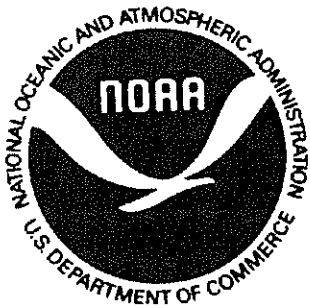




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Number 590

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H α SOLAR FLARES

APRIL 1993

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo Day	Dur (Min)	Imp Opt Xray	Obs See Type	Time (UT)	Area Measurement		Remarks
														Apparent (10-6 Disk)	Corr (Sq Deg)	
			01 0002		0039			No Flare Patrol								
			01 0117		0126			No Flare Patrol								
			01 0133		0238			No Flare Patrol								
0001		01	04238	04332	0504	S12	E20	7463	04	2.7	41	1B C 3.9		189	2.6	EFU
	LEAR	01	0423	0433	0504	S11	E19	7463	04	2.6	41	1W C 3.9	3	138		UF
	TACH	01	0431	0435	0505	S13	E20	7463	04	2.7	34	1B	3	240	2.6	E
0002	KANZ	01	0742	0746	0750	S12	E17	7463	04	2.6	8	SF	2			
0003		01	0842	08422	0852	S12	E16	7463	04	2.6	10	SF B 4.0		17		
	KANZ	01	0842	0842	0854	S12	E17	7463	04	2.6	12	SF	2			
	SVTO	01	0842	0844	0850	S11	E16	7463	04	2.6	8	SF B 4.0	3	17		
0004	KANZ	01	0858	0902	0910	N14	W66		03	27.5	12	SF	2			
0005	KANZ	01	1206	1210	1222	S10	E57	7469	04	5.8	16	SF	2			
0006		01	13342	13371	1342	S12	E13	7463	04	2.5	8	SF B 3.0		14		F
	KANZ	01	1334	1338	1342	S12	E13	7463	04	2.5	8	SF	2			
	SVTO	01	1336	1337	1342	S11	E13	7463	04	2.5	6	SF B 3.0	3	14		F
0007		01	15426	15491	1559	N08	W45	7467	03	29.4	17	SF B 4.3		42		F
	KANZ	01	1542	1550	1602	N08	W46	7467	03	29.3	20	SF	2			
	HOLL	01	1543	1549	1603	N08	W41	7467	03	29.7	20	SF B 4.3	3	62		F
	RAMY	01	1548	1549	1553	N09	W47	7467	03	29.2	5	SF	3	22		
0008		01	16344	16381	1658	N05	W06	7461	04	1.2	24	SF B 9.6		36		F
	KANZ	01	1634	1638	1658D	N04	W05	7461	04	1.3	24D	SF	2			
	HOLL	01	1634	1639	1712	N04	W07	7461	04	1.2	38	SF B 9.6	3	51		F
	RAMY	01	1638	1639	1644	N06	W07	7461	04	1.2	6	SF	3	22		F
0009		01	17051	17071	1716	N10	W47	7467	03	29.3	11	SF B 8.0		35		F
	HOLL	01	1705	1708	1717	N10	W47	7467	03	29.3	12	SF B 8.0	3	42		F
	RAMY	01	1706	1707	1716	N09	W47	7467	03	29.3	10	SF	3	28		F
			01 2230		2233			No Flare Patrol								
			01 2308		2312			No Flare Patrol								
0010		02	1034	1038	1058	S11	E41	7468	04	5.5	24	SF				
	KANZ	02	1034	1038	1050	S10	E38	7468	04	5.3	16	SF	2			
	KANZ	02	1034	1038	1106	S12	E44	7468	04	5.7	32	SF	2			
			02 1935		1945			No Flare Patrol								
			02 1947		1956			No Flare Patrol								
			02 2027		2052			No Flare Patrol								
			02 2141		2156			No Flare Patrol								
0011		03	0705	07061	0722	S13	W09	7463	04	2.6	17	SN C 1.2		32	0.3	F
	LEAR	03	0705	0706	0718	S13	W09	7463	04	2.6	13	SF C 1.2	3	33		F
	HTPR	03	0705	0707	0726	S13	W09	7463	04	2.6	21	SN		30	0.3	
			03 1927		1933			No Flare Patrol								
			03 1938		2011			No Flare Patrol								
			03 2034		2052			No Flare Patrol								
			03 2141		2210			No Flare Patrol								
			03 2359		2400			No Flare Patrol								
			04 0000		0015			No Flare Patrol								
0012	SVTO	04	1232	1233	1245	S21	W47	7466	03	31.9	13	SF B 3.3	3	25		
0013		04	2123	21253	2136	S09	E38	7470	04	7.7	13	SF		24		H
	HOLL	04	2123E	2125	2133	S10	E37	7470	04	7.7	10D	SF	2	21		H
	PALE	04	2123	2128	2140	S08	E38	7470	04	7.7	17	SF	3	27		
			04 2217		2234			No Flare Patrol								
			04 2310		2400			No Flare Patrol								
			05 0000		0007			No Flare Patrol								
			05 1135		1139			No Flare Patrol								
			05 1216		1304			No Flare Patrol								

H α SOLAR FLARES5
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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	NOAA/ USAF			CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks	
						Lat	CMD	Region								Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)		
			05 1336		1427	No Flare Patrol														
			05 2017		2023	No Flare Patrol														
			05 2029		2056	No Flare Patrol														
0014	HOLL	05	2057	2058	2109	S12	E16	7469	04	7.1	12	SF	B	9.4	3	E	18		F	
			05 2206		2213	No Flare Patrol														
0015	PALE	05	2218E	2219U	2222	S20	W62	7466	04	1.2	40	SF	B	9.7	3	E	46			
			05 2251		2328	No Flare Patrol														
			05 2335		2344	No Flare Patrol														
0016	LEAR	06	0234	0238	0257	S07	W14	7465	04	5.0	23	SF	C	2.9	2	E	79		F	
0017	HTPR	06	0616E	0631	0638	S06	W17	7465	04	5.0	220	SF			C	0631	10	0.1	T	
0018	RAMY	06	1119	1125	1136	S09	W17	7465	04	5.2	17	SF			3	E	22		H	
0019		06	1150	1156	1252	S07	W18	7465	04	5.1	62	1F	C	5.6			111		EF	
	RAMY	06	1150	1156	1252	S08	W18	7465	04	5.1	62	1F	C	5.6	3	E	111		FE	
	HTPR	06	1200E		1232D	S06	W17	7465	04	5.2	320				C					
0020		06	12018	1202*	1218	S11	E12	7469	04	7.4	17	SF					18		F	
	RAMY	06	1201	1202	1208	S11	E11	7469	04	7.3	7	SF			3	E	14		F	
	RAMY	06	1209	1219	1227	S10	E11	7469	04	7.3	18	SF			3	E	21		F	
	HTPR	06	1227E		1232D	S11	E13	7469	04	7.5	50				C					
0021	RAMY	06	1244	1245	1254	S11	E08	7469	04	7.1	10	SF			3	E	12		F	
0022	RAMY	06	1355	1356	1402	S11	E09	7469	04	7.2	7	SF			3	E	14		F	
0023	HTPR	06	1515	1524	1541D	S10	E15	7469	04	7.8	260	SF			C	1524	20	0.2		
0024	PALE	06	1846	1851	1902D	S12	E08	7469	04	7.4	160	SF	C	4.4	3	E	75			
			06 2036		2157	No Flare Patrol														
0025		06	2315	2319	2329	S12	E07	7469	04	7.5	14	SF					86	1.6	DIJ	
	VORO	06	2315	2319	2329	S11	E04	7469	04	7.3	14	SF			2	C	2319	152	1.6	DIJ
	PALE	06	2319E	2319U	2325D	S14	E10	7469	04	7.7	60	SF			2	E	21			
0026		06	23422	2345	2357	S12	E04	7469	04	7.3	15	1B					286	3.0	EIJ	
	VORO	06	2342	2345	2401	S11	E04	7469	04	7.3	19	1N			2	C	2345	224	2.3	EIJ
	MITK	06	2344	2345	2353	S12	E04	7469	04	7.3	9	1B				C	2345	348	3.6	
0027	WATU	07	0144	0147	0151	S11	E03	7469	04	7.3	7	SF			C	0147	10	0.1	D	
0028	WATU	07	0236	0239	0242	S11	E02	7469	04	7.2	6	SN			C	0239	20	0.2	E	
0029		07	0416	04164	0429	S12	E02	7469	04	7.3	13	SN					49	0.5	EF	
	WATU	07	0416	0416	0431	S11	E01	7469	04	7.2	15	SB			C	0421	50	0.5	EF	
	URUM	07	0416	0420	0427	S12	E02	7469	04	7.3	11	SF			C		48	0.5	E	
0030		07	05031	05056	0518	S12	E01	7469	04	7.3	15	SN					54	0.6	DE	
	WATU	07	0503	0505	0505D	S11	E01	7469	04	7.3	20	SF			P	0505	20	0.2	E	
	MITK	07	0504	0511	0518	S12	E01	7469	04	7.3	14	SB			C	0511	89	0.9	D	
0031		07	0615	0616*	0641	S11	E00	7469	04	7.3	26	SF	C	1.4			25	0.2	FKT	
	SVTO	07	0615	0616	0630	S12	E00	7469	04	7.3	15	SF	C	1.4	3	E	31		F	
	HTPR	07	0626E	0636	0647	S10	E00	7469	04	7.3	210	SF			C	0636	20	0.2	FKT	
	HTPR	07	0626E	0643	0647	S10	E00	7469	04	7.3	210	SF			C	0643	25	0.2	T	
0032	HTPR	07	0657E	0716	0730	S10	E00	7469	04	7.3	330	SF			C	0716	20	0.2	FKT	
0033		07	07583	08061	0818	S10	W08	7469	04	6.7	20	SF	C	1.3			39		F	
	KANZ	07	0758	0806	0814	S10	W10	7469	04	6.6	16	SF			2	C				
	SVTO	07	0801	0807	0821	S11	W05	7469	04	6.9	20	SF	C	1.3	3	E	39		F	

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Apr 93

H α SOLAR FLARES

APRIL 1993

Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0034		07 0919	09234	0932	S12	W02	7469	04	7.2	13	SF					25		F
	KANZ	07 0919	0923	0932	S13	W01	7469	04	7.3	13	SF		2	C				
	SVTO	07 0919	0927	0932	S12	W02	7469	04	7.2	13	SF		3	E		25		F
0035		07 09371	09411	1000	S10	W30	7465	04	5.1	23	SF C 4.1					62		EF
	KANZ	07 0937	0941	1002	S10	W30	7465	04	5.1	25	SF		2	C				
	SVTO	07 0938	0942	0958	S10	W31	7465	04	5.1	20	SF C 4.1		3	E		62		FE
0036		07 09491	09501	1014	S12	W02	7469	04	7.2	25	SF					19		F
	SVTO	07 0949	0951	1014	S12	W02	7469	04	7.2	25	SF		3	E		19		F
	KANZ	07 0950	0950	1011D	S13	W02	7469	04	7.2	21D	SF		2	C				
0037		07 1042	10451	1056	S12	W01	7469	04	7.4	14	SN C 3.0					41		E
	SVTO	07 1042	1045	1054	S12	W01	7469	04	7.4	12	SN C 3.0		3	E		41		E
	KANZ	07 1042	1046	1058	S13	W01	7469	04	7.4	16	SN		2	C				
0038		07 11103	11151	1119	S12	W03	7469	04	7.2	9	SF					16		F
	LARI	07 1104E	1104U	1104	S11	W02	7469	04	7.3	9D	SF			P				
	RAMY	07 1110	1115	1132	S12	W04	7469	04	7.2	22	SF		3	E		18		F
	SVTO	07 1113	1116	1121	S12	W04	7469	04	7.2	8	SF		3	E		15		
0039		07 11414	1154	1201	S12	W02	7469	04	7.3	20	SN C 3.5					49	0.5	EFT
	RAMY	07 1141	1154	1201	S12	W05	7469	04	7.1	20	SF C 3.5		3	E		48		F
	KANZ	07 1142	1154	1202	S13	W02	7469	04	7.3	20	SN		2	C				
	SVTO	07 1145	1154	1201	S12	W03	7469	04	7.3	16	SN		3	E		48		E
	HTPR	07 1146E	1154	1200	S10	E00	7469	04	7.5	14D	SF			C	1154	50	0.5	T
0040		07 1255	1255	1306	S13	W03	7469	04	7.3	11	SF					17		
	KANZ	07 1255	1255	1259	S13	W02	7469	04	7.4	4	SF		2	C				
	HOLL	07 1303E	1303U	1312	S13	W04	7469	04	7.2	9D	SF		1	E		17		
0041		07 13421	1343	1346	S12	W03	7469	04	7.3	4	SF C 1.2					30		FH
	RAMY	07 1342	1343	1346	S12	W04	7469	04	7.3	4	SF		3	E		31		F
	SVTO	07 1343	1343	1347	S12	W03	7469	04	7.3	4	SF C 1.2		3	E		29		H
	KANZ	07 1343	1343	1351D	S12	W03	7469	04	7.3	8D	SF		2	C				
0042		07 1341*	13575	1443	S12	W05	7469	04	7.2	62	SN C 7.6					123	2.0	EFT
	HOLL	07 1341	1358	1458	S12	W07	7469	04	7.0	77	1N		3	E		167		F
	SVTO	07 1354	1401	1455D	S12	W07	7469	04	7.0	61D	SN		3	E		84		E
	RAMY	07 1356	1357	1426	S12	W06	7469	04	7.1	30	SF C 7.6		3	E		42		FE
	HTPR	07 1358	1402	1500	S10	E00	7469	04	7.6	62	SN			C	1402	200	2.0	T
	KANZ	07 1403E	1403U	1427	S12	W07	7469	04	7.0	24D	SF		2	C				
0043	PALE	08 0054E	0055U	0103D	S13	W11	7469	04	7.2	9D	SF		3	E		36		F
0044		08 0123	01252	0137	S10	W11	7469	04	7.2	14	SF B 8.8					63	0.3	F
	PALE	08 0113E	0126U	0135D	S12	W10	7469	04	7.3	22D	1F B 8.8		2	E		122		F
	LEAR	08 0123	0125	0133	S12	W10	7469	04	7.3	10	SN B 8.8		3	E		44		F
	YUNN	08 0125E	0127	0141	S07	W13	7469	04	7.1	16D	SF			P		24	0.3	
0045	YUNN	08 0150	0237	0313	S08	W13	7469	04	7.1	83	SN			C		110	1.2	
0046	LEAR	08 0217	0220	0231	S13	W10	7469	04	7.3	14	SF		3	E		27		F
0047		08 0211	03201	0430	S04	W42	7465	04	4.9	139	1F C 5.9					126	1.8	EF
	LEAR	08 0211	0320	0440	S06	W41	7465	04	5.0	149	1F C 5.9		3	E		124		F
	URUM	08 0224E	0321	0420	S02	W43	7465	04	4.9	116D	SF			C		129	1.8	E
0048	WATU	08 0225	0231	0231D	S01	W40	7465	04	5.1	6D	SN			P	0231	50	0.7	E
0049	TACH	08 0338E		0516	S02	W38	7465	04	5.3	98D	2B		3	C	0350	877	11.6	E
0050	WATU	08 0537	0540	0543	S11	W19	7469	04	6.8	6	SN			C	0540	10	0.1	D
0051	LEAR	08 0655	0702	0709	S09	W45	7465	04	4.9	14	SF		3	E		27		
0052	RAMY	08 1132	1132	1140	S08	W15	7470	04	7.3	8	SF		3	E		10		
0053	HTPR	08 1229	1232	1235	S10	W13	7469	04	7.5	6	SF			C	1232	50	0.5	

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0054	RAMY	08	1229	1232	1235	S12	W23	7469	04	6.8	6	SF		3	E		30		
0055	RAMY	08	1332	1335	1341	S12	W23	7469	04	6.8	9	SF	C 2.1	4	E		14		
0056		08	1446*	15281	1538	S08	W17	7470	04	7.3	52	SF	C 1.3				56	0.6	EF
	HOLL	08	1446	1528	1552	S06	W18	7470	04	7.3	66	SF		3	E		62		F
	KANZ	08	1517	1529	1533	S07	W19	7470	04	7.2	16	SF		2	C				
	HTPR	08	1524	1529	1533	S10	W13	7470	04	7.7	9	SN			C	1529	60	0.6	E
	RAMY	08	1524	1529	1534	S07	W19	7470	04	7.2	10	SF	C 1.3	4	E		46		F
0057	HOLL	08	1449	1545	1553	S11	W19	7469	04	7.2	64	SF		3	E		55		F
0058	HOLL	08	1553	1614	1625	S06	W18	7470	04	7.3	32	SF	B 9.9	3	E		23		F
0059	KANZ	08	1601	1605	1613	S09	W50	7468	04	4.9	12	SF		2	C				
0060		08	19316	19582	2030	S11	W21	7469	04	7.2	59	SF	C 6.5				90		EF
	HOLL	08	1931	2000	2033	S11	W22	7469	04	7.1	62	SF		3	E		93		F
	RAMY	08	1937	1958	2026	S10	W21	7469	04	7.2	49	SF	C 6.5	3	E		54		F
	PALE	08	1939E	1948U	2126D	S13	W21	7469	04	7.2	107D	1N		3	E		124		FE
0061		08	20341	20374	2148	N17	E62		04	13.6	74	1N	C 9.2				95		FSU
	HOLL	08	2034	2037	2207	N16	E62		04	13.5	93	1N	C 9.2	3	E		125		US
	RAMY	08	2035	2041	2128	N18	E62		04	13.6	53	SF		3	E		65		F
0062		08	21091	21259	2143	S06	W51	7465	04	5.1	34	SF					47		F
	HOLL	08	2109	2133	2145	S03	W52	7465	04	5.0	36	SF		3	E		43		F
	RAMY	08	2110	2134	2141	S06	W52	7465	04	5.0	31	SF		3	E		36		F
	PALE	08	2123E	2125	2204D	S09	W50	7465	04	5.1	41D	SF		3	E		63		F
0063	HOLL	08	2204	2210	2223	S06	W23	7470	04	7.2	19	SF		3	E		25		F
		08	2215		2229	No Flare Patrol													
		08	2304		2335	No Flare Patrol													
0064	PALE	08	2331	2342	2352	S04	W57	7465	04	4.7	21	SF		3	E		79		
0065		08	23348	23349	2344	N04	W21	7472	04	7.4	10	SF					22		F
	PALE	08	2334	2334	2338	N04	W21	7472	04	7.4	4	SF		3	E		21		F
	PALE	08	2342	2343	2350	N04	W21	7472	04	7.4	8	SF		3	E		22		
0066	PALE	08	2340	2348	2350	S08	W22	7470	04	7.3	10	SF		3	E		16		
0067	PALE	08	2359E	0000U	2409D	S08	W22	7470	04	7.3	10D	SF		3	E		23		
0068		09	00175	00185	0025	N04	W22	7472	04	7.4	8	SF					21		
	PALE	09	0017	0018	0021	N04	W22	7472	04	7.4	4	SF		3	E		23		
	PALE	09	0022	0023	0029	N04	W22	7472	04	7.4	7	SF		3	E		19		
0069	PALE	09	0022	0028	0031	S08	W22	7470	04	7.4	9	SF		3	E		13		
0070	KANZ	09	0741	0745	0753	S09	W26	7470	04	7.4	12	SF		2	C				
0071		09	08258	08295	0835	S10	W27	7470	04	7.3	10	SF					21		F
	KANZ	09	0825	0833	0837	S10	W27	7470	04	7.3	12	SF		2	C				
	LEAR	09	0826	0829	0831	S09	W27	7470	04	7.3	5	SF		3	E		27		
	SVTO	09	0833	0834	0838	S10	W26	7470	04	7.4	5	SF		3	E		15		F
0072	KANZ	09	1105	1105	1109	S12	W37	7469	04	6.7	4	SF		2	C				
0073		09	14563	15002	1507	S07	W30	7470	04	7.4	11	SF					18		F
	HOLL	09	1456	1502	1509	S06	W30	7470	04	7.4	13	SF		3	E		22		F
	SVTO	09	1459	1500	1505	S08	W30	7470	04	7.4	6	SF		3	E		13		F
0074		09	16161	1617	1622	S10	W44	7469	04	6.4	6	SF					16		F
	HOLL	09	1616	1617	1623	S08	W44	7469	04	6.4	7	SF		3	E		21		F
	SVTO	09	1617	1617	1622	S11	W44	7469	04	6.4	5	SF		3	E		11		
0075	HOLL	09	1814	1816	1829	S06	W33	7470	04	7.3	15	SF		3	E		35		F

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Grp #	Sta	Start Day (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
															Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
		09 1814		1832			No Flare Patrol											
		09 1854		1904			No Flare Patrol											
		09 1909		1949			No Flare Patrol											
		09 1953		2000			No Flare Patrol											
0076	HOLL	09 2011	2022	2034	S05	W35	7470	04	7.2	23	SF C	1.2	3	E		50		F
0077		09 21231	2125	2136	S06	W36	7470	04	7.2	13	SN C	2.1				62		F
	HOLL	09 2123	2125	2136	S06	W35	7470	04	7.3	13	SN C	2.1	3	E		70		
	RAMY	09 2124	2125	2135	S07	W36	7470	04	7.2	11	SF		3	E		53		F
		09 2143		2236			No Flare Patrol											
0078	VORO	09 2317E		2331	S15	W40	7469	04	6.9	14D	1F		1	C	2317	170	2.3	DIJ
0079	PALE	10 0121	0133	0137	N03	W38	7472	04	7.2	16	SF		3	E		43		
0080	LEAR	10 0137	0140	0200	S09	W69	7465	04	4.9	23	SF C	1.0	3	E		61		F
		10 0254		0406			No Flare Patrol											
0081	PALE	10 0326	0328	0335	S04	W70	7465	04	4.9	9	SF		3	E		23		
0082	BUCA	10 0845	0845U	0905	S07	W43	7470	04	7.1	20	SF			P	0845	129	1.8	E
		10 1202		1212			No Flare Patrol											
0083	RAMY	10 1224	1226	1233	N06	W43	7472	04	7.3	9	SF B	8.7	3	E		31		F
0084	RAMY	10 1247	1249	1256	N06	W43	7472	04	7.3	9	SF C	1.1	3	E		16		F
0085	HOLL	10 1510	1517	1523D	N06	W46	7472	04	7.2	13D	SF		3	E		30		
		10 1605		1613			No Flare Patrol											
0086	HOLL	10 1640	1641	1650	S02	W80	7465	04	4.7	10	SF C	1.3	3	E		17		
0087	RAMY	10 1655	1655	1701	N05	W47	7472	04	7.2	6	SF		3	E		18		
0088		10 17282	17332	1742	N05	W47	7472	04	7.2	14	SF					62		
	PALE	10 1728	1733	1745	N04	W47	7472	04	7.2	17	SF		3	E		81		
	RAMY	10 1730	1735	1740	N06	W47	7472	04	7.2	10	SF		3	E		42		
0089		10 17391	17444	1821	S06	W48	7470	04	7.1	42	1N C	6.6				135		FU
	RAMY	10 1739	1747	1823	S07	W47	7470	04	7.2	44	1N C	6.6	3	E		146		UF
	HOLL	10 1739	1748	1820	S04	W48	7470	04	7.1	41	1N		3	E		150		F
	PALE	10 1740	1744	1819	S08	W48	7470	04	7.1	39	1N		3	E		109		UF
		10 2038		2048			No Flare Patrol											
		10 2054		2140			No Flare Patrol											
0090	HOLL	10 2120	2120	2124	S01	W83	7465	04	4.7	4	SF C	4.4	3	E		56		
		10 2156		2219			No Flare Patrol											
0091		10 2323*	2324*	2340	S10	W52	7469	04	7.1	17	1N C	1.4				124	3.3	EF
	HOLL	10 2323	2324	2329	S07	W54	7469	04	6.9	6	SF C	1.4	3	E		22		
	HOLL	10 2331	2334	2354	S08	W51	7469	04	7.1	23	1N C	9.1	3	E		116		FE
	MITK	10 2333	2334	2338	S09	W53	7469	04	7.0	5	1B			C	2334	191	3.3	
	PALE	10 2333	2340U	2346D	S15	W52	7469	04	7.0	13D	1N		3	E		169		F
0092		11 00216	00281	0058	S12	W53	7469	04	7.0	37	1N C	6.2				162	3.1	EFHIJ
	HOLL	11 0021	0029	0200	S09	W55	7469	04	6.9	99	1B		3	E		132		FH
	PALE	11 0024	0028	0045	S13	W54	7469	04	6.9	21	SN C	6.2	3	E		96		EH
	MITK	11 0027	0029	0034	S09	W54	7469	04	7.0	7	1B			C	0029	187	3.2	E
	WATU	11 0028E	0028	0034	S12	W55	7469	04	6.9	6D	SN			P	0028	20	0.4	E
	VORO	11 0030E		0057	S15	W48	7469	04	7.4	27D	1N		1	C	0032	376	5.8	EIJ
0093	MITK	11 0531	0532	0533	S06	W59	7470	04	6.8	2	SN			C	0532	40	0.8	D

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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	Time (UT)	Area Measurement		Remarks
																	Apparent (10-6 Disk)	Corr (Sq Deg)	
0094	MITK	11	0613	0613	0616	S06	W60	7470	04	6.8	3	SB			C	0613	83	1.7	E
0095	MITK	11	0619	0619	0620	S06	W59	7470	04	6.8	1	SN			C	0619	14	0.3	
		11	0849		0939	No Flare Patrol													
0096	RAMY	11	1202	1206	1213	S10	W59	7469	04	7.1	11	SF		3	E		10		
0097	SVTO	11	1345	1345	1349	S12	W63	7469	04	6.8	4	SF		3	E		11		F
0098	HOLL	11	1657	1658	1706	N07	W62	7472	04	7.1	9	SF		1	E		10		
0099	PALE	12	0013	0013	0025	N07	W66	7472	04	7.1	12	SF		3	E		23		
0100	VORO	12	0137	0142	0159D	N31	W66		04	6.8	22D	1F		1	C	0142	188		EIJ
0101	VORO	12	0140	0144	0155	S11	W88	7465	04	5.4	15	1N		1	C	0144	108		DIJ
0102		12	0141*	01467	0452	S10	W76	7469	04	6.3	191	SF					28		DIJ
	WATU	12	0141	0146	0452	S10	W78	7469	04	6.2	191	SF			C	0146	20		D
	VORO	12	0152	0153	0159D	S11	W73	7469	04	6.6	7D	SF		1	C	0153	36		DIJ
0103	PALE	12	0306	0307	0313	N07	W68	7472	04	7.0	7	SF		2	E		29		
0104	PALE	12	0320	0327	0343D	S12	W67	7469	04	7.1	23D	SF	C 1.5	3	E		44		
0105	PALE	12	0323	0330	0348D	N07	W68	7472	04	7.0	25D	SF		3	E		28		
0106	HOLL	12	1805	1809	1815	S05	W74	7469	04	7.2	10	SF	B 7.6	3	E		34		
		12	1932		1937	No Flare Patrol													
		12	2027		2032	No Flare Patrol													
		12	2034		2050	No Flare Patrol													
		12	2052		2112	No Flare Patrol													
		12	2114		2126	No Flare Patrol													
		12	2200		2237	No Flare Patrol													
		12	2239		2243	No Flare Patrol													
		12	2245		2327	No Flare Patrol													
0107	PALE	12	2305	2309	2324	N01	W76	7472	04	7.3	19	SF	C 1.4	3	E		73		F
		12	2349		2354	No Flare Patrol													
0108	PALE	13	0143E	0147U	0205D	N02	W77	7472	04	7.3	22D	SF	B 7.4	2	E		59		
		13	0151		0152	No Flare Patrol													
		13	1932		2131	No Flare Patrol													
		13	2143		2214	No Flare Patrol													
		13	2228		2243	No Flare Patrol													
		13	2245		2322	No Flare Patrol													
		13	2332		2336	No Flare Patrol													
		14	1950		2030	No Flare Patrol													
		14	2038		2042	No Flare Patrol													
		14	2054		2056	No Flare Patrol													
0109	HOLL	15	1500	1504	1509	N04	E44	7475	04	18.9	9	SF		3	E		19		
		15	1924		1935	No Flare Patrol													
		15	2004		2058	No Flare Patrol													
		15	2108		2156	No Flare Patrol													
		16	0353		0359	No Flare Patrol													
		16	0426		0430	No Flare Patrol													
0110		16	0616E	0621	0633	N05	E35	7475	04	18.9	17D	SN	B 2.8				13	0.1	E
	HTPR	16	0616E	0621	0636	N06	E35	7475	04	18.9	20D	SF			C	0621	10	0.1	
	SVTO	16	0619E	0621	0630	N05	E35	7475	04	18.9	11D	SF	B 2.8	3	E		16		
	ISTA	16	0625E		0632	N05	E35	7475	04	18.9	7D	SB							E

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Apparent (10 ⁻⁶ Disk)	Measurement Corr (Sq Deg)	Remarks
0111		16	07124	07242	0834	S14	E30	7485	04	18.6	82	SF					30	0.3	E
	HTPR	16	0712	0726	0847	S13	E30	7485	04	18.6	95	SF			C	0726	30	0.3	E
	KANZ	16	0716	0724	0820	S14	E31	7485	04	18.6	64	SF		2	C				
0112		16	1022	1024	1041	N06	E34	7475	04	19.0	19	SF					20	0.2	
	HTPR	16	1022	1024	1036	N06	E35	7475	04	19.0	14	SF			C	1024	20	0.2	
	LARI	16	1046E	1046U	1046	N07	E34	7475	04	19.0	14D	SF			P				
0113	RAMY	16	1601	1603	1610	N09	E79	7477	04	22.6	9	SF	B 4.1	3	E		25		
0114	PALE	16	1733E	1746U	1938D	N10	E81	7477	04	22.8	125D	SF		3	E		30		
		16	1832		1846			No Flare Patrol											
		16	1848		1856			No Flare Patrol											
		16	1901		1908			No Flare Patrol											
		16	1918		1927			No Flare Patrol											
		16	2032		2036			No Flare Patrol											
		16	2211		2223			No Flare Patrol											
		16	2320		2335			No Flare Patrol											
		16	2337		2344			No Flare Patrol											
		17	0303		0305			No Flare Patrol											
0115	PALE	17	0309	0314	0329	N15	W60	7473	04	12.6	20	SF	B 3.2	3	E		13		
		17	0316		0323			No Flare Patrol											
0116	HTPR	17	0544E	0615	0708	N15	W68	7473	04	12.1	84D	SF			C	0615	20		T
0117	HTPR	17	0549	0612	0623	N10	E70	7477	04	22.5	34	SF			C	0612	20		
0118	HTPR	17	0649	0658	0702	S07	W09	7478	04	16.6	13	SF			C	0658	10		
0119	HTPR	17	0739E	0739	0809	N10	E70	7477	04	22.6	30D	SN			C	0739	30		T
0120	KANZ	17	0935E	0935U	0939	N09	E76	7477	04	23.1	4D	SF		2	C				
0121		17	1005	1009	1038	N15	W66	7473	04	12.4	33	SN	C 1.6				32		T
	HTPR	17	1005	1009	1052	N15	W68	7473	04	12.3	47	SN			C	1009	30		T
	SVTO	17	1011E	1012U	1023	N15	W64	7473	04	12.6	12D	SF	C 1.6	2	E		33		
0122		17	1242	12453	1255	N10	E74	7477	04	23.1	13	SF					31		
	SVTO	17	1242	1245	1307D	N11	E75	7477	04	23.2	25D	SF		3	E		34		
	KANZ	17	1242	1246U	1246D	N09	E74	7477	04	23.1	4D	SF		2	C				
	RAMY	17	1242	1248	1255	N10	E74	7477	04	23.1	13	SF		3	E		28		
0123		17	14421	14451	1456	N10	E72	7477	04	23.0	14	SF	B 8.2				56		
	RAMY	17	1442	1445	1459	N10	E72	7477	04	23.0	17	SF		3	E		52		
	KANZ	17	1442	1446	1454	N09	E71	7477	04	22.9	12	SN		2	C				
	HOLL	17	1442	1446	1459	N08	E74	7477	04	23.2	17	SF	B 8.2	3	E		69		
	SVTO	17	1443	1445	1453	N11	E73	7477	04	23.1	10	SF		3	E		46		
0124		17	15342	15367	1544	N08	E70	7477	04	22.9	10	SF					11		
	KANZ	17	1534	1538	1546	N08	E70	7477	04	22.9	12	SF		2	C				
	SVTO	17	1535E	1539U	1541D	N09	E71	7477	04	23.0	6D	SF		2	E		10		
	RAMY	17	1535	1543	1546	N10	E70	7477	04	22.9	11	SF		3	E		12		
	HOLL	17	1536	1536	1540	N07	E71	7477	04	23.0	4	SF		3	E		10		
0125	HOLL	17	1609	1609	1621	N18	W70	7473	04	12.3	12	SF		3	E		21		
0126		17	1630*	1638*	1742	N08	E70	7477	04	22.9	72	SF	B 9.8				55		
	KANZ	17	1630	1638	1658D	N09	E68	7477	04	22.8	28D	SF		2	C				
	HOLL	17	1630	1654	1745	N07	E71	7477	04	23.0	75	SF	B 9.8	3	E		68		
	RAMY	17	1659	1700	1738	N09	E70	7477	04	23.0	39	SF	C 1.8	3	E		42		
0127	RAMY	17	1748	1755	1807	N10	E67	7477	04	22.8	19	SF		3	E		11		
0128	RAMY	17	1838	1841	1845	N10	E68	7477	04	22.9	7	SF		3	E		12		

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10 ⁻⁶ Disk)	Corr (Sq Deg)	
0129		17	19055	19112	1918	N09	E68	7477	04	22.9	13	SF					28		
	RAMY	17	1905	1913	1919	N10	E68	7477	04	22.9	14	SF		3	E		31		
	HOLL	17	1910	1911	1917	N08	E68	7477	04	22.9	7	SF		3	E		24		
0130	HOLL	17	2007	2009	2014	N08	E70	7477	04	23.1	7	SF		3	E		12		
0131	LEAR	18	0318	0319	0325	S15	E83	7480	04	24.4	7	SF		3	E		39		
0132	LEAR	18	0428	0428	0432	S15	E83	7480	04	24.5	4	SF		3	E		29		
0133	LEAR	18	0432	0435	0443	N16	W78	7473	04	12.3	11	SF B	7.8	3	E		40		
0134	LEAR	18	0524	0533	0602	N12	E62	7477	04	22.9	38	SF		3	E		35		
0135	LEAR	18	0548	0550	0613	N16	W79	7473	04	12.2	25	SF C	2.7	3	E		31		
0136	LEAR	18	0611	0626	0650	N12	E61	7477	04	22.8	39	SF		3	E		47		F
0137	LEAR	18	0618	0620	0629	N16	W79	7473	04	12.3	11	SF		3	E		25		
0138		18	0824*	0834*	0853	N15	W77	7473	04	12.5	29	SF					27		
	LEAR	18	0824	0841	0900	N16	W84	7473	04	12.0	36	SF		3	E		42		
	SVTO	18	0832	0834	0839	N14	W77	7473	04	12.5	7	SF		3	E		18		
	KANZ	18	0832E	0836U	0836D	N14	W73	7473	04	12.8	4D	SF		2	C				
	SVTO	18	0842	0849	0901	N15	W78	7473	04	12.4	19	SF		3	E		22		
	KANZ	18	0844E	0849	0908D	N14	W73	7473	04	12.8	24D	SF		2	C				
0139	LEAR	18	0902	0910	0921	N11	E61	7477	04	23.0	19	SF C	1.2	3	E		39		
0140	SVTO	18	0928	0929	0934	S12	E78	7480	04	24.3	6	SF		3	E		12		
0141	SVTO	18	0951	0959	1020	S15	E79	7480	04	24.4	29	1F C	4.5	3	E		102		FH
0142	SVTO	18	1102	1104	1112	S14	E75	7480	04	24.1	10	SF		3	E		20		
0143		18	1210	1211	1220	N10	E60	7477	04	23.0	10	SF C	1.1				22		F
	RAMY	18	1210	1211	1220	N10	E59	7477	04	22.9	10	SF		3	E		17		F
	SVTO	18	1210	1211	1221	N11	E60	7477	04	23.0	11	SF C	1.1	3	E		27		
0144	SVTO	18	1436	1446	1502	N11	E57	7477	04	22.9	26	SF		3	E		19		
0145	HOLL	18	1455	1507	1514	S14	E74	7480	04	24.2	19	SF		3	E		22		
0146	RAMY	18	1618	1622	1630	N10	E55	7477	04	22.8	12	SF		3	E		12		F
0147	HOLL	18	1643	1645	1651	S17	E70	7480	04	24.0	8	SF		3	E		37		
0148		18	17095	17125	1720	S18	E75	7480	04	24.4	11	SF B	8.1				55		FH
	HOLL	18	1709	1712	1721	S19	E76	7480	04	24.5	12	SF B	8.1	3	E		50		FH
	RAMY	18	1709	1715	1719	S17	E75	7480	04	24.4	10	SF		3	E		35		FH
	PALE	18	1714	1717	1720	S17	E75	7480	04	24.4	6	SF		3	E		80		H
0149	RAMY	18	1818	1824	1830	N10	E54	7477	04	22.8	12	SF C	1.1	3	E		20		F
0150		18	1907	1909	2010	N09	E56	7477	04	23.0	63	1B M	8.7				164		EF
	RAMY	18	1907	1909	2011	N10	E55	7477	04	22.9	64	1B M	8.7	3	E		247		FE
	HOLL	18	1910E	1912U	2010	N08	E57	7477	04	23.1	60D	SB		1	E		80		F
		18	2016		2023	No Flare Patrol													
		18	2027		2130	No Flare Patrol													
		18	2132		2237	No Flare Patrol													
0151		18	2340*	2407*	2422	N10	E51	7477	04	22.8	42	SF C	3.4				65	0.6	DFJ
	LEAR	18	2340	2407	2435	N10	E52	7477	04	22.9	55	SF C	3.4	3	E		96		F
	HOLL	19	0002E	0002U	0032D	N08	E53	7477	04	23.0	30D	SF		2	E		89		F
	WATU	19	0007	0010	0013	N10	E50	7477	04	22.8	6	SF			C	0010	20	0.3	D
	VORO	19	0009E	0019	0019	N10	E50	7477	04	22.8	10D	SF		2	C	0009	54	0.9	DJ

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks		
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)			
0152		19	02199	02311	0241	N08	E50	7477	04	22.8	22	SN	C 1.5				80	1.9	E		
	LEAR	19	0219	0231	0244	N09	E50	7477	04	22.8	25	SF	C 1.5	3	E		45				
	MITK	19	0228	0232	0238	N07	E50	7477	04	22.8	10	SN			C	0232	116	1.9	E		
0153	MITK	19	0332	0334	0349	S15	E66	7480	04	24.1	17	SB			C	0334	28		E		
0154		19	0450*	05151	0529	N09	E49	7477	04	22.9	39	1N	C 1.1				110	2.4	F		
	LEAR	19	0450	0515	0531	N10	E48	7477	04	22.8	41	SF	C 1.1	3	E		74		F		
	MITK	19	0514	0516	0527	N08	E50	7477	04	23.0	13	1N			C	0516	145	2.4			
0155	MITK	19	0528	0530	0531	N07	E48	7484	04	22.8	3	SN			C	0530	62	1.0	D		
0156		19	06032	06043	0613	N10	E51	7477	04	23.1	10	SF	C 2.1				41	1.4	DF		
	SVTO	19	0603	0604	0615	N11	E50	7477	04	23.0	12	SF	C 2.1	3	E		20		F		
	LEAR	19	0604	0604	0614	N11	E51	7477	04	23.1	10	SF		3	E		21		F		
	MITK	19	0605	0607	0609	N08	E51	7477	04	23.1	4	SN			C	0607	83	1.4	D		
0157	SVTO	19	0635	0636	0643	S15	E65	7480	04	24.2	8	SF		3	E		22		F		
0158	SVTO	19	0700	0701	0719	N11	E47	7477	04	22.8	19	SF		3	E		16				
0159		19	0748	07513	0805	S17	E67	7480	04	24.4	17	SF	C 2.7				62		F		
	KANZ	19	0748E	0748U	0757D	S18	E68	7480	04	24.5	9D	SF		2	C						
	LEAR	19	0748	0751	0805	S16	E67	7480	04	24.4	17	SF	C 2.7	3	E		77		F		
	SVTO	19	0748	0754	0805	S16	E67	7480	04	24.4	17	SF		3	E		47		F		
0160	RAMY	19	1231	1231	1235	N10	E45	7477	04	22.9	4	SF		3	E		22				
0161	SVTO	19	1307	1316	1324	N11	E43	7477	04	22.8	17	SF		3	E		21				
0162		19	1431	14332	1448	N09	E44	7477	04	22.9	17	SF	B 9.4				16				
	HOLL	19	1431	1433	1445	N09	E43	7477	04	22.8	14	SF		3	E		15				
	SVTO	19	1431	1433	1451	N10	E44	7477	04	22.9	20	SF	B 9.4	3	E		16				
	KANZ	19	1431	1435	1447	N08	E44	7477	04	22.9	16	SF		2	C						
0163	HOLL	19	1658	1700	1708	S14	E63	7480	04	24.5	10	SF		3	E		12				
0164		19	1709*	17262	1813	N11	E42	7477	04	22.9	64	SF					33		EF		
	RAMY	19	1709	1726	1752	N13	E41	7477	04	22.8	43	SF		3	E		30				
	HOLL	19	1724	1728	1730	N09	E41	7477	04	22.8	6	SF		2	E		10				
	PALE	19	1724E	1823U	1917	N10	E43	7477	04	22.9	113D	SF		3	E		60		FE		
0165	RAMY	19	1924	1925	1931	N11	E41	7477	04	22.9	7	SF	C 2.8	3	E		11				
0166	RAMY	19	2016	2016	2023	S17	E59	7480	04	24.3	7	SF		3	E		11				
0167	RAMY	19	2023	2023	2036	N12	E40	7477	04	22.9	13	SF		3	E		12				
0168	HOLL	19	2046	2050	2055	N08	E44	7477	04	23.2	9	SF		3	E		10				
0169	PALE	19	2128E	2137U	2153D	N11	E40	7477	04	22.9	25D	SF		3	E		46				
		19	2142		2239	No Flare Patrol															
0170	HOLL	19	2150	2153	2158	N05	E32	7484	04	22.3	8	SF		3	E		31		H		
0171	PALE	19	2204E	2205U	2213D	N12	E40	7477	04	22.9	9D	SF		2	E		43				
		19	2322		2330	No Flare Patrol															
		19	2332		2400	No Flare Patrol															
		20	0000		0006	No Flare Patrol															
		20	0056		0104	No Flare Patrol															
0172	PALE	20	0202E	0202U	0210D	S13	E57	7480	04	24.4	8D	SF		3	E		22				
0173	PALE	20	0215	0218U	0228	N10	E37	7477	04	22.9	13	SF	B 7.3	3	E		24				
		20	0244		0253	No Flare Patrol															
		20	0311		0314	No Flare Patrol															
		20	0322		0324	No Flare Patrol															

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	Cmd	NOAA/ USAF Region	Chp Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Apparent (10-6 Disk)	Measurement Corr (Sq Deg)	Remarks
0174	WATU	20	0517	0520	0526	S14	E14	7483	04	21.3	9	SN			P	0520	20	0.2	E
0175		20	07033	0706	0746	N10	E34	7477	04	22.8	43	SF	B 8.2				31		F
	LEAR	20	0703	0706	0745	N11	E35	7477	04	22.9	42	SF	B 8.2	3	E		31		F
	KANZ	20	0706	0706	0746	N10	E34	7477	04	22.8	40	SF		2	C				
0176		20	0927	0945	1001	N10	E34	7477	04	22.9	34	SF	C 1.2				14		F
	SVTO	20	0927	0945	1001	N11	E33	7477	04	22.9	34	SF	C 1.2	3	E		14		F
	KANZ	20	0939E	0939U	0955D	N10	E34	7477	04	22.9	160	SF		1	C				
0177	SVTO	20	1012	1012	1018	N12	E33	7477	04	22.9	6	SF		3	E		11		F
0178		20	10182	10213	1032	S15	E54	7480	04	24.5	14	SF	C 1.8				79	1.7	F
	HPR	20	1018	1024	1032	S15	E55	7480	04	24.6	14	SN			C	1024	110	1.7	F
	SVTO	20	1020	1021	1033	S14	E53	7480	04	24.4	13	SF	C 1.8	3	E		48		F
	KANZ	20	1030E		1030D	S15	E53	7480	04	24.4	130	SF		1	C				
0179		20	1250*	1251*	1309	N11	E31	7477	04	22.9	19	SF	C 5.6				51	0.7	EFH
	HOLL	20	1247E	1254U	1305	N11	E31	7477	04	22.9	180	SF	C 5.6	1	E		72		
	HPR	20	1250	1252	1311	N12	E33	7477	04	23.0	21	SN			C	1252	60	0.7	
	RAMY	20	1251	1251	1301	N10	E31	7477	04	22.9	10	SF		3	E		45		FE
	SVTO	20	1251	1253	1314	N11	E31	7477	04	22.9	23	SN	C 5.6	3	E		64		EH
	RAMY	20	1305	1305	1313	N11	E30	7477	04	22.8	8	SF		3	E		13		F
0180		20	1315*	13322	1349	N10	E31	7477	04	22.9	34	SF	C 1.3				32	0.6	F
	HPR	20	1315	1334	1355	N12	E33	7477	04	23.0	40	SN			C	1334	50	0.6	
	SVTO	20	1329	1334	1344	N10	E31	7477	04	22.9	15	SF		3	E		22		F
	RAMY	20	1330	1332	1347	N10	E31	7477	04	22.9	17	SF	C 1.3	3	E		21		F
	HOLL	20	1333	1351U	1353D	N09	E29	7477	04	22.7	200	SF		1	E		33		
0181		20	13238	1331*	1347	S14	E10	7483	04	21.3	24	SF					22		FH
	HOLL	20	1323	1346	1353D	S14	E10	7483	04	21.3	300	SF		1	E		33		H
	RAMY	20	1331	1331	1347	S14	E10	7483	04	21.3	16	SF		3	E		10		F
0182		20	14067	14171	1431	S14	E11	7483	04	21.4	25	SF	B 7.7				21	0.2	F
	HPR	20	1406	1418	1433	S15	E12	7483	04	21.5	27	SF			C	1418	20	0.2	
	SVTO	20	1413	1417	1429	S14	E10	7483	04	21.3	16	SF	B 7.7	3	E		22		F
0183		20	1517	1519	1541	N12	E32	7477	04	23.0	24	SF	C 1.6				17	0.1	E
	HPR	20	1516E	1519	1536D	N12	E33	7477	04	23.1	200	SF			C	1519	10	0.1	
	SVTO	20	1517	1519	1541	N12	E30	7477	04	22.9	24	SF	C 1.6	3	E		24		E
0184	RAMY	20	1655E	1658	1705	N11	E28	7477	04	22.8	100	SF		3	E		19		F
0185	RAMY	20	1655E	1656U	1704	S15	E08	7483	04	21.3	90	SF		3	E		12		F
0186		20	1707*	1715*	1806	N11	E28	7477	04	22.8	59	SF	C 1.3				32		EF
	HOLL	20	1707	1746	1825	N11	E28	7477	04	22.8	78	SN	C 1.3	3	E		52		E
	RAMY	20	1713	1715	1739	N11	E28	7477	04	22.8	26	SF		3	E		15		F
	PALE	20	1717E	1718U	1737D	N12	E29	7477	04	22.9	200	SF		2	E		19		
	RAMY	20	1744	1752	1815	N11	E29	7477	04	22.9	31	SF	C 5.1	4	E		44		F
0187		20	1728*	17452	1824	S14	E08	7483	04	21.3	56	SF					41		F
	HOLL	20	1728	1747	1848	S14	E09	7483	04	21.4	80	SF		3	E		55		
	RAMY	20	1738	1745	1800	S15	E08	7483	04	21.3	22	SF		4	E		27		F
0188	HOLL	20	1847	1850	1919	N11	E28	7477	04	22.9	32	SF	C 1.2	3	E		33		
0189	HOLL	20	1920	1951	2018	N11	E27	7477	04	22.8	58	SF		3	E		10		
		20	1927		2245	No Flare Patrol													
0190		20	2004	2011	2031	S14	E08	7483	04	21.4	27	SF					46		F
	HOLL	20	2004	2011	2031	S14	E07	7483	04	21.4	27	SF		3	E		37		F
	PALE	20	2004	2011U	2037D	S14	E08	7483	04	21.4	330	SF		3	E		54		F
0191	PALE	20	2020	2020U	2047D	N11	E28	7477	04	22.9	27D	SF	C 1.3	3	E		20		

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Grp #	Sta	Start Day	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)	
0192		20	2109	21095	2122	N11 E27	7477		04	22.9	13	SF	C 1.6				24		F
	HOLL	20	2109	2109	2119	N11 E27	7477		04	22.9	10	SF	C 1.6	3	E		16		F
	PALE	20	2109	2114	2124	N11 E27	7477		04	22.9	15	SF		3	E		31		
		20	2247		2346	No Flare Patrol													
0193		21	00554	01031	0123	S14 E03	7483		04	21.3	28	SN	B 8.9				58	0.8	F
	YUNH	21	0055	0104	0118	S14 E03	7483		04	21.3	23	SN			P		79	0.8	
	LEAR	21	0059	0103	0128	S14 E03	7483		04	21.3	29	SF	B 8.9	3	E		36		F
0194		21	01323	0137	0157	S14 E04	7483		04	21.4	25	SN					64	0.5	
	YUNH	21	0132	0137	0150	S14 E04	7483		04	21.4	18	SN			C		47	0.5	
	PALE	21	0135	0137U	0204	S15 E04	7483		04	21.4	29	SF		3	E		80		
0195		21	03189	03209	0330	S14 E02	7483		04	21.3	12	SN	B 5.2				11	0.1	E
	WATU	21	0318	0320	0329	S13 E03	7483		04	21.4	11	SN			C	0320	10	0.1	E
	PALE	21	0327	0329	0331	S14 E02	7483		04	21.3	4	SF	B 5.2	3	E		12		
0196		21	0425	04272	0451	N12 E22	7477		04	22.8	26	SN	C 1.2				75	1.3	EF
	TACH	21	0423E	0427	0447	N12 E22	7477		04	22.8	240	SN		3	C	0427	112	1.3	E
	LEAR	21	0425	0429	0455	N11 E23	7477		04	22.9	30	SF	C 1.2	3	E		38		F
0197	ISTA	21	0631E		0705	N11 E23	7477		04	23.0	340	1F							F
0198		21	07201	07213	0748	N11 E21	7477		04	22.9	28	1M					132	1.6	EF
	WATU	21	0720	0722	0742	N11 E21	7477		04	22.9	22	SB			P	0722	50	0.6	E
	BUCA	21	0720	0724	0734	N12 E21	7477		04	22.9	14	1M			C	0724	215	2.5	E
	ISTA	21	0721		0800	N11 E22	7477		04	23.0	39	1B							F
	KANZ	21	0721	0721	0757	N11 E21	7477		04	22.9	36	SF		2	C				
0199	LARI	21	0801E	0801U	0801	N13 E20	7477		04	22.8	360	SF			P				
0200		21	0849	08533	0905	S15 E02	7483		04	21.5	16	SF	C 1.1				22		FH
	KANZ	21	0849	0853	0905	S15 E02	7483		04	21.5	16	SF		2	C				
	SVTO	21	0849	0855	0904	S15 E02	7483		04	21.5	15	SF	C 1.1	3	E		21		FH
	LEAR	21	0849	0856	0907	S14 E01	7483		04	21.4	18	SF		1	E		23		F
0201	KANZ	21	1005	1009	1033	N14 E18	7477		04	22.8	28	SF		2	C				
0202		21	1431	14316	1518	S15 W04	7483		04	21.3	47	SN	C 4.5				59		EF
	RAMY	21	1431	1431	1517	S15 W04	7483		04	21.3	46	SN	C 4.5	3	E		53		FE
	SVTO	21	1431	1434	1518	S14 W04	7483		04	21.3	47	SF		3	E		65		F
	KANZ	21	1433E	1437	1501D	S15 W05	7483		04	21.2	280	SN		2	C				
		21	2324		2400	No Flare Patrol													
		22	0000		0024	No Flare Patrol													
0203		22	07269	0727*	0742	S15 E29	7480		04	24.5	16	SF	B 7.0				22		F
	LARI	22	0726	0729	0748	S13 E25	7480		04	24.2	22	SF			P				
	KANZ	22	0726	0730	0738	S16 E29	7480		04	24.5	12	SF		2	C				
	LEAR	22	0727	0727	0739	S16 E30	7480		04	24.6	12	SF	B 7.0	3	E		27		F
	SVTO	22	0735	0737	0741	S16 E31	7480		04	24.7	6	SF		3	E		16		F
0204	ISTA	22	0735E		0746	N21 E26			04	24.3	110	1F							E
0205		22	09131	09131	0921	S14 E24	7480		04	24.2	8	SF	B 5.6				23		F
	KANZ	22	0913	0913	0921	S14 E24	7480		04	24.2	8	SF		2	C				
	LEAR	22	0914	0914	0920	S14 E24	7480		04	24.2	6	SF	B 5.6	3	E		20		
	SVTO	22	0914	0914	0921	S14 E24	7480		04	24.2	7	SF	B 5.6	3	E		26		F
0206	RAMY	22	1144	1145	1153	N11 E05	7477		04	22.9	9	SF		3	E		14		F
0207	SVTO	22	1326	1336	1352	N11 E05	7477		04	22.9	26	SF	B 6.7	3	E		29		
0208		22	14035	14094	1454	N11 E03	7477		04	22.8	51	SB	M 1.5				79		EFZ
	SVTO	22	1403	1413	1450	N11 E03	7477		04	22.8	47	1M		3	E		119		FE
	HOLL	22	1407	1409	1512	N11 E04	7477		04	22.9	65	SB	M 1.5	3	E		54		F
	RAMY	22	1408	1409	1441	N11 E03	7477		04	22.8	33	SB		3	E		65		ZF

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP No	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
0209		22	14061	1410	1430	S14	W16	7483	04	21.4	24	SF					64		EF
	SVTO	22	1406	1410	1430	S15	W17	7483	04	21.3	24	SF		3	E		67		FE
	RAMY	22	1407	1410	1431	S14	W16	7483	04	21.4	24	SF		3	E		62		F
0210		22	17161	1719	1730	S11	W09	7487	04	22.0	14	SF B 6.6					47		F
	HOLL	22	1716	1719	1729	S11	W10	7487	04	22.0	13	SF B 6.6	3	E			53		F
	RAMY	22	1717	1719	1730	S10	W10	7487	04	22.0	13	SF		3	E		46		F
	PALE	22	1721E	1723U	1730D	S11	W08	7487	04	22.1	9D	SF		3	E		43		F
0211		22	19433	19461	2012	N10	E00	7477	04	22.8	29	SF B 5.3					21		F
	PALE	22	1943	1947	2011	N11	E00	7477	04	22.8	28	SF B 5.3	3	E			23		F
	HOLL	22	1946	1946	2012	N10	E01	7477	04	22.9	26	SF		3	E		19		F
		22	2325		2400	No Flare Patrol													
0212	HTPR	23	1321	1351	1400	S15	W28	7483	04	21.4	39	SF			C	1351	40	0.4	
0213		23	1348	1350*	1413	N11	W09	7477	04	22.9	25	SF B 7.6					31	0.2	F
	SVTO	23	1348	1350	1411	N10	W10	7477	04	22.8	23	SF B 7.6	3	E			29		F
	HTPR	23	1348	1352	1415	N15	W08	7477	04	23.0	27	SF			C	1352	20	0.2	
	RAMY	23	1348	1400	1404D	N09	W10	7477	04	22.8	16D	SF		3	E		44		F
0214		23	1540	15443	1605	N09	W10	7477	04	22.9	25	SF B 7.8					58	1.0	F
	RAMY	23	1540	1544	1555	N09	W11	7477	04	22.8	15	SF B 7.8	3	E			47		F
	SVTO	23	1540	1544	1606	N09	W11	7477	04	22.8	26	SF B 7.8	3	E			26		F
	HTPR	23	1540	1547	1615	N10	W08	7477	04	23.0	35	SF			C	1547	100	1.0	
0215	RAMY	23	1723	1723	1728	S14	W32	7483	04	21.3	5	SF B 5.4	3	E			26		F
		23	2121		2143	No Flare Patrol													
		23	2224		2229	No Flare Patrol													
		23	2242		2246	No Flare Patrol													
		23	2249		2357	No Flare Patrol													
0216	HOLL	23	2326	2327	2333	S13	W37	7483	04	21.2	7	SF		2	E		23		
		24	0153		0157	No Flare Patrol													
		24	0233		0234	No Flare Patrol													
		24	0239		0240	No Flare Patrol													
		24	0243		0247	No Flare Patrol													
		24	0252		0258	No Flare Patrol													
		24	0304		0309	No Flare Patrol													
		24	0311		0312	No Flare Patrol													
		24	0321		0326	No Flare Patrol													
		24	0345		0355	No Flare Patrol													
		24	0406		0408	No Flare Patrol													
0217		24	0759	08012	0810	S16	W42	7483	04	21.1	11	SF C 1.0					15		F
	SVTO	24	0759	0801	0808	S17	W42	7483	04	21.1	9	SF C 1.0	3	E			15		F
	KANZ	24	0759	0803	0811	S15	W41	7483	04	21.2	12	SF		2	C				
0218		24	09021	0903	0912	N10	E48	7489	04	28.0	10	SF B 8.5					29		F
	SVTO	24	0902	0903	0913	N11	E47	7489	04	27.9	11	SF B 8.5	3	E			29		F
	KANZ	24	0903	0903	0911	N10	E48	7489	04	28.0	8	SF		2	C				
0219		24	1040	10518	1113	S15	W42	7483	04	21.3	33	SF					15		F
	SVTO	24	1040	1059	1113	S15	W43	7483	04	21.2	33	SF		4	E		15		F
	KANZ	24	1042E	1051	1116D	S15	W41	7483	04	21.3	34D	SF		2	C				
0220	RAMY	24	1120E	1128U	1131D	S14	W44	7483	04	21.1	11D	SF		2	E		20		F
0221	SVTO	24	1234	1313	1325	S15	W44	7483	04	21.2	51	SF		3	E		14		F
0222	SVTO	24	1406	1418	1428	S15	W45	7483	04	21.2	22	SF		3	E		16		F
0223		24	15363	15406	1607	S15	W46	7483	04	21.2	31	SF B 8.6					23		F
	RAMY	24	1536	1540	1602	S14	W46	7483	04	21.2	26	SF B 8.6	3	E			30		F
	SVTO	24	1539	1546	1617	S15	W46	7483	04	21.2	38	SF		3	E		16		F
	KANZ	24	1541E	1541U	1602	S15	W45	7483	04	21.2	21D	SF		2	C				

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Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Area Measurement			Remarks
																Time (UT)	Apparent (10-6 Disk)	Corr (Sq Deg)	
		24	1904		1912			No Flare Patrol											
0224	PALE	24	2102	2137	2214	S14	W48	7483	04	21.2	72	SF		3	E			20	
		24	2114		2246			No Flare Patrol											
		24	2248		2303			No Flare Patrol											
0225		25	0715	07163	0730	N12	W34	7477	04	22.7	15	SF B 5.6						16	
	LEAR	25	0715	0716	0734	N10	W34	7477	04	22.7	19	SF		3	E			18	
	SVTO	25	0715	0719	0726	N13	W33	7477	04	22.8	11	SF B 5.6		3	E			13	
0226	SVTO	25	0832	0841	0852	N12	W35	7477	04	22.7	20	SF B 6.4		3	E			16	
0227		25	08441	08482	0900	S10	W50	7487	04	21.6	16	SF						17	H
	KANZ	25	0844	0848	0900	S10	W50	7487	04	21.6	16	SF		2	C				
	SVTO	25	0845	0850	0900	S10	W50	7487	04	21.6	15	SF		3	E			17	H
0228		25	0910*	0910*	0920	N11	W34	7477	04	22.8	10	SF C 1.0						15	F
	SVTO	25	0910	0910	0916	N10	W35	7477	04	22.7	6	SF C 1.0		3	E			10	F
	SVTO	25	0922	0922	0925	N12	W34	7477	04	22.8	3	SF		3	E			20	F
0229	SVTO	25	0959	1004	1014	N12	W35	7477	04	22.8	15	SF C 1.9		3	E			26	H
0230	SVTO	25	1021	1025	1031	N10	W35	7477	04	22.8	10	SF		3	E			12	F
0231	SVTO	25	1124	1126U	1136D	N12	W36	7477	04	22.8	12D	SF C 1.7		3	E			19	F
0232	HOLL	25	1603	1604	1657D	S13	W20	7480	04	24.1	54D	SF		3	E			14	F
0233	HOLL	25	1606	1612	1624	S11	W60	7483	04	21.1	18	SF		3	E			41	F
0234	PALE	25	1845	1846	1852	S14	W59	7483	04	21.3	7	SF		3	E			19	
		25	2020		2034			No Flare Patrol											
		25	2050		2159			No Flare Patrol											
0235	HOLL	25	2335	2337	2340	S13	W24	7480	04	24.2	5	SF		3	E			12	
0236	WATU	26	0258		0259D	S12	W66	7483	04	21.1	1D	SF			P	0259		10	E
0237	PALE	26	0348E	0400U	0419D	S14	W65	7483	04	21.2	31D	SF C 1.2		3	E			68	H
0238		26	0621*	06297	0643	S12	W69	7483	04	21.1	22	SF						20	D
	KANZ	26	0621	0629	0645	S13	W70	7483	04	21.0	24	SF		2	C				
	WATU	26	0634	0636	0641	S11	W68	7483	04	21.1	7	SF			C	0636		20	D
0239		26	11187	11233	1129	S13	W70	7483	04	21.2	11	SF B 7.2						13	F
	KANZ	26	1118	1126	1130	S13	W70	7483	04	21.2	12	SF		2	C				
	RAMY	26	1123	1123	1129	S12	W71	7483	04	21.1	6	SF B 7.2		4	E			11	
	SVTO	26	1125	1126	1129	S14	W68	7483	04	21.3	4	SF		3	E			15	F
0240		26	11463	11491	1154	S12	W72	7483	04	21.1	8	SF						13	
	KANZ	26	1146	1150	1154	S12	W73	7483	04	21.0	8	SF		2	C				
	RAMY	26	1149	1149	1154	S12	W71	7483	04	21.1	5	SF		4	E			13	
0241		26	12051	1206	1217	S12	W72	7483	04	21.1	12	SF B 7.3						38	
	SVTO	26	1205	1206	1212	S13	W72	7483	04	21.1	7	SF		3	E			35	
	RAMY	26	1205	1206	1214	S12	W71	7483	04	21.1	9	SF B 7.3		4	E			41	
	KANZ	26	1206	1206	1226	S12	W73	7483	04	21.0	20	SF		2	C				
0242		26	1246*	12519	1259	S12	W71	7483	04	21.2	13	SF B 5.1						31	
	KANZ	26	1246	1250U	1250D	S12	W73	7483	04	21.0	4D	SF		2	C				
	RAMY	26	1247	1251	1257	S12	W71	7483	04	21.2	10	SF B 5.1		4	E			50	
	SVTO	26	1250	1251	1254	S14	W69	7483	04	21.3	4	SF		3	E			29	
	RAMY	26	1259	1300	1307	S12	W71	7483	04	21.2	8	SF		4	E			14	
0243		26	14353	14353	1446	S12	W74	7483	04	21.0	11	SF						13	F
	HOLL	26	1435	1435	1449	S09	W75	7483	04	21.0	14	SF		3	E			13	F
	KANZ	26	1438	1438	1442	S14	W72	7483	04	21.2	4	SF		2	C				

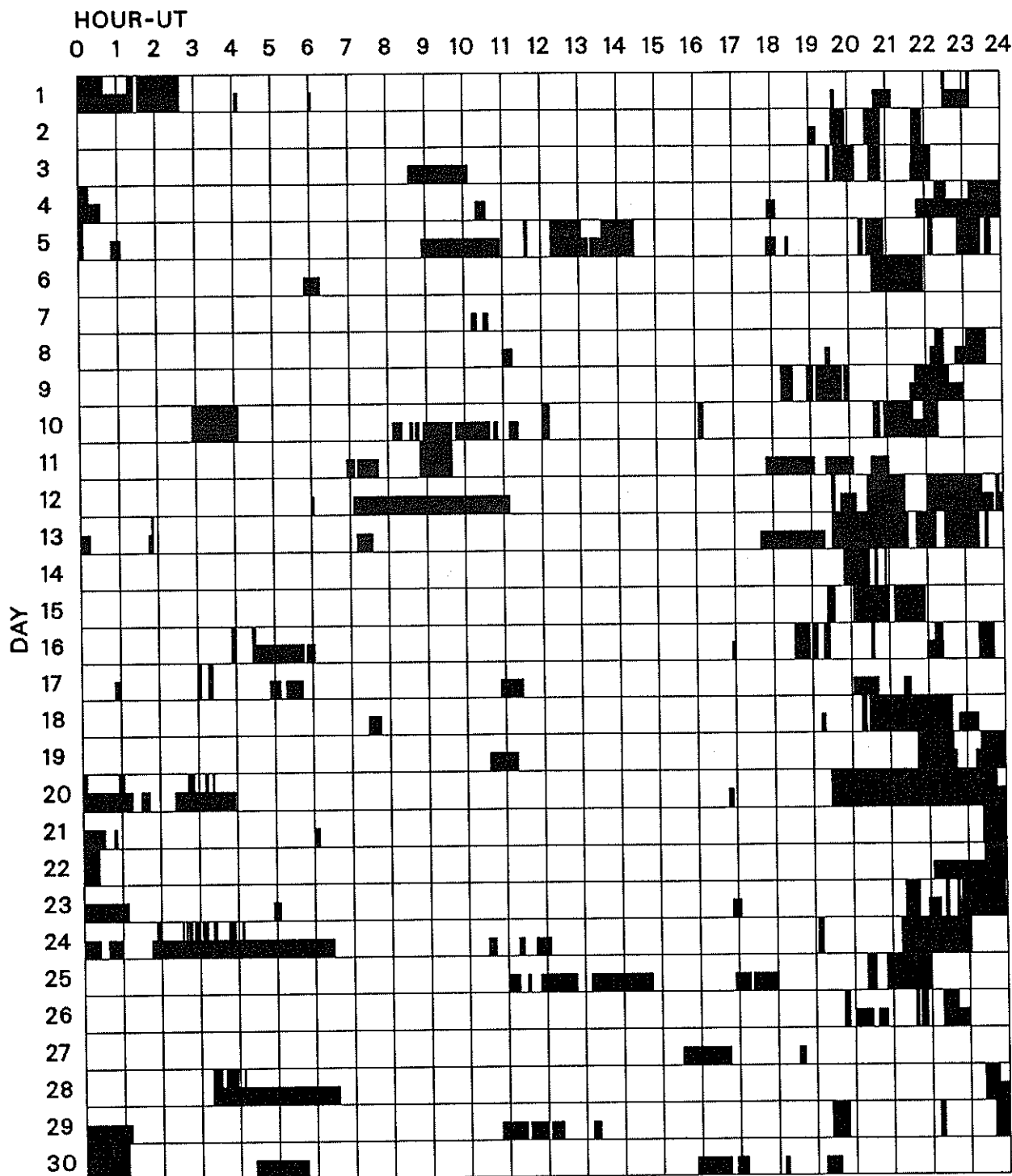
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Apr 93

APRIL 1993

Grp #	Sta	Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	NOAA/ USAF Region	CMP Mo	Day	Dur (Min)	Imp Opt	Xray	Obs See	Type	Time (UT)	Area Measurement		Remarks
																	Apparent (10-6 Disk)	Corr (Sq Deg)	
0244		26	15131	15142	1519	N11	W86	7486	04	20.2	6	SF					43		
	HOLL	26	1505E	1508U	1515	N14	W89	7486	04	19.9	100	SF		2	E		63		
	SVTO	26	1513	1516	1521	N10	W87	7486	04	20.1	8	SF		3	E		23		
	KANZ	26	1514	1514	1522	N10	W81	7486	04	20.5	8	SF		2	C				
		26	1944		1952	No Flare Patrol													
		26	2135		2140	No Flare Patrol													
		26	2144		2154	No Flare Patrol													
		26	2218		2242	No Flare Patrol													
0245	WATU	27	0020	0022	0027	S11	W37	7480	04	24.2	7	SF			C	0022	10	0.1	E
0246	KANZ	27	0720	0720	0724	S10	W81	7487	04	21.2	4	SF		2	C				
0247		27	0948	09493	1004	N12	W60	7477	04	22.9	16	SF C 1.1					38		F
	SVTO	27	0948	0949	1004	N12	W61	7477	04	22.8	16	SF C 1.1	3	E			38		F
	KANZ	27	0948	0952	1004	N12	W59	7477	04	23.0	16	SF		2	C				
0248	HOLL	27	1810	1820	1845	S14	E13	7492	04	28.7	35	SF		3	E		16		
0249	HOLL	27	1816	1816	1820	N13	W68	7477	04	22.6	4	SF B 6.7	3	E			20		
0250		27	20038	2012	2020	S14	W46	7480	04	24.3	17	SF B 6.6					31		
	HOLL	27	2003	2012	2025	S14	W46	7480	04	24.3	22	SF B 6.6	3	E			47		
	PALE	27	2011	2012	2016	S14	W46	7480	04	24.4	5	SF B 6.6	3	E			15		
0251		27	2219	22211	2224	N12	W66	7477	04	22.9	5	SF					20		
	HOLL	27	2219	2221	2224	N15	W68	7477	04	22.8	5	SF		3	E		22		
	PALE	27	2220E	2222	2232D	N10	W64	7477	04	23.1	12D	SF		3	E		19		
0252	VORO	27	2311	2313	2323	S11	W52	7480	04	24.0	12	SF		2	C	2313	72	1.2	EJ
		28	0318		0331	No Flare Patrol													
		28	0338		0356	No Flare Patrol													
		28	0407		0408	No Flare Patrol													
0253		28	0709	0712	0735	N08	E30	7490	04	30.5	26	1F B 6.9					42		F
	SVTO	28	0707E	0710U	0730	N09	E29	7490	04	30.5	230	SF		2	E		43		F
	ISTA	28	0709		0744	N06	E31	7490	04	30.6	35	1N							F
	LEAR	28	0709	0712	0730	N09	E29	7490	04	30.5	21	SF B 6.9	3	E			41		F
	LARI	28	0709	0712	0736	N08	E29	7490	04	30.5	27	1F			P				
0254	RAMY	28	1118	1119	1228D	S13	E05	7492	04	28.8	700	SF		3	E		12		H
0255		28	1328*	1411	1422	S13	E04	7492	04	28.9	54	SF					17		FH
	HOLL	28	1328	1411	1423	S13	E03	7492	04	28.8	55	SF		3	E		21		H
	RAMY	28	1410	1411	1420	S13	E04	7492	04	28.9	10	SF		3	E		13		F
0256	HOLL	28	1340	1348	1359	N09	E25	7490	04	30.4	19	SF		3	E		29		
0257		28	1741	1747	1750	N08	E24	7490	04	30.5	9	SF					12		
	HOLL	28	1741	1747	1750	N08	E25	7490	04	30.6	9	SF		3	E		13		
	PALE	28	1742E	1742U	1802D	N09	E23	7490	04	30.5	200	SF		3	E		11		
		28	2323		2345	No Flare Patrol													
0258	HOLL	29	1349	1353	1357	N09	W21	7489	04	28.0	8	SF		3	E		10		F
		29	1923		1950	No Flare Patrol													
		29	2212		2219	No Flare Patrol													
		29	2338		2400	No Flare Patrol													
		30	0000		0040	No Flare Patrol													
		30	0042		0106	No Flare Patrol													
0259	SVTO	30	1418	1419	1424	S06	E29	7494	05	2.8	6	SF		3	E		12		

INTERVALS OF NO FLARE PATROL OBSERVATION FOR PRECEDING SOLAR FLARE TABLE

APRIL 1993



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

Athens
Abastumani
Bucharest
Haute Provence

Holloman
Istanbul
Kanzelhoehe
Kharkov

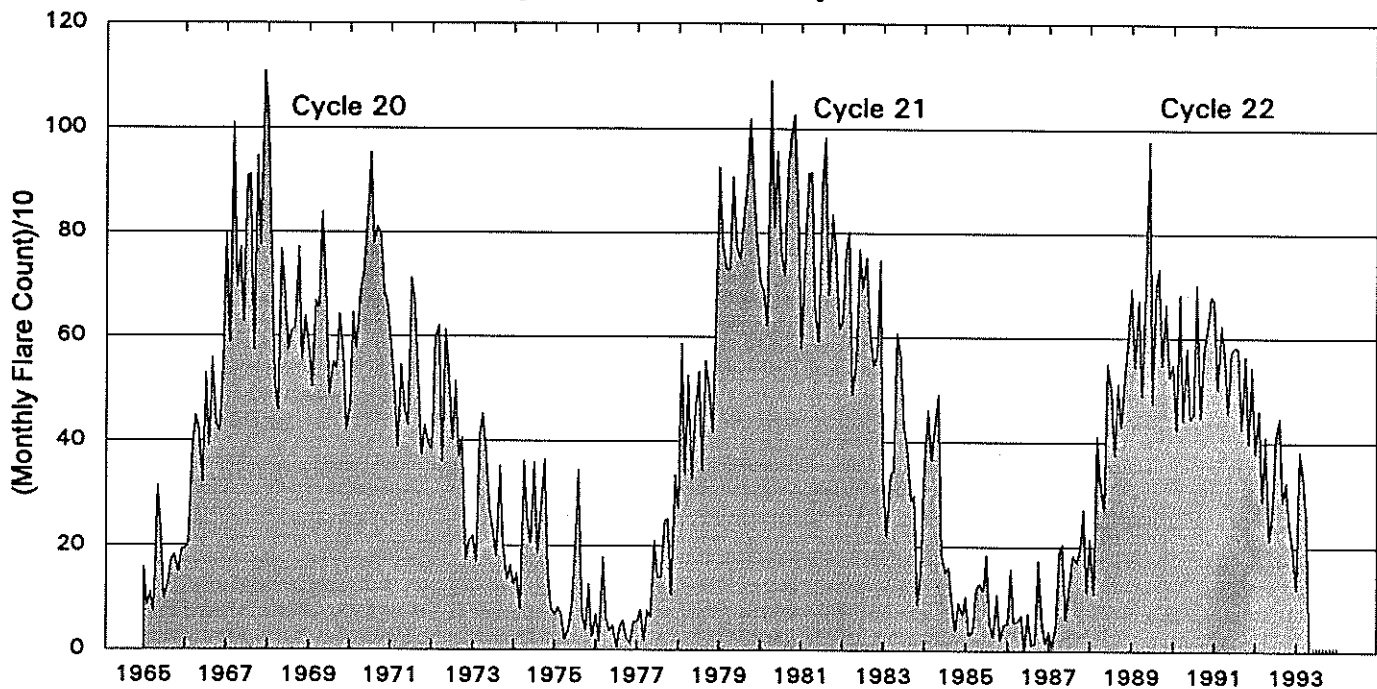
Larissa
Learmonth
Mitaka
Palehua

Mitaka
Ramey
San Vito
Tashkent

Urumqi
Voroshilov
Watukosek
Yunnan

Monthly Counts of Grouped Solar Flares

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Apr 93



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	121	384	347	259									1111

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

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Apr 93

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

Outstanding Occurrences

APRIL 1993

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Mean	Int	Remarks
01	127	TORN	43 NS	0900.0		270.0		3.0		V=0
	127	TORN	43 NS	0925.0		200.0		1.0		V=1
	235	CUBA	44 NS	1330.0E		408.00		11.0		
	280	CUBA	44 NS	1332.0E		408.00		17.0		
	9100	GORK	20 GRF	0416.6	0435.3	82.4	13.0			
	2950	GORK	2 S/F	0429.2	0431.0	3.0	14.0			
	950	GORK	1 S	0429.2	0431.7	4.5	3.0			
	2850	CRIM	2 S/F	0429.4	0431.0	3.2	16.0	5.0		
	2950	GORK	29 PBI	0432.2	0432.2	69.8	5.0			
	204	IZMI	8 S	0632.0	0632.2	0.5	130.0			
	204	IZMI	8 S	0649.0	0649.1	0.2	75.0	70.0		
	204	IZMI	42 SER	0818.0	0818.8	1.2	130.0			
	2950	GORK	1 S	0841.1	0841.7	1.4	5.0			
	950	GORK	1 S	0841.2	0841.7	1.4	3.0			
	9100	GORK	2 S/F	1054.0	1055.2	4.3	16.0			
	536	ONDR	45 C	1206.0	1207.5	2.0	70.0			
	245	SGMR	8 S	1234.0	1236.0	2.0	58.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	1234.0	1236.0	2.0	68.0			QL=4 ST=2 TYP=3
	260	ONDR	45 C	1235.5	1236.0	3.0	156.0			
	245	PALE	8 S	2005.0	2005.0	1.0	63.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2005.0	2005.0	U	50.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2114.0	2115.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2116.0	2117.0	1.0	79.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2127.0	2127.0	U	360.0			QL=4 ST=2 TYP=3
02	235	CUBA	44 NS	1344.0E		466.00		15.0		
	245	LEAR	8 S	0513.0	0514.0	1.0	82.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0513.0	0514.0	1.0	82.0			QL=4 ST=3 TYP=3
	9100	GORK	1 S	0551.4	0552.1	1.7	4.0			
	245	LEAR	8 S	0555.0	0556.0	1.0	61.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0555.0	0556.0	1.0	58.0			QL=4 ST=3 TYP=3
	204	IZMI	7 C	0711.5	0711.7	0.5	72.0			
	204	IZMI	7 C	0731.5	0731.7	0.5	61.0			
03	260	ONDR	44 NS	0900.0E	1011.0	270.00	510.0			
	280	CUBA	44 NS	1318.0E		483.00		13.0		
	235	CUBA	44 NS	1318.0E		483.00		11.0		
	2850	CRIM	4 S/F	0704.0	0705.0	2.0	32.0	10.0		
	2850	CRIM	29 PBI	0704.0	0706.0	25.0	4.0	1.0		
	2950	GORK	2 S/F	0704.1	0705.0	4.2	20.0			
	950	GORK	1 S	0704.7	0705.0	0.8	3.0			
	9100	GORK	1 S	0704.7	0705.0	10.3	5.0			
	245	SGMR	8 S	1517.0	1517.0	U	57.0			QL=4 ST=3 TYP=3
	245	SGMR	4 S/F	1812.0	1814.0	3.0	39.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	1814.0	1814.0	1.0	53.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1920.0	1921.0	1.0	120.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	1921.0	1921.0	U	170.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1925.0	1927.0	2.0	120.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	2013.0	2013.0	1.0	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2013.0	2013.0	1.0	130.0			QL=4 ST=2 TYP=3
04	245	LEAR	43 NS	0223.0	0223.0	U	60.0			QL=4 ST=3 TYP=1
	127	TORN	43 NS	0640.0		320.0				V=1
	260	ONDR	45 C	1155.0	1158.0	3.0	255.0			
	260	ONDR	45 C	1229.0	1231.0	8.0	80.0			
	245	SVTO	8 S	1231.0	1231.0	U	41.0			QL=4 ST=2 TYP=3
	127	TORN	42 SER	1236.0	1237.5	4.0	80.0	10.0		
	245	SGMR	8 S	2128.0	2128.0	U	72.0			QL=4 ST=2 TYP=3
05	127	TORN	44 NS	0830.0E		390.00		3.0		V=1
	235	CUBA	44 NS	1512.0E		238.00		11.0		
	280	CUBA	44 NS	1512.0E		288.00		14.0		
	245	PALE	4 S/F	0101.0	0102.0	4.0	79.0			QL=4 ST=2 TYP=3
	127	TORN	8 S	0922.9	0923.2	0.9	240.0	120.0		
	260	ONDR	46 C	1317.0	1321.5	5.0	80.0			
	127	TORN	27 RF	1317.0	1320.9	7.0	170.0	60.0		
	245	PALE	8 S	2101.0	2101.0	U	97.0			QL=2 ST=2 TYP=3
	245	SGMR	8 S	2101.0	2101.0	1.0	98.0			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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Apr 93

APRIL 1993

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Mean	Int	Remarks
06	127	TORN	43 NS	0923.0		337.0		1.0		V=1
	235	CUBA	44 NS	1327.0E		393.00		11.0		
	280	CUBA	44 NS	1327.0E		393.00		16.0		
	245	LEAR	4 S/F	0546.0	0549.0	4.0	170.0			QL=4 ST=2 TYP=5
	245	SVTO	4 S/F	0546.0	0549.0	4.0	200.0			QL=2 ST=2 TYP=5
	410	LEAR	8 S	0549.0	0549.0	U	340.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0549.0	0549.0	U	320.0			QL=4 ST=2 TYP=3
	2950	GORK	1 S	0755.6	0755.8	0.5	1.0			
	127	TORN	8 S	0806.6	0807.1	1.0	460.0	230.0		
	245	SVTO	8 S	0850.0	0850.0	U	51.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1153.0	1153.0	1.0	50.0			QL=4 ST=2 TYP=3
	245	SVTO	4 S/F	1158.0	1200.0	8.0	150.0			QL=4 ST=2 TYP=3
	33	UPIC	46 C	1158.8	1200.3	3.2				
	245	SGMR	4 S/F	1159.0	1200.0	3.0	160.0			QL=4 ST=3 TYP=3
	410	SVTO	4 S/F	1159.0	1201.0	7.0	66.0			QL=4 ST=2 TYP=3
	127	TORN	45 C	1159.0	1200.3	3.0	270.0	70.0		
	410	SGMR	8 S	1200.0	1201.0	2.0	52.0			QL=4 ST=3 TYP=3
	536	ONDR	45 C	1200.0	1201.2	3.0	65.0			
	260	ONDR	45 C	1200.0	1200.5	3.5	330.0			
	33	UPIC	4 S/F	1321.1	1321.3	0.7				
	245	SGMR	8 S	1606.0	1606.0	1.0	54.0			QL=4 ST=2 TYP=3
	245	PALE	49 GB	1748.0	1749.0	1.0	540.0			QL=2 ST=2 TYP=6
	610	PALE	8 S	1748.0	1748.0	1.0	70.0			QL=2 ST=2 TYP=3
	410	PALE	8 S	1748.0	1748.0	1.0	250.0			QL=2 ST=2 TYP=3
	245	SGMR	49 GB	1748.0	1749.0	2.0	610.0			QL=4 ST=2 TYP=6
	610	SGMR	8 S	1748.0	1748.0	1.0	80.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1748.0	1748.0	1.0	260.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1849.0	1849.0	U	93.0			QL=4 ST=2 TYP=3
	2800	PENT	4 S/F	2343.4	2345.2	3.8	49.2	12.0		
	245	LEAR	8 S	2344.0	2344.0	U	55.0			QL=4 ST=2 TYP=3
	610	LEAR	49 GB	2344.0	2344.0	1.0	630.0			QL=4 ST=2 TYP=6
	1415	LEAR	8 S	2344.0	2344.0	1.0	52.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	2344.0	2345.0	1.0	57.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	2344.0	2345.0	1.0	52.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	2344.0	2344.0	U	46.0			QL=2 ST=2 TYP=3
	245	PALE	8 S	2344.0	2344.0	U	50.0			QL=2 ST=2 TYP=3
	4995	PALE	8 S	2344.0	2344.0	1.0	48.0			QL=2 ST=2 TYP=3
	2695	PALE	8 S	2344.0	2345.0	1.0	51.0			QL=2 ST=2 TYP=3
	15400	PALE	8 S	2344.0	2344.0	1.0	80.0			QL=2 ST=2 TYP=3
	610	PALE	8 S	2344.0	2344.0	U	320.0			QL=2 ST=2 TYP=3
	8800	PALE	8 S	2344.0	2344.0	1.0	83.0			QL=2 ST=2 TYP=3
07	235	CUBA	44 NS	1312.0E		408.00		11.0		
	280	CUBA	44 NS	1312.0E		408.00		17.0		
	2850	CRIM	24 R	0505.0	0620.0		15.0			
	9100	GORK	1 S	0641.7	0642.0	1.5	4.0			
	2950	GORK	2 S/F	0854.9	0855.5	1.1	4.0			
	3013	IZMI	5 S	0855.0	0855.5	0.8	6.0	3.0		
	9100	GORK	1 S	0855.1	0855.2	0.8	4.0			
	2950	GORK	21 GRF	0900.0	0954.0	120.00	9.0			
	260	ONDR	42 SER	0932.5	0933.0	236.0	80.0			
	950	GORK	21 GRF	0946.0	1045.6	74.00	8.0			
	2950	GORK	46 C	1040.5	1041.5	5.8	3.0			
	2950	GORK	46 C	1040.5	1044.7		37.0			
	2950	GORK	46 C	1040.5	1043.9		7.0			
	3013	IZMI	7 C	1041.0	1044.8	6.0	39.0	20.0		
	950	GORK	42 SER	1041.3	1044.5	4.3	108.0			
	9100	GORK	5 S	1043.4	1044.7	3.9	35.0			
	2850	CRIM	7 C	1043.5	1044.0	3.0	10.0			
	2850	CRIM	7 C	1043.5	1044.3		50.0			
	2850	CRIM	1 S	1049.0	1049.1	1.0	8.0	3.0		
	2950	GORK	2 S/F	1049.0	1049.2	1.2	7.0			
	9100	GORK	1 S	1049.0	1049.3	1.5	12.0			
	9500	CUBA	20 GRF	1356.0	1407.0	27.0	16.0	8.0		
	9500	CUBA	2 S/F	1536.0	1536.9	2.0	54.0	27.0		
	9500	CUBA	8 S	1745.0	1745.2	0.3	103.0	51.0		
	9500	CUBA	8 S	1752.0	1752.1	0.2	27.0	14.0		
	610	LEAR	8 S	2354.0	2355.0	1.0	170.0			QL=4 ST=3 TYP=3
	610	PALE	8 S	2355.0	2355.0	U	160.0			QL=2 ST=2 TYP=3

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Apr 93

SOLAR RADIO EMISSION Outstanding Occurrences

APRIL 1993

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 ⁻²² W/m ² Hz)	Mean	Int	Remarks
08	235	CUBA	44 NS	1302.0E		431.0D		10.0		
	280	CUBA	44 NS	1302.0E		431.0D		17.0		
	610	LEAR	8 S	0049.0	0049.0	U	110.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0208.0	0209.0	1.0	55.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0209.0	0209.0	U	54.0			QL=2 ST=2 TYP=3
	2950	GORK	23 GRF	0345.0E	0355.0	225.0D	13.0			
	2950	GORK	2 S/F	0537.0	0537.3	0.6	3.0			
	950	GORK	1 S	0636.0	0637.3	3.1	5.0			
	2950	GORK	22 GRF	0741.1	0744.0	10.7	2.0			
	610	SVTO	4 S/F	0926.0	0932.0	9.0	100.0			QL=4 ST=2 TYP=3
	950	GORK	4 S/F	0931.0	0932.8	5.0	200.0			
	610	LEAR	8 S	0932.0	0932.0	1.0	82.0			QL=4 ST=2 TYP=3
	1415	LEAR	8 S	0932.0	0932.0	1.0	270.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	0932.0	0932.0	1.0	290.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0932.0	0932.0	1.0	250.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	0932.0	0932.0	U	21.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	0932.0	0932.0	1.0	450.0			QL=4 ST=2 TYP=3
	2950	GORK	2 S/F	0932.3	0932.7	3.7	15.0			
	9100	GORK	1 S	0932.3	0932.8	1.4	7.0			
	410	LEAR	8 S	0934.0	0935.0	1.0	58.0			QL=4 ST=2 TYP=3
	950	GORK	1 S	1009.4	1010.1	2.7	3.0			
	2950	GORK	2 S/F	1009.5	1010.1	1.3	3.0			
	2850	CRIM	3 S	1032.4	1032.9	2.0	24.0	8.0		
	610	SGMR	8 S	1230.0	1230.0	2.0	260.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	1231.0	1231.0	U	420.0			QL=4 ST=2 TYP=3
	1415	SGMR	8 S	1231.0	1231.0	1.0	33.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	1231.0	1231.0	1.0	32.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1231.0	1231.0	U	350.0			QL=4 ST=2 TYP=3
	9500	CUBA	23 GRF	1909.0	2001.0	81.0D	29.0			2030 OFF
	2800	PENT	3 S	1927.0	1933.0	7.5				
	2800	PENT	29 PBI	1934.5	1957.5	270.0	15.9	9.0		
	1415	PALE	8 S	1945.0	1945.0	U	89.0			QL=2 ST=2 TYP=3
	610	PALE	4 S/F	1956.0	2002.0	7.0	80.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	2001.0	2002.0	1.0	75.0			QL=4 ST=2 TYP=3
	2800	PENT	4 S/F	2029.5	2039.1	17.4	35.9	12.0		
	2695	SGMR	4 S/F	2036.0	2038.0	18.0	44.0			QL=2 ST=2 TYP=3
	4995	SGMR	4 S/F	2036.0	2038.0	18.0	34.0			QL=4 ST=2 TYP=3
	2800	PENT	29 PBI	2047.0	2047.0	66.0	12.9	7.0		
09	280	CUBA	44 NS	1311.0E		239.0D		20.0		
	235	CUBA	44 NS	1311.0E		239.0D		11.0		
	8800	PALE	8 S	0229.0	0229.0	U	59.0			QL=4 ST=2 TYP=3
	410	LEAR	4 S/F	0230.0	0231.0	4.0	160.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	0230.0	0231.0	2.0	180.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0230.0	0231.0	2.0	250.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0231.0	0231.0	1.0	230.0			QL=4 ST=2 TYP=3
	610	LEAR	8 S	0231.0	0231.0	1.0	180.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0231.0	0231.0	1.0	66.0			QL=4 ST=2 TYP=3
	2950	GORK	2 S/F	0609.5	0609.9	0.7	6.0			
	2850	CRIM	8 S	0609.8	0609.9	0.3	12.0	2.0		
	410	LEAR	8 S	0802.0	0802.0	1.0	160.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	0802.0	0802.0	1.0	230.0			QL=4 ST=2 TYP=3
	127	TORN	8 S	1202.5	1203.0U	1.2	700.0D	350.0		
10	127	TORN	4 S/F	1320.7	1321.7	1.4	70.0	30.0		
	33	UPIC	45 C	1321.1	1321.2	0.7				
	127	TORN	7 C	1448.6	1448.8	1.2	280.0	90.0		
10	127	TORN	43 NS	0738.0		442.0		1.0		V=1
	235	CUBA	44 NS	1303.0E		428.0D		13.0		
	280	CUBA	44 NS	1323.0E		428.0D		19.0		
	2950	GORK	20 GRF	0842.0	0844.1	15.0	4.0			
	2850	CRIM	1 S	0842.9	0844.0	4.0	4.3	1.0		
	950	GORK	1 S	0843.4	0843.6	1.3	5.0			
	2800	PENT	28 PRE	1731.4	1741.5	10.3	4.8	2.0		
	235	CUBA	7 C	1735.7	1739.3	5.2	281.0			
	280	CUBA	7 C	1735.7E	1739.3	5.1D	511.0	17.0		
	9500	CUBA	20 GRF	1741.0	1807.0	97.0	13.0	6.0		
	2800	PENT	4 S/F	1741.5	1747.9	22.1	26.3	13.0		
	4995	PALE	4 S/F	1743.0	1747.0	11.0	39.0			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

23
Apr 93

APRIL 1993

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak Mean (10 -22 W/m 2 Hz)		Int	Remarks
10	2695	PALE	8 S	1744.0	1744.0	1.0	31.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	1744.0	1745.0	2.0	24.0			QL=4 ST=2 TYP=3
	2800	PENT	29 PBI	1803.6	1803.6	84.0	10.4	5.0		
	245	PALE	8 S	1841.0	1841.0	1.0	240.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1841.0	1841.0	1.0	280.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	1925.0	1925.0	3.0	130.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	1926.0	1926.0	2.0	140.0			QL=4 ST=2 TYP=3
	1415	PALE	4 S/F	2118.0	2119.0	3.0	14.0			QL=2 ST=2 TYP=3
	4995	PALE	8 S	2118.0	2118.0	1.0	25.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	2118.0	2119.0	1.0	40.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	2118.0	2118.0	1.0	59.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	2118.0	2118.0	1.0	24.0			QL=4 ST=2 TYP=3
	2800	PENT	3 S	2118.8	2119.1	1.8	35.9	9.0		
	2695	LEAR	8 S	2332.0	2333.0	2.0	170.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	2332.0	2333.0	2.0	130.0			QL=4 ST=2 TYP=3
	8800	PALE	8 S	2332.0	2333.0	1.0	72.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	2332.0	2333.0	1.0	93.0			QL=4 ST=2 TYP=3
	2695	PALE	8 S	2332.0	2333.0	2.0	140.0			QL=4 ST=2 TYP=3
	2800	PENT	3 S	2332.7	2333.6	2.5	132.1	36.0		
	1415	LEAR	8 S	2333.0	2333.0	U	180.0			QL=4 ST=2 TYP=3
	1415	PALE	8 S	2333.0	2333.0	1.0	190.0			QL=2 ST=2 TYP=3
	4995	PALE	8 S	2333.0	2333.0	1.0	110.0			QL=4 ST=2 TYP=3
11	260	ONDR	44 NS	0900.0E	1105.0	270.0D	65.0			
	127	TORN	43 NS	1225.0		130.0		2.0		V=1
	15400	LEAR	8 S	0026.0	0027.0	1.0	79.0			QL=4 ST=2 TYP=3
	15400	PALE	8 S	0026.0	0027.0	1.0	39.0			QL=4 ST=2 TYP=3
	4995	LEAR	8 S	0027.0	0027.0	U	30.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0027.0	0027.0	U	32.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	0053.0	0054.0	1.0	86.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0053.0	0054.0	1.0	79.0			QL=4 ST=2 TYP=3
	2950	GORK	22 GRF	0333.0E	0444.0	140.0D	5.0			
	950	GORK	21 GRF	0609.8	0615.0	16.5	8.0			
	3013	IZNI	45 C	0611.0	0612.5	5.0	616.0			
	610	LEAR	8 S	0612.0	0612.0	1.0	340.0			QL=4 ST=2 TYP=3
	2695	SVTO	8 S	0612.0	0613.0	2.0	150.0			QL=2 ST=2 TYP=3
	610	SVTO	8 S	0612.0	0613.0	1.0	250.0			QL=2 ST=2 TYP=3
	2950	GORK	4 S/F	0612.0	0613.8	3.8	123.0			
	2850	CRIM	3 S	0612.3	0613.6	7.0	169.0	27.0		
	9100	GORK	5 S	0612.4	0613.6	3.6	54.0			
	950	GORK	4 S/F	0612.8	0613.7	2.2	37.0			
	4995	LEAR	8 S	0613.0	0613.0	1.0	110.0			QL=4 ST=2 TYP=3
	410	LEAR	49 GB	0613.0	0613.0	1.0	1000.0			QL=4 ST=2 TYP=6
	245	LEAR	8 S	0613.0	0613.0	1.0	300.0			QL=4 ST=2 TYP=3
	2695	LEAR	8 S	0613.0	0613.0	1.0	110.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0613.0	0613.0	1.0	320.0			QL=4 ST=2 TYP=3
	1415	SVTO	8 S	0613.0	0613.0	1.0	39.0			QL=4 ST=2 TYP=3
	4995	SVTO	8 S	0613.0	0613.0	1.0	120.0			QL=4 ST=2 TYP=3
	8800	SVTO	8 S	0613.0	0613.0	1.0	44.0			QL=4 ST=2 TYP=3
	33	UPIC	46 C	0613.5	0614.2	1.5				
	2950	GORK	29 PBI	0615.8	0615.8	8.2	4.0			
	9100	GORK	29 PBI	0616.0	0616.0	9.3	11.0			
	33	UPIC	8 S	1225.7	1226.0	0.7				
	127	TORN	7 C	1253.1	1253.9	2.0	190.0	30.0		
	127	TORN	8 S	1354.5	1355.0	1.2	1100.0	500.0		
	33	UPIC	3 S	1431.5	1431.7	0.5				
	410	SVTO	8 S	1449.0	1449.0	U	56.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2006.0	2007.0	2.0	56.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2007.0	2007.0	U	67.0			QL=4 ST=2 TYP=3
12	260	ONDR	44 NS	0900.0E	0901.0	270.0D	130.0			
	127	TORN	43 NS	1110.0	1134.4	65.0	12.0	1.0		V=1
	280	CUBA	44 NS	1311.0E		349.0D		17.0		
	235	CUBA	44 NS	1311.0E		349.0D		10.0		
	245	LEAR	8 S	0524.0	0524.0	U	71.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0524.0	0524.0	U	87.0			QL=4 ST=2 TYP=3
	950	GORK	41 F	1058.9	1100.2		200.0			
	950	GORK	41 F	1058.9	1059.3	1.5	47.0			
	33	UPIC	4 S/F	1114.5	1114.7	0.5				

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

Outstanding Occurrences

APRIL 1993

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Mean	Int	Remarks
13	280	CUBA	44 NS	1305.0E		415.00		14.0		
	235	CUBA	44 NS	1305.0E		415.00		9.0		
	2950	GORK	2 S/F	0558.4	0559.2	1.6	1.0			
	950	GORK	1 S	0558.9	0559.1	1.1	2.0			
	260	ONDR	42 SER	1117.0	1201.0		180.0			
	245	PALE	8 S	1924.0	1925.0	1.0	49.0			QL=4 ST=2 TYP=3
14	235	CUBA	44 NS	1307.0E		445.00		10.0		
	280	CUBA	44 NS	1307.0E		445.00		14.0		
15	235	CUBA	44 NS	1314.0E		436.00		10.0		
	280	CUBA	44 NS	1314.0E		436.00		13.0		
	127	TORN	7 C	1335.7	1336.6	1.8	200.0	50.0		
16	235	CUBA	44 NS	1302.0E		328.00		11.0		
	280	CUBA	44 NS	1302.0E		328.00		15.0		
	204	IZMI	7 C	0659.8	0700.2	0.5	24.0	12.0		
	245	SVTO	8 S	0923.0	0923.0	U	54.0			QL=4 ST=2 TYP=3
	127	TORN	47 GB	0925.3	0926.0U	8.0	500.00	40.0		
	127	TORN	42 SER	1057.7	1102.9	13.0U	10.0			
	2695	PALE	8 S	2006.0	2006.0	1.0	70.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	2006.0	2007.0	1.0	27.0			QL=4 ST=2 TYP=3
	2695	SGMR	8 S	2006.0	2006.0	1.0	95.0			QL=2 ST=2 TYP=3
	4995	SGMR	8 S	2006.0	2006.0	1.0	24.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2008.0	2008.0	1.0	56.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2008.0	2009.0	1.0	53.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	2254.0	2255.0	3.0	140.0			QL=4 ST=2 TYP=3
	410	PALE	4 S/F	2254.0	2255.0	3.0	270.0			QL=4 ST=2 TYP=3
	245	LEAR	8 S	2255.0	2255.0	U	130.0			QL=4 ST=2 TYP=3
	410	LEAR	8 S	2255.0	2255.0	U	270.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	2255.0	2255.0	1.0	110.0			QL=4 ST=2 TYP=3
	610	SGMR	8 S	2255.0	2255.0	1.0	53.0			QL=4 ST=2 TYP=3
	245	SGMR	8 S	2255.0	2255.0	U	170.0			QL=4 ST=2 TYP=3
	410	SGMR	8 S	2255.0	2255.0	U	220.0			QL=4 ST=2 TYP=3
17	9100	GORK	3 S	0531.6	0531.8	0.5	13.0			
	2850	CRIM	3 S	0642.2	0644.0	2.5	16.0	5.0		
	2950	GORK	2 S/F	0643.1	0644.0	2.4	12.0			
	3013	IZMI	5 S	0643.5	0644.0	2.0	6.0	3.0		
	950	GORK	1 S	0643.7	0644.1	1.7	3.0			
	9100	GORK	1 S	0643.8	0644.1	1.1	7.0			
	245	LEAR	8 S	0735.0	0735.0	1.0	120.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0735.0	0735.0	1.0	130.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	0735.5	0736.0	1.0	200.0			
	2950	GORK	1 S	0735.7	0736.0	0.9	1.0			
	204	IZMI	41 F	0754.0	0754.2	2.0	150.0			
	204	IZMI	42 SER	0854.0	0904.0	13.5	120.0			
	260	ONDR	42 SER	0900.5	0901.5	5.5	80.0			
	33	UPIC	4 S/F	1304.0	1304.2	1.3				
	33	UPIC	46 C	1430.0	1432.2	3.5				
18	260	ONDR	44 NS	0900.0E	1002.0	270.00	505.0			
	2950	GORK	1 S	0531.2	0532.4	3.7	2.0			
	610	LEAR	8 S	0907.0	0907.0	U	200.0			QL=4 ST=2 TYP=3
	2950	GORK	2 S/F	0947.1	0948.1	3.3	3.0			
	33	UPIC	46 C	0947.5	0948.1	1.9				
	2950	GORK	46 C	0957.6	1002.1		7.0			
	2950	GORK	46 C	0957.6	0959.4	5.4	5.0			
	33	UPIC	48 C	0958.0	1002.2	5.0				
	950	GORK	4 S/F	0958.4	1002.1	5.0	30.0			
	245	SVTO	8 S	1001.0	1002.0	1.0	490.0			QL=4 ST=2 TYP=3
	410	SVTO	8 S	1001.0	1002.0	1.0	92.0			QL=4 ST=2 TYP=3
	204	IZMI	41 F	1001.4	1002.0	1.0	680.0			
	9100	GORK	1 S	1001.6	1002.1	1.0	4.0			
	610	PALE	49 GB	1903.0	1908.0	13.0	9000.0			QL=4 ST=2 TYP=6
	610	SGMR	49 GB	1903.0	1908.0	14.0	11000.0			QL=4 ST=2 TYP=6
	410	PALE	49 GB	1904.0	1909.0	11.0	2200.0			QL=4 ST=2 TYP=6
	410	SGMR	49 GB	1904.0	1909.0	13.0	2400.0			QL=4 ST=2 TYP=6
	2800	PENT	28 PRE	1904.5	1906.4	3.5	20.5	9.0		

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

Outstanding Occurrences

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APRIL 1993

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Mean	Int	Remarks
18	1415	PALE	49 GB	1905.0	1908.0	9.0	5700.0			QL=2 ST=2 TYP=7
	4995	PALE	49 GB	1905.0	1908.0	12.0	950.0			QL=2 ST=2 TYP=6
	2695	PALE	49 GB	1905.0	1908.0	11.0	680.0			QL=4 ST=2 TYP=6
	1415	SGMR	49 GB	1905.0	1908.0	12.0	6200.0			QL=4 ST=2 TYP=7
	4995	SGMR	49 GB	1905.0	1908.0	12.0	1100.0			QL=4 ST=2 TYP=6
	245	PALE	4 S/F	1906.0	1915.0	16.0	190.0			QL=4 ST=2 TYP=3
	2695	SGMR	49 GB	1906.0	1908.0	11.0	650.0			QL=2 ST=2 TYP=6
	245	SGMR	4 S/F	1906.0	1908.0	11.0	300.0			QL=4 ST=2 TYP=3
	8800	PALE	49 GB	1907.0	1908.0	9.0	1400.0			QL=4 ST=2 TYP=6
	8800	SGMR	49 GB	1907.0	1908.0	10.0	1200.0			QL=4 ST=2 TYP=6
	15400	PALE	49 GB	1908.0	1909.0	9.0	1500.0			QL=4 ST=2 TYP=6
	15400	SGMR	49 GB	1908.0	1909.0	9.0	1300.0			QL=2 ST=2 TYP=6
	2800	PENT	47 GB	1908.0	1909.1	9.7	612.0	159.0		
	610	SGMR	8 S	1941.0	1943.0	2.0	140.0			QL=4 ST=2 TYP=3
19	127	TORN	43 NS	1001.0		180.0		1.0		V=1
	280	CUBA	44 NS	1343.0E		392.0D		17.0		
	235	CUBA	44 NS	1343.0E		392.0D		13.0		
	9100	GORK	1 S	0604.0	0604.3	2.0	4.0			
	245	SVTO	8 S	0609.0	0609.0	U	150.0			QL=2 ST=2 TYP=3
	410	SVTO	8 S	0609.0	0609.0	U	43.0			QL=2 ST=2 TYP=3
	2950	GORK	23 GRF	0746.8	0748.9	13.2	3.0			
	3013	IZMI	40 F	0747.0	0753.4	9.0	5.0			
	9100	GORK	7 C	0748.6	0749.1	5.5	4.0			
	2950	GORK	1 S	0752.7	0753.3	1.3	3.0			
	950	GORK	1 S	0752.7	0753.7	1.3	8.0			
	2950	GORK	1 S	1028.3	1028.7	1.7	2.0			
20	204	IZMI	44 NS	0600.0E		360.0D		50.0		
	127	TORN	43 NS	0758.0		340.0		3.0		V=1
	260	ONDR	44 NS	0900.0E	1003.0	270.0D	260.0			
	245	SGMR	43 NS	1210.0	1239.0	35.0	75.0			QL=4 ST=2 TYP=1
	280	CUBA	44 NS	1406.0E		370.0D		15.0		
	235	CUBA	44 NS	1406.0E		429.0D		13.0		
	9100	GORK	1 S	0703.5	0705.9	3.1	5.0			
	204	IZMI	41 F	0708.0	0708.3	1.0	120.0			
	204	IZMI	41 F	0736.0	0736.2	0.8	200.0			
	245	LEAR	8 S	0739.0	0739.0	U	54.0			QL=4 ST=2 TYP=3
	9100	GORK	1 S	0842.0	0844.8	4.0	6.0			
	2950	GORK	1 S	0843.5	0843.9	1.5	3.0			
	245	LEAR	8 S	0908.0	0908.0	U	64.0			QL=4 ST=2 TYP=3
	245	LEAR	4 S/F	0915.0	0916.0	3.0	94.0			QL=4 ST=2 TYP=3
	9100	GORK	1 S	0925.1	0925.2	0.7	9.0			
	245	LEAR	8 S	0939.0	0939.0	U	58.0			QL=4 ST=2 TYP=3
	245	SVTO	8 S	0939.0	0939.0	1.0	48.0			QL=2 ST=2 TYP=3
21	204	IZMI	44 NS	0600.0E		360.0D		10.0		
	127	TORN	43 NS	1031.0		130.0		1.0		V=0
	235	CUBA	44 NS	1315.0E		429.0D		13.0		
	280	CUBA	44 NS	1315.0E		429.0D		17.0		
	245	PALE	4 S/F	0005.0	0007.0	4.0	72.0			QL=4 ST=2 TYP=3
	245	PALE	8 S	0006.0	0007.0	1.0	72.0			QL=4 ST=3 TYP=3
	8800	LEAR	4 S/F	0718.0	0720.0	8.0	54.0			QL=4 ST=2 TYP=3
	9100	GORK	5 S	0719.9	0720.5	2.9	59.0			
	4995	SVTO	8 S	0720.0	0720.0	U	27.0			QL=2 ST=2 TYP=3
	8800	SVTO	8 S	0720.0	0720.0	U	53.0			QL=2 ST=2 TYP=3
	3013	IZMI	4 S/F	0720.0	0720.5	6.0	9.0			
	9100	GORK	29 PBI	0722.8	0722.8	28.2	6.0			
22	235	CUBA	44 NS	1315.0E		423.0D		13.0		
	280	CUBA	44 NS	1315.0E		423.0D		17.0		
	2950	GORK	1 S	0912.9	0913.5	1.8	2.0			
	950	GORK	4 S/F	0913.1	0913.2	0.6	17.0			
	2850	CRIM	3 S	1406.4	1409.0	12.0	112.0	40.0		
	9500	CUBA	3 S	1406.7	1408.0U	6.3	117.0D			
	4995	SGMR	4 S/F	1407.0	1408.0	7.0	460.0			QL=4 ST=2 TYP=3
	15400	SGMR	4 S/F	1407.0	1408.0	7.0	450.0			QL=2 ST=2 TYP=3
	8800	SGMR	4 S/F	1407.0	1408.0	7.0	430.0			QL=4 ST=2 TYP=3
	4995	SVTO	4 S/F	1407.0	1408.0	593.0	460.0			QL=4 ST=1 TYP=3

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

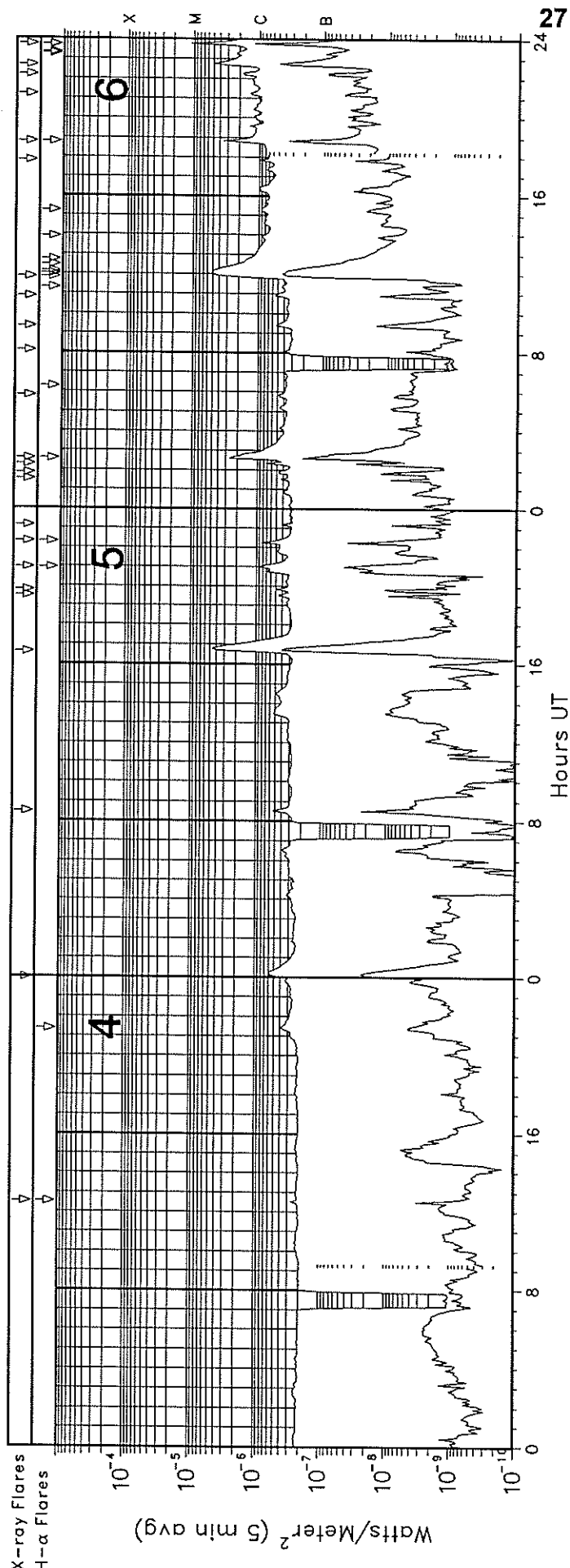
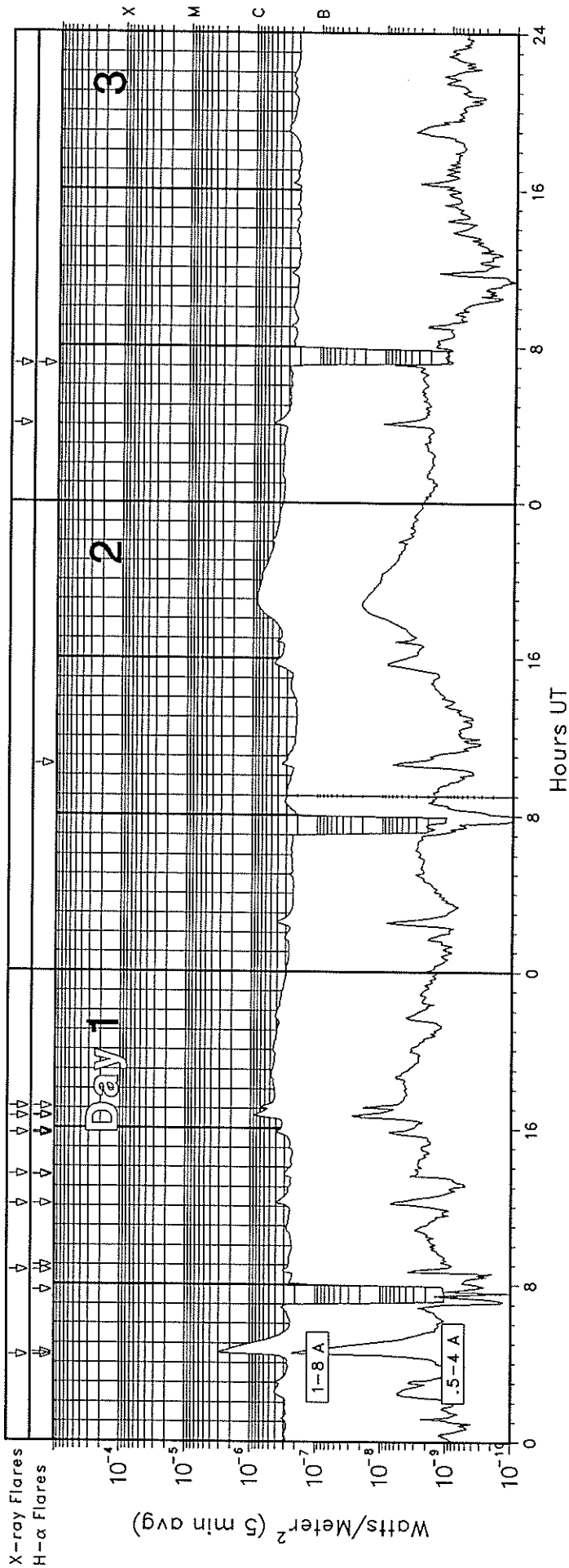
Outstanding Occurrences

APRIL 1993

Day	Freq	Sta	Type	Start (UT)	Time of Maximum (UT)	Duration (Min)	Flux Density Peak (10 -22 W/m 2 Hz)	Mean	Int	Remarks
22	8800	SVTO	4 S/F	1407.0	1408.0	593.0	370.0			QL=4 ST=1 TYP=3
	2695	SGMR	4 S/F	1408.0	1408.0	6.0	97.0			QL=2 ST=2 TYP=3
	2695	SVTO	4 S/F	1408.0	1408.0	592.0	120.0			QL=2 ST=1 TYP=3
	15400	SVTO	4 S/F	1408.0	1408.0	592.0	440.0			QL=4 ST=1 TYP=3
	9500	CUBA	29 PBI	1413.0		34.0	22.0	11.0		
23	235	CUBA	44 NS	1310.0E		428.0D		12.0		
	245	LEAR	8 S	0742.0	0742.0	U	53.0			QL=4 ST=2 TYP=3
	2850	CRIM	20 GRF	1346.0	1350.0	6.0	8.0	2.0		
24	204	IZMI	43 NS	0930.0		150.0D		20.0		
	235	CUBA	44 NS	1305.0E		445.0D		12.0		
	280	CUBA	44 NS	1305.0E		445.0D		18.0		
	9100	GORK	20 GRF	0400.0E	0758.9	408.0D	18.0			
	2850	CRIM	24 R	1000.0	1100.0		10.0			
	610	PALE	8 S	2237.0	2239.0	2.0	32.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	2237.0	2239.0	2.0	37.0			QL=4 ST=2 TYP=3
	245	PALE	4 S/F	2237.0	2239.0	3.0	42.0			QL=4 ST=2 TYP=3
25	280	CUBA	44 NS	1300.0E		412.0D		17.0		
	235	CUBA	44 NS	1300.0E		412.0D		13.0		
	245	PALE	8 S	0201.0	0202.0	2.0	42.0			QL=4 ST=2 TYP=3
	610	PALE	8 S	0201.0	0201.0	1.0	30.0			QL=4 ST=2 TYP=3
	410	PALE	8 S	0201.0	0202.0	2.0	36.0			QL=4 ST=2 TYP=3
	2950	GORK	22 GRF	0841.0	0854.0	32.6	2.0			
	2950	GORK	20 GRF	0951.0	0954.2	24.0	4.0			
	3013	IZMI	20 GRF	0953.0	0954.5	7.0	4.0	3.0		
	9100	GORK	1 S	0953.5	0955.7	3.2	4.0			
	2850	CRIM	24 R	0958.0	0959.0		4.0			
	204	IZMI	41 F	1022.5	1024.5	3.0	10.0			
	260	ONDR	45 C	1023.0	1027.5	6.0	75.0			
	127	TORN	4 S/F	1023.7	1024.8	1.8	100.0	50.0		
26	204	IZMI	43 NS	0600.0		360.0D		10.0		
	260	ONDR	43 NS	1100.0	1141.0	130.0	80.0			
	235	CUBA	44 NS	1305.0E		415.0D		14.0		
	280	CUBA	44 NS	1305.0E		415.0D		18.0		
27	9100	GORK	1 S	0405.8	0406.4	0.9	6.0			
	204	IZMI	7 C	0610.5	0611.5	1.5				
	2950	GORK	20 GRF	0946.2	0948.5	27.3	5.0			
	2850	CRIM	1 S	0946.5	0948.5	3.0	6.0	2.0		
	3013	IZMI	20 GRF	0946.5	0948.5	7.0	4.0	3.0		
	245	PALE	8 S	2006.0	2006.0	U	67.0			QL=4 ST=2 TYP=3
28	9100	GORK	7 C	0403.1	0403.2	0.9	6.0			
	2950	GORK	1 S	0403.1	0403.2	0.4	2.0			
	204	IZMI	7 C	0814.2	0814.5	1.5	19.0			
	204	IZMI	41 F	0937.6	0937.6U	1.0	20.0			
	245	SGMR	8 S	1517.0	1518.0	2.0	94.0			QL=4 ST=2 TYP=3
29	280	CUBA	44 NS	1304.0E		296.0D		14.0		
	235	CUBA	44 NS	1304.0E		466.0D		11.0		
	9100	GORK	20 GRF	0400.0E	0500.0	186.0D	11.0			
	536	ONDR	8 S	0830.0	0830.0	0.5	70.0			
	260	ONDR	2 S/F	0830.0	0830.5	2.0	32.0			
	536	ONDR	8 S	0832.5	0832.8	0.5	62.0			
	260	ONDR	2 S/F	0837.5	0839.0	2.5	40.0			
	808	ONDR	8 S	0838.5	0839.0	0.5	73.0			
	536	ONDR	8 S	0838.5	0839.0	1.0	80.0			
	245	PALE	8 S	2029.0	2029.0	U	55.0			QL=4 ST=2 TYP=3
30	235	CUBA	44 NS	1308.0E		312.0D		11.0		
	280	CUBA	44 NS	1308.0E		312.0D		14.0		
	9500	CUBA	2 S/F	1413.8	1414.0	0.3	12.0	6.0		
	9500	CUBA	2 S/F	1428.7	1428.9	0.5	21.0	10.0		

GOES-7 X-RAY DETECTOR

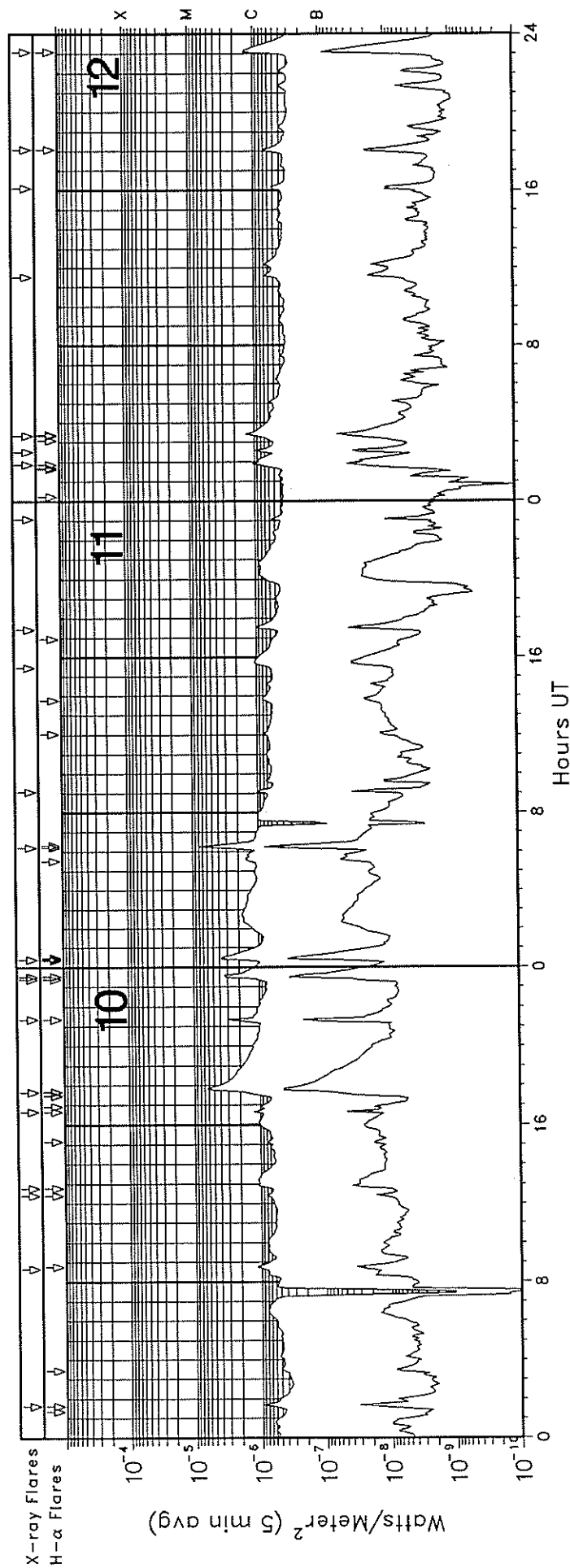
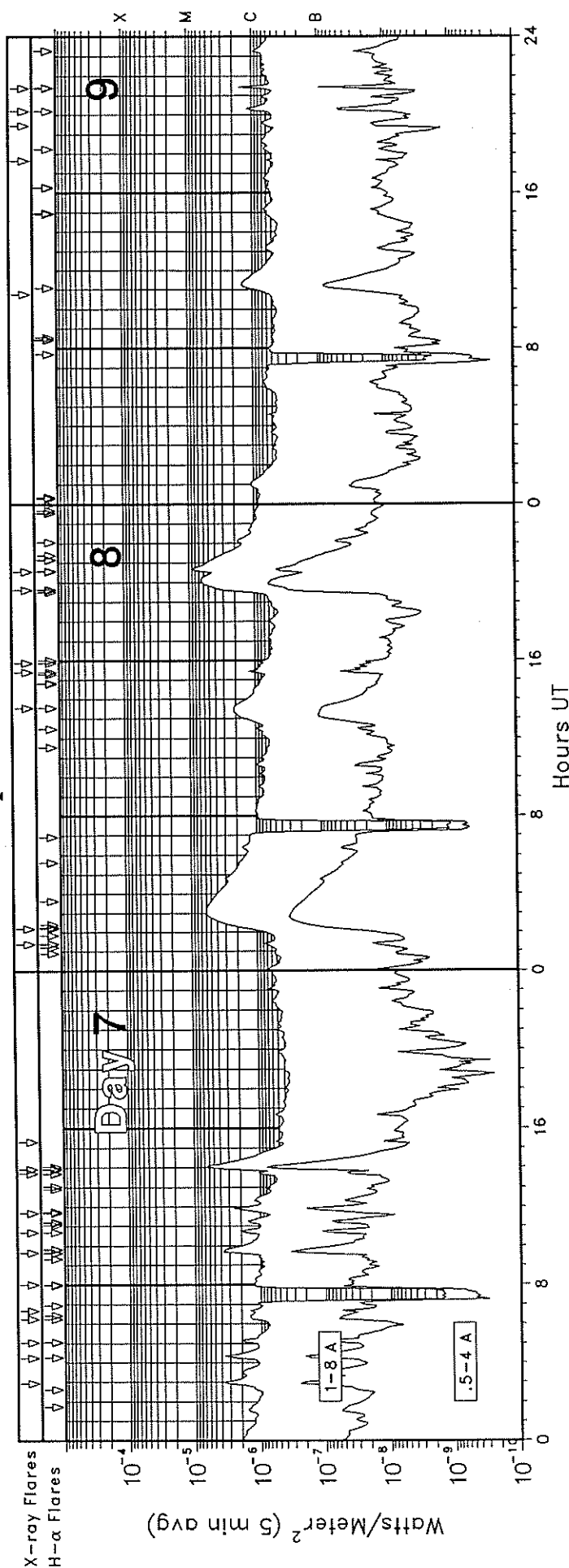
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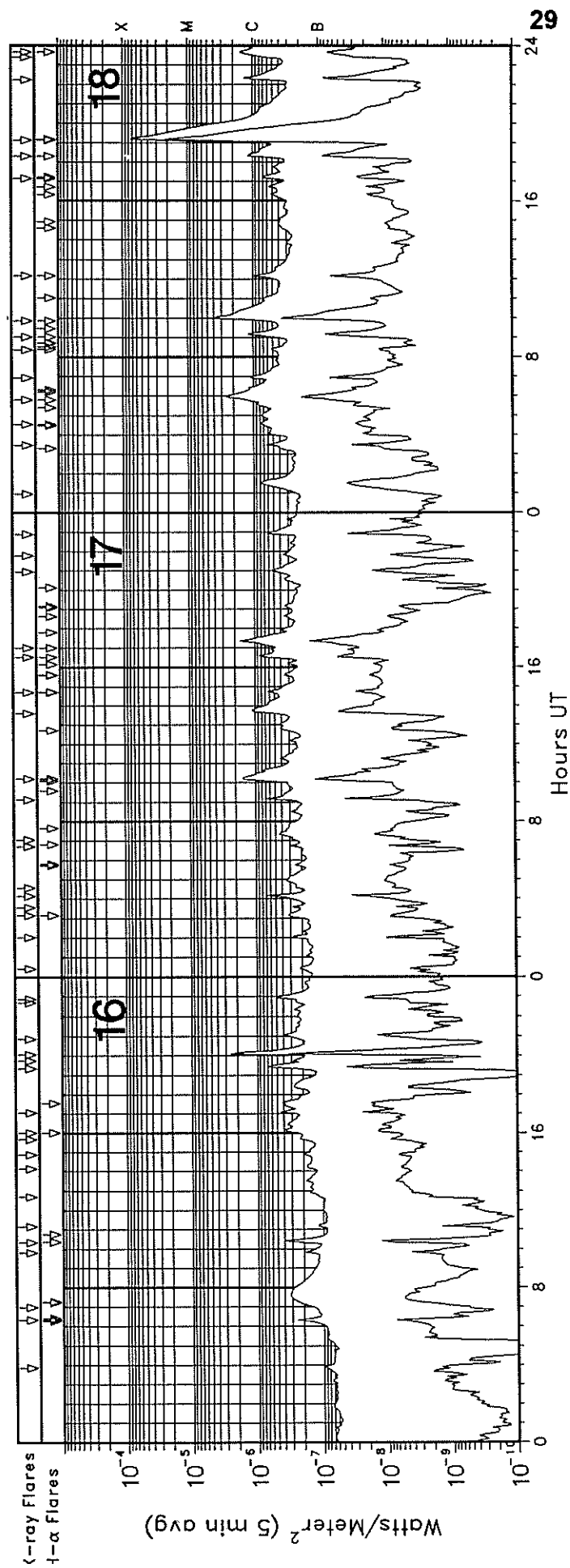
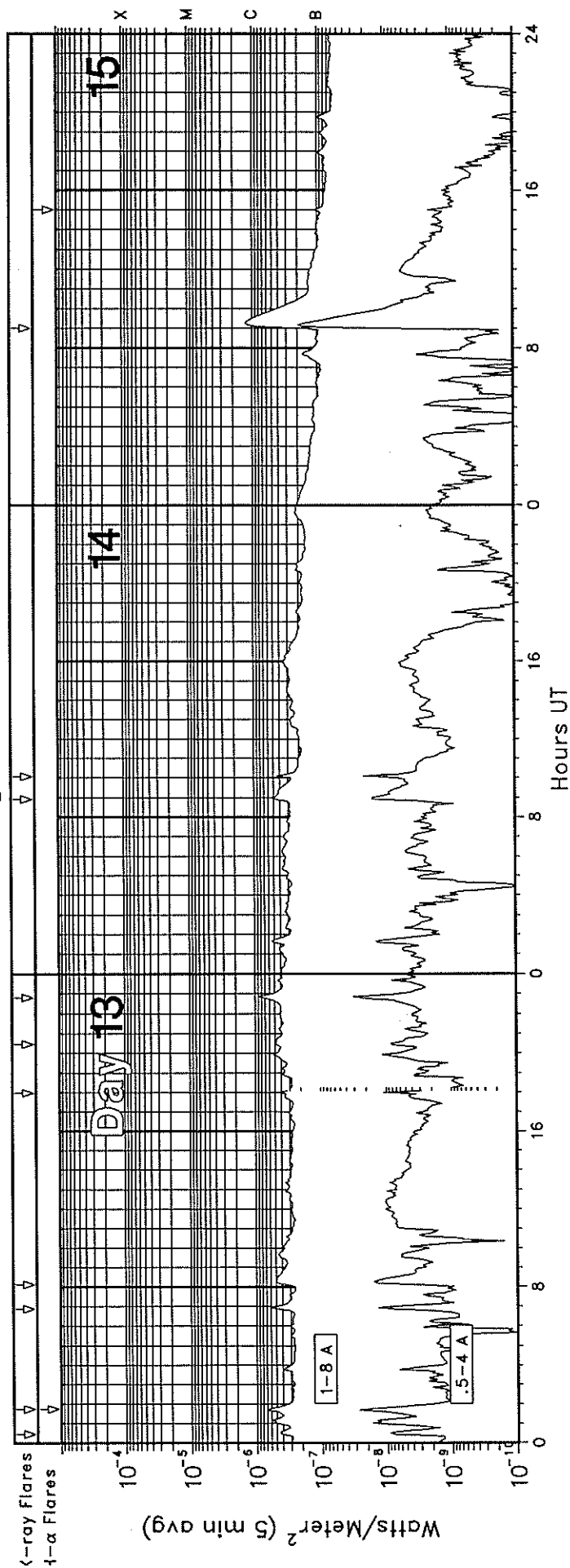
GOES-7 X-RAY DETECTOR

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GOES-7 X-RAY DETECTOR

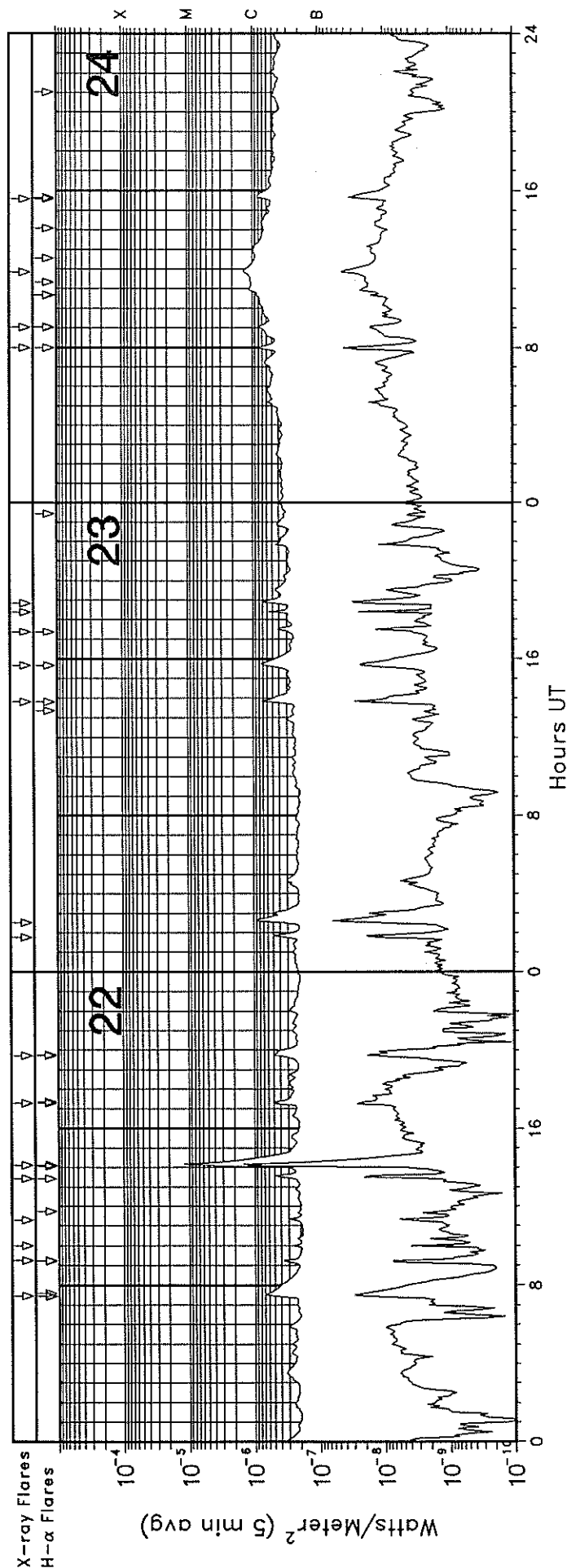
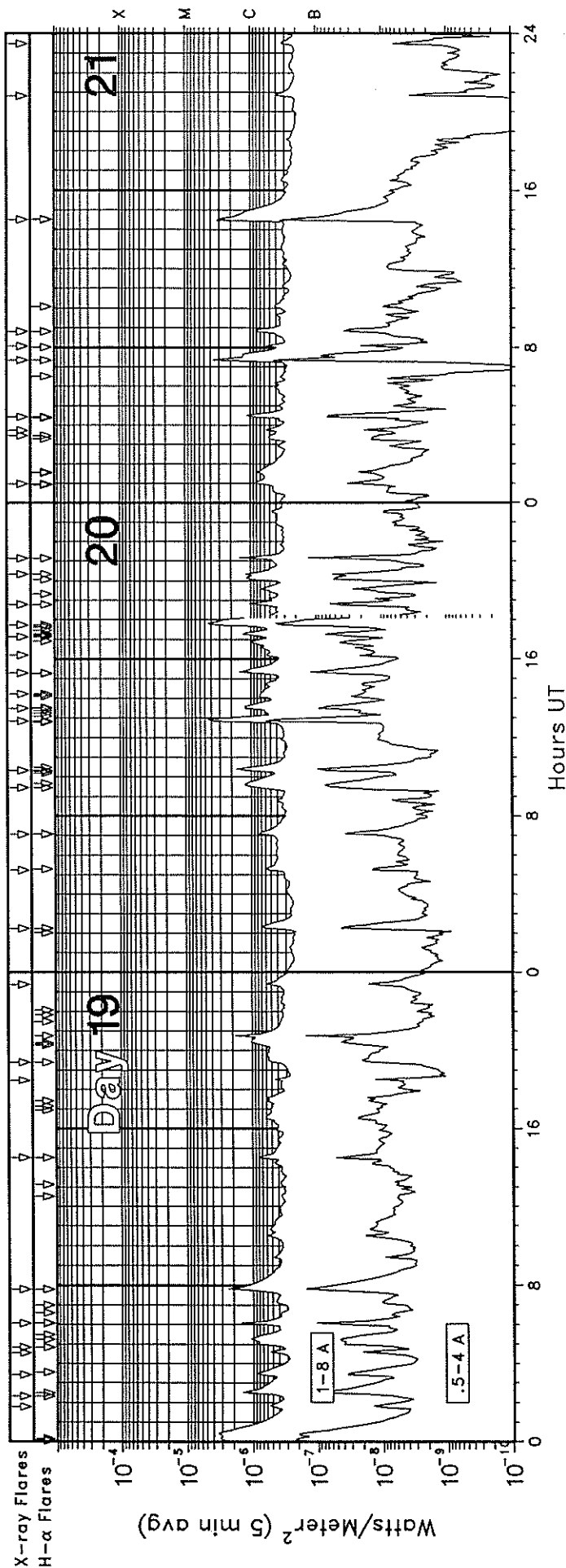
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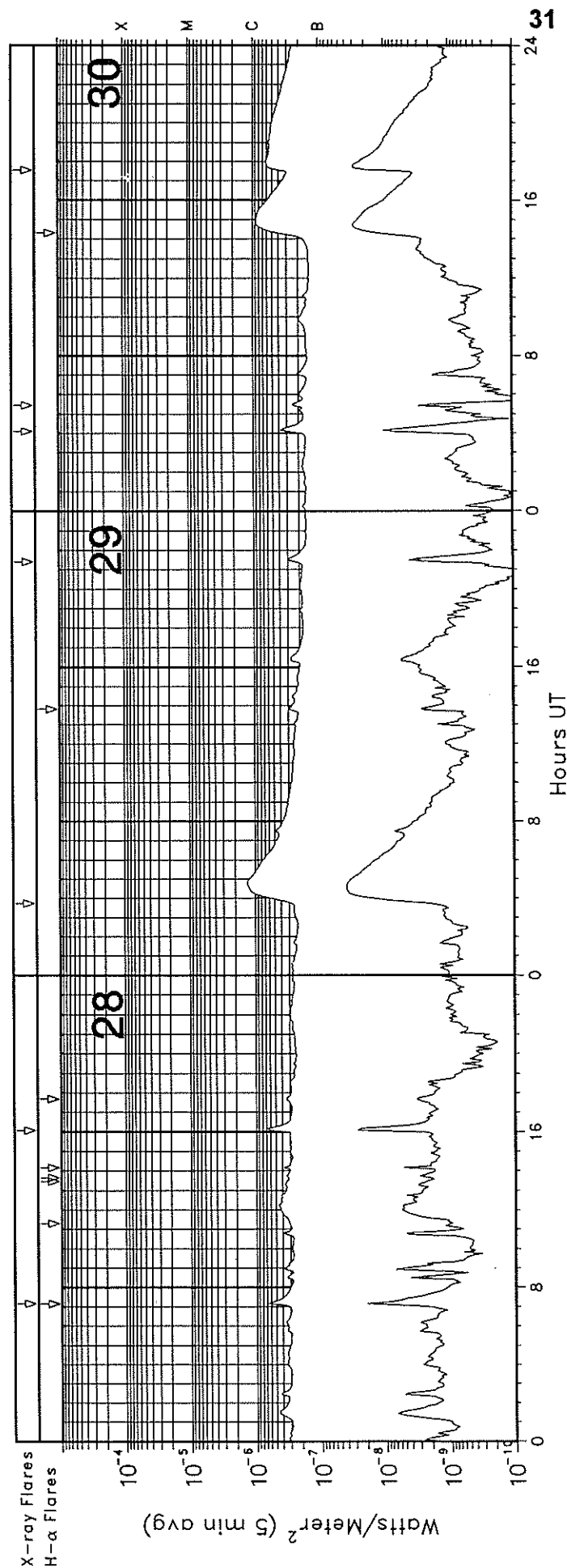
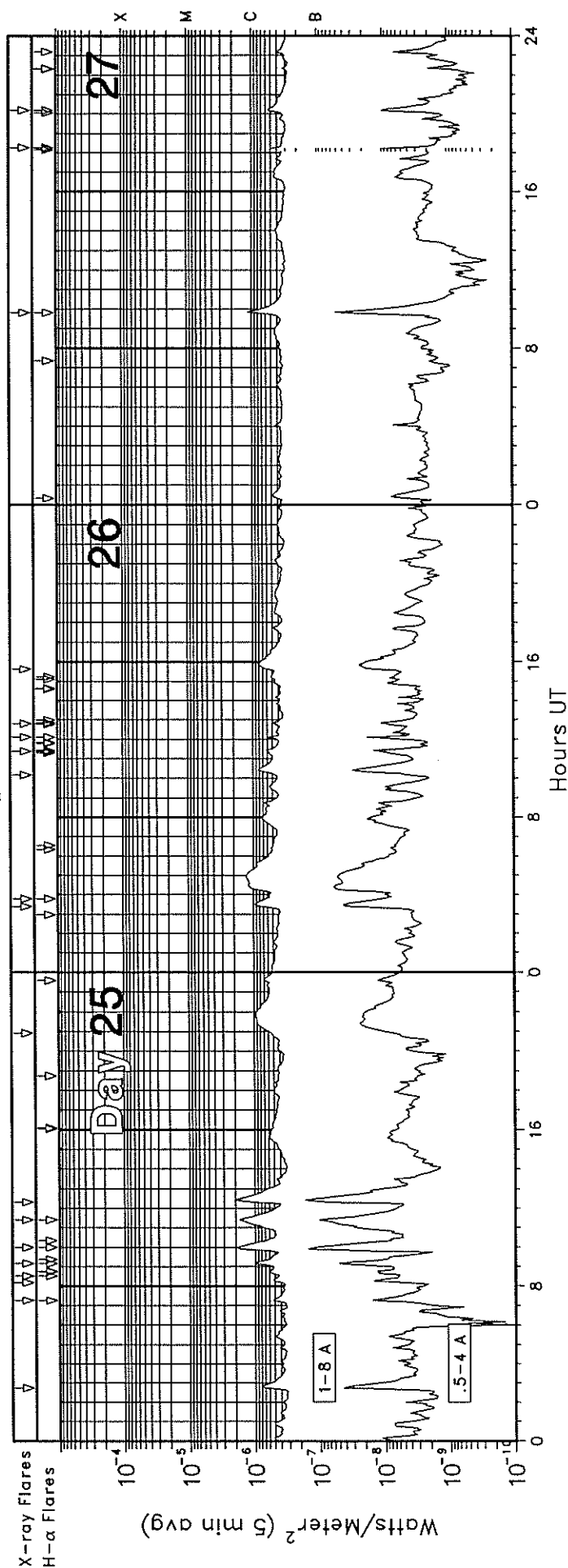
GOES-7 X-RAY DETECTOR

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GOES SOLAR X-RAY FLARES
Preliminary Listing

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Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/USAF Region
01	0423	0433	0504	S11	E19	1N	C3.9	7463
01	0842	0844	0850	S11	E16	SF	B4.0	7463
01	1205	1214	1226				B3.9	
01	1336	1337	1342	S11	E13	SF	B3.0	7463
01	1543	1549	1603	N08	W41	SF	B4.3	7467
01	1634	1639	1712	N04	W07	SF	B9.6	7461
01	1705	1708	1717	N10	W47	SF	B8.0	7467
03	0402	0407	0414				B5.1	
03	0705	0706	0718	S13	W09	SF	C1.2	7463
04	1232	1233	1245	S21	W47	SF	B3.3	7466
05	0000	0012	0028				B6.0	
05	0829	0834	0903				B5.9	
05	1635	1648	1700				C4.6	
05	1929	1931	1935				B4.7	
05	1947	1951	1956				B5.3	
05	2057	2058	2109	S12	E16	SF	B9.4	7469
05	2218E	2219U	2222	S20	W62	SF	B9.7	7466
05	2308	2312	2315				B4.5	
06	0130	0133	0136				B4.8	
06	0150	0155	0159				B5.5	
06	0217	0222	0225				B8.3	
06	0234	0238	0257	S07	W14	SF	C2.9	7465
06	0547	0551	0553				B5.6	
06	0805	0808	0810				B5.3	
06	0919	0926	0933				B5.4	
06	1051	1058	1104				B5.6	
06	1150	1156	1252	S08	W18	1F	C5.6	7465
06	1748	1751	1753				C1.4	
06	1846	1851	1902D	S12	E08	SF	C4.4	7469
06	2111	2115	2120				C1.6	
06	2210	2215	2219				C1.9	
06	2239	2247	2254				C5.2	
06	2343	2346	2352				M1.5	
07	0255	0259	0305				C4.2	
07	0415	0421	0427				C4.1	
07	0503	0512	0515				C2.2	
07	0615	0616	0630	S12	W00	SF	C1.4	7469
07	0641	0644	0646				C1.7	
07	0801	0807	0821	S11	W05	SF	C1.3	7469
07	0938	0942	0958	S10	W31	SF	C4.1	7465
07	1042	1045	1054	S12	W01	SN	C3.0	7469
07	1141	1154	1201	S12	W05	SF	C3.5	7469
07	1343	1343	1347	S12	W03	SF	C1.2	7469
07	1356	1357	1426	S12	W06	SF	C7.6	7469
07	1520	1523	1526				B6.4	
08	0123	0125	0133	S12	W10	SN	B8.8	7469
08	0211	0320	0440	S06	W41	1F	C5.9	7465
08	1332	1335	1341	S12	W23	SF	C2.1	7469
08	1524	1529	1534	S07	W19	SF	C1.3	7470
08	1553	1614	1625	S06	W18	SF	B9.9	7470
08	1937	1958	2026	S10	W21	SF	C6.5	7469
08	2034	2037	2207	N16	E62	1N	C9.2	
09	1046	1119	1208				C1.4	
09	1739	1742	1744				B7.1	
09	1927	1930	1932				B8.6	
09	2011	2022	2034	S05	W35	SF	C1.2	7470
09	2123	2125	2136	S06	W35	SN	C2.1	7470

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Opt	Imp Xray	NOAA/USAF Region
10	0137	0140	0200	S09	W69	SF	C1.0	7465
10	0840	0846	0855				C1.1	
10	1224	1226	1233	N06	W43	SF	B8.7	7472
10	1247	1249	1256	N06	W43	SF	C1.1	7472
10	1640	1641	1650	S02	W80	SF	C1.3	7465
10	1739	1747	1823	S07	W47	1N	C6.6	7470
10	2120	2120	2124	S01	W83	SF	C4.4	7465
10	2323	2324	2329	S07	W54	SF	C1.4	7469
10	2331	2334	2354	S08	W51	1N	C9.1	7469
11	0024	0028	0045	S13	W54	SN	C6.2	7469
11	0612	0616	0622				C8.9	
11	0904	0909	0914				C1.2	
11	1526	1541	1614				C1.0	
11	1726	1733	1744				C1.0	
11	2304	2308	2311				B6.1	
12	0152	0156	0201				C1.1	
12	0230	0238	0242				C1.0	
12	0320	0327	0343D	S12	W67	SF	C1.5	7469
12	1131	1139	1147				B6.8	
12	1606	1610	1616				B5.6	
12	1805	1809	1815	S05	W74	SF	B7.6	7469
12	2305	2309	2324	N01	W76	SF	C1.4	7472
13	0026	0036	0041				B4.6	
13	0143E	0147U	0205D	N02	W77	SF	B7.4	7472
13	0652	0659	0704				B6.0	
13	0807	0817	0856				B5.1	
13	1759	1802	1804				B5.0	
13	2027	2030	2037				B5.5	
13	2247	2252	2256				B9.5	
14	0854	0902	0928				B4.9	
14	1003	1007	1012				B4.7	
15	0901	0920	0948				C1.2	
16	0352	0355	0359				B1.1	
16	0619E	0621	0630	N05	E35	SF	B2.8	7475
16	0658	0735	0812				B3.2	
16	0948	0952	0956				B2.1	
16	1020	1026	1031				B4.4	
16	1111	1115	1117				B1.5	
16	1242	1245	1247				B1.4	
16	1409	1418	1431				B1.7	
16	1452	1456	1459				B2.3	
16	1540	1544	1546				B2.5	
16	1601	1603	1610	N09	E79	SF	B4.1	7477
16	1704	1709	1712				B5.0	
16	1921	1927	1937				B7.2	
16	1945	1948	1951				B3.2	
16	2003	2010	2013				C3.5	
16	2052	2107	2112				B4.3	
16	2241	2246	2248				B3.0	
16	2253	2304	2306				B5.5	
17	0026	0029	0033				B2.5	
17	0202	0205	0207				B5.1	
17	0309	0314	0329	N15	W60	SF	B3.2	7473
17	0334	0337	0340				B3.4	
17	0408	0411	0414				B9.8	
17	0435	0438	0444				B2.8	
17	0643	0646	0650				B3.3	

GOES SOLAR X-RAY FLARES
Preliminary Listing

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Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt Xray	NOAA/ USAF Region
17	0703	0706	0708			B3.2	
17	0908	0912	0914			B9.9	
17	1011E	1012U	1023	N15	W64	SF C1.6	7473
17	1336	1346	1402			C1.1	
17	1442	1446	1459	N08	E74	SF B8.2	7477
17	1630	1654	1745	N07	E71	SF B9.8	7477
17	1659	1700	1738	N09	E70	SF C1.8	7477
17	2057	2102	2110			B5.5	
17	2147	2152	2157			B3.7	
17	2253	2259	2306			B7.4	
18	0057	0139	0146			B6.9	
18	0328	0332	0337			B6.8	
18	0432	0435	0443	N16	W78	SF B7.8	7473
18	0548	0550	0613	N16	W79	SF C2.7	7473
18	0655	0659	0704			C1.3	
18	0821	0824	0830			B5.7	
18	0902	0910	0921	N11	E61	SF C1.2	7477
18	0951	0959	1020	S15	E79	1F C4.5	7480
18	1210	1211	1221	N11	E60	SF C1.1	7477
18	1709	1712	1721	S19	E76	SF B8.1	7480
18	1818	1824	1830	N10	E54	SF C1.1	7477
18	1907	1909	2011	N10	E55	1B M8.7	7477
18	2214	2221	2228			C1.4	
18	2324	2342	2355			C1.5	
18	2340	0007	0035	N10	E52	SF C3.4	7477
19	0146	0151	0200			B5.6	
19	0219	0231	0244	N09	E50	SF C1.5	7477
19	0325	0331	0338			B9.4	
19	0432	0440	0444			B5.6	
19	0450	0515	0531	N10	E48	SF C1.1	7477
19	0603	0604	0615	N11	E50	SF C2.1	7477
19	0748	0751	0805	S16	E67	SF C2.7	7480
19	1431	1433	1451	N10	E44	SF B9.4	7477
19	1828	1831	1833			B5.2	
19	1924	1925	1931	N11	E41	SF C2.8	7477
19	2322	2327	2332			B6.2	
20	0215	0218U	0228	N10	E37	SF B7.3	7477
20	0515	0520	0525			B7.4	
20	0703	0706	0745	N11	E35	SF B8.2	7477
20	0927	0945	1001	N11	E33	SF C1.2	7477
20	1020	1021	1033	S14	E53	SF C1.8	7480
20	1251	1253	1314	N11	E31	SN C5.6	7477
20	1330	1332	1347	N10	E31	SF C1.3	7477
20	1413	1417	1429	S14	E10	SF B7.7	7483
20	1517	1519	1541	N12	E30	SF C1.6	7477
20	1611	1615	1618			B7.7	
20	1707	1746	1825	N11	E28	SN C1.3	7477
20	1744	1752	1815	N11	E29	SF C5.1	7477
20	1847	1850	1919	N11	E28	SF C1.2	7477
20	2020	2020U	2047D	N11	E28	SF C1.3	7477
20	2109	2109	2119	N11	E27	SF C1.6	7477
21	0059	0103	0128	S14	E03	SF B8.9	7483
21	0327	0329	0331	S14	E02	SF B5.2	7483
21	0344	0348	0352			B5.8	
21	0425	0429	0455	N11	E23	SF C1.2	7477
21	0720	0720	0759	N12	E20	SF C4.5	7477

Day	Start (UT)	Max (UT)	End (UT)	Lat	CMD	Imp Opt Xray	NOAA/ USAF Region
21	0804	0808	0810			B6.3	
21	0849	0855	0904	S15	E02	SF C1.1	7483
21	1431	1431	1517	S15	W04	SN C4.5	7483
21	2048	2055	2103			B4.1	
21	2330	2334	2339			B3.6	
22	0727	0727	0739	S16	E30	SF B7.0	7480
22	0914	0914	0921	S14	E24	SF B5.6	7480
22	0959	1002	1005			B2.9	
22	1117	1121	1125			B3.2	
22	1326	1336	1352	N11	E05	SF B6.7	7477
22	1407	1409	1512	N11	E04	SB M1.5	7477
22	1716	1719	1729	S11	W10	SF B6.6	7487
22	1943	1947	2011	N11	W00	SF B5.3	7477
23	0146	0151	0157			B5.4	
23	0230	0239	0247			C1.1	
23	1348	1350	1411	N10	W10	SF B7.6	7477
23	1540	1544	1606	N09	W11	SF B7.8	7477
23	1723	1723	1728	S14	W32	SF B5.4	7483
23	1823	1827	1829			B8.0	
23	1850	1856	1905			B7.5	
24	0759	0801	0808	S17	W42	SF C1.0	7483
24	0902	0903	0913	N11	E47	SF B8.5	7489
24	1150	1152	1159			C1.3	
24	1536	1540	1602	S14	W46	SF B8.6	7483
25	0244	0250	0302			B8.4	
25	0715	0719	0726	N13	W33	SF B5.6	7477
25	0810	0820	0829			B5.5	
25	0832	0841	0852	N12	W35	SF B6.4	7477
25	0910	0910	0916	N10	W35	SF C1.0	7477
25	0959	1004	1014	N12	W35	SF C1.9	7477
25	1124	1126U	1136D	N12	W36	SF C1.7	7477
25	1219	1228	1240			C2.0	
25	2055	2135	2230			B9.0	
26	0323	0332	0346			B9.5	
26	0348E	0400U	0419D	S14	W65	SF C1.2	7483
26	1010	1028	1041			B8.6	
26	1123	1123	1129	S12	W71	SF B7.2	7483
26	1205	1206	1214	S12	W71	SF B7.3	7483
26	1247	1251	1257	S12	W71	SF B5.1	7483
26	1537	1554	1611			B8.1	
27	0948	0949	1004	N12	W61	SF C1.1	7477
27	1816	1816	1820	N13	W68	SF B6.7	7477
27	2011	2012	2016	S14	W46	SF B6.6	7480
28	0709	0712	0730	N09	E29	SF B6.9	7490
28	1604	1610	1618			B7.2	
29	0345	0452	0600			C1.3	7494
29	2124	2132	2143			B3.0	
30	0406	0413	0421			B3.8	
30	0526	0530	0536			B2.7	
30	1732	1752	2030			B6.1	

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Preliminary GOES Satellite Data
Daily Average X-ray Background
Apr 1992 - Mar 1993

	1992								1993			
Day	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
1	B4.2	B1.4	B3.9	B3.2	B1.2	B1.9	B6.3	B4.0	B3.3	B9.2	B4.5	B1.6
2	B4.5	B1.4	B3.6	B4.6	B1.7	B2.3	B7.9	B4.6	B3.4	B5.1	B7.6	B1.9
3	B3.5	B1.6	B4.1	B7.1	B2.0	B2.2	B4.9	B4.5	B3.3	B5.1	C1.0	B1.2
4	B6.3	B1.7	B3.1	B5.2	B3.5	B2.6	B5.4	B4.2	B2.3	B6.3	B8.2	B1.2
5	B7.6	B2.0	C1.1	B3.8	B9.2	B4.2	B5.0	B3.6	B2.4	B8.6	B6.5	B1.7
6	B4.4	B2.3	C1.2	B3.7	C1.1	B4.4	B4.3	B3.6	B2.7	B8.1	B7.4	B3.2
7	B4.3	B2.4	B8.8	B4.3	C1.7	B6.0	B3.4	B3.3	B3.3	B7.9	B3.5	B3.6
8	B3.2	B2.4	B7.3	B5.4	B7.9	B4.3	B3.0	B6.2	B3.4	B8.5	B2.3	B4.7
9	B2.8	B3.3	B7.0	B4.8	B6.4	B3.2	B3.5	B4.5	B2.5	C1.0	B2.6	B3.9
10	B2.4	B3.5	B8.5	B5.4	B4.0	B2.5	B3.6	B5.1	B2.7	B8.2	B3.0	B5.8
11	B2.6	B3.5	B8.6	B5.1	B3.0	B2.7	B2.7	B6.1	B2.8	B8.4	B6.2	B6.1
12	B2.7	B3.3	B8.8	B3.9	B2.4	B3.6	B2.3	B5.1	B4.9	B6.2	B6.2	B3.2
13	B2.6	B3.2	B9.1	B3.5	B2.8	B4.9	B4.3	B6.1	B6.5	B6.8	B4.0	B2.7
14	B3.2	B3.2	B9.1	B3.7	B3.5	B2.5	B3.5	B6.5	B4.4	B7.5	B3.2	B1.9
15	B3.0	B2.8	C1.1	---	B3.7	B1.2	B4.5	B5.4	B3.2	B4.8	B4.6	A7.8
16	B2.1	B2.4	B6.9	B3.5	B4.8	B1.8	B7.5	B5.2	B3.9	B5.0	B2.6	A9.5
17	B1.8	B2.8	B5.5	B3.9	B5.2	B2.7	B6.7	B6.1	B3.1	B6.4	B2.0	B2.0
18	B2.2	B2.7	B7.3	B3.9	B3.5	B3.2	B6.6	B6.2	B2.7	B5.4	B2.3	B2.8
19	B5.9	B2.2	B7.1	B6.1	B2.9	B5.1	B6.1	B5.1	B2.1	B2.4	B2.5	B3.3
20	B4.3	B2.2	B9.8	B8.9	B2.5	B3.8	B6.7	B4.8	B1.7	B2.3	B2.6	B2.8
21	B4.0	B2.3	B3.4	B7.4	B2.3	B4.0	B6.2	B4.7	B1.2	B3.6	B3.2	B2.6
22	B3.5	B2.9	B2.2	---	B1.9	B4.5	B8.5	B4.0	B1.1	B3.0	B2.5	B1.9
23	B3.4	B4.9	B2.2	B4.9	B2.0	B4.9	C1.1	B3.3	B1.1	B3.4	B3.0	B2.0
24	B3.3	B5.7	B2.2	B4.8	B1.8	B3.6	B9.6	B3.3	B1.1	B3.2	B1.9	B3.7
25	B2.6	B7.9	B2.0	B2.6	B2.4	B5.9	B7.5	B2.9	B1.5	B3.0	B1.6	B3.5
26	B2.4	B8.0	B1.5	B1.8	B2.0	B7.7	B6.3	B2.4	B2.2	B2.5	B2.0	B3.7
27	B2.6	B5.0	B1.4	B1.0	B2.6	C1.1	B5.5	B2.0	B2.8	B2.2	B1.9	B3.1
28	B2.7	B6.4	B1.2	B1.1	B2.1	B8.6	B4.6	B2.3	B2.1	B2.5	B2.1	B2.7
29	B2.5	B4.1	B2.0	B1.8	B2.1	C1.1	B5.2	B2.8	B1.8		B1.9	B1.9
30	B1.7	B4.3	B2.0	B1.3	B2.0	C1.3	B5.4	B3.8	B2.0		B1.6	B1.3
31	B1.2		B1.9	B1.2		C1.3		B4.5	B4.2		B1.3	

MASS EJECTIONS FROM THE SUN--PROXY DATA*

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April 1993

Site	Mo	Day	— Observed UT —			Location		Freq or Wavelength	Kind of Event
			Start	Max	End	RA*	R/Ro		
SGMR	Apr	18	1910.0		2100.0			Meter	IV
PALE	Apr	18	1929.0		2025.0			Meter	IV
WROC	Apr	28	1043		1330	260	1.1	H-alpha	S
POTS	Apr	30	1427		1432			Meter	II
SVTO	Apr	30	1428.0		1431.0			Meter	II

QUALIFIERS ON START, MAX AND END TIMES

E = event began before the tabulated time
U = uncertain time

REPORTING STATIONS

WROC = Wroclaw
POTS = Potsdam
SGMR = Sagamore Hill
SVTO = San Vito
PALE = Palehua

TYPE OF EVENT

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

*Please be advised that this list is made up of proxy data--not actual measurements of coronal mass ejections (CMEs). The list was requested by the IAU Commission 10 in 1979. See page 46 in the July 1987 supplement to Solar-Geophysical Data for more information.

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ACTIVE PROMINENCES AND FILAMENTS

APRIL 1993

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
01	DSD	0605E	1635	S10	E15	04 2.4		02	9	9	E	SVTO	7463	
01	AFS	0605E	1635	S12	E19	04 2.7		03	9	9	E	SVTO	7463	
01	AFS	0607E	1635	N06	W02	04 1.1		02	9	9	E	SVTO	7461	
01	AFS	0610E	1635	N08	W41	03 29.3		02	9	9	E	SVTO	7467	
01	AFS	0611E	1635	S21	E04	04 1.6		02	9	9	E	SVTO	7466	
01	SPY	0832	0853	W90	N10	04 2.3	0					VALA		
01	APR	0844	0921	W90	N24	04 3.6	1					VALA		
01	ADF	0930E	1635	S04	E40	04 4.4	1	06	9	9	E	SVTO	7465	
01	DSD	0932E	1635	N08	W07	03 31.9		02	9	9	E	SVTO	7461	
01	APR	1046	1217	W90	N52	04 6.3	0					VALA		
01	DSD	1102E	1844	S02	E40	04 4.4		02	9	9	E	RAMY	7465	
01	AFS	1103E	1844	S04	E41	04 4.5		01	7	7	E	RAMY	7465	
01	AFS	1107E	1844	S13	E18	04 2.8		01	9	9	E	RAMY	7463	
01	SPY	1107	1130	W90	N24	04 3.7	1					VALA		
01	AFS	1109E	1844	S21	E01	04 1.5		02	9	9	E	RAMY	7466	
01	DSD	1110E	1844	S21	E00	04 1.5		01	9	9	E	RAMY	7466	
01	DSD	1117E	1844	N05	W02	04 1.3		03	9	9	E	RAMY	7461	
01	SSB	1128		276	W23	04 7.3			0	0	E	RAMY		
01	DSD	1149E	1635	S11	E10	04 2.2		03	9	9	E	SVTO	7463	
01	ASR	1225E	1256D	S19	W90	03 25.7		01	9	9	E	SVTO		
01	DSD	1230E	1625D	S11	E10	04 2.3		03	9	9	E	RAMY	7463	
01	DSD	1232E	1844	N05	W09	03 31.8		02	9	9	E	RAMY	7461	
01	ADF	1259E	1844	S16	E65	04 6.5	1	22	9	9	E	RAMY	7468	
01	SSB	1408		275	W24	04 7.4			0	0	E	HOLL		
01	DSD	1455E	0033	N03	W10	03 31.9		02	9	3	E	HOLL	7461	
01	AFS	1457E	0033	N10	W46	03 29.3		01	6	8	E	HOLL	7467	
01	AFS	1503E	1844	N09	W46	03 29.3		01	9	9	E	RAMY	7467	
01	AFS	1515E	0033	N21	W03	04 1.4		03	9	9	E	HOLL	7466	
01	AFS	1615E	1844	S08	E50	04 5.4		01	9	9	E	RAMY	7468	
01	ADF	1636E	1844	S08	E42	04 4.8	1	07	9	9	E	RAMY	7465	
01	DSD	1814E	0033	S02	E16	04 2.9		04	9	9	E	HOLL	7463	
01	AFS	2114E	0411	N07	W08	04 1.3		03	9	9	E	PALE	7461	
01	DSD	2121E	0411	S05	E11	04 2.7		01	8	8	E	PALE	7463	
01	AFS	2121E	0411	S12	E12	04 2.8		01	8	8	E	PALE	7463	
01	ADF	2130E	0411	S08	E48	04 5.5	2	05	9	9	E	PALE	7468	
01	AFS	2200E	0411	S22	W06	04 1.4		02	9	9	E	PALE	7466	
01	DSD	2206E	0033D	N02	W15	03 31.8		02	9	9	E	PALE	7461	
01	SSB	2301		274	W28	04 7.7			0	0	E	PALE		
01	AFS	2305E	1005	S22	W06	04 1.5		03	6	6	E	LEAR	7466	
02	SSB	0130		275	W29	04 7.9			0	0	E	LEAR		
02	AFS	0205E	1005	S13	E09	04 2.8		02	9	9	E	LEAR	7463	
02	AFS	0255E	1005	N05	W14	04 1.1		02	9	9	E	LEAR	7461	
02	AFS	1048E	1900	S13	E31	04 4.8		01	9	9	E	RAMY	7463	
02	DSD	1049E	1900	N04	W21	03 31.9		03	9	9	E	RAMY	7461	
02	AFS	1057E	1900	S08	E38	04 5.3		02	9	9	E	RAMY	7468	
02	DSD	1058E	1900	S04	E27	04 4.5		02	9	9	E	RAMY	7465	
02	AFS	1101E	1900	S20	W13	04 1.5		02	9	9	E	RAMY	7466	
02	AFS	1101E	1900	S21	W12	04 1.5		02	9	9	E	RAMY	7466	
02	SSB	1118		275	W35	04 8.5			0	0	E	RAMY		302 W62
02	APR	1136E	1900	N24	W90	03 26.6	1	04	9	9	E	RAMY		
02	AFS	1446E	0117	N04	W19	04 1.2		03	8	8	E	HOLL	7461	
02	AFS	1837E	0429	N08	W19	04 1.3		01	9	9	E	PALE	7461	
02	ADF	1837E	0429	S10	E25	04 4.6	2	04	9	9	E	PALE	7465	
02	ADF	1948E	0429	S10	E38	04 5.7	2	03	9	9	E	PALE	7468	
02	SSB	1957		262	W27	04 7.7			0	0	E	PALE		274 W39
02	AFS	1957E	0429	S21	W18	04 1.4		04	9	9	E	PALE	7466	
02	AFS	2020E	0117	S11	W02	04 2.7		02	9	9	E	HOLL	7463	
02	AFS	2256E	0429	S12	W03	04 2.7		02	9	9	E	PALE	7463	
02	SSB	2355		276	W43	04 9.2			0	0	E	LEAR		
02	AFS	2355E	0300D	S11	W08	04 2.4		02	9	9	E	LEAR	7463	
02	AFS	2355E	1003	S20	W21	04 1.4		02	9	9	E	LEAR	7466	
03	AFS	0020E	0117	S10	E62	04 7.7		01	9	9	E	HOLL		
03	AFS	0020E	0117	S11	E55	04 7.1		01	9	9	E	HOLL		
03	AFS	0059E	0429	S09	E63	04 7.8		01	8	8	E	PALE		
03	AFS	0059E	0429	S10	E56	04 7.2		01	8	8	E	PALE		
03	AFS	0245E	1003	S09	E62	04 7.8		01	9	9	E	LEAR		
03	AFS	0305E	1003	S13	W08	04 2.5		02	9	9	E	LEAR	7463	
03	DSD	1102E	2140	N03	W35	03 31.8		02	9	9	E	RAMY	7461	

ACTIVE PROMINENCES AND FILAMENTS

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Apr 93

APRIL 1993

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
03	AFS	1105E	2140	S12	W09	04 2.8		02	7	7	E	RAMY	7463	
03	AFS	1108E	2140	N09	W67	03 29.5		01	9	9	E	RAMY	7467	
03	AFS	1110E	2140	S20	W27	04 1.4		02	9	9	E	RAMY	7466	
03	DSD	1110E	2140	S20	W29	04 1.2		03	9	9	E	RAMY	7466	
03	DSD	1111E	2140	S10	E49	04 7.1		02	9	9	E	RAMY	7469	
03	AFS	1111E	2140	S10	E57	04 7.7		02	9	9	E	RAMY	7470	
03	AFS	1111E	2140	S11	E50	04 7.2		02	9	9	E	RAMY	7469	
03	AFS	1115E	2140	S08	E26	04 5.4		01	8	8	E	RAMY	7468	
03	AFS	1116E	2140	S03	W19	04 2.0		01	9	9	E	RAMY	7465	
03	SSB	1119		273	W46	04 9.5			0	0	E	RAMY		300 W73
03	SSB	1332		265	W40	04 8.8			0	0	E	HOLL		
03	DSD	1341E	1640	N03	W39	03 31.6		03	9	9	E	SVTO	7461	
03	DSD	1341E	1640	S13	W18	04 2.2		02	9	9	E	SVTO	7463	
03	AFS	1350E	0117	S10	E48	04 7.2		02	9	9	E	HOLL		
03	DSD	1350E	0117	S10	E49	04 7.2		03	9	9	E	HOLL		
03	AFS	1350E	0117	S10	E55	04 7.7		02	9	9	E	HOLL		
03	DSD	1352E	1640	S08	E46	04 7.0		02	9	9	E	SVTO		
03	AFS	1352E	1640	S08	E48	04 7.2		02	9	9	E	SVTO		
03	DSD	1352E	1640	S08	E49	04 7.2		03	9	9	E	SVTO		
03	AFS	1352E	1640	S08	E55	04 7.7		02	9	9	E	SVTO		
03	DSD	1421E	1640	S22	W32	04 1.1		02	9	9	E	SVTO	7466	
03	AFS	1421E	1640	S21	W30	04 1.3		02	9	9	E	SVTO	7466	
03	EPL	1433E	1640	S03	W90	03 28.0	2	11	7	8	E	SVTO		
03	APR	1440E	1640	N21	E90	04 10.5	2	05	7	7	E	SVTO		
03	DSD	1449E	1640	S04	E17	04 4.9		02	9	9	E	SVTO	7465	
03	AFS	1456E	1640	N08	W72	03 29.3		01	8	8	E	SVTO	7467	
03	AFS	2325E	0920	S09	E70	04 9.2		02	9	9	E	LEAR	7469	
04	DSD	0020E	0342	N01	W38	04 1.2		02	9	9	E	PALE	7461	
04	AFS	0020E	0342	N07	W36	04 1.3		02	9	9	E	PALE	7461	
04	DSD	0020E	0342	S05	E13	04 5.0		02	9	9	E	PALE	7465	
04	DSD	0020E	0342	S10	E38	04 6.9		01	9	9	E	PALE	7469	
04	AFS	0020E	0342	S12	W24	04 2.2		01	9	9	E	PALE	7463	
04	AFS	0022E	0342	S10	E43	04 7.2		02	9	9	E	PALE	7469	
04	AFS	0025E	0342	S09	E47	04 7.5		01	9	9	E	PALE	7470	
04	ADF	0025E	0342	S22	W38	04 1.1	1	04	9	9	E	PALE	7466	
04	AFS	0025E	0342	S24	W30	04 1.7		01	9	9	E	PALE	7466	
04	AFS	0150E	0920	N08	W38	04 1.2		03	8	8	E	LEAR	7463	
04	SSB	0200		269	W61	04 10.2			0	0	E	LEAR		
04	ADF	0215E	0735D	S19	W39	04 1.1	1	10	9	9	E	LEAR	7466	
04	DSD	0433E	0835D	S11	E37	04 7.0		02	9	9	E	LEAR	7469	
04	AFS	0455E	0920	S04	E10	04 4.9		01	9	9	E	LEAR	7465	
04	AFS	0840E	0920	S09	E37	04 7.1		02	9	9	E	LEAR	7469	
04	AFS	1108E	2216	S06	E42	04 7.6		01	9	9	E	RAMY	7470	
04	AFS	1108E	2216	S08	E36	04 7.2		02	9	9	E	RAMY	7469	
04	ADF	1112E	1350D	S13	E19	04 5.9	1	11	9	9	E	RAMY		
04	DSD	1120E	1400D	S03	E05	04 4.8		01	9	9	E	RAMY	7465	
04	DSD	1131E	2216	S24	W44	04 1.1		03	9	9	E	RAMY	7466	
04	AFS	1132E	2216	S19	W41	04 1.3		01	7	7	E	RAMY	7466	
04	SSB	1227		218	W06	04 5.9			0	0	E	RAMY		270 W58
04	DSD	1321E	0105	S07	E41	04 7.6		03	9	9	E	HOLL	7470	
04	AFS	1321E	0105	S10	E34	04 7.1		02	9	9	E	HOLL	7469	
04	SSB	1325		212	W00	04 5.4			0	0	E	HOLL		
04	DSD	1347E	2216	S03	E37	04 7.3		01	9	9	E	RAMY		
04	APR	1604E	2123D	N25	W90	03 28.8		06	9	9	E	HOLL	7460	
04	DSD	1705E	0226	N04	W51	03 31.9		01	7	7	E	PALE	7461	
04	AFS	1705E	0226	S12	W31	04 2.4		01	8	8	E	PALE	7463	
04	DSD	1705E	0226	S22	W43	04 1.4		01	9	9	E	PALE	7466	
04	SSB	1715		265	W55	04 10.3			0	0	E	PALE		
04	AFS	1740E	2216	N06	W46	04 1.3		03	8	8	E	RAMY	7461	
04	DSD	1749E	2036D	S11	W31	04 2.4		02	9	9	E	RAMY	7463	
04	ASR	1815E	2035D	N20	W90	03 29.0		04	5	6	E	RAMY	7460	
04	DSD	1940E	0105	S18	W50	04 1.0		04	9	9	E	HOLL	7466	
04	AFS	2043E	2216	N07	W56	03 31.7		02	8	8	E	RAMY	7461	
04	DSD	2123E	0105	S08	E38	04 7.7		05	9	9	E	HOLL	7470	
04	DSD	2330E	0130D	S19	W51	04 1.1		15	9	9	E	LEAR	7466	
05	AFS	0140E	0950	S21	W50	04 1.2		02	8	9	E	LEAR	7466	
05	AFS	0150E	0950	S12	E26	04 7.0		02	7	6	E	LEAR	7469	
05	BSL	0556	0706	S20	W90	03 29.5	1					ABST		

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ACTIVE PROMINENCES AND FILAMENTS

APRIL 1993

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
05	APR	0830	0930	S20	W90	03 29.6						ATHN		
05	AFS	1048E	1752	N08	W54	04 1.4		02	9	9	E	RAMY	7461	
05	DSD	1058E	1752	S11	W40	04 2.4		04	9	9	E	RAMY	7463	
05	AFS	1104E	1752	S19	W53	04 1.4		01	9	9	E	RAMY	7466	
05	DSD	1105E	1650D	S19	W57	04 1.1		03	9	9	E	RAMY	7466	
05	AFS	1116E	1752	S08	E30	04 7.7		01	7	7	E	RAMY	7470	
05	AFS	1123E	1752	S11	E23	04 7.2		03	9	9	E	RAMY	7469	
05	AFS	1123E	1752	S12	E26	04 7.4		01	9	9	E	RAMY	7469	
05	SSB	1133		219	W19	04 6.9			0	0	E	RAMY		261 W61
05	DSD	1506E	1752	S09	E15	04 6.7		03	9	9	E	RAMY	7469	
05	DSD	1516E	1752	S22	W53	04 1.6		01	9	9	E	RAMY	7466	
05	DSD	1605E	1752	S07	W08	04 5.1		02	9	9	E	RAMY	7465	
05	DSD	1613E	2334	S17	W61	04 1.0		10	9	9	E	HOLL	7466	
05	DSD	1708E	1752	S19	W62	04 1.0		07	9	9	E	RAMY	7466	
05	AFS	1837E	0418	N06	W60	04 1.3		02	9	9	E	PALE	7461	
05	DSD	1837E	2221D	S07	W09	04 5.1		05	9	9	E	PALE	7468	
05	AFS	1839E	0418	S08	E27	04 7.8		02	8	8	E	PALE	7470	
05	AFS	1839E	0418	S10	E21	04 7.3		02	9	9	E	PALE	7469	
05	DSD	1845E	2334	S07	W11	04 4.9		05	9	9	E	HOLL	7465	
05	AFS	2145E	2334	S07	W12	04 5.0		02	9	9	E	HOLL	7465	
05	AFS	2221E	0418	S07	W11	04 5.1		03	9	9	E	PALE	7468	
06	AFS	0100E	0337	S08	W14	04 5.0		03	7	7	E	LEAR	7465	
06	AFS	0125E	0648D	N04	E08	04 6.6		02	4	5	E	LEAR		
06	AFS	0130E	0337	S12	E12	04 7.0		02	6	9	E	LEAR	7469	
06	AFS	0651E	1630	S10	E11	04 7.1		03	9	9	E	SVTO	7469	
06	AFS	0654E	1630	S09	W17	04 5.0		03	9	9	E	SVTO	7465	
06	DSD	0656E	1630	S10	W14	04 5.2		03	9	9	E	SVTO	7465	
06	AFS	0726E	0907D	S12	W48	04 2.7		02	7	7	E	SVTO	7463	
06	AFS	0825E	1630	S03	W20	04 4.8		01	9	9	E	SVTO	7465	
06	ADF	0827E	1630	S10	E04	04 6.6	1	06	9	9	E	SVTO	7469	
06	AFS	1045E	1630	N04	E12	04 7.3		01	9	9	E	SVTO		
06	SSB	1056		219	W32	04 7.9			0	0	E	RAMY		
06	AFS	1105E	1826	S11	E08	04 7.1		02	9	9	E	RAMY	7469	
06	DSD	1111E	1826	S12	E12	04 7.4		02	9	9	E	RAMY	7469	
06	AFS	1113E	1826	S08	E17	04 7.7		01	9	9	E	RAMY	7470	
06	AFS	1116E	1826	S08	W19	04 5.0		03	9	9	E	RAMY	7465	
06	DSD	1120E	1826	S10	W16	04 5.3		03	9	9	E	RAMY	7465	
06	DSD	1143E	1826	S19	W74	03 31.8		06	9	9	E	RAMY	7466	
06	APR	1230E	1826	N16	E90	04 13.3	1	03	9	9	E	RAMY		
06	AFS	1325E	1826	S10	W18	04 5.2		01	9	9	E	RAMY	7465	
06	AFS	1330E	1826	S08	W52	04 2.7		01	9	9	E	RAMY	7463	
06	DSF	1505U	1042U	N28	E76	04 12.6	2	10	0	0	E	RAMY		
06	ASR	1730E	2334	N12	W90	03 31.0		02	9	9	E	PALE	7464	
06	AFS	1730E	2334	S07	W21	04 5.1		02	9	9	E	PALE	7465	
06	AFS	1730E	2334	S11	E05	04 7.1		01	9	9	E	PALE	7469	
06	ASR	1732E	1826	N10	W90	03 31.0		05	9	9	E	RAMY		
06	SSB	1859		210	W27	04 7.6			0	0	E	PALE		
06	DSF	1953U	1325U	S01	W47	04 3.3		14	0	0	E	HOLL		
06	SSB	2010		232	W50	04 9.5			0	0	E	HOLL		
06	DSD	2010E	0118	S07	W25	04 5.0		02	7	7	E	HOLL	7468	
07	AFS	0553E	1455	S11	W02	04 7.1		02	9	9	E	SVTO	7469	
07	AFS	0557E	1455	S09	W30	04 5.0		03	9	9	E	SVTO	7465	
07	SSB	0600		220	W44	04 8.9			0	0	E	SVTO		
07	APR	0630	1050	S18	W90	03 31.4						ATHN		
07	ADF	0840E	1455	S10	W10	04 6.6	1	05	9	9	E	SVTO	7469	
07	AFS	0916E	1455	S12	W09	04 6.7		01	9	9	E	SVTO	7469	
07	SSB	1110		220	W46	04 9.1			0	0	E	RAMY		
07	AFS	1303E	0050	S14	W05	04 7.2		02	9	9	E	HOLL	7469	
07	AFS	1305E	0050	S11	W33	04 5.1		02	9	9	E	HOLL	7465	
07	SSB	1324		204	W32	04 7.9			0	0	E	HOLL		
07	DSD	1345	1455	S12	W03	04 7.3		02	9	9	E	SVTO	7469	
07	DSD	1346E	1356D	S12	W03	04 7.3		04	9	9	E	RAMY	7469	
07	APR	1710E	0050	N12	E90	04 14.5		02	7	7	E	HOLL		
07	ADF	2134E	0228	S07	W16	04 6.7	1	04	9	9	E	PALE	7469	
07	AFS	2134E	0228	S13	W08	04 7.3		03	9	9	E	PALE	7469	
07	SSB	2142		208	W40	04 8.5			0	0	E	PALE		
07	ADF	2142E	0228	S06	W31	04 5.6	1	10	9	9	E	PALE	7465	
07	ADF	2256E	0050	S08	W33	04 5.5	1	16	9	9	E	HOLL	7465	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
07	APR	2336E	0228	N16	E90	04	14.8	1	03	9	9	E	PALE		
08	DSF	0022U	1335U	S08	W18	04	6.7		05	0	0	E	HOLL	7469	
08	AFS	0027E	0955	S08	W40	04	5.0		03	5	5	E	LEAR	7465	
08	AFS	0028E	0955	S11	W12	04	7.1		03	9	9	E	LEAR	7469	
08	AFS	0028E	0955	S13	W13	04	7.0		05	9	9	E	LEAR	7469	
08	ASR	0030E	0955	S19	W90	04	1.1		03	7	9	E	LEAR	7466	
08	ADF	0222E	0705D	S10	W35	04	5.5	1	12	9	9	E	LEAR	7465	
08	DSD	1057E	2214	S03	W49	04	4.8		01	9	9	E	RAMY	7465	
08	AFS	1057E	2214	S08	W45	04	5.1		03	9	9	E	RAMY	7465	
08	AFS	1103E	2214	S10	W18	04	7.1		02	9	9	E	RAMY	7469	
08	AFS	1103E	2214	S12	W15	04	7.3		02	9	9	E	RAMY	7469	
08	DSD	1104E	2214	S09	W24	04	6.6		02	9	9	E	RAMY	7469	
08	AFS	1104E	2214	S10	W25	04	6.6		01	7	7	E	RAMY	7469	
08	ADF	1105E	2214	S13	W24	04	6.6	1	07	9	9	E	RAMY	7469	
08	AFS	1110E	2214	S07	W15	04	7.3		03	9	9	E	RAMY	7470	
08	ADF	1114E	2214	N13	E73	04	14.0	1	04	9	9	E	RAMY		
08	AFS	1122E	2214	N16	W03	04	8.2		01	9	9	E	RAMY	7471	
08	AFS	1124E	2214	N04	W15	04	7.3		01	9	9	E	RAMY		
08	SSB	1335		205	W46	04	9.0			0	0	E	HOLL		
08	AFS	1400E	0119	N05	W16	04	7.4		01	9	9	E	HOLL		
08	AFS	1400E	0119	S07	W15	04	7.4		02	9	9	E	HOLL	7470	
08	AFS	1400E	0119	S09	W20	04	7.1		02	9	9	E	HOLL	7469	
08	DSD	1400E	0119	S10	W26	04	6.6		03	9	9	E	HOLL	7469	
08	APR	1409E	0119	N11	E72	04	14.0		09	9	9	E	HOLL		
08	AFS	1604E	0119	N15	W05	04	8.3		01	9	9	E	HOLL		
08	ADF	1655E	2214	S14	W35	04	6.0	1	09	9	9	E	RAMY		
08	EPL	2052	2132	N14	E72	04	14.3	3	26	9	9	E	HOLL		
08	EPL	2054E	2138D	N19	E81	04	15.0	3	21	9	9	E	RAMY		
08	AFS	2249E	0415	S11	W24	04	7.1		02	9	9	E	PALE	7469	
08	AFS	2315E	0857	N04	W23	04	7.2		03	9	9	E	LEAR	7474	
08	AFS	2315E	0857	S07	W22	04	7.3		03	9	9	E	LEAR	7470	
08	AFS	2315E	0857	S09	W24	04	7.2		02	9	9	E	LEAR	7469	
08	AFS	2315E	0857	S13	W22	04	7.3		03	9	9	E	LEAR	7469	
08	AFS	2325E	0415	N03	W22	04	7.3		02	9	9	E	PALE	7472	
08	DSD	2325E	0415	N03	W22	04	7.3		01	9	9	E	PALE	7472	
08	ADF	2341E	0415	S02	W54	04	4.9	1	03	9	9	E	PALE	7465	
09	AFS	0016E	0415	S08	W23	04	7.3		02	9	9	E	PALE	7470	
09	AFS	0310E	0857	S09	W55	04	5.0		02	9	9	E	LEAR	7465	
09	DSD	0445E	0555D	S10	W25	04	7.3		02	9	9	E	LEAR	7469	
09	APR	0605E	0648D	N19	E90	04	16.1	2	11	9	9	E	SVTO		
09	APR	0615E	0857	N12	E90	04	16.0	1	06	8	8	E	LEAR		
09	DSD	0637E	1702	S05	W66	04	4.3		01	9	9	E	SVTO	7465	
09	DSD	0637E	1702	S08	W24	04	7.5		02	9	9	E	SVTO	7469	
09	DSD	0637E	1702	S10	W34	04	6.7		02	9	9	E	SVTO	7469	
09	AFS	0637E	1702	S11	W28	04	7.2		03	9	9	E	SVTO	7469	
09	DSD	0637E	1702	S11	W35	04	6.6		03	9	9	E	SVTO	7469	
09	AFS	0637E	1702	S11	W57	04	5.0		02	9	9	E	SVTO	7465	
09	AFS	0807E	1702	N03	W27	04	7.3		03	9	9	E	SVTO	7472	
09	AFS	0807E	1702	N15	W15	04	8.2		02	9	9	E	SVTO	7471	
09	AFS	0819E	1702	S07	W26	04	7.4		02	9	9	E	SVTO	7470	
09	DSD	0916E	1702	N16	E58	04	13.8		06	9	9	E	SVTO		
09	DSD	0916E	1702	N18	E48	04	13.0		02	9	9	E	SVTO		
09	DSD	0916E	1702	S06	W47	04	5.9		01	9	9	E	SVTO	7468	
09	ADF	1102E	2142	S08	W53	04	5.5	1	13	9	9	E	RAMY	7465	
09	ADF	1103E	2142	S09	W53	04	5.5	1	05	9	9	E	RAMY	7465	
09	AFS	1104E	2142	S08	W58	04	5.1		01	9	9	E	RAMY	7465	
09	AFS	1109E	2142	N16	W18	04	8.1		01	9	9	E	RAMY	7471	
09	AFS	1112E	2142	N04	W29	04	7.3		01	9	9	E	RAMY	7472	
09	DSD	1115E	2142	S08	W39	04	6.5		03	9	9	E	RAMY	7469	
09	DSD	1116E	2142	S10	W37	04	6.7		04	9	9	E	RAMY	7469	
09	ADF	1117E	2142	S09	W28	04	7.4	1	03	9	9	E	RAMY	7469	
09	AFS	1120E	2142	S12	W30	04	7.2		02	9	9	E	RAMY	7469	
09	DSD	1239E	1702	S07	W32	04	7.1		05	9	9	E	SVTO	7470	
09	DSD	1500	0120	S10	W34	04	7.1		02	7	9	E	HOLL	7469	
09	DSD	1510E	2142	S08	W30	04	7.4		03	9	9	E	RAMY	7469	
09	AFS	1528E	0120	N05	W31	04	7.3		02	9	9	E	HOLL	7472	
09	AFS	1545E	0120	N10	W34	04	7.1		02	9	9	E	HOLL	7471	
09	SSB	1555		179	W34	04	16.0			0	0	E	HOLL		

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	NOAA/ USAF Sta Reg#	Remarks
09	DSF	1601U	2330U	N05	E50	04 13.4		09	0	0	E	HOLL	
09	ADF	1639E	2142	N13	E57	04 14.0	1	08	9	9	E	RAMY	
09	SSB	2005		212	W70	04 10.9			0	0	E	RAMY	
09	AFS	2305E	0758	N04	W35	04 7.3		02	9	9	E	LEAR 7472	
10	AFS	0515E	0758	S09	W70	04 5.0		02	9	9	E	LEAR 7465	
10	DSD	0525E	0758	N06	W40	04 7.2		02	9	9	E	LEAR 7472	
10	DSD	0557E	1600	S15	W59	04 5.8		12	9	9	E	SVTO 7465	
10	DSD	0605E	0758	S14	W70	04 5.0		11	9	9	E	LEAR 7465	
10	DSD	0630E	1600	N01	W43	04 7.0		02	9	9	E	SVTO 7472	
10	AFS	0630E	1600	N02	W40	04 7.3		03	9	9	E	SVTO 7472	
10	DSD	0630E	1600	N03	W42	04 7.1		02	9	9	E	SVTO 7472	
10	AFS	0630E	1600	N15	W29	04 8.1		01	9	9	E	SVTO 7471	
10	DSD	0630E	1600	N15	W31	04 7.9		01	9	9	E	SVTO 7471	
10	DSD	0630E	1600	S08	W40	04 7.3		01	9	9	E	SVTO 7470	
10	ADF	0630E	1600	S09	W41	04 7.2	1	03	9	9	E	SVTO 7470	
10	DSD	0630E	1600	S10	W48	04 6.7		02	9	9	E	SVTO 7469	
10	DSD	0630E	1600	S10	W73	04 4.8		01	9	9	E	SVTO 7465	
10	AFS	0630E	1600	S11	W41	04 7.2		03	9	9	E	SVTO 7469	
10	AFS	0630E	1600	S11	W69	04 5.1		02	9	9	E	SVTO 7465	
10	AFS	1050E	2155	N04	W42	04 7.3		03	9	9	E	RAMY 7472	
10	AFS	1053E	2155	S09	W71	04 5.1		02	9	9	E	RAMY 7465	
10	AFS	1105E	2155	S11	W43	04 7.2		02	9	9	E	RAMY 7469	
10	DSD	1116E	15100	S06	W45	04 7.1		01	9	9	E	RAMY 7470	
10	AFS	1117E	2155	N16	W31	04 8.1		01	9	9	E	RAMY 7471	
10	ADF	1124E	2155	N24	E48	04 14.2	1	04	9	9	E	RAMY 7473	
10	ADF	1330E	0121	S04	W77	04 4.8		10	9	9	E	HOLL 7465	
10	AFS	1410E	0121	N05	W44	04 7.3		03	9	9	E	HOLL 7472	
10	BSD	1845	20000	N06	W84	04 4.5		07	9	9	E	HOLL 7465	
10	DSD	2052E	2155	S07	W57	04 6.6		04	9	9	E	RAMY 7469	
10	ASR	2130	0121	S02	W86	04 4.5		05	9	9	E	HOLL 7465	
10	APR	2133E	0406	S06	W90	04 4.2		04	9	9	E	PALE 7465	
10	SSB	2134		182	W54	04 17.9			0	0	E	PALE	
10	AFS	2140E	0406	N04	W51	04 7.1		02	9	9	E	PALE 7472	
10	ADF	2141E	0406	S10	W55	04 6.8	1	08	9	9	E	PALE 7469	
10	ADF	2141E	0406	S16	W74	04 5.3	1	05	9	9	E	PALE 7465	
10	ASR	2142E	2155	S05	W88	04 4.3		03	9	9	E	RAMY 7465	
10	SSB	2200		182	W54	04 18.0			0	0	E	HOLL	
11	DSD	0035	0121	S08	W54	04 7.0		06	9	9	E	HOLL 7469	
11	DSD	0042E	0406	S10	W54	04 7.0		05	9	9	E	PALE 7469	
11	ASR	0120E	0406	S13	W90	04 4.3		04	9	9	E	PALE 7465	
11	BSL	0423	0704	S33	E90	04 18.3	1					ABST	
11	APR	0530	0710	N10	E90	04 18.0						ATHN	
11	EPL	0745E	10070	N10	E90	04 18.1	2	14	8	7	E	SVTO	
11	ASR	0817E	0829	S04	W90	04 4.6		05	9	9	E	SVTO 7465	
11	ADF	0838E	1412	S08	W54	04 7.3	1	04	9	9	E	SVTO 7469	
11	ASR	0838E	1412	S10	W90	04 4.6		02	9	9	E	SVTO 7465	
11	AFS	0838E	1412	S12	W56	04 7.1		02	9	9	E	SVTO 7469	
11	DSD	0842E	1412	N18	E27	04 13.4		02	9	9	E	SVTO 7473	
11	AFS	0842E	1412	N21	E29	04 13.6		02	9	9	E	SVTO 7473	
11	APR	1007E	1412	N10	E90	04 18.2	2	14	9	9	E	SVTO	
11	DSD	1029E	1412	N03	W60	04 6.9		02	9	9	E	SVTO 7472	
11	AFS	1029E	1412	N04	W56	04 7.2		03	9	9	E	SVTO 7472	
11	AFS	1029E	1412	N15	W44	04 8.1		01	9	9	E	SVTO 7471	
11	DSD	1029E	1412	N21	W56	04 7.1		02	9	9	E	SVTO 7471	
11	ASR	1029E	1412	S08	W90	04 4.7		01	9	9	E	SVTO 7465	
11	AFS	1047E	1749	N05	W55	04 7.3		02	9	9	E	RAMY 7472	
11	DSD	1047E	1749	N06	W55	04 7.3		02	9	9	E	RAMY 7472	
11	DSD	1050E	1749	N04	W61	04 6.9		04	9	9	E	RAMY 7472	
11	AFS	1105E	1749	N16	W44	04 8.1		01	7	7	E	RAMY 7471	
11	DSD	1112E	1749	S07	W55	04 7.3		02	9	9	E	RAMY 7469	
11	AFS	1116E	1749	S09	W58	04 7.1		02	9	9	E	RAMY 7469	
11	ASR	1130E	1749	S04	W90	04 4.7		03	9	9	E	RAMY 7465	
11	DSD	1318E	1412	N11	E07	04 12.1		01	9	9	E	SVTO	
11	APR	1330E	0121	N06	E90	04 18.3		12	9	9	E	HOLL	
11	DSD	1330E	0121	N06	W64	04 6.8		04	9	9	E	HOLL 7472	
11	ASR	1330E	0121	S07	W90	04 4.8		04	9	9	E	HOLL 7465	
11	DSD	1354E	1749	N05	W66	04 6.6		04	9	9	E	RAMY 7472	
11	ASR	1406E	1749	S09	W90	04 4.8		02	9	9	E	RAMY 7465	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
11	AFS	1538E	1749	N22	W61	04 7.0		02	9	9	E	RAMY		
11	APR	1615E	1749	S09	W90	04 4.9	1	04	9	9	E	RAMY	7465	
11	ADF	1740E	1749	N18	E22	04 13.4	1	07	9	9	E	RAMY	7473	
11	DSD	1746E	1749	S13	W60	04 7.2		04	9	9	E	RAMY	7469	
11	APR	1934E	0121	N00	W90	04 5.1		03	9	9	E	HOLL	7465	
11	AFS	1934E	0121	N08	W61	04 7.2		02	9	9	E	HOLL	7472	
12	BSL	0423	0704	N11	E90	04 18.9	1					ABST		
12	ADF	1111E	2051	N12	E08	04 13.1	1	04	9	9	E	RAMY	7473	
12	ASR	1112E	2051	S14	W87	04 5.9		05	9	9	E	RAMY	7469	
12	APR	1113E	2051	S07	W90	04 5.7	1	04	9	9	E	RAMY		
12	ASR	1114E	2051	S10	E90	04 19.2		03	8	9	E	RAMY		
12	AFS	1139E	2051	S09	W73	04 7.0		03	9	9	E	RAMY	7469	
12	ADF	1140E	2051	S05	W66	04 7.5	1	05	9	9	E	RAMY	7469	
12	AFS	1145E	2051	N06	W71	04 7.2		02	9	9	E	RAMY	7472	
12	DSD	1148E	2051	N03	W76	04 6.8		04	9	9	E	RAMY	7472	
12	AFS	1230E	2051	N22	W72	04 7.0		02	9	9	E	RAMY	7424	
12	ADF	1327E	2348	N16	E05	04 12.9		06	9	9	E	HOLL	7473	
12	AFS	1449E	2348	S05	W72	04 7.2		01	9	9	E	HOLL	7469	
12	DSD	2143E	2348	N07	W69	04 7.7		03	9	9	E	HOLL	7472	
12	APR	2256E	0448	S08	W90	04 6.2	1	01	7	7	E	PALE	7469	
12	DSD	2303E	0448	N03	W77	04 7.2		02	9	9	E	PALE	7472	
13	ASR	0028E	0448	S15	W90	04 6.2		02	9	9	E	PALE	7469	
13	ASR	0559E	1656	S10	W85	04 6.9		04	9	9	E	SVTO	7469	
13	BSL	0639	0709	S33	E90	04 20.4	1					ABST		
13	ASR	1052E	1739	S09	W87	04 6.9		07	9	9	E	RAMY	7469	
13	ASR	1059E	1739	N06	W85	04 7.1		02	9	9	E	RAMY	7472	
13	AFS	1109E	1739	N16	W73	04 7.9		02	9	9	E	RAMY	7471	
13	AFS	1110E	1739	N24	W74	04 7.7		02	8	8	E	RAMY	7474	
13	ADF	1113E	1739	S12	E73	04 19.0	1	11	9	9	E	RAMY		
13	AFS	1150E	1656	N18	W68	04 8.3		01	8	8	E	SVTO	7471	
13	ASR	1200E	1656	S12	W90	04 6.7		04	8	8	E	SVTO	7469	
13	ASR	1303E	1321D	N07	E90	04 20.3		02	9	9	E	SVTO		
13	ASR	1320E	1740	S09	W90	04 6.8		03	9	9	E	HOLL	7469	
13	ASR	1348E	1739	N08	E90	04 20.3		02	9	9	E	RAMY		
13	AFS	1350E	1739	N09	E75	04 19.2		02	9	9	E	RAMY		
13	DSD	1615E	1739	N05	E67	04 18.7		02	9	9	E	RAMY		
13	DSD	1618E	1739	N13	W21	04 12.1		01	9	9	E	RAMY		
13	SSB	1626		146	W55	04 17.6			0	0	E	HOLL		
13	DSF	1635U	1605U	N17	E09	04 14.4		06	0	0	E	HOLL	7473	
13	ASR	1925E	0423	S11	W90	04 7.0		03	9	9	E	PALE	7469	
13	AFS	2300E	0423	S25	E34	04 16.6		01	9	9	E	PALE		
13	ASR	2337E	0319D	N03	W90	04 7.2		01	9	9	E	PALE	7472	
14	ASR	0110E	0955	S08	W90	04 7.3		02	9	9	E	LEAR	7469	
14	DSF	0703U	0345U	N20	E00	04 14.3		10	0	0	E	LEAR		
14	ASR	0741E	0801	S11	W90	04 7.5		05	9	9	E	SVTO	7469	
14	AFS	0743E	1350	N06	E62	04 19.0		02	9	9	E	SVTO		
14	ASR	0840E	0905D	S11	W90	04 7.6		02	9	9	E	SVTO	7469	
14	AFS	0845E	0955	N06	E60	04 18.8		03	8	8	E	LEAR		
14	ADF	0903E	1350	S26	E29	04 16.6	1	02	9	9	E	SVTO		
14	DSF	1116U	1452U	N02	W25	04 12.6	2	06	0	0	E	RAMY		
14	APR	1124E	2154	S04	W90	04 7.7	1	02	9	9	E	RAMY	7469	
14	ASR	1124E	2154	S10	W90	04 7.7		02	9	9	E	RAMY	7469	
14	DSD	1129E	2154	S19	E60	04 19.0		03	9	9	E	RAMY		
14	DSD	1134E	1350	N09	E51	04 18.3		01	9	9	E	SVTO		
14	DSD	1136E	2154	N09	E54	04 18.5		03	9	9	E	RAMY		
14	AFS	1137E	2154	N05	E58	04 18.8		01	9	9	E	RAMY	7475	
14	APR	1308E	1353D	N10	E86	04 21.0	1	03	9	9	E	RAMY		
14	DSD	1743E	2154	N06	E54	04 18.8		02	9	9	E	RAMY	7475	
14	ADF	1810E	0030D	N05	E56	04 18.9	1	02	9	9	E	PALE	7475	
14	ADF	1821E	0030D	S09	E51	04 18.6	1	03	9	9	E	PALE		
14	SSB	2000		137	W63	04 18.1			0	0	E	HOLL		
14	ADF	2137E	0421	N18	E19	04 16.3	1	03	8	9	E	PALE	7473	
14	SSB	2235		109	W34	04 15.6			0	0	E	PALE		
14	AFS	2241E	0421	N05	E53	04 18.9		02	8	8	E	PALE	7475	
14	SSB	2253		140	W65	04 18.5			0	0	E	PALE		
15	ADF	1054E	2107	N04	E45	04 18.8	1	05	9	9	E	RAMY	7475	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP No	Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
15	AFS	1054E	2107	N05	E46	04	18.9		02	9	9	E	RAMY	7475	
15	ADF	1200E	2107	N12	W33	04	13.0	1	04	9	9	E	RAMY	7473	
15	ADF	1257E	1452	N05	E45	04	18.9	1	04	9	9	E	SVTO	7475	
15	SSB	1341		104	W38	04	15.9			0	0	E	HOLL		142 W76
15	ADF	1341E	1452	N12	W33	04	13.1	1	05	9	9	E	SVTO	7473	
15	AFS	1359E	2235D	N04	E45	04	18.9		01	9	9	E	HOLL	7475	
15	ADF	1403E	2235D	N04	E44	04	18.9	1	04	9	9	E	HOLL	7475	
15	DSD	1403E	1452	N11	E35	04	18.2		04	9	9	E	SVTO	7475	
15	ADF	1725E	0425	N03	E43	04	18.9	1	03	9	9	E	PALE	7475	
15	AFS	1725E	0425	N05	E44	04	19.0		02	9	9	E	PALE	7475	
16	ADF	0125E	0941	N05	E38	04	18.9	1	06	9	9	E	LEAR	7475	
16	AFS	0125E	0941	N06	E39	04	19.0		01	8	8	E	LEAR	7475	
16	ADF	0720E	0941	N16	W50	04	12.5	1	08	9	9	E	LEAR	7473	
16	AFS	1040E	2210	N05	E32	04	18.8		01	9	9	E	RAMY	7475	
16	ADF	1045E	2210	N17	W46	04	12.9	1	03	9	9	E	RAMY	7473	
16	AFS	1047E	2210	N16	W50	04	12.6		01	9	9	E	RAMY	7473	
16	ASR	1105E	2210	N08	E90	04	23.2		02	9	9	E	RAMY	7477	
16	AFS	1600E	0036	N05	E30	04	18.9		02	9	9	E	HOLL	7475	
16	ASR	1600E	0036	N07	E84	04	22.9		03	9	9	E	HOLL		
16	AFS	1600E	0036	N18	W54	04	12.5		02	9	9	E	HOLL	7473	
16	DSD	1613E	2210	N05	E30	04	18.9		03	9	9	E	RAMY	7475	
16	AFS	1740E	0325D	N06	E29	04	18.9		02	9	9	E	PALE	7475	
16	ASR	1740E	0325D	N10	E80	04	22.7		02	9	9	E	PALE		
16	DSD	2006E	2050D	N10	E76	04	22.5		05	9	9	E	RAMY	7477	
16	AFS	2109E	2210	N09	E76	04	22.6		03	9	9	E	RAMY	7477	
16	DSD	2140E	0417	N03	E26	04	18.8		02	6	6	E	PALE	7475	
16	ADF	2140E	0417	N11	W53	04	12.9	1	05	9	9	E	PALE	7473	
16	ADF	2225E	0036	N17	W57	04	12.6		11	9	9	E	HOLL	7473	
16	AFS	2344E	0948	N05	E25	04	18.8		02	8	8	E	LEAR	7475	
16	AFS	2345E	0948	N09	E78	04	22.8		01	9	9	E	LEAR	7477	
17	ADF	0210E	0948	N15	W57	04	12.8	1	09	7	7	E	LEAR	7473	
17	DSD	0212E	0247D	N17	W62	04	12.4		02	9	9	E	LEAR	7473	
17	AFS	0330E	0417	N01	E20	04	18.6		01	8	8	E	PALE	7475	
17	DSD	0330E	0417	N14	W62	04	12.5		02	9	9	E	PALE	7473	
17	BSL	0920E	0920	E90	E13	04	18.6	1					VALA		
17	BSL	0950	1003	E90	S13	04	18.6	1					VALA		
17	BSL	1006	1020	E90	S13	04	18.6	1					VALA		
17	BSL	1024	1048	E90	S13	04	18.6	1					VALA		
17	AFS	1047E	2217	S06	W07	04	16.9		01	9	9	E	RAMY	7478	
17	AFS	1050E	1633	N15	W64	04	12.6		02	9	9	E	SVTO	7473	
17	AFS	1051E	2217	N10	E70	04	22.7		02	9	9	E	RAMY	7477	
17	AFS	1058E	2217	N05	E18	04	18.8		01	9	9	E	RAMY	7475	
17	AFS	1107E	2217	N16	W64	04	12.6		02	9	9	E	RAMY	7473	
17	ASR	1111E	2217	S14	E90	04	24.3		02	9	9	E	RAMY		
17	ASR	1111E	2217	S16	E90	04	24.3		03	9	9	E	RAMY		
17	ASR	1413E	0126	N17	E90	04	24.4		01	9	9	E	HOLL		
17	ASR	1413E	0126	N17	E90	04	24.4		01	9	9	E	HOLL		
17	ADF	1416E	0126	N14	E54	04	21.7	3	18	9	9	E	HOLL		
17	BSL	1451E	1451	E90	S13	04	18.8	1					VALA		
17	AFS	1515E	0126	N08	E71	04	22.9		02	5	5	E	HOLL	7477	
17	ADF	1519E	2217	N16	E53	04	21.6	3	14	9	9	E	RAMY		
17	AFS	1525E	0126	N18	W67	04	12.5		04	9	9	E	HOLL	7473	
17	DSD	1735E	2028D	N06	E14	04	18.8		03	9	9	E	RAMY	7475	
17	DSD	1755E	2217	N16	W70	04	12.4		04	9	9	E	RAMY	7473	
17	APR	1805E	2035D	N19	W80	04	11.6	1	06	7	8	E	RAMY		
17	DSD	1850	1945D	N05	E14	04	18.8		03	8	9	E	HOLL	7475	
17	SSB	2115		101	W65	04	18.0			0	0	E	HOLL		
17	AFS	2325E	0940	N16	W71	04	12.6		03	9	9	E	LEAR	7473	
18	ASR	0318	0354	S16	E90	04	25.0		10	9	9	E	LEAR		
18	DSD	0645E	0942	N11	E49	04	22.0		02	9	9	E	LEAR	7477	
18	DSD	0830E	1628	N09	E01	04	18.4		03	9	9	E	SVTO	7475	
18	AFS	0830E	1628	N11	E63	04	23.1		02	9	9	E	SVTO	7477	
18	AFS	0830E	1628	N12	E60	04	22.9		02	9	9	E	SVTO	7477	
18	ADF	0830E	1628	N14	E57	04	22.7	1	07	9	9	E	SVTO	7477	
18	AFS	0830E	1628	N15	W76	04	12.6		02	9	9	E	SVTO	7473	
18	DSD	0830E	1628	N16	W76	04	12.6		02	9	9	E	SVTO	7473	
18	AFS	0830E	1628	S06	W19	04	16.9		01	9	9	E	SVTO	7478	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
18	DSD	0830E	1628	S11	E78	04 24.2		03	9	9	E	SVTO		
18	AFS	0830E	1628	S13	E81	04 24.5		02	9	9	E	SVTO		
18	AFS	0830E	1628	S17	E18	04 19.7		01	9	9	E	SVTO		
18	BSD	0944E	1628	N14	W80	04 12.3		04	9	9	E	SVTO	7473	
18	DSD	0954E	1628	N12	E63	04 23.1		02	9	9	E	SVTO	7477	
18	BSL	1012	1043	S15	E90	04 25.2		15	9	9	E	SVTO		
18	BSD	1034E	1115D	N15	W77	04 12.6		02	9	9	E	RAMY	7473	
18	DSD	1039E	1109D	S13	E75	04 24.1		03	9	9	E	RAMY		
18	AFS	1046E	2026	N10	E61	04 23.0		01	9	9	E	RAMY	7477	
18	AFS	1050E	2026	N11	E58	04 22.8		02	9	9	E	RAMY	7477	
18	AFS	1100E	2026	S14	E77	04 24.3		02	9	9	E	RAMY	7480	
18	AFS	1101E	2026	N16	W76	04 12.7		02	9	9	E	RAMY	7473	
18	SSB	1125		399	W11	04 11.0			0	0	E	RAMY		105 W77
18	APR	1130E	1315D	N14	E90	04 25.3	1	03	9	9	E	RAMY		
18	AFS	1301E	2026	S06	E09	04 19.2		01	9	9	E	RAMY		
18	AFS	1327E	1628	S06	E09	04 19.2		01	9	9	E	SVTO		
18	ASR	1331E	1628	N16	W90	04 11.7		01	9	9	E	SVTO	7473	
18	BSD	1354E	2026	N15	W82	04 12.4		06	9	9	E	RAMY	7473	
18	BSD	1420E	2134D	N18	W81	04 12.4		09	9	9	E	HOLL	7473	
18	DSD	1447E	1459D	N09	E38	04 21.5		03	9	9	E	RAMY		
18	ASR	1709	1745D	S17	E79	04 24.7		09	9	9	E	RAMY	7480	
18	AFS	1709E	2026	S17	E13	04 19.7		01	9	9	E	RAMY	7479	
18	DSD	1714E	0428	S14	E70	04 24.0		02	9	9	E	PALE	7480	
18	BSD	1720	2134D	S19	E80	04 24.8		10	9	9	E	HOLL	7480	
18	BSD	1720	0428	S20	E82	04 25.0		11	9	9	E	PALE	7480	
18	AFS	1725E	0428	N10	E54	04 22.8		02	8	8	E	PALE	7477	
18	BSD	1725E	0428	N15	W90	04 11.9		03	9	9	E	PALE	7473	
18	AFS	1725E	0428	S05	W21	04 17.1		01	9	9	E	PALE	7478	
18	AFS	1725E	0428	S18	E14	04 19.8		01	9	9	E	PALE	7479	
18	ADF	1727E	0428	S17	E03	04 18.9	1	03	9	9	E	PALE		
18	SSB	1730		412	W27	04 17.8			0	0	E	PALE		
18	DSD	1735E	2026	N10	E56	04 22.9		02	9	9	E	RAMY	7477	
18	ASR	2345E	0345	N16	W90	04 12.2		03	7	7	E	LEAR	7473	
19	ADF	0635E	1645	N10	E51	04 23.1	1	04	9	9	E	SVTO	7477	
19	AFS	0635E	1645	N11	E47	04 22.8		02	9	9	E	SVTO	7477	
19	DSD	0635E	1645	N11	E49	04 23.0		02	9	9	E	SVTO	7477	
19	DSD	0645E	0942	N11	E49	04 23.0		02	9	9	E	LEAR	7477	
19	DSD	0650E	0939D	N11	E48	04 22.9		04	9	9	E	SVTO	7477	
19	ADF	0715	0855	S10	E22	04 20.9						ATHN		
19	AFS	0731E	1645	S06	W02	04 19.2		02	9	9	E	SVTO		
19	DSD	0731E	1645	S06	W03	04 19.1		03	9	9	E	SVTO		
19	AFS	0731E	1645	S13	E64	04 24.1		02	9	9	E	SVTO	7480	
19	AFS	0735E	0942	S02	W05	04 18.9		02	9	9	E	LEAR		
19	DSD	0735E	0942	S03	W05	04 18.9		03	9	9	E	LEAR		
19	AFS	0740E	1645	S06	W33	04 16.8		01	9	9	E	SVTO	7478	
19	AFS	0835E	0942	N04	W36	04 16.7		02	8	8	E	LEAR		
19	AFS	0843E	1645	N03	W36	04 16.7		01	9	9	E	SVTO		
19	AFS	1107E	2141	N10	E45	04 22.8		02	9	9	E	RAMY	7477	
19	DSD	1108E	2141	N09	E44	04 22.8		02	9	9	E	RAMY	7477	
19	AFS	1128E	2141	S16	E64	04 24.3		02	9	9	E	RAMY	7480	
19	AFS	1130E	2141	S06	W05	04 19.1		02	9	9	E	RAMY	7481	
19	DSD	1130E	2141	S07	W05	04 19.1		03	9	9	E	RAMY	7481	
19	APR	1131E	2141	N07	W90	04 12.7	1	03	8	7	E	RAMY		
19	SSB	1132		400	W25	04 19.5			0	0	E	RAMY		
19	AFS	1313E	0128	N05	W10	04 18.8		01	9	9	E	HOLL		
19	AFS	1313E	0128	N09	E45	04 22.9		02	9	9	E	HOLL	7477	
19	ADF	1313E	0128	N12	E41	04 22.6		06	9	9	E	HOLL	7477	
19	AFS	1313E	0128	S18	E63	04 24.3		02	9	9	E	HOLL	7478	
19	DSD	1445E	1645	N09	E03	04 19.8		03	9	9	E	SVTO		
19	AFS	1515E	1645	S13	E21	04 21.2		02	9	9	E	SVTO		
19	AFS	1515E	1645	S14	E25	04 21.5		03	9	9	E	SVTO		
19	AFS	1522E	2141	S15	E22	04 21.3		01	9	9	E	RAMY	7483	
19	AFS	1523E	2141	S14	E21	04 21.2		01	7	7	E	RAMY	7483	
19	ADF	1640E	2141	S15	E59	04 24.2	1	13	9	9	E	RAMY	7480	
19	AFS	1715E	0128	S06	W08	04 19.1		02	8	7	E	HOLL	7481	
19	ADF	1720E	1750D	S06	W11	04 18.9	1	04	9	9	E	RAMY	7481	
19	DSF	1720U	1750U	S06	W11	04 18.9	2	04	0	0	E	RAMY	7481	
19	ADF	1805E	0420	N08	E36	04 22.4	1	04	9	9	E	PALE	7477	
19	AFS	1805E	0420	N10	E41	04 22.8		03	9	9	E	PALE	7477	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
19	AFS	1812E	0128	N09	E01	04 19.8		01	7	7	E	HOLL		
19	AFS	1812E	0128	S15	E22	04 21.4		02	9	9	E	HOLL	7483	
19	AFS	1828E	0420	S07	W09	04 19.1		03	9	9	E	PALE	7481	
19	MDP	1839E	0420	N06	W90	04 13.0		02	9	9	E	PALE		
19	DSD	2200E	0128	N04	E30	04 22.1		02	9	9	E	HOLL	7484	
19	SSB	2246		401	W32	04 19.9			0	0	E	PALE		
19	AFS	2332E	0420	N06	E31	04 22.3		02	9	9	E	PALE	7484	
19	DSD	2345E	0020D	N06	E29	04 22.2		02	9	9	E	PALE	7484	
19	AFS	2350E	0945	N05	E30	04 22.2		02	9	9	E	LEAR	7484	
19	AFS	2350E	0945	N11	E38	04 22.8		02	9	9	E	LEAR	7477	
19	AFS	2351E	0945	S14	E17	04 21.3		01	8	8	E	LEAR	7483	
19	AFS	2352E	0945	S14	E56	04 24.2		01	8	8	E	LEAR	7480	
19	ADF	2353E	0945	N06	E29	04 22.2	1	03	9	9	E	LEAR	7484	
20	SSB	0041		416	W39	04 18.7			0	0	E	HOLL		
20	DSF	0041U	1304U	N19	E51	04 23.9		11	0	0	E	HOLL		
20	AFS	0203E	0420	N09	W04	04 19.8		01	9	9	E	PALE		
20	AFS	0334E	0420	S15	E18	04 21.5		02	8	8	E	PALE	7483	
20	DSD	0615E	1518D	N11	E35	04 22.9		03	9	9	E	SVTO	7477	
20	DSD	0615E	1518D	S18	E59	04 24.7		02	9	9	E	SVTO	7480	
20	ADF	0615E	1651	N09	E38	04 23.1	1	04	9	9	E	SVTO	7477	
20	AFS	0615E	1651	N11	E36	04 23.0		02	9	9	E	SVTO	7477	
20	AFS	0615E	1651	S13	E53	04 24.2		02	9	9	E	SVTO	7480	
20	ADF	0615E	1651	S18	E60	04 24.8	1	08	9	9	E	SVTO	7480	
20	ADF	0800E	0945	S14	E53	04 24.3	1	05	9	9	E	LEAR	7480	
20	DSD	0938E	1524D	S15	E11	04 21.2		02	9	9	E	SVTO	9900	
20	DSD	0938E	1529D	N03	W49	04 16.7		01	9	9	E	SVTO	7482	
20	AFS	1232E	1651	N02	W52	04 16.6		02	8	8	E	SVTO	7482	
20	AFS	1246E	1926	N10	E31	04 22.9		02	9	9	E	RAMY	7477	
20	AFS	1247E	1926	N06	E23	04 22.2		01	9	9	E	RAMY	7484	
20	AFS	1255E	1926	S14	E49	04 24.2		02	9	9	E	RAMY	7480	
20	DSD	1305E	1926	S12	W27	04 18.5		02	9	9	E	RAMY	7485	
20	AFS	1314E	1926	S14	E08	04 21.1		01	5	5	E	RAMY	7483	
20	DSD	1314E	1926	S14	E09	04 21.2		03	9	9	E	RAMY	7483	
20	AFS	1314E	1926	S14	E10	04 21.3		01	6	5	E	RAMY	7483	
20	DSD	1317E	0129	N05	E21	04 22.1		03	9	9	E	HOLL	7484	
20	AFS	1317E	0129	N05	E23	04 22.3		02	9	9	E	HOLL	7484	
20	ADF	1317E	0129	N10	E30	04 22.8		05	9	9	E	HOLL	7477	
20	DSD	1317E	0129	S14	E10	04 21.3		02	9	9	E	HOLL	7483	
20	DSD	1320E	1926	S12	E20	04 22.1		01	9	9	E	RAMY	7487	
20	SSB	1322		381	W21	04 14.3			0	0	E	RAMY		409 W49 406 W62
20	AFS	1724E	1926	S05	W23	04 19.0		02	9	9	E	RAMY	7481	
20	AFS	1757E	1926	S11	E17	04 22.0		02	9	9	E	RAMY	7487	
20	AFS	1845E	0129	S11	E17	04 22.1		01	9	9	E	HOLL	7487	
20	ADF	1924E	0432	N09	E27	04 22.8	1	04	9	9	E	PALE	7477	
20	DSD	1930E	0344D	S06	W23	04 19.1		02	9	9	E	PALE	7481	
20	ADF	1940E	0432	N08	W26	04 18.9	1	02	9	9	E	PALE	7475	
20	DSD	2107E	0432	S15	E06	04 21.3		03	9	9	E	PALE	7483	
20	AFS	2132E	0129	S05	W24	04 19.1		02	7	9	E	HOLL	7481	
20	AFS	2201E	0432	S14	E11	04 21.7		03	9	9	E	PALE	7483	
20	AFS	2300E	0432	N11	E27	04 23.0		01	9	9	E	PALE	7477	
20	AFS	2300E	0432	S11	E15	04 22.1		01	8	8	E	PALE	7487	
20	AFS	2300E	0432	S15	E46	04 24.4		02	9	9	E	PALE	7480	
20	AFS	2300E	2344D	S14	E11	04 21.8		02	9	9	E	PALE	7483	
20	SSB	2301		408	W53	04 20.3			0	0	E	PALE		
20	AFS	2301E	0432	S07	W24	04 19.2		02	9	9	E	PALE	7481	
20	AFS	2328E		S15	E43	04 24.2		03	9	9	E	LEAR	7480	
20	AFS	2330E	2101	S06	W25	04 19.1		02	9	9	E	LEAR	7481	
20	AFS	2332E		S15	E03	04 21.2		02	9	9	E	LEAR	7483	
20	DSD	2334E	2101	S11	E14	04 22.0		02	9	9	E	LEAR	7487	
21	DSD	0815E	1232D	S07	W32	04 18.9		01	9	9	E	SVTO	7481	
21	DSD	0815E	1425D	N07	W33	04 18.9		01	9	9	E	SVTO	7475	
21	DSD	0815E	1425D	N12	E22	04 23.0		01	9	9	E	SVTO	7477	
21	DSD	0849	0900	S15	E01	04 21.4		05	9	9	E	SVTO	7483	
21	AFS	1051E	1643D	S07	W34	04 18.9		01	9	9	E	RAMY	7481	
21	DSD	1054E	2044	S11	E08	04 22.0		01	9	9	E	RAMY	7487	
21	AFS	1055E	2044	S11	E07	04 22.0		01	9	9	E	RAMY	7487	
21	AFS	1057E	2044	S14	E00	04 21.4		01	9	9	E	RAMY	7483	
21	AFS	1058E	2044	S14	W03	04 21.2		01	9	9	E	RAMY	7483	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
21	ADF	1103E	1700D	S16	W03	04 21.2	1	02	9	9	E	RAMY	7483	
21	AFS	1110E	2044	N05	E10	04 22.2		01	6	6	E	RAMY	7484	
21	DSD	1113E	2044	S14	E37	04 24.3		01	9	9	E	RAMY	7480	
21	AFS	1114E	2044	S14	E36	04 24.2		01	9	9	E	RAMY	7480	
21	ADF	1115E	2044	S17	E41	04 24.6	1	03	9	9	E	RAMY	7480	
21	DSD	1121E	1723D	N09	E22	04 23.1		01	9	9	E	RAMY	7477	
21	AFS	1122E	2044	N10	E17	04 22.7		01	9	9	E	RAMY	7477	
21	DSD	1230	1242	S15	W04	04 21.2		03	9	9	E	SVTO	7483	
21	AFS	1729E	0440	N06	E08	04 22.3		01	9	9	E	PALE	7484	
21	AFS	1729E	0440	N10	E18	04 23.1		02	9	9	E	PALE	7477	
21	AFS	1729E	0440	S11	E04	04 22.0		02	9	9	E	PALE	7487	
21	AFS	1729E	0440	S14	W05	04 21.3		01	9	9	E	PALE	7483	
21	AFS	1805E	0440	S14	E33	04 24.2		01	9	9	E	PALE	7480	
21	AFS	1805E	0440	S16	E37	04 24.5		03	9	9	E	PALE	7480	
21	SSB	1806		403	W58	04 21.5			0	0	E	PALE		
21	ADF	1806E	0440	S08	W39	04 18.8	1	04	9	9	E	PALE	7481	
21	AFS	1820E	2323	S14	E30	04 24.0		02	7	9	E	HOLL	7480	
21	ADF	2145E	0440	S15	W39	04 18.9	1	03	9	9	E	PALE	7485	
21	AFS	2330E	0953	N10	E12	04 22.9		03	9	9	E	LEAR	7477	
21	DSD	2331E	0953	N10	E11	04 22.8		05	9	9	E	LEAR	7477	
21	AFS	2334E	0953	S16	E34	04 24.6		03	9	9	E	LEAR	7480	
21	AFS	2335E	0953	S13	E30	04 24.2		02	9	9	E	LEAR	7480	
22	ASR	0715E	0953	S24	E90	04 29.2		04	9	9	E	LEAR		
22	ADF	0735E	1700	N10	E05	04 22.7	1	04	9	9	E	SVTO	7477	
22	AFS	0735E	1700	N11	E06	04 22.8		02	9	9	E	SVTO	7477	
22	DSD	0745E	1329D	N12	E11	04 23.1		02	9	9	E	SVTO	7477	
22	AFS	0800E	1700	N15	W14	04 21.3		02	9	9	E	SVTO	7483	
22	ADF	0800E	1700	N15	W16	04 21.1	1	03	9	9	E	SVTO	7483	
22	AFS	0841E	1700	N08	W46	04 18.9		02	9	9	E	SVTO	7481	
22	ADF	0841E	1700	N17	W46	04 18.9	1	05	9	9	E	SVTO	7481	
22	ADF	0910E	1700	N05	W48	04 18.8	1	02	9	9	E	SVTO	7475	
22	DSD	0942	0950	N11	E05	04 22.8		02	9	9	E	SVTO	7477	
22	AFS	1038E	2213	S13	E23	04 24.2		02	9	9	E	RAMY	7480	
22	AFS	1045E	2213	N10	E07	04 23.0		02	9	9	E	RAMY	7477	
22	DSD	1045E	2213	N12	E09	04 23.1		02	9	9	E	RAMY	7477	
22	AFS	1104E	2213	S10	W06	04 22.0		02	9	9	E	RAMY	7487	
22	AFS	1106E	2213	S15	W16	04 21.2		01	9	9	E	RAMY	7483	
22	ADF	1121E	2213	S08	W49	04 18.8	1	02	9	9	E	RAMY	7481	
22	AFS	1219E	1700	S10	W07	04 22.0		03	9	9	E	SVTO	7487	
22	ADF	1222E	1700	N02	W48	04 18.9	1	05	9	9	E	SVTO	7475	
22	AFS	1240E	1700	S14	W14	04 21.5		02	9	9	E	SVTO	7483	
22	DSD	1518E	2213	S13	W18	04 21.3		02	9	9	E	RAMY	7483	
22	AFS	1750E	2213	S24	E75	04 28.5		02	9	9	E	RAMY	7488	
22	AFS	1800E	0211	N14	E01	04 22.8		02	8	8	E	PALE	7477	
22	AFS	1800E	2213	N10	W31	04 20.4		01	9	9	E	RAMY	7486	
22	APR	1822E	2213	S25	E90	04 29.7	1	05	7	7	E	RAMY		
22	DSD	1825E	0211	N06	W07	04 22.2		02	9	9	E	PALE	7484	
22	AFS	1825E	0211	S14	E20	04 24.3		02	9	9	E	PALE	7480	
22	AFS	1825E	0211	S14	W19	04 21.3		01	9	9	E	PALE	7483	
22	DSD	1825E	0211	S15	E22	04 24.4		02	9	9	E	PALE	7480	
22	DSD	1825E	0211	S15	W20	04 21.2		02	9	9	E	PALE	7483	
22	AFS	1917E	0211	S10	W11	04 22.0		02	9	9	E	PALE	7487	
22	SSB	1945		389	W58	04 15.0			0	0	E	PALE		340 W09
22	AFS	1945E	0211	N10	W31	04 20.5		01	9	9	E	PALE	7486	
22	ADF	1945E	0211	S15	W57	04 18.5	1	05	9	9	E	PALE	7485	
22	DSF	2013U	1855U	S33	W33	04 20.2	2	13	0	0	E	HOLL		
22	AFS	2016E	2243	S10	W12	04 21.9		01	6	6	E	HOLL	7487	
22	ADF	2028E	2243	S17	E19	04 24.3		03	9	9	E	HOLL	7480	
22	DSD	2039E	2213	S14	W24	04 21.0		03	9	9	E	RAMY	7483	
22	DSD	2045E	2243	S14	W24	04 21.0		04	9	9	E	HOLL	7483	
22	AFS	2132E	2213	N10	E67	04 27.9		02	9	9	E	RAMY		
22	DSF	2159U	1045U	S18	W25	04 21.0	2	09	0	0	E	RAMY		
23	AFS	0746E	1708	N09	W39	04 20.4		02	9	9	E	SVTO	7486	
23	AFS	0746E	1708	S15	W27	04 21.3		03	9	9	E	SVTO	7483	
23	AFS	0749E	1708	N12	W09	04 22.6		03	8	8	E	SVTO	7477	
23	ADF	0749E	1708	N13	W12	04 22.4	1	05	9	9	E	SVTO	7477	
23	AFS	0751E	1708	S14	E12	04 24.2		02	8	7	E	SVTO	7480	
23	DSD	0751E	1708	S15	E07	04 23.8		02	9	9	E	SVTO	7480	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/ USAF Reg#	Remarks
23	AFS	0924E	1708	S11	W20	04 21.9		03	9	9	E	SVTO	7487	
23	AFS	1051E	1853	S14	E09	04 24.1		01	7	7	E	RAMY	7480	
23	DSD	1052E	1853	S13	E07	04 24.0		01	9	9	E	RAMY	7480	
23	ADF	1057E	1853	N07	W15	04 22.3	1	03	9	9	E	RAMY	7484	
23	AFS	1104E	1853	N11	W10	04 22.7		01	7	7	E	RAMY	7477	
23	AFS	1108E	1853	S11	W20	04 21.9		01	9	9	E	RAMY	7487	
23	DSD	1111E	1853	S10	W21	04 21.9		02	9	9	E	RAMY	7487	
23	AFS	1113E	1853	S15	W28	04 21.3		02	9	9	E	RAMY	7483	
23	DSD	1118E	1853	N10	W42	04 20.3		01	9	9	E	RAMY	7486	
23	SSB	1800		346	W27	04 20.2			0	0	E	RAMY		395 W76
23	AFS	2003E	0122	S13	W35	04 21.2		02	9	9	E	HOLL	7483	
23	ASR	2350E	0945	N08	E84	04 30.3		03	9	9	E	LEAR		
23	AFS	2350E	0945	S16	W35	04 21.3		04	9	9	E	LEAR	7483	
24	AFS	0225E	0945	N11	W17	04 22.8		02	9	9	E	LEAR	7477	
24	AFS	0225E	0945	S14	E02	04 24.2		02	9	9	E	LEAR	7480	
24	ADF	0635E	1700	N09	W20	04 22.8	1	06	9	9	E	SVTO	7477	
24	AFS	0635E	1700	N11	E50	04 28.0		01	9	9	E	SVTO	7489	
24	AFS	0635E	1700	N11	W19	04 22.8		02	9	9	E	SVTO	7477	
24	AFS	0635E	1700	S12	W31	04 21.9		02	8	8	E	SVTO	7487	
24	AFS	0635E	1700	S14	E00	04 24.3		02	9	9	E	SVTO	7480	
24	AFS	0635E	1700	S14	W40	04 21.2		02	9	9	E	SVTO	7483	
24	ADF	0635E	1700	S15	E00	04 24.3	1	04	9	9	E	SVTO	7480	
24	AFS	0635E	1700	S16	W39	04 21.3		02	9	9	E	SVTO	7483	
24	DSD	0635E	1700	S23	E58	04 28.7		02	9	9	E	SVTO	7488	
24	APR	0824E	0824D	E90	S19	04 26.1	1					VALA		
24	ADF	1124E	2113	N05	W20	04 23.0	1	04	9	9	E	RAMY	7477	
24	AFS	1125E	2113	N11	W22	04 22.8		01	8	8	E	RAMY	7477	
24	AFS	1127E	2113	S14	W43	04 21.2		03	9	9	E	RAMY	7483	
24	APR	1252E	2113	S02	E90	05 1.2	1	04	8	8	E	RAMY		
24	AFS	1305E	2113	S14	W04	04 24.2		02	7	7	E	RAMY	7480	
24	AFS	1309E	2113	N09	E77	04 30.3		03	9	9	E	RAMY	7490	
24	AFS	1311E	2113	N11	W56	04 20.3		01	9	9	E	RAMY	7486	
24	AFS	1325E	2113	S10	W36	04 21.8		01	8	8	E	RAMY	7487	
24	BSD	1409E	1430D	N07	E79	04 30.5		02	9	9	E	RAMY		
24	APR	1520E	2113	N28	E90	05 1.7	1	08	9	9	E	RAMY		
24	AFS	1607E	2113	S23	E50	04 28.5		03	9	9	E	RAMY	7488	
24	AFS	1637E	0135	S12	W47	04 21.1		02	4	6	E	HOLL	7483	
24	AFS	1730E	0204	N10	W28	04 22.6		02	9	9	E	PALE	7477	
24	DSD	1730E	0204	S11	W08	04 24.1		02	9	9	E	PALE	7480	
24	ADF	1735E	0204	S11	W47	04 21.2	1	03	9	9	E	PALE	7483	
24	ADF	1735E	0204	S12	W09	04 24.0	1	03	9	9	E	PALE	7480	
24	DSD	1735E	0204	S13	W46	04 21.3		02	9	9	E	PALE	7483	
24	DSD	1735E	0204	S15	W09	04 24.0		01	8	8	E	PALE	7480	
24	AFS	1735E	0204	S17	W43	04 21.5		01	9	9	E	PALE	7483	
24	AFS	1736E	0204	N08	W54	04 20.7		01	8	8	E	PALE	7486	
24	DSD	1736E	0204	S11	W43	04 21.5		02	9	9	E	PALE	7487	
24	DSD	1740E	0204	N06	E46	04 28.2		01	9	9	E	PALE	7489	
24	DSD	1740E	0204	N06	W29	04 22.6		01	7	7	E	PALE	7484	
24	DSD	1740E	0204	S24	E46	04 28.3		02	9	9	E	PALE	7488	
24	AFS	1740E	0204	S26	E52	04 28.8		02	9	9	E	PALE	7488	
24	SSB	1742		338	W33	04 21.7			0	0	E	PALE		
24	APR	1743E	0204	N00	E90	05 1.4		03	9	9	E	PALE		
24	ADF	1910E	0135	S14	W02	04 24.6	1	04	8	6	E	HOLL	7480	
24	ADF	1910E	0135	S14	W08	04 24.2		04	9	9	E	HOLL	7480	
25	AFS	0315E	0950	N12	W30	04 22.9		02	9	9	E	LEAR	7477	
25	AFS	0709E	1535	N12	W33	04 22.8		02	9	9	E	SVTO	7477	
25	AFS	0713E	1535	S14	W55	04 21.1		03	8	7	E	SVTO	7483	
25	ADF	0714E	0853D	S10	W46	04 21.8	1	02	9	9	E	SVTO	7487	
25	DSD	0802E	1535	N13	W31	04 23.0		02	9	9	E	SVTO	7477	
25	AFS	0823E	0950	S13	W56	04 21.1		03	9	9	E	LEAR	7483	
25	DSD	0852E	0938D	S09	W51	04 21.5		03	9	9	E	SVTO	7487	
25	APR	0929E	1535	N03	E90	05 2.1		04	7	7	E	SVTO		
25	DSD	0944	1535	N11	W32	04 23.0		06	9	9	E	SVTO	7477	
25	AFS	1048E	1535	N10	E13	04 26.4		02	9	9	E	SVTO		
25	AFS	1048E	1535	N10	W69	04 20.3		02	9	9	E	SVTO	7486	
25	AFS	1301E	1722	N09	E36	04 28.2		02	7	7	E	RAMY	7489	
25	AFS	1303E	1722	N09	E66	04 30.5		03	9	9	E	RAMY	7490	
25	AFS	1308E	1722	S25	E40	04 28.6		01	8	8	E	RAMY	7488	

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Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
25	AFS	1309E	1722	S10	W47	04 22.0		02	8	8	E	RAMY	7480	
25	AFS	1310E	1722	S13	W58	04 21.2		03	9	9	E	RAMY	7483	
25	AFS	1315E	1722	N10	W72	04 20.1		02	9	9	E	RAMY	7486	
25	AFS	1613E	1722	N12	W39	04 22.7		02	9	9	E	RAMY	7477	
25	DSD	1624E	1722	S13	W64	04 20.8		03	9	9	E	RAMY	7483	
25	AFS	1635E	1722	S11	W52	04 21.8		02	7	7	E	RAMY	7487	
25	ADF	1642E	1722	S12	E19	04 27.1	1	04	9	9	E	RAMY	7480	
25	AFS	1649E	1722	N09	E10	04 26.4		01	5	6	E	RAMY	7491	
25	DSD	1652E	1722	N06	E29	04 27.9		04	9	9	E	RAMY	7489	
25	ADF	1652E	1722	N08	E34	04 28.2	1	05	9	9	E	RAMY	7489	
25	ADF	1953E	0431	N07	W39	04 22.9	1	03	9	9	E	PALE	7477	
25	AFS	1953E	0431	N12	W39	04 22.9		02	9	9	E	PALE	7477	
25	DSD	1959E	0431	N07	E63	04 30.5		02	9	9	E	PALE	7490	
25	ADF	2004E	0431	N08	E31	04 28.2	1	04	8	6	E	PALE	7489	
26	AFS	0000E	0948	N09	W43	04 22.8		02	9	9	E	LEAR	7477	
26	AFS	0000E	0948	N12	W43	04 22.8		01	9	9	E	LEAR	7477	
26	AFS	0000E	0948	N14	W41	04 22.9		02	9	9	E	LEAR	7477	
26	ADF	0035E	0431	N13	W72	04 20.6	1	04	9	9	E	PALE	7486	
26	ADF	0039E	0431	N05	W09	04 25.3	1	02	9	9	E	PALE		
26	ADF	0215E	0948	S13	W67	04 21.0	1	05	9	9	E	LEAR	7483	
26	AFS	0315E	0948	N10	E53	04 30.1		02	9	9	E	LEAR	7490	
26	DSD	0351E	0410D	S14	W65	04 21.2		02	9	9	E	PALE	7483	
26	APR	0530	1050	N16	E90	05 3.0						ATHN		
26	APR	0530	1050	N22	W90	04 19.3						ATHN		
26	ADF	0530	1050	S03	E80	05 2.2						ATHN		
26	APR	0530	1050	S19	W90	04 19.4						ATHN		
26	AFS	1034E	2036	N12	W48	04 22.8		02	9	9	E	RAMY	7477	
26	AFS	1040E	2036	S11	W71	04 21.1		01	9	9	E	RAMY	7483	
26	AFS	1040E	2036	S14	W70	04 21.1		02	9	9	E	RAMY	7483	
26	AFS	1049E	2036	N09	W80	04 20.4		01	8	8	E	RAMY	7486	
26	DSD	1053E	1644D	S22	E27	04 28.5		01	9	9	E	RAMY	7488	
26	AFS	1057E	2036	N06	E55	04 30.6		02	9	9	E	RAMY	7490	
26	DSD	1057E	2036	N09	E49	04 30.1		02	9	9	E	RAMY	7490	
26	DSD	1130E	1325D	N07	E58	04 30.8		02	9	9	E	SVTO	7490	
26	APR	1252	1322D	S08	W90	04 19.8	1	03	9	9	E	RAMY		
26	SSB	1258		283	W02	05 2.7			0	0	E	HOLL		
26	ADF	1600E	0032	S09	W33	04 24.2		05	8	8	E	HOLL	7480	
26	AFS	1626E	0032	S14	E30	04 28.9		01	9	9	E	HOLL	7488	
26	ASR	1632E	0032	N14	W90	04 19.9		01	5	5	E	HOLL	7486	
26	AFS	1707E	0424	N13	W51	04 22.9		02	6	7	E	PALE	7477	
26	AFS	1720E	0424	S24	E25	04 28.6		02	8	6	E	PALE	7488	
26	ADF	1726E	0424	N06	E50	04 30.5	1	02	9	9	E	PALE	7490	
26	SSB	1753		285	W06	05 3.1			0	0	E	PALE		
26	AFS	1842E	0424	N14	E27	04 28.8		02	9	9	E	PALE		
26	AFS	1953E	2036	S13	E26	04 28.8		01	9	9	E	RAMY		
27	ADF	0157E	0424	S18	W36	04 24.3	1	03	9	9	E	PALE	7480	
27	ASR	0350E	0800D	S04	E90	05 3.9		02	9	7	E	LEAR		
27	APR	0600	0700	N23	W90	04 20.3						ATHN		
27	ADF	0610	0700	N02	E59	05 1.7						ATHN		
27	ASR	0704E	0942	N12	W90	04 20.5		01	9	9	E	LEAR	7486	
27	APR	0810E	1000D	N11	W90	04 20.6	1	03	8	8	E	SVTO		
27	ADF	1131E	1439	N08	W61	04 22.9	1	05	9	9	E	RAMY	7477	
27	AFS	1131E	1439	N12	W62	04 22.8		01	9	9	E	RAMY	7477	
27	AFS	1134E	1439	N07	E42	04 30.6		02	9	9	E	RAMY	7490	
27	DSD	1136E	1439	S13	W42	04 24.3		04	9	9	E	RAMY	7480	
27	AFS	1143E	1439	S14	E17	04 28.8		02	9	9	E	RAMY	7492	
27	DSD	1201E	1439	S14	E16	04 28.7		02	9	9	E	RAMY	7492	
27	AFS	1814E	0152	N14	E12	04 28.7		01	9	9	E	PALE	7492	
27	SSB	1926		284	W19	05 4.2			0	0	E	PALE		291 W26
27	ADF	1932E	0152	S17	W46	04 24.3	1	02	9	9	E	PALE	7480	
27	AFS	2014E	0152	N08	E37	04 30.6		01	9	9	E	PALE	7490	
27	ASR	2014E	0152	S13	W90	04 21.0		02	8	8	E	PALE	7483	
27	SSB	2050		284	W20	05 4.3			0	0	E	HOLL		
27	ASR	2330E	2348	S11	W90	04 21.2		02	9	9	E	HOLL	7483	
28	ASR	0001E	0944	S12	W90	04 21.2		04	9	9	E	LEAR	7483	
28	AFS	0641E	1049	S13	E07	04 29.8		02	9	9	E	SVTO	7492	
28	ADF	0750E	1049	N14	E31	05 1.7	1	10	9	9	E	SVTO	7490	

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ACTIVE PROMINENCES AND FILAMENTS

APRIL 1993

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	NOAA/ USAF Sta Reg#	Remarks
28	DSD	1111E	1712	N06	E30	04 30.7		01	9	9	E	RAMY 7490	
28	AFS	1111E	1712	N07	E28	04 30.6		02	7	6	E	RAMY 7490	
28	DSD	1118E	1712	S12	E05	04 28.8		02	9	9	E	RAMY 7492	
28	ASR	1407E	0120	S13	W90	04 21.8		07	7	8	E	HOLL 7483	
28	ASR	1545E	1712	S12	W90	04 21.9		10	9	9	E	RAMY 7483	
28	SSB	1725		383	W29	04 22.2			0	0	E	HOLL	
28	BSD	1730E	1826	N17	W85	04 22.3		04	0	0	E	HOLL 7477	
28	AFS	1740E	0421	N08	E25	04 30.6		01	9	9	E	PALE 7490	
28	AFS	1740E	0421	S01	E13	04 29.7		01	9	9	E	PALE 7492	
28	DSD	1740E	20180	N09	E19	04 30.2		01	9	9	E	PALE 7490	
28	SSB	1741		283	W31	05 5.3			0	0	E	PALE	252 W12
28	AFS	1741E	0421	S04	E54	05 2.8		01	9	9	E	PALE	
28	ADF	1741E	0421	S19	W57	04 24.4	1	04	9	9	E	PALE 7480	
28	AFS	1753E	0120	S06	E53	05 2.7		01	9	9	E	HOLL	
28	DSD	1755E	1842	S12	E02	04 28.9		01	9	9	E	HOLL 7492	
28	ASR	1758E	21340	S14	W90	04 21.9		05	9	9	E	PALE 7483	
28	ASR	1800E	20150	N14	W78	04 22.8		02	9	9	E	PALE 7477	
28	DSD	1914E	20000	N08	E18	04 30.1		02	9	9	E	HOLL 7490	
28	ADF	2016E	22190	N10	E24	04 30.6	1	07	5	5	E	HOLL 7490	
28	ADF	2044E	0421	N13	E31	05 1.2	1	06	9	9	E	PALE 7490	
28	ASR	2050E	22300	N17	W89	04 22.1		03	3	5	E	HOLL 7477	
28	ASR	2115E	0421	N14	W79	04 22.9		02	8	8	E	PALE 7477	
29	AFS	0215	0833	S12	W04	04 28.8		02	9	9	E	LEAR 7492	
29	AFS	1227E	1702	S04	E43	05 2.7		01	9	9	E	RAMY 7494	
29	AFS	1245E	1702	S14	W09	04 28.8		02	9	9	E	RAMY 7492	
29	AFS	1254E	1702	N04	E60	05 4.0		02	9	9	E	RAMY	
29	DSD	1309E	14380	S15	W09	04 28.9		02	9	9	E	HOLL 7492	
29	DSD	1310E	1702	S12	W10	04 28.8		02	9	9	E	RAMY 7492	
29	ASR	1401E	1452	N12	W89	04 22.9		01	9	9	E	SVTO 7477	
29	AFS	1401E	1452	S12	W10	04 28.8		03	9	9	E	SVTO 7492	
29	AFS	1405E	1452	S11	W18	04 28.2		01	9	9	E	SVTO 7492	
29	AFS	1411E	1702	S10	W17	04 28.3		01	9	9	E	RAMY	
29	ASR	1415E	1702	N13	W90	04 22.8		02	9	9	E	RAMY 7477	
29	ADF	1609E	1702	S07	E38	05 2.5	1	14	7	8	E	RAMY	
29	AFS	1631E	2326	S11	W13	04 28.7		04	4	5	E	HOLL 7492	
29	AFS	1645E	0454	N08	E06	04 30.1		01	8	8	E	PALE 7490	
29	ADF	1645E	0454	S04	E53	05 3.7	1	05	9	9	E	PALE 7493	
29	APR	1645E	0454	S04	E53	05 3.7		07	9	9	E	PALE 7493	
29	ADF	1645E	0454	S12	W08	04 29.1	1	04	8	8	E	PALE 7492	
29	DSD	1645E	0454	S12	W14	04 28.6		02	9	9	E	PALE 7492	
29	SSB	1654		264	W24	05 4.6			0	0	E	PALE	
29	SSB	1721		280	W29	05 6.0			0	0	E	HOLL	
29	AFS	1725E	2326	S06	E40	05 2.7		01	8	8	E	HOLL	
29	ADF	1755E	0454	N11	E10	04 30.5	1	03	9	9	E	PALE 7490	
29	AFS	1755E	0454	S10	E45	05 3.1		02	9	9	E	PALE 7493	
29	ASR	1820E	2326	N17	W90	04 22.9		03	9	9	E	HOLL 7477	
29	ADF	1908E	2326	N04	E58	05 4.1	1	11	3	3	E	HOLL	
29	ADF	2255E	0454	N06	W27	04 27.9	1	03	9	9	E	PALE 7489	
30	ADF	0610E	1631	N05	W31	04 27.9	1	04	9	9	E	SVTO 7489	
30	AFS	0612E	1631	S03	E33	05 2.7		02	9	9	E	SVTO 7494	
30	ADF	0759E	1631	S09	E51	05 4.2	1	04	9	9	E	SVTO 7493	
30	SSB	0800		286	W55	05 7.8			0	0	E	SVTO	
30	DSF	0840U	2355U	S06	E31	05 2.7		17	0	0	E	LEAR	
30	ADF	1215E	1631	S05	E39	05 3.4	1	07	9	9	E	SVTO 4602	
30	AFS	1236E	1922	N10	W35	04 27.9		02	9	9	E	RAMY 7489	
30	DSD	1236E	1922	N11	W34	04 28.0		03	8	7	E	RAMY 7489	
30	SSB	1245		285	W57	05 7.9			0	0	E	RAMY	
30	DSD	1310E	1922	S13	W25	04 28.7		02	9	9	E	RAMY 7492	
30	ADF	1320E	1922	S03	E45	05 3.9	1	08	9	9	E	RAMY 7493	
30	DSF	1348U	1431U	S06	E25	05 2.4	2	23	0	0	E	SVTO	
30	ADF	1350E	20110	S06	E26	05 2.5	1	22	9	9	E	HOLL 7494	
30	ADF	1350E	20110	S06	E26	05 2.5	1	22	9	9	E	HOLL 7494	
30	DSF	1350U	1415U	S06	E25	05 2.4	3	20	0	0	E	HOLL 7494	
30	DSD	1439E	1922	N07	W06	04 30.2		02	9	9	E	RAMY 7490	
30	DSD	1545E	20000	N03	E07	05 1.2		01	9	9	E	HOLL 7490	
30	SSB	1630		239	W13	05 3.6			0	0	E	HOLL	
30	ADF	1935E	0339	S12	W24	04 29.0	1	03	9	9	E	PALE 7492	
30	AFS	1935E	0339	S13	W29	04 28.6		01	9	9	E	PALE 7492	

ACTIVE PROMINENCES AND FILAMENTS

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APRIL 1993

Day	Event Type	Start (UT)	End (UT)	Lat	CMD	CMP Mo Day	Imp	Extent	Blue Shift (.1 A)	Red Shift (.1 A)	Obs Type	Sta	NOAA/USAF Reg#	Remarks
30	SSB	1937		239	W14	05 3.8			0	0	E	PALE		263 W38 283 W58
30	AFS	1945E	0339	N09	E00	04 30.8		01	9	9	E	PALE	7490	
30	AFS	1945E	0339	N10	W08	04 30.2		01	9	9	E	PALE	7490	
30	ADF	2020E	0339	S05	E37	05 3.6	1	05	9	9	E	PALE	7493	
30	AFS	2020E	0339	S13	E23	05 2.6		02	9	9	E	PALE	7494	
30	DSD	2020E	0339	S14	E33	05 3.3		02	9	9	E	PALE	7493	
30	ADF	2337E	0339	N08	W40	04 28.0	1	08	9	9	E	PALE	7489	

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

HOLL = Holloman

KHAR = Kharkov

LEAR = Learmonth

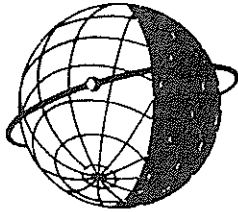
PALE = Palehua

RAMY = Ramey

SVTO = San Vito

VORO = Voroshilov

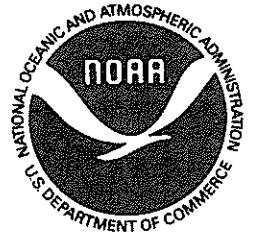
VALA = Valasske Mezirici



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FOR

SOLAR-TERRESTRIAL PHYSICS



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

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