8800	PALE	49 GB	2207.0	2209.0	113.0	1600.0			QL=4 ST=3 TYP=6
	410	PALE	4 S/F	2207.0	2208.0	113.0	480.0			QL=4 ST=3 TYP=3
	1415	PALE	48 C	2208.0	2308.0	67.0	40000.0			QL=4 ST=2 TYP=8
	1415	PALE	49 GB	2208.0	2209.0	112.0	2700.0			QL=4 ST=3 TYP=6
	245	PALE	4 S/F	2208.0	2208.0	112.0	99.0			QL=4 ST=1 TYP=3
	245	PALE	4 S/F	2208.0	2208.0	112.0	99.0			QL=4 ST=3 TYP=3
	245	LEAR	48 C	2209.0	2210.0	18.0	1200.0			QL=4 ST=2 TYP=8
	610	LEAR	48 C	2211.0	2247.0	37.0	540.0			QL=4 ST=2 TYP=8
	2800	HIRA	47 GB	2211.0	2229.0	78.0	1240.0			
	410	LEAR	48 C	2212.0	2247.0	42.0	390.0			QL=4 ST=2 TYP=8
	410	PALE	48 C	2354.0	2357.0	3.0	190.0			QL=4 ST=2 TYP=8
	610	PALE	8 S	2355.0	2355.0	U	120.0			QL=4 ST=2 TYP=3
15	127	TORN	44 NS	0730.0E		390.0D		23.0		V=2
	2804	VORO	40 F	0000.1	0005.4	36.0	11.3			
	610	PALE	48 C	0002.0	0004.0	3.0	230.0			QL=4 ST=2 TYP=8
	410	PALE	8 S	0005.0	0005.0	U	110.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0905.0	0905.0	2.0	120.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0915.0	0915.0	1.0	140.0			QL=4 ST=2 TYP=3

Reports are received routinely from the following observatories:

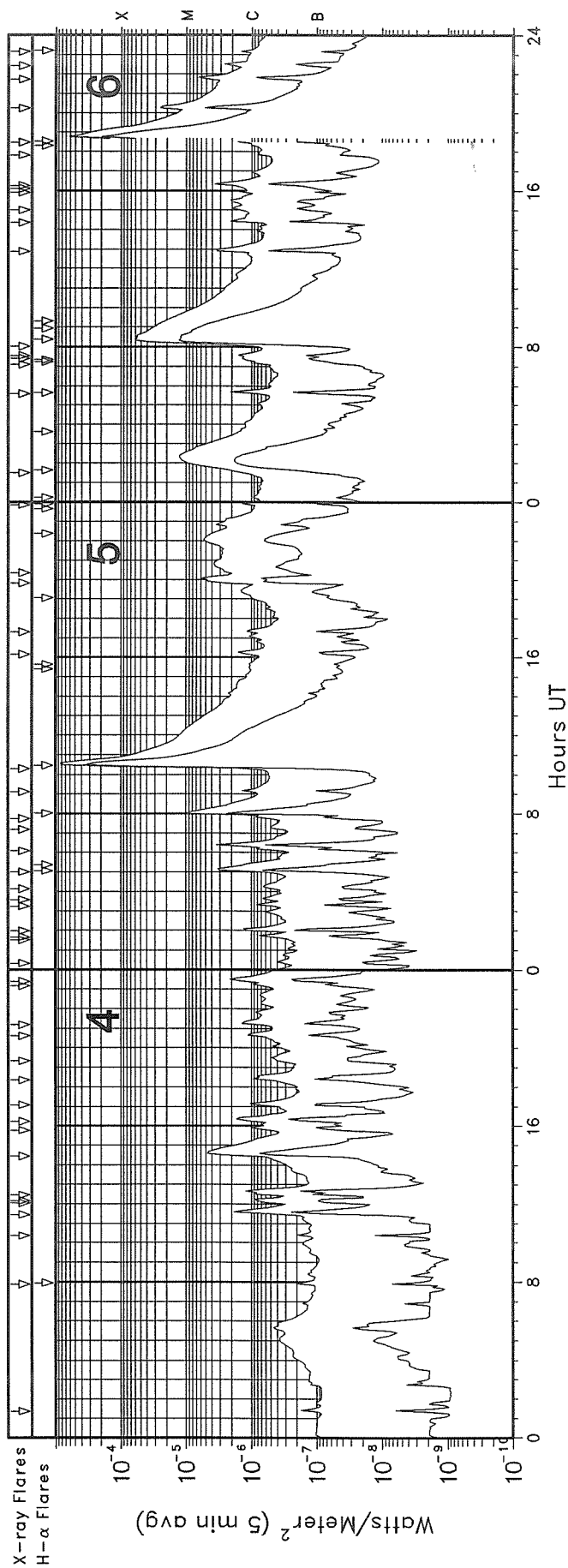
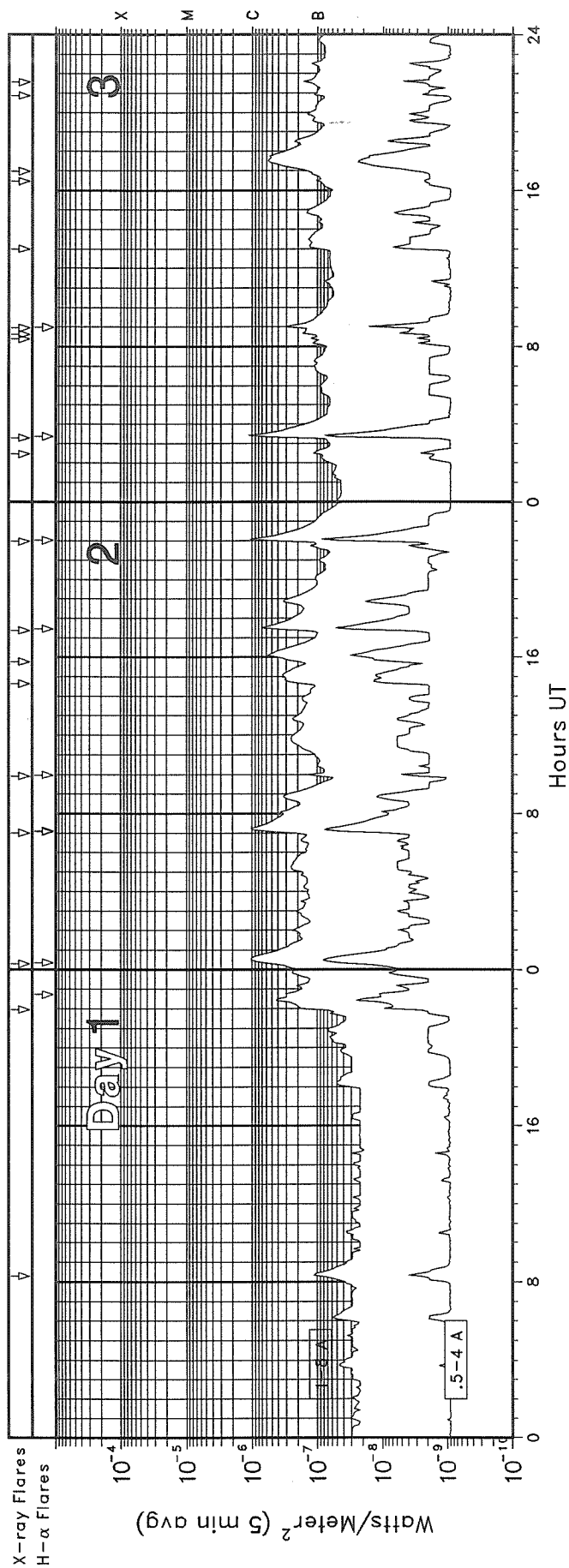
CUBA = Havana	LEAR = Learmonth	SGMR = Sagamore Hill
GORK = Gorky	PEKG = Peking	SVTO = San Vito
HIRA = Hiraiso	PALE = Palehua	TORN = Torun
IZMI = IZMIRAN	PENT = Penticton	UPIC = Upice

Explanation of Type Code:

1 Simple 1	7 Minor +	24 Rise	30 Post Burst Increase A	43 Onset of Noise Storm
2 Simple 1F	8 Spike	25 Rise A	31 Post Burst Decrease	44 Noise Storm in Progress
3 Simple 2	20 Simple 3	26 Fall	33 Absorption	45 Complex
4 Simple 2F	21 Simple 3A	27 Rise and Fall	40 Fluctuation	46 Complex F
5 Simple	22 Simple 3F	28 Precursor	41 Group of Bursts	47 Great Burst
6 Minor	23 Simple 3AF	29 Post Burst Increase	42 Series of Bursts	48 Major
1A Simple 1A	4A Simple 2AF	24PF Post Rise F	27F Rise and Fall F	
3A Simple 2A	40 Rise Only	16A Fall A	27AF Rise and Fall AF	
21A Simple 3A GRF	40F Rise Only F	260 Fall Only	31A Post Burst Decrease A	
2A Simple 1AF	4P Post Rise	26F Fall F	32A Absorption A	

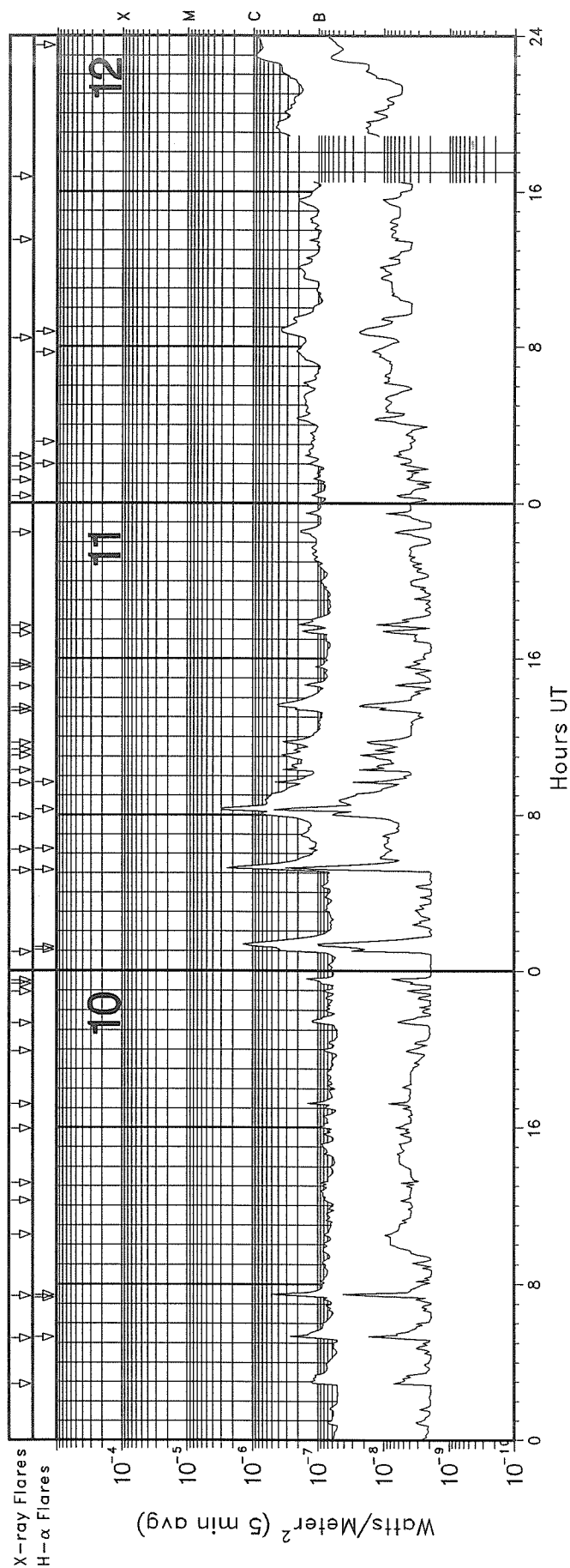
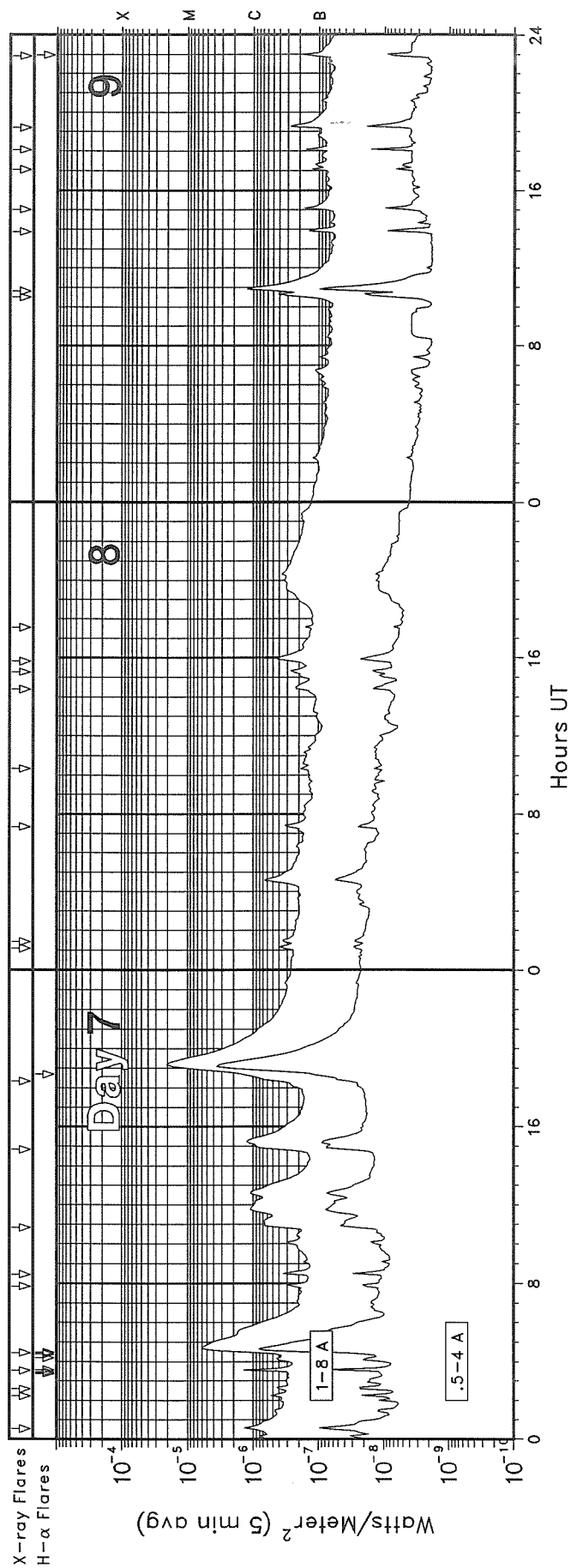
RSTN Site Information: Beginning in April 1986, the RSTN sites LEAR, PALE, SGMR, and SVTO fixed frequency solar radio data are periodically adjusted to several world standard stations. These world standard stations include: Kislovodsk, USSR 15,500 MHz; Penticton, Canada 2800 MHz; and Hiraiso, Japan 500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

GOES X-RAY DETECTOR December 2006

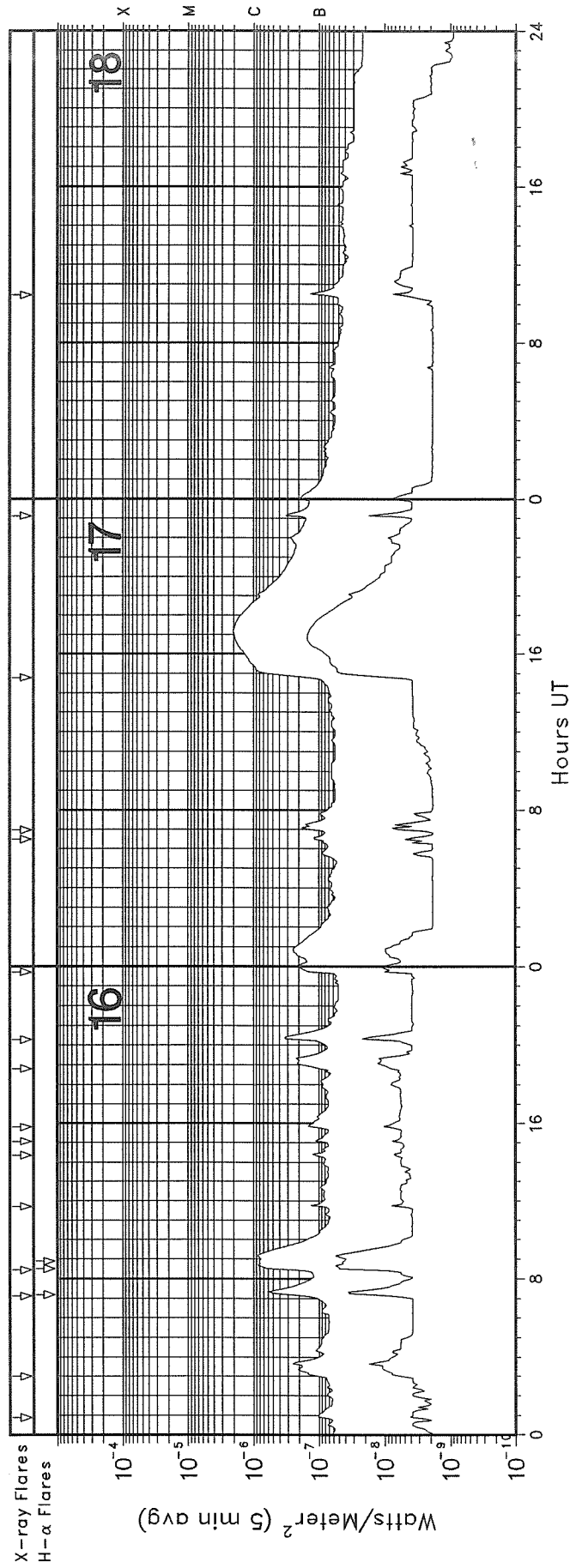
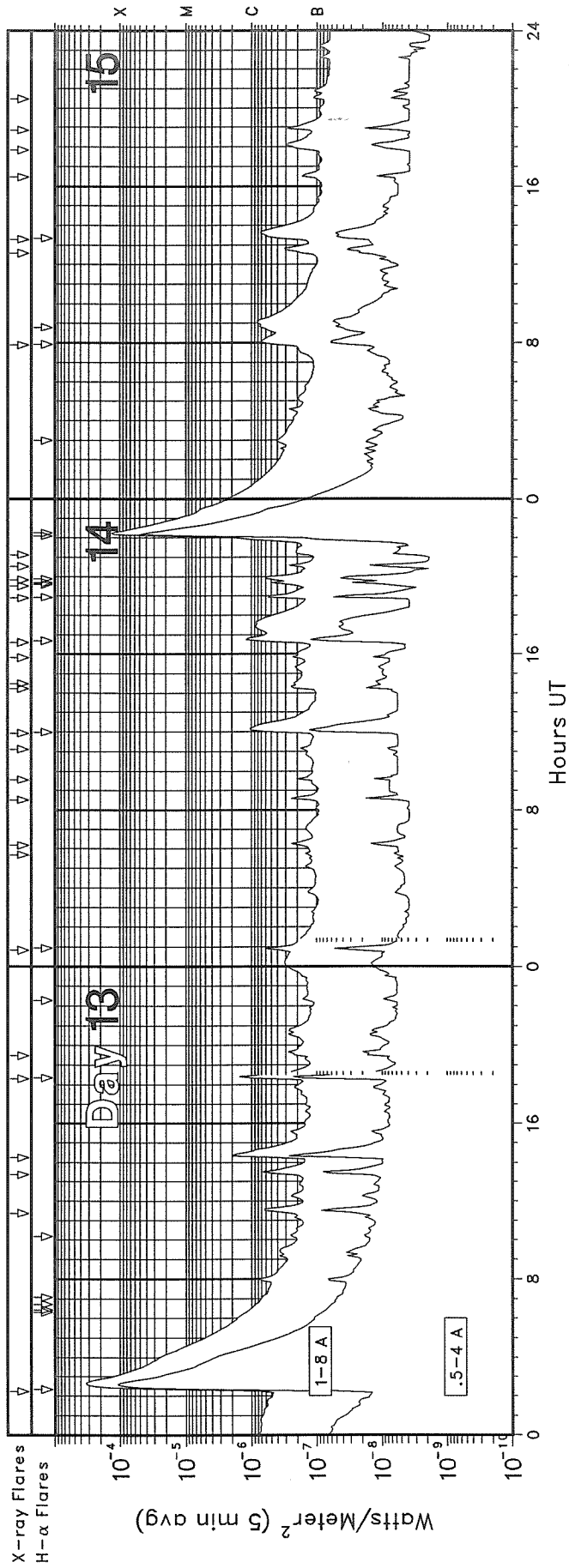


GOES X-RAY DETECTOR

December 2006

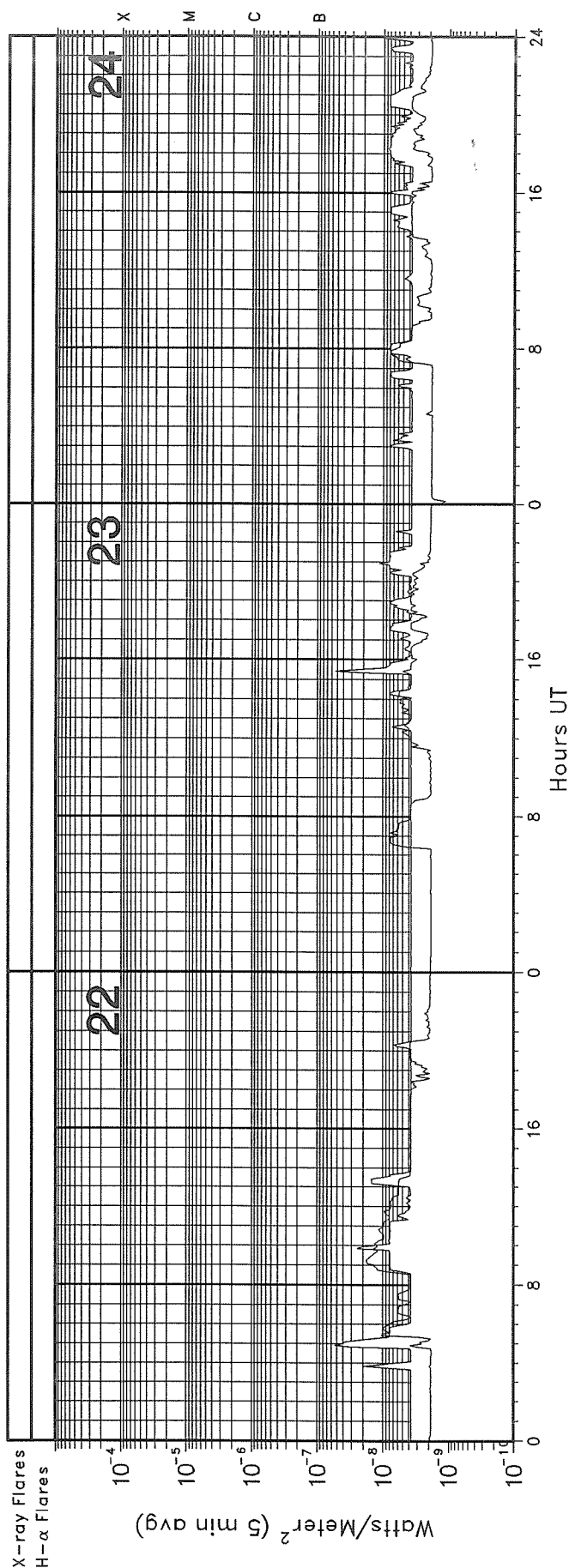
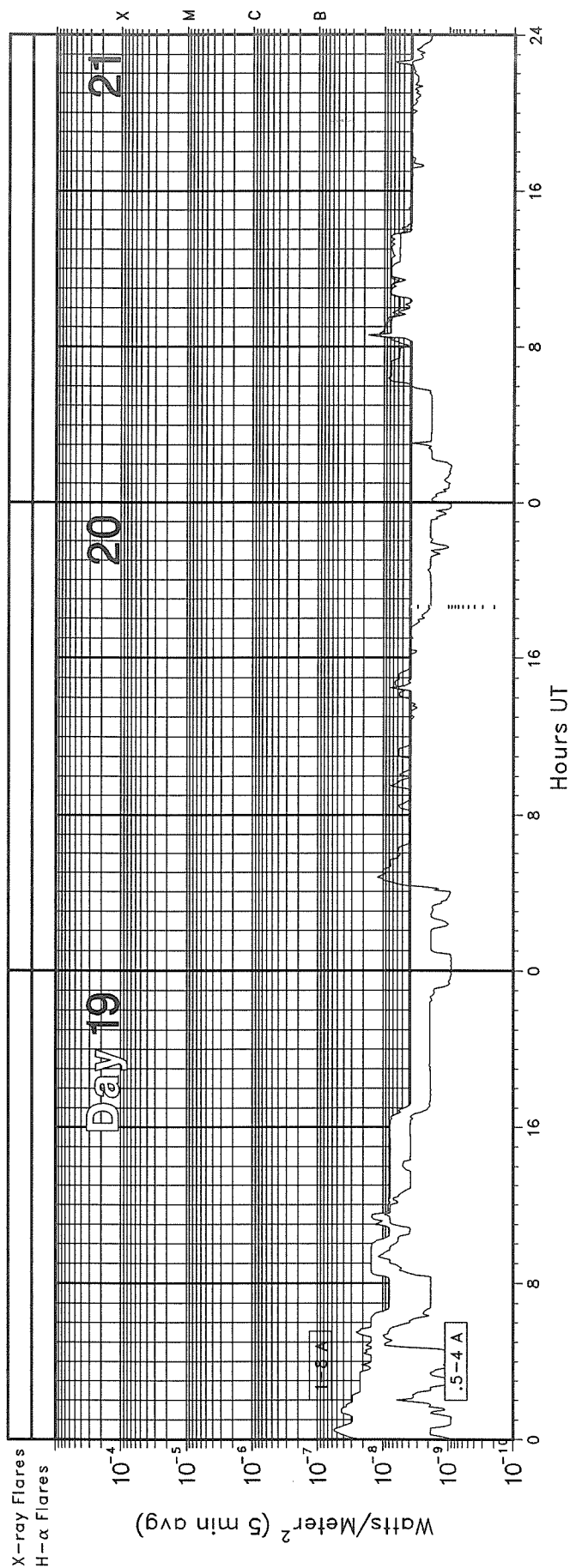


GOES X-RAY DETECTOR December 2006

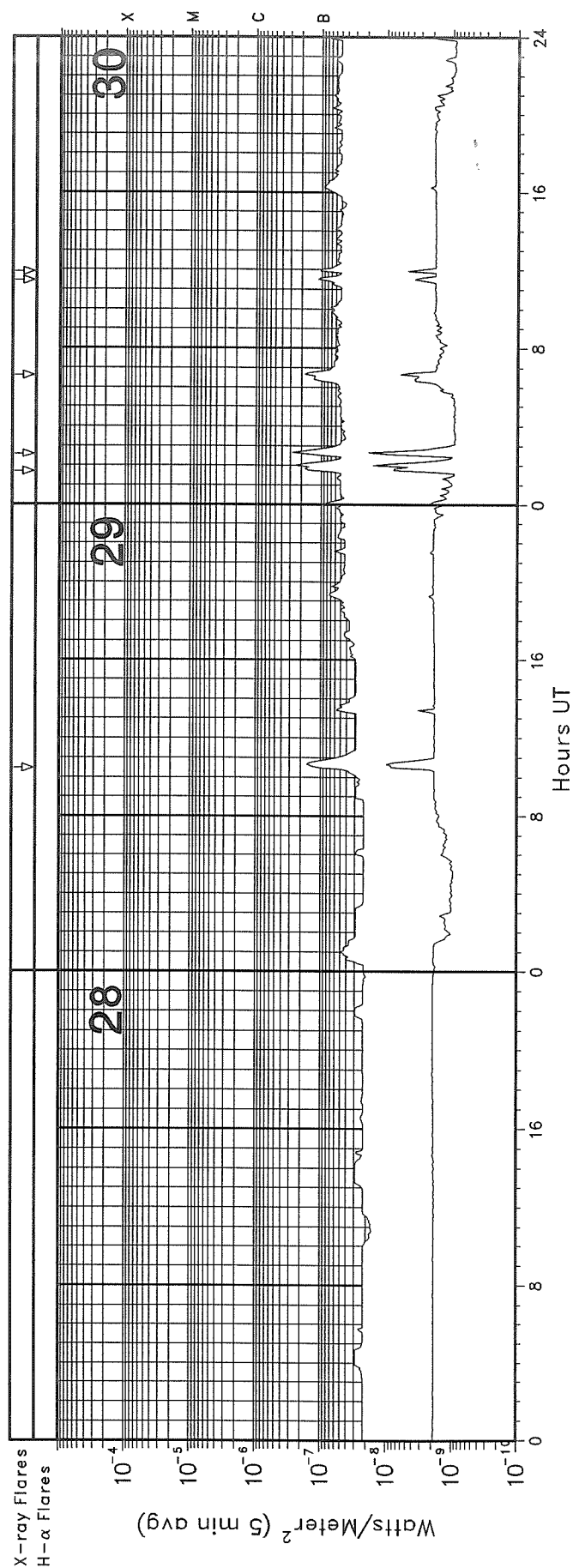
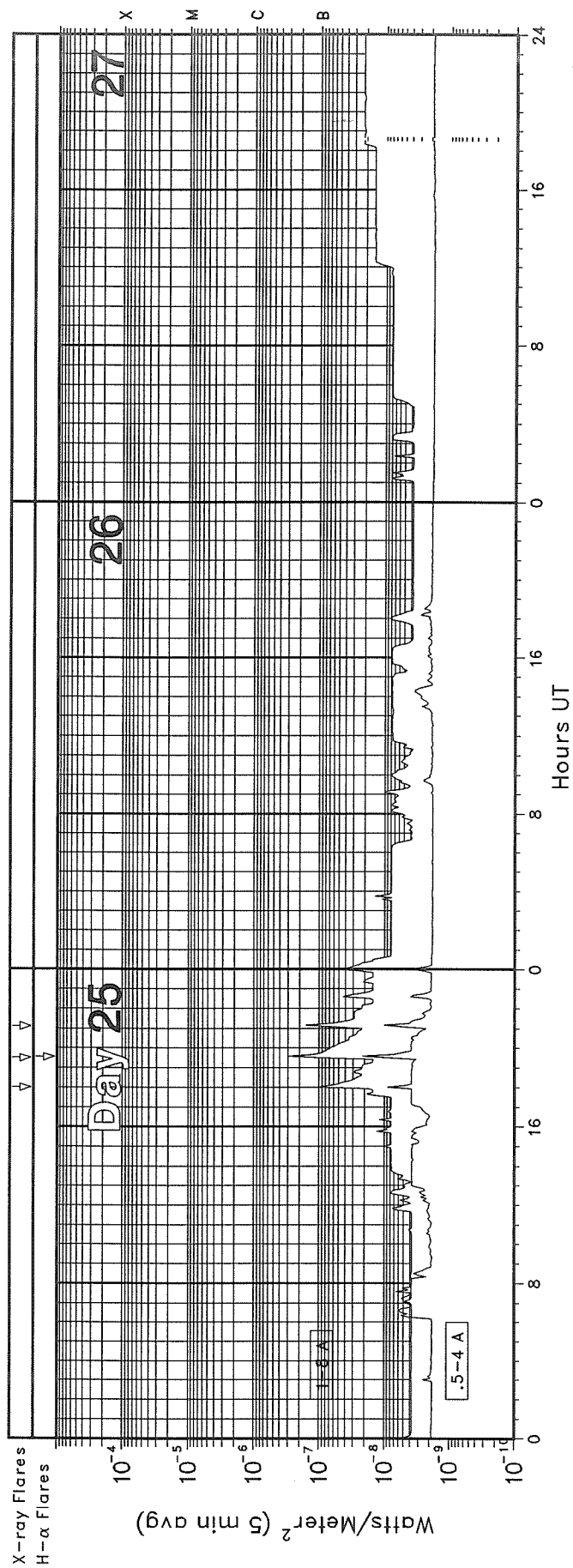


GOES X-RAY DETECTOR

December 2006

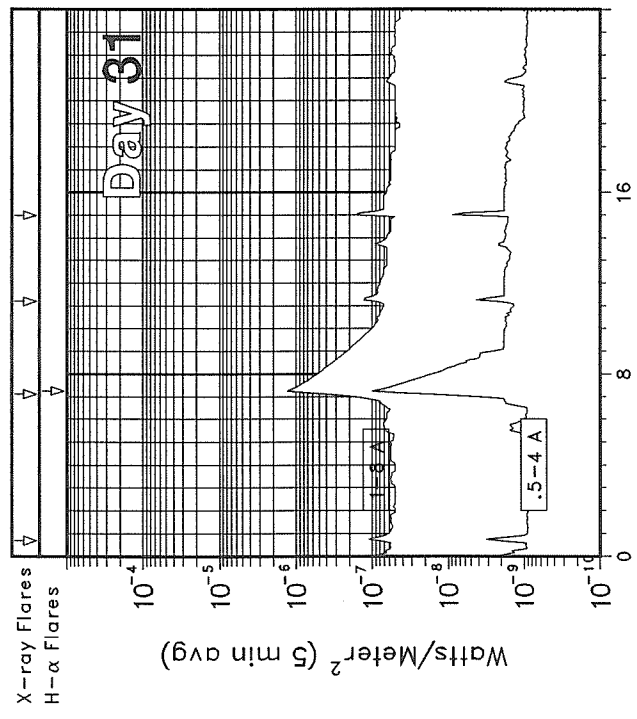


GOES X-RAY DETECTOR December 2006

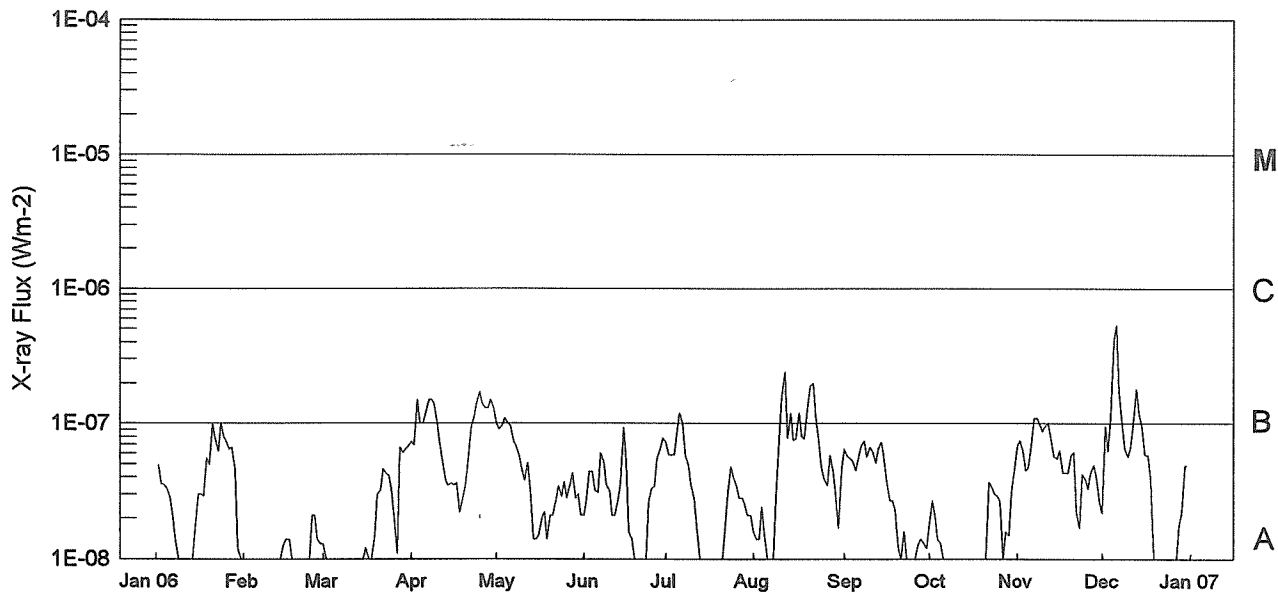


GOES X-RAY DETECTOR

December 2006



Preliminary GOES Satellite Daily X-Ray Background Jan 2006 - Dec 2006



Day	Jan 06	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	A5.8	<A1.0	A1.3	A7.3	B1.0	A2.1	A5.9	A1.4	A6.4	A1.8	A6.8	A2.2
2	A4.9	<A1.0	<A1.0	A6.9	A9.1	A2.8	A5.8	A1.4	A5.7	A2.7	A7.5	A9.5
3	A3.6	<A1.0	<A1.0	B1.5	A9.6	A4.4	A5.9	A2.4	A5.5	A2.1	A6.2	A6.3
4	A3.5	<A1.0	<A1.0	B1.0	B1.1	A4.4	A8.6	A1.4	A5.3	A1.4	A4.5	B1.1
5	A3.3	<A1.0	<A1.0	B1.0	B1.0	A3.2	B1.2	<A1.0	A4.5	A1.3	A4.7	B4.1
6	A2.8	<A1.0	<A1.0	B1.2	A9.6	A3.1	B1.0	<A1.0	A5.5	<A1.0	A7.0	B5.3
7	A2.1	<A1.0	<A1.0	B1.5	A7.4	A6.0	A5.9	<A1.0	A6.8	<A1.0	B1.1	B1.7
8	A1.4	<A1.0	<A1.0	B1.5	A6.7	A5.2	A4.9	A2.8	A7.4	<A1.0	B1.1	A9.7
9	<A1.0	<A1.0	<A1.0	B1.4	A5.7	A3.5	A3.5	A7.6	A5.7	<A1.0	A9.8	A6.5
10	<A1.0	<A1.0	<A1.0	B1.0	A4.5	A3.2	A2.8	B1.6	A6.6	<A1.0	A8.8	A5.7
11	<A1.0	<A1.0	<A1.0	A7.1	A3.8	A2.1	A1.7	B2.4	A6.2	<A1.0	A9.6	A6.6
12	<A1.0	<A1.0	<A1.0	A5.0	A5.1	A2.1	<A1.0	A7.8	A5.1	<A1.0	B1.0	A9.8
13	<A1.0	<A1.0	<A1.0	A3.8	A3.2	A2.7	<A1.0	B1.2	A6.5	<A1.0	A7.5	B1.8
14	<A1.0	<A1.0	<A1.0	A3.5	A1.4	A3.6	<A1.0	A7.5	A7.2	<A1.0	A5.7	B1.2
15	A1.7	A1.3	<A1.0	A3.6	A1.4	A9.3	<A1.0	A7.7	A5.4	<A1.0	A5.5	A9.2
16	A3.0	A1.4	A1.2	A3.5	A1.5	A5.2	<A1.0	B1.2	A3.7	<A1.0	A6.3	A5.9
17	A3.0	A1.4	<A1.0	A3.6	A2.0	A1.6	<A1.0	A8.0	A2.7	<A1.0	A4.3	A5.8
18	A2.9	<A1.0	<A1.0	A2.2	A2.2	A1.4	<A1.0	A7.7	A2.7	<A1.0	A4.3	A3.9
19	A5.5	<A1.0	A1.5	A2.7	A1.4	<A1.0	<A1.0	B1.3	A2.3	<A1.0	A4.3	<A1.0
20	A5.0	<A1.0	A3.0	A3.5	A2.1	<A1.0	A1.0	B1.9	A1.2	<A1.0	A5.9	<A1.0
21	A9.8	<A1.0	A3.2	A5.3	A2.1	<A1.0	A1.7	B2.0	<A1.0	<A1.0	A6.1	<A1.0
22	A7.8	<A1.0	A4.6	A9.5	A2.7	<A1.0	A3.0	B1.1	A1.6	A3.7	A2.2	<A1.0
23	A6.2	<A1.0	A4.3	B1.1	A3.4	<A1.0	A4.8	A7.9	<A1.0	A3.4	A1.7	<A1.0
24	B1.0	<A1.0	A4.1	B1.4	A2.9	A2.7	A4.0	A4.6	<A1.0	A3.0	A4.2	<A1.0
25	A8.2	A2.1	A3.2	B1.7	A3.7	A3.3	A3.4	A3.9	<A1.0	A2.9	A3.9	<A1.0
26	A7.4	A2.1	A1.8	B1.4	A2.8	A3.4	A2.8	A3.5	<A1.0	A2.7	A3.3	<A1.0
27	A6.5	A1.4	A1.1	B1.3	A3.5	A5.5	A2.8	A5.8	A1.3	<A1.0	A4.3	<A1.0
28	A6.6	A1.3	A6.6	B1.3	A4.3	A6.5	A2.5	A4.4	A1.4	A1.6	A4.9	A1.8
29	A4.6		A6.1	B1.5	A2.8	A7.8	A2.1	A2.8	A1.3	A1.5	A4.0	A2.2
30	A1.2		A6.5	B1.3	A3.0	A7.2	A2.1	A1.7	A1.2	A3.1	A2.6	A4.9
31	<A1.0		A6.8		A2.1		A1.6	A4.5		A4.7		A4.8

Levels below B1.0 are unreliable.

ACTIVE PROMINENCES AND FILAMENTS

25
Dec 06

DECEMBER 2006

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
02	DSF	2319U	1440U	S38	E32	12	5.5	3	17	0	0	E	HOLL		
24	APR	0328	0448	S30	E90	12	31.2	2		0	0	E	LEAR		

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

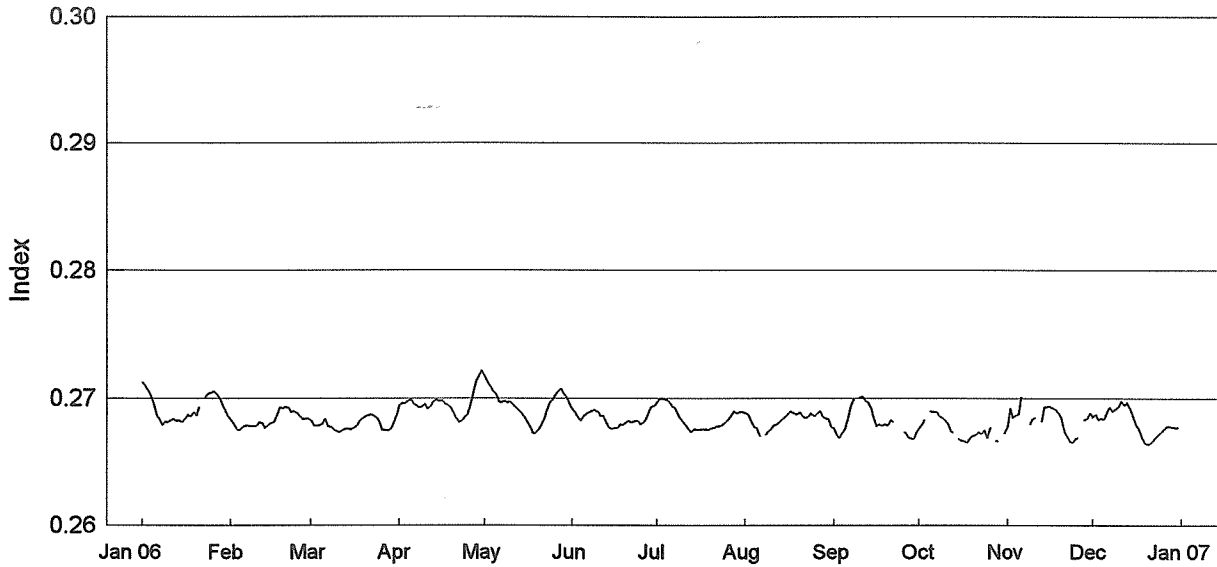
The remark "Bright Emission 1/3" indicates that bright emission was observed 1/3 of time.
The remark "Normal Emission 1/3" indicates that normal emission was observed 1/3 of time.

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

ABST = Abastumani	HOLL = Holloman	RAMY = Ramey
ATHN = Athens	KHAR = Kharkov	SVTO = San Vito
BUCA = Bucharest	LEAR = Learmonth	VORO = Voroshilov
CATA = Catania	PALE = Palehua	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 Jan 2006 - Dec 2006 Version 9.1



Day	Jan 06	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.2713	0.2683	0.2683	0.2695	0.2718	0.2691	0.2697	0.2689	0.2676	0.2676	0.2678	0.2685
2	0.2710	0.2680	0.2679	0.2696	0.2713	0.2689	0.2700	0.2687	0.2671	0.2680	0.2692	0.2687
3	0.2706	0.2676	0.2679	0.2696	0.2709	0.2685	0.2700	0.2682	0.2669	0.2683	0.2685	0.2683
4	0.2702	0.2675	0.2679	0.2698	0.2706	0.2682	0.2700	0.2678	0.2673	---	0.2687	0.2684
5	0.2695	0.2677	0.2680	0.2699	0.2703	0.2686	0.2698	0.2677	0.2676	0.2690	0.2688	0.2684
6	0.2687	0.2679	0.2684	0.2696	0.2697	0.2688	0.2694	0.2669	0.2685	0.2689	0.2701	0.2689
7	0.2683	0.2679	0.2678	0.2695	0.2697	0.2689	0.2693	---	0.2694	0.2689	---	0.2693
8	0.2679	0.2678	0.2678	0.2693	0.2698	0.2690	0.2688	0.2671	0.2700	0.2687	---	0.2690
9	0.2682	0.2678	0.2676	0.2693	0.2697	0.2691	0.2684	0.2674	---	0.2685	0.2680	0.2691
10	0.2681	0.2678	0.2674	0.2695	0.2697	0.2689	0.2682	0.2676	0.2701	0.2683	0.2684	0.2693
11	0.2683	0.2681	0.2673	0.2692	0.2695	0.2686	0.2679	0.2679	0.2701	0.2680	0.2685	0.2698
12	0.2684	0.2681	0.2675	0.2694	0.2693	0.2686	0.2676	0.2679	0.2699	0.2675	---	0.2694
13	0.2682	0.2677	0.2676	0.2697	0.2690	0.2681	0.2673	0.2682	0.2697	0.2672	0.2682	0.2697
14	0.2683	0.2679	0.2676	0.2699	0.2688	0.2677	0.2676	0.2683	0.2693	---	0.2693	0.2691
15	0.2681	0.2681	0.2676	0.2698	0.2686	0.2676	0.2675	0.2685	0.2685	0.2668	0.2694	0.2686
16	0.2684	0.2681	0.2677	0.2698	0.2682	0.2677	0.2676	0.2688	0.2678	0.2666	0.2694	0.2679
17	0.2687	0.2686	0.2678	0.2696	0.2678	0.2677	0.2676	0.2690	0.2680	0.2667	0.2693	0.2676
18	0.2686	0.2693	0.2682	0.2695	0.2673	0.2680	0.2676	0.2688	0.2679	0.2665	0.2691	0.2671
19	0.2689	0.2693	0.2684	0.2692	0.2672	0.2679	0.2675	0.2688	0.2680	0.2669	0.2688	0.2666
20	0.2686	0.2693	0.2686	0.2689	0.2675	0.2681	0.2677	0.2689	0.2679	0.2671	0.2685	0.2664
21	0.2694	0.2693	0.2687	0.2684	0.2678	0.2682	0.2677	0.2686	0.2683	0.2671	0.2674	0.2664
22	---	0.2689	0.2687	0.2681	0.2684	0.2681	0.2678	0.2685	0.2682	0.2673	0.2670	0.2667
23	0.2700	0.2690	0.2687	0.2682	0.2690	0.2682	0.2678	0.2685	---	0.2672	0.2666	0.2669
24	0.2704	0.2689	0.2685	0.2685	0.2697	0.2683	0.2679	0.2688	0.2677	0.2675	0.2665	0.2672
25	0.2704	0.2686	0.2681	0.2687	0.2699	0.2680	0.2681	0.2686	---	0.2669	0.2669	0.2673
26	0.2705	0.2684	0.2675	0.2695	0.2702	0.2681	0.2683	0.2687	0.2673	0.2678	0.2669	0.2676
27	0.2703	0.2684	0.2675	0.2704	0.2705	0.2684	0.2687	0.2690	0.2670	---	---	0.2678
28	0.2700	0.2684	0.2675	0.2712	0.2707	0.2689	0.2690	0.2686	0.2669	0.2667	0.2683	0.2678
29	0.2696		0.2676	0.2717	0.2704	0.2694	0.2688	0.2684	0.2668	0.2667	0.2684	0.2677
30	0.2690		0.2680	0.2721	0.2701	0.2694	0.2689	0.2684	0.2673	---	0.2689	0.2678
31	0.2686		0.2687		0.2696		0.2689	0.2678		0.2672		0.2677
Mean	0.2692	0.2630	0.2679	0.2695	0.2694	0.2694	0.2684	0.2683	0.2681	0.2675	0.2683	0.2681

Data at: <http://www.sec.noaa.gov/ftpmenu/sbu.html>

SOLAR CORONAL MASS EJECTIONS (CMEs) FROM SOHO/LASCO

<http://cdaw.gsfc.nasa.gov/>

Center for Solar Physics and Space Weather (CSPSW) – The Catholic University of America/NRL/NASA
DECEMBER 2006

First C2 Appearance		Central Width			Linear Fit			Measurement		Remarks	
Date	Time UT	Position Angle degree	Angular Width degree	Speed km/s	Initial km/s	Final km/s	20R km/s	Accel m/s ²	Position Angle degree		
2006/12/02	05:12:04	117	28	206		231	672	17.3*	117	Very Poor; Only C2	
2006/12/02	06:12:04	287	38	512		737	2227	205.5*	287		Only C2
2006/12/02	07:12:04	82	46	131		29	0	-61.4*	91		Very Poor; Only C2
2006/12/03	06:48:04	108	34	360		341	0	-13.0*	106	Poor Event; Only C2	
2006/12/04	04:36:05	104	54	574		480	0	-61.7*	94	Only C2	
2006/12/06	20:12:05	Halo	360	----		---	---	---	135	Only 1 pt; Only C2	
2006/12/06	22:12:04	133	79	935		693	579	-43.6*	132		
2006/12/07	19:37:56	128	78	830		805	816	-2.7	127		
2006/12/08	19:13:10	284	40	611		679	705	8.7	286		
2006/12/09	06:47:00	124	14	230		309	731	21.1*	122	Poor Event; Only C2	
2006/12/09	14:36:04	95	7	594		570	0	-17.6*	93		Only C2
2006/12/09	19:36:06	232	14	215		221	265	1.1*	235	Poor Event; Only C2	
2006/12/10	13:00:04	287	23	155		135	0	-26.9*	285	Very Poor; Only C2 Only 3 points	
2006/12/11	02:00:05	241	25	95		87	0	-1.0*	239	Very Poor; Only C2	
2006/12/11	09:36:04	93	51	315		438	669	16.9*	81		
2006/12/11	22:12:04	288	82	543		523	531	-1.4	281		
2006/12/12	13:12:04	119	8	425		322	0	-12.8*	114	Poor Event	
2006/12/12	20:28:05	193	50	474		643	1284	64.7*	198		
2006/12/12	21:47:08	204	75	146		271	566	13.3*	207		
2006/12/13	02:54:04	Halo	360	1774		1622	1573	-61.4*	193		
2006/12/13	23:48:24	233	40	388		370	294	-3.3*	237		
2006/12/14	02:58:36	65	32	434		565	540	8.0	70		
2006/12/14	20:30:04	237	16	316		252	0	-18.6*	239		
2006/12/14	22:30:04	Halo	360	1042		1039	1041	-0.4	248		
2006/12/15	08:30:04	228	16	373		217	0	-21.6*	233		
2006/12/16	05:30:04	242	21	314		---	---	---	244	Very Poor; Only C2 Only 2 points	
2006/12/16	09:30:13	118	39	70		163	212	1.9*	108		
2006/12/17	01:54:04	33	6	756		1120	2936	353.5*	40	Poor Event; Only C2 Only 3 points	
2006/12/17	15:30:04	243	44	785		1238	1680	117.5	244		
2006/12/18	03:54:04	301	5	496		372	0	-120.8*	301	Very Poor; Only C2 Only 3 points	
2006/12/18	23:06:04	89	18	225		365	1544	97.3*	87	Very Poor; Only C2 Only 3 points;	
2006/12/19	04:54:04	67	44	234		329	693	19.1*	74		
2006/12/19	12:30:04	65	62	119		231	404	7.1*	59		
2006/12/19	18:31:57	231	13	337		426	514	9.5*	234		
2006/12/20	13:31:44	119	40	136		165	302	3.4*	118		
2006/12/20	16:30:04	291	11	512		645	1043	40.6*	287		

SOLAR CORONAL MASS EJECTIONS (CMEs) FROM SOHO/LASCO

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Center for Solar Physics and Space Weather (CSPSW) – The Catholic University of America/NRL/NASA
DECEMBER 2006

First C2 Appearance		Central Width		Linear Fit	—2nd order speed—			Accel	Measurement	Remarks
Date	Time UT	Position Angle degree	Angular Width degree	Speed km/s	Initial km/s	Final km/s	20R km/s	m/s ²	Position Angle degree	
2006/12/20	22:06:04	226	5	342		289	0	-30.4*	228	Poor Event; Only C2 Only 3 points
2006/12/21	22:06:04	24	4	314		224	0	-37.6*	29	Very Poor; Only C2 Only 3 points
2006/12/22	00:30:04	230	24	231		287	748	22.3*	234	Only C2
2006/12/23	07:31:43	101	62	76		141	238	2.4*	92	Very Poor Event
2006/12/24	15:30:04	179	182	339		346	353	0.6	181	Partial Halo
2006/12/24	21:30:07	92	48	302		187	0	-27.6*	92	
2006/12/25	06:30:04	102	17	231		253	500	8.6*	102	Poor Event; Only C2
2006/12/25	08:30:05	184	3	318		391	1242	61.8*	185	Poor Event; Only C2 Only 3 points
2006/12/25	10:30:22	106	31	251		297	451	6.8*	101	Poor Event
2006/12/26	05:54:18	92	29	209		83	0	-67.2*	88	Very Poor; Only C2
2006/12/26	12:54:04	25	4	570		---	---	---	28	Very Poor; Only C2 Only 2 points
2006/12/27	02:06:04	92	40	189		181	0	-1.7*	87	Only C2
2006/12/28	00:30:04	140	5	130		218	829	28.6*	139	Very Poor; Only C2
2006/12/28	18:54:05	350	9	379		---	---	---	345	Very Poor; Only C2 Only 2 points
2006/12/29	21:08:03	267	73	236		369	317	3.7	269	
2006/12/30	03:54:07	267	67	249		289	427	5.7*	275	
2006/12/30	18:30:04	253	43	142		332	384	6.2*	250	
2006/12/30	20:30:04	34	2	434		---	---	---	37	Poor Event; Only C2 Only 2 points
2006/12/31	20:30:04	80	29	138		204	555	12.4*	78	Very Poor; Only C2

* Acceleration is uncertain due to either poor height measurement or a small number of height-time measurements (See Section 3.4 of Yashiro et al. 2004 for details).